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BUREAU OF CONSUMER FINANCIAL PROTECTION

12 CFR Parts 1024 and 1026

[Docket No. CFPB–2014–0028]

RIN 3170–AA48

Amendments to the 2013 Integrated Mortgage Disclosures Rule Under the Real Estate Settlement Procedures Act (Regulation X) and the Truth In Lending Act (Regulation Z) and the 2013 Loan Originator Rule Under the Truth in Lending Act (Regulation Z)

AGENCY: Bureau of Consumer Financial Protection.

ACTION: Final rule; Official Interpretations.

SUMMARY: This final rule modifies the 2013 TILA–RESPA Final Rule. This rule extends the timing requirement for revised disclosures when consumers lock a rate or extend a rate lock after the Loan Estimate is provided and permits certain language related to construction loans for transactions involving new construction on the Loan Estimate. This rule also amends the 2013 Loan Originator Final Rule to provide for placement of the Nationwide Mortgage Licensing System and Registry ID (NMLSR ID) on the integrated disclosures. Additionally, the Bureau is making non-substantive corrections, including citation and cross-reference updates and wording changes for clarification purposes, to various provisions of Regulations X and Z as amended or adopted by the 2013 TILA–RESPA Final Rule.

DATES: The rule is effective August 1, 2015. The final rule applies to transactions for which the creditor or mortgage broker receives an application on or after August 1, 2015.

FOR FURTHER INFORMATION CONTACT: Jaydee DiGiovanni, Policy and Procedure Analyst; Richard Arculin and David Friend, Counsels; Office of Regulations at (202) 435–7700.

SUPPLEMENTARY INFORMATION:

I. Summary of Final Rule

In November 2013, pursuant to sections 1098 and 1100A of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), the Bureau issued the Integrated Mortgage Disclosures under the Real Estate Settlement Procedures Act (Regulation X) and the Truth in Lending Act (Regulation Z) (2013 TILA–RESPA Final Rule),[1] combining certain disclosures that consumers receive in connection with applying for and closing on a mortgage loan.

On October 10, 2014, the Bureau proposed several amendments to Regulation Z provisions adopted by the 2013 TILA–RESPA Final Rule[2] (the proposal):

- To extend the timing requirement for creditors to provide a revised Loan Estimate to consumers when consumers lock a rate or extend a rate lock after the Loan Estimate is provided. The 2013 TILA–RESPA Final Rule requires creditors to provide a revised Loan Estimate with the revised interest rate, the points disclosed pursuant to § 1026.37(f)(1), lender credits, and any other interest rate dependent charges and terms on the date the interest rate is locked. The Bureau proposed to extend the timing requirement to the next business day after the rate is locked.
- To provide for the placement on the Loan Estimate form of language relating to construction loans in transactions involving new construction that is required in order for creditors to redisclose estimated charges.
- To make non-substantive corrections, including minor wording changes, corrected or updated citations and cross-references, in the regulation and commentary adopted by the 2013 TILA–RESPA Final Rule.
- The Bureau also proposed to amend the 2013 Loan Originator Final Rule[3] to provide for placement of the NMLSR ID on the integrated disclosures.

With respect to the proposal to allow creditors to redisclose the Loan Estimate one business day after the interest rate is locked, the Bureau is extending the timing requirement to three business days after the rate is locked. With respect to all other aspects of the proposal, the Bureau is adopting the amendments as proposed. The Bureau also is adopting additional, non-substantive corrections identified since the proposal was issued.

II. Background

A. The Integrated Disclosures Rulemaking

In July 2010, the Dodd-Frank Act was enacted. The Dodd-Frank Act transferred rulemaking authority under both TILA and RESPA to the Bureau. In addition, Dodd-Frank Act sections 1032(f), 1098, and 1100A mandated that the Bureau establish a single disclosure scheme for use by lenders or creditors in complying with the disclosure requirements of both RESPA and TILA. Section 1098(2) of the Dodd-Frank Act amended RESPA section 4(a) to require that the Bureau publish a single, integrated disclosure for mortgage loan transactions, including ''the disclosure requirements of this section and section 5, in conjunction with the disclosure requirements of [TILA]. . . .''[4] Similarly, section 1100A(5) of the Dodd-Frank Act amended TILA section 105(b) to require that the Bureau publish a single, integrated disclosure for mortgage loan transactions, including ''the disclosure requirements of this title in conjunction with the disclosure requirements of [RESPA]. . . .''[5] The Dodd-Frank Act required the Bureau to issue for public comment rules and model disclosures that integrated the

[1] 78 FR 79730 (Dec. 31, 2013).

[2] 79 FR 64336 (Oct. 29, 2014).

[3] 78 FR 11280 (Feb. 15, 2013).

[4] 12 U.S.C. 2603(a).

[5] 15 U.S.C. 1604(b). The amendments to RESPA and TILA mandating a ''single, integrated disclosure'' are among numerous conforming amendments to existing Federal laws found in subtitle H of the Consumer Financial Protection Act of 2010. Subtitle C of the Consumer Financial Protection Act, ''Specific Bureau Authorities,'' codified at 12 U.S.C. chapter 53, subchapter V, part C, contains a similar provision. Specifically, section 1032(f) of the Dodd-Frank Act provides that, by July 21, 2012, the Bureau ''shall propose for public comment rules and model disclosures that combine the disclosures required under [TILA] and sections 4 and 5 of [RESPA] into a single, integrated disclosure for mortgage loan transactions covered by those laws, unless the Bureau determines that any proposal issued by the [Board] and [HUD] carries out the same purpose.'' 12 U.S.C. 5532(f). The Bureau issued the 2012 TILA–RESPA Proposal pursuant to that mandate and the parallel mandates established by the conforming amendments to RESPA and TILA, discussed above.

TILA and RESPA disclosures by July 21, 2012.[6]

The Bureau issued proposed integrated disclosure forms and rules for public comment on July 9, 2012 (the 2012 TILA–RESPA Proposal).[7] On December 31, 2013, more than 17 years after Congress first directed the Federal Reserve Board and the Department of Housing and Urban Development (HUD) to integrate the disclosures under TILA and RESPA, the Bureau published the 2013 TILA–RESPA Final Rule.[8]

B. Implementation Support

In early 2014, the Bureau initiated efforts to support industry implementation of the 2013 TILA–RESPA Final Rule. These on-going efforts include: (1) The publication of a plain-language compliance guide and guide to forms to help industry understand the new rules, including updates to the guides, as needed; (2) the publication of a readiness guide for institutions to evaluate their readiness and facilitate compliance with the new rules; (3) the publication of a disclosure timeline that illustrates the process and timing requirements of the new disclosure rules; (4) an ongoing series of webinars to address common interpretive questions; (5) roundtable meetings with industry, including creditors, settlement service providers, and technology vendors, to discuss implementation; (6) participation in conferences and forums; and (7) close collaboration with State and Federal regulators on implementation of the 2013 TILA–RESPA Final Rule, including coordination on consistent examination procedures. More information regarding the Bureau's TILA–RESPA implementation initiative can be found on the Bureau's regulatory implementation Web site at *www.consumerfinance.gov/regulatory-implementation.*

III. Comments

The Bureau received 31 comments from creditors, trade associations, technology vendors, and others in response to the October 10, 2014 proposal to amend the 2013 TILA–RESPA Final Rule. Many of the comments discussed issues beyond the scope of the proposal. The Bureau discusses those comments that were responsive to the proposal in the section-by-section analysis below. This final rule does not make any changes outside the scope of the proposal, other than additional, non-substantive corrections identified since the proposal was issued.

IV. Legal Authority

The Bureau is issuing this final rule pursuant to its authority under TILA, RESPA, and the Dodd-Frank Act. Section 1061 of the Dodd-Frank Act transferred to the Bureau the ''consumer financial protection functions'' previously vested in certain other Federal agencies, including the Board's consumer protection functions relating to TILA mortgage disclosures and the HUD Secretary's consumer protection functions relating to RESPA.[9] The term ''consumer financial protection function'' is defined to include ''all authority to prescribe rules or issue orders or guidelines pursuant to any Federal consumer financial law, including performing appropriate functions to promulgate and review such rules, orders, and guidelines.''[10] Title X of the Dodd-Frank Act, including section 1061 of the Dodd-Frank Act, along with TILA, RESPA, and certain subtitles and provisions of title XIV of the Dodd-Frank Act, are Federal consumer financial laws.[11] Accordingly, the Bureau has authority to issue regulations pursuant to TILA and RESPA, including the disclosure requirements added to those statutes by title XIV of the Dodd-Frank Act, as well as title X of the Dodd-Frank Act.

A. The Integrated Disclosure Mandate

Section 1032(f) of the Dodd-Frank Act requires that, ''[n]ot later than one year after the designated transfer date [of July 21, 2011], the Bureau shall propose for public comment rules and model disclosures that combine the disclosures required under [TILA] and sections 4 and 5 of [RESPA], into a single, integrated disclosure for mortgage loan transactions covered by those laws, unless the Bureau determines that any proposal issued by the [Board] and [HUD] carries out the same purpose.''[12] In addition, the Dodd-Frank Act amended section 105(b) of TILA and section 4(a) of RESPA to require the integration of the TILA disclosures and the disclosures required by sections 4 and 5 of RESPA.[13] The purpose of the integrated disclosure is to facilitate compliance with the disclosure requirements of TILA and RESPA and to help the consumer understand the transaction by using readily understandable language to simplify the technical nature of the disclosures.[14]

Although Congress imposed this integrated disclosure requirement, it did not harmonize the underlying statutes. In particular, TILA and RESPA establish different timing requirements for disclosing mortgage credit terms and costs to consumers and require that those disclosures be provided by different parties. TILA generally requires that, within three business days of receiving the consumer's application and at least seven business days before consummation of certain mortgage transactions, creditors must provide consumers a good faith estimate of the costs of credit.[15] If the annual percentage rate that was initially disclosed becomes inaccurate, TILA requires creditors to redisclose the information at least three business days before consummation.[16] These disclosures must be provided in final form at consummation.[17] RESPA also requires that the creditor or broker provide consumers with a good faith estimate of settlement charges no later

[6] 12 U.S.C. 5532(f).

[7] *See* Press Release, *Consumer Financial Protection Bureau, CFPB proposes ''Know Before You Owe'' Mortgage Forms* (July 9, 2012), *available at http://www.consumerfinance.gov/pressreleases/consumer-financial-protection-bureau-proposes-know-before-you-owe-mortgage-forms/;* CFPB Mortgage Disclosure Team, CFPB Blog, *Know Before You Owe: Introducing our proposed mortgage disclosure forms* (July 9, 2012), *available at http://www.consumerfinance.gov/blog/know-before-you-owe-introducing-our-proposed-mortgage-disclosure-forms/.*

[8] 78 FR 79730 (Dec. 31, 2013).

[9] Dodd-Frank Wall Street Reform and Consumer Protection Act, Public Law 111–203, 124 Stat. 1376, section 1061(b)(7) (2010); 12 U.S.C. 5581(b)(7).

[10] 12 U.S.C. 5581(a)(1).

[11] Dodd-Frank Act section 1002(14), 12 U.S.C. 5481(14) (defining ''Federal consumer financial law'' to include the ''enumerated consumer laws'' and the provisions of title X of the Dodd-Frank Act); Dodd-Frank Act section 1002(12), 12 U.S.C. 5481(12) (defining ''enumerated consumer laws'' to include TILA and RESPA); Dodd-Frank Act section 1400(b), 15 U.S.C. 1601 note (defining ''enumerated consumer laws'' to include certain subtitles and provisions of Title XIV).

[12] 12 U.S.C. 5532(f).

[13] Section 1100A of the Dodd-Frank Act amended TILA section 105(b) to provide that the ''Bureau shall publish a single, integrated disclosure for mortgage loan transactions (including real estate settlement cost statements) which includes the disclosure requirements of this title in conjunction with the disclosure requirements of the Real Estate Settlement Procedures Act of 1974 that, taken together, may apply to a transaction that is subject to both or either provisions of law.'' 15 U.S.C. 1604(b). Section 1098 of the Dodd-Frank Act amended RESPA section 4(a) to require the Bureau to publish a ''single, integrated disclosure for mortgage loan transactions (including real estate settlement cost statements) which includes the disclosure requirements of this section and section 5, in conjunction with the disclosure requirements of the Truth in Lending Act that, taken together, may apply to a transaction that is subject to both or either provisions of law.'' 12 U.S.C. 2603(a).

[14] *See* Dodd-Frank Act sections 1098, 1100A.

[15] TILA section 128(b)(2)(A); 15 U.S.C. 1638(b)(2)(A). This requirement applies to extensions of credit that are both secured by a dwelling and subject to RESPA.

[16] TILA section 128(b)(2)(D); 15 U.S.C. 1638(b)(2)(D).

[17] TILA section 128(b)(2)(B)(ii); 15 U.S.C. 1638(b)(2)(B)(ii).

than three business days after receiving the consumer's application. However, unlike TILA, RESPA requires that, at or before settlement, ''the person conducting the settlement'' (which may or may not be the creditor) provide the consumer with a statement that records all charges imposed upon the consumer in connection with the settlement.[18]

The Dodd-Frank Act did not reconcile these and other statutory differences. Therefore, to meet the Dodd-Frank Act's mandate to integrate the disclosures required by TILA and RESPA, the Bureau was required to do so. Dodd-Frank Act section 1032(f), TILA section 105(b), and RESPA section 4(a) provide the Bureau with authority to issue regulations that reconcile certain provisions of TILA and RESPA to carry out Congress' mandate to integrate the statutory disclosure requirements.

B. Other Rulemaking and Exception Authorities

This rule also relies on the rulemaking and exception authorities specifically granted to the Bureau by TILA, RESPA, and the Dodd-Frank Act, including the authorities discussed below.

Truth in Lending Act

TILA section 105(a). As amended by the Dodd-Frank Act, TILA section 105(a), 15 U.S.C. 1604(a), directs the Bureau to prescribe regulations to carry out the purposes of TILA and provides that such regulations may contain additional requirements, classifications, differentiations, or other provisions and may further provide for such adjustments and exceptions for all or any class of transactions that the Bureau judges are necessary or proper to effectuate the purposes of TILA, to prevent circumvention or evasion thereof, or to facilitate compliance therewith. A purpose of TILA is ''to assure a meaningful disclosure of credit terms so that the consumer will be able to compare more readily the various credit terms available to him and avoid the uninformed use of credit.'' [19] This stated purpose is informed by Congress' finding that ''economic stabilization would be enhanced and the competition among the various financial institutions and other firms engaged in the extension of consumer credit would be strengthened by the informed use of credit[.]'' [20] Thus, strengthened competition among financial institutions is a goal of TILA.

Historically, TILA section 105(a) has served as a broad source of authority for rules that promote the informed use of credit through required disclosures and substantive regulation of certain practices. Dodd-Frank Act section 1100A clarified the Bureau's section 105(a) authority by amending that section to provide express authority to prescribe regulations that contain ''additional requirements'' that the Bureau finds are necessary or proper to effectuate the purposes of TILA, to prevent circumvention or evasion thereof, or to facilitate compliance. This amendment clarified the Bureau's authority to prescribe requirements beyond those specifically listed in the statute that meet the standards outlined in TILA section 105(a). The Dodd-Frank Act also clarified the Bureau's rulemaking authority over certain high-cost mortgages pursuant to section 105(a). As amended by the Dodd-Frank Act, TILA section 105(a) authority to make adjustments and exceptions to the requirements of TILA applies to all transactions subject to TILA, except with respect to the provisions of TILA section 129 that apply to the high-cost mortgages referred to in TILA section 103(bb), 15 U.S.C. 1602(bb).[21]

TILA section 129B(e). Dodd-Frank Act section 1405(a) amended TILA to add new section 129B(e), 15 U.S.C. 1639B(e). That section authorizes the Bureau to ''prohibit or condition terms, acts, or practices relating to residential mortgage loans that the Bureau finds to be abusive, unfair, deceptive, predatory, necessary or proper to ensure that responsible, affordable mortgage credit remains available to consumers in a manner consistent with the purposes of this section and section 129C [of TILA], necessary or proper to effectuate the purposes of this section and section 129C [of TILA], to prevent circumvention or evasion thereof, or to facilitate compliance with such sections, or are not in the interest of the borrower.'' In developing rules under TILA section 129B(e), the Bureau has considered the broad mandate of section 129B.

Real Estate Settlement Procedures Act

Section 19(a) of RESPA, 12 U.S.C. 2617(a), authorizes the Bureau to prescribe such rules and regulations and to make such interpretations and grant such reasonable exemptions for classes of transactions as may be necessary to achieve the purposes of RESPA. In enacting RESPA, Congress sought ''to insure that consumers . . . are provided with greater and more timely information on the nature and costs of the settlement process and protected from unnecessarily high settlement charges caused by certain abusive practices in some areas of the country.'' [22] RESPA section 19(a) has served as a broad source of authority to prescribe disclosures and substantive requirements to carry out the purposes of RESPA.

In developing rules under RESPA section 19(a), the Bureau has considered the purposes of RESPA. One purpose of RESPA is ''to effect certain changes in the settlement process for residential real estate that will result in more effective advance disclosure to home buyers and sellers of settlement costs.'' [23]

Dodd-Frank Act

Dodd-Frank Act section 1021. Section 1021(a) of the Dodd-Frank Act provides that the Bureau shall seek to implement and, where applicable, enforce Federal consumer financial law consistently for the purpose of ensuring that all consumers have access to markets for consumer financial services and that markets for consumer financial products and services are fair, transparent, and competitive.[24] In addition, section 1021(b) of the Dodd-Frank Act provides that the Bureau is authorized to exercise its authorities under Federal consumer financial law for the purposes of ensuring, with respect to consumer financial products and services, that, among other things: (1) Consumers are provided with timely and understandable information to make responsible decisions about financial transactions; (2) consumers are protected from unfair, deceptive, or abusive acts and practices and from discrimination; (3) outdated, unnecessary, or unduly burdensome regulations are regularly identified and addressed in order to reduce unwarranted regulatory burdens; (4) Federal consumer financial law is enforced consistently, without regard to the status of a person as a depository institution, in order to promote fair competition; and (5) markets for consumer financial products and services operate transparently and efficiently to facilitate access and

[18] RESPA sections 4(b), 5(c); 12 U.S.C. 2603(b), 2604(c).

[19] TILA section 102(a); 15 U.S.C. 1601(a).

[20] TILA section 102(a).

[21] 15 U.S.C. 1639. TILA section 129 contains requirements for certain high-cost mortgages, established by the Home Ownership and Equity Protection Act (HOEPA), which are commonly called HOEPA loans.

[22] RESPA section 2(a); 12 U.S.C. 2601(a).

[23] RESPA section 2(b); 12 U.S.C. 2601(b).

[24] 12 U.S.C. 5511(a).

innovation.[25] In developing this rulemaking, the Bureau has sought to ensure that it is consistent with the purposes of Dodd-Frank Act section 1021(a) and with the objectives of Dodd-Frank Act section 1021(b), specifically including Dodd-Frank Act section 1021(b)(1) and (3).

Dodd-Frank Act section 1022(b). Section 1022(b)(1) of the Dodd-Frank Act authorizes the Bureau to prescribe rules ''as may be necessary or appropriate to enable the Bureau to administer and carry out the purposes and objectives of the Federal consumer financial laws, and to prevent evasions thereof.'' [26] Section 1022(b)(2) of the Dodd-Frank Act prescribes certain standards for rulemaking that the Bureau must follow in exercising its authority under section 1022(b)(1).[27] As discussed above, TILA and RESPA are Federal consumer financial laws. Accordingly, in finalizing this rule, the Bureau is exercising its authority under Dodd-Frank Act section 1022(b) to prescribe rules under TILA, RESPA, and title X of the Dodd-Frank Act that carry out the purposes and objectives and prevent evasion of those laws. See part VI for a discussion of the Bureau's standards for rulemaking under Dodd-Frank Act section 1022(b)(2).

Dodd-Frank Act section 1032. Section 1032(a) of the Dodd-Frank Act provides that the Bureau ''may prescribe rules to ensure that the features of any consumer financial product or service, both initially and over the term of the product or service, are fully, accurately, and effectively disclosed to consumers in a manner that permits consumers to understand the costs, benefits, and risks associated with the product or service, in light of the facts and circumstances.'' [28] The authority granted to the Bureau in section 1032(a) is broad and empowers the Bureau to prescribe rules regarding the disclosure of the ''features'' of consumer financial products and services generally. Accordingly, the Bureau may prescribe rules containing disclosure requirements even if other Federal consumer financial laws do not specifically require disclosure of such features.

Dodd-Frank Act section 1032(c) provides that, in prescribing rules pursuant to section 1032, the Bureau ''shall consider available evidence about consumer awareness, understanding of, and responses to disclosures or communications about the risks, costs, and benefits of consumer financial products or services.'' [29] Accordingly, in developing the 2013 TILA–RESPA Final Rule and amendments thereto under Dodd-Frank Act section 1032(a), the Bureau considered available studies, reports, and other evidence about consumer awareness, understanding of, and responses to disclosures or communications about the risks, costs, and benefits of consumer financial products or services. Moreover, the Bureau has considered the evidence developed through its consumer testing of the integrated disclosures as well as prior testing done by the Board and HUD regarding TILA and RESPA disclosures. See part III of the 2013 TILA–RESPA Final Rule for a discussion of the Bureau's consumer testing.[30]

Dodd-Frank Act section 1405(b). Section 1405(b) of the Dodd-Frank Act provides that, ''[n]otwithstanding any other provision of [title XIV of the Dodd-Frank Act], in order to improve consumer awareness and understanding of transactions involving residential mortgage loans through the use of disclosures, the Bureau may, by rule, exempt from or modify disclosure requirements, in whole or in part, for any class of residential mortgage loans if the Bureau determines that such exemption or modification is in the interest of consumers and in the public interest.'' [31] Section 1401 of the Dodd-Frank Act, which amends TILA section 103(cc)(5), 15 U.S.C. 1602(cc)(5), generally defines a residential mortgage loan as any consumer credit transaction that is secured by a mortgage on a dwelling or on residential real property that includes a dwelling other than an open-end credit plan or an extension of credit secured by a consumer's interest in a timeshare plan. Notably, the authority granted by section 1405(b) applies to ''disclosure requirements'' generally and is not limited to a specific statute or statutes. Accordingly, Dodd-Frank Act section 1405(b) is a broad source of authority to exempt from or modify the disclosure requirements of TILA and RESPA.

In developing rules for residential mortgage loans under Dodd-Frank Act section 1405(b), the Bureau has considered the purposes of improving consumer awareness and understanding of transactions involving residential mortgage loans through the use of disclosures and the interests of consumers and the public.

V. Section-by-Section Analysis

A. General—Non-Substantive Corrections

The Bureau proposed non-substantive corrections, including citation and cross-reference updates and wording changes for clarification purposes, in Regulation X and Regulation Z. The Bureau received comments that supported these proposed changes. The Bureau is adopting as proposed the non-substantive corrections to regulatory text in §§ 1024.5(d), 1026.37(o), and 1026.38(e); commentary to §§ 1026.37(b), (c), and (h) and 1026.38(a) and (e); and appendix H. The Bureau also is making non-substantive clarifications to the commentary to § 1026.38(g) for the reasons discussed in the section-by-section analysis below, as well as other, non-substantive corrections and wording clarifications to regulatory text in § 1026.38(j) and (t).

B. Regulation Z

Section 1026.19—Certain Mortgage and Variable-Rate Transactions

19(e) Mortgage Loans Secured By Real Property—Early Disclosures

19(e)(3) Good Faith Determination For Estimates of Closing Costs

19(e)(3)(iv) Revised Estimates

19(e)(3)(iv)(D) Interest Rate Dependent Charges

Proposed Rule

Pursuant to the Bureau's authority as described in the 2012 TILA–RESPA Proposal [32] and the 2013 TILA–RESPA Final Rule [33], the Bureau proposed to amend § 1026.19(e)(3)(iv)(D) to modify the timing requirement for creditors to provide a revised Loan Estimate to consumers when the interest rate is locked after the provision of the Loan Estimate. Section § 1026.19(e)(3)(iv)(D), as adopted by the 2013 TILA–RESPA Final Rule, requires creditors to provide the revised disclosure with the revised interest rate, the points disclosed pursuant to § 1026.37(f)(1), lender credits, and any other interest rate dependent charges and terms on the date the interest rate is locked. The Bureau proposed to change the timing requirement to the next business day after the rate is locked. As discussed in detail below, this final rule amends § 1026.19(e)(3)(iv)(D) to provide creditors with three business days, rather than one business day, to provide the revised Loan Estimate. This amendment harmonizes the timing requirement in § 1026.19(e)(3)(iv)(D)

[25] 12 U.S.C. 5511(b).

[26] 12 U.S.C. 5512(b)(1).

[27] 12 U.S.C. 5512(b)(2).

[28] 12 U.S.C. 5532(a).

[29] 12 U.S.C. 5532(c).

[30] 78 FR 79730, 79741 (Dec. 31, 2013).

[31] 15 U.S.C. 1601 note.

[32] 77 FR 51116, 51165–51169 (Aug. 23, 2012).

[33] 78 FR 79730, 79816–79822 (Dec. 31, 2013).

with other timing requirements for redisclosure adopted in the 2013 TILA–RESPA Final Rule and is consistent with current law and practice pursuant to § 1024.7(f)(5), under which creditors have three business days from rate lock to provide a revised Good Faith Estimate.

As discussed in the proposal, the Bureau proposed to allow creditors an additional business day to provide the revised Loan Estimate because it received information suggesting that creditors may not control when a rate is locked to the same extent the Bureau believed when it issued the 2013 TILA–RESPA Final Rule. The Bureau also learned that operational challenges due to the same-day redisclosure requirement in § 1026.19(e)(3)(iv)(D) could restrict the flexibility many creditors currently provide consumers to lock their interest rates and could result in creditors imposing time restrictions on when consumers may lock their rates (*e.g.,* ''cut-off'' times). Given the potential consequences of losing the ability to reset the applicable tolerances for interest rate dependent charges pursuant to § 1026.19(e)(3), the Bureau believes creditors could respond to the same-day timing requirement adopted by the 2013 TILA–RESPA Final Rule by limiting consumers' ability to lock rates at the time of their choice and imposing cut-off times that only allow consumers to lock interest rates on business days during preset hours. Accordingly, the Bureau reconsidered the same-day redisclosure requirement and proposed to amend § 1026.19(e)(3)(iv)(D) and its commentary to adjust this timing requirement.

Currently, some creditors permit the consumer, or loan originator working on behalf of the consumer, to lock the interest rate unilaterally at any point during a business day or even after normal business hours. The Bureau believes this flexibility is beneficial to consumers because it allows them to lock interest rates on a date and time of their choosing, without time restrictions imposed by the creditor. The same-day redisclosure requirement could reduce consumers' ability to determine when their rates are locked, if creditors respond by either imposing cut-off times after which consumers are unable to lock their interest rates until the next business day or refusing to lock the rate contractually until the business day after the consumer requests a rate lock.

As explained in the proposal, the Bureau believes that, if creditors impose cut-off times, consumers would be limited to certain times of day that they or their representatives could lock interest rates. This could result in consumers, particularly those who are in different time zones than their creditors, missing the applicable time window to lock on a day of their choice and having to wait until the next business day to do so. Alternatively, the Bureau believes some creditors may be able to provide a revised Loan Estimate on the date that a rate lock agreement is formed if those creditors allow consumers to request the rate only at a time of the creditors' choosing and then later execute or form a binding agreement with the consumers. However, the Bureau believes this result could present other challenges to consumers. For example, consumers may be confused if they believe they are locking an interest rate at a certain time but in fact are merely requesting rates that are not contractually binding until the creditor accepts the request at some later time. Accordingly, the Bureau stated in the proposal that it believed the same-day redisclosure requirement warranted reconsideration because it could create implementation challenges to industry that may result in reduced consumer flexibility in locking or resetting floating interest rates.

The Bureau maintained, however, that the same-day redisclosure requirement could benefit consumers by allowing them to have more time to evaluate the revised Loan Estimate. The Bureau also noted that creditors should be able to provide a revised Loan Estimate based on interest rate dependent charges more quickly in comparison to other types of redisclosures because creditors may not need to obtain information from other parties, such as third-party vendors. Accordingly, the Bureau proposed a next-business-day timing requirement, on the ground that providing for redisclosure on the next business day after the rate is locked could provide consumer benefits without the operational challenges to creditors presented by a same-day redisclosure requirement.

The Bureau sought comment on whether consumers could be harmed if creditors were given until the next business day to provide a revised Loan Estimate or if consumers would benefit from the same-day requirement. Additionally, the Bureau sought comment on whether a single business day is sufficient for creditors to deliver or place in the mail a revised Loan Estimate while preventing any unintended consequences, such as restricting the timing flexibility of consumers to lock the interest rate, and whether consumers would be harmed if redisclosures were permitted more than one business day after the interest rate was locked.

Comments

The Bureau received comments from industry trade associations, creditors, technology vendors, and other industry representatives addressing these proposed changes. All comments supported the proposal to relax the timing requirement, but most advocated for extending it to three business days. The Bureau received no comments that opposed the proposal or that raised concerns about extending the timing requirement beyond the next business day.

Most commenters argued that a next-business-day requirement presents many of the same operational challenges to industry as a same-day redisclosure requirement. For example, a credit union stated that one business day does not allow creditors sufficient time to address potential software issues or conduct quality control review of a revised Loan Estimate. Another industry commenter stated that it takes time to update fees and verify that the correct information is printed on the disclosures generated by older loan operating systems. A national banking trade association noted that consumers with ''self-lock'' capability commonly make mistakes in locking rates or attempt to lock through an incorrect channel, which requires creditors to verify the consumer's intent to lock the rate. Consumers also may leave an ambiguous voicemail or email that the creditor needs to verify is a rate lock request. This commenter explained that a single business day is not always enough time for a creditor both to verify the consumer's intent and also to issue a revised disclosure. Consequently, a next-business-day deadline could still result in creditors imposing cut-off times for consumers to lock interest rates.

Additionally, trade associations, banks, and an individual industry commenter working for a creditor stated that smaller institutions in particular may have difficulty redisclosing on the next business day after the rate lock due to staffing level constraints. Commenters noted that, in some cases, a single individual may be responsible for creating the disclosures, and staffing levels may also be affected by inclement weather, Saturday business hours, and employee training. A credit union commenter noted that the next-business-day requirement could burden small lending operations that do not have a full-time employee to prepare disclosures on Saturdays and around the holidays. Accordingly, these small

creditors may require additional staff to meet the next-business-day delivery requirement.

Commenters argued that expanding the timing requirement to three business days would facilitate compliance for industry and consumer understanding because it would provide consistent timing rules for redisclosures. A bank stated that the three-business-day timeframe is the standard in operating procedures and systems and is also well-established among industry professionals. Commenters noted that a next-business-day requirement for rate locks would result in different timing requirements for rate-lock-based redisclosure as opposed to other events that permit redisclosure, such as ''changed circumstances'' described in § 1026.19(e)(3)(iv)(A). These other triggering events for redisclosure may occur around the time of a rate lock. Commenters noted that consumer confusion could result if a changed circumstance occurs on the same date that the rate is locked and the creditor needs to produce two different revised disclosures on two different dates. These commenters stated that the provision of two revised Loan Estimates to a consumer within the same week could cause confusion as to which Loan Estimate reflects the most recent and accurate information.

Finally, commenters questioned the benefit to consumers of receiving a revised Loan Estimate for rate-lock-related changes two business days earlier than is required for other redisclosure events, such as ''changed circumstances'' described in § 1026.19(e)(3)(iv)(A). Commenters argued that allowing creditors two extra business days to provide a revised Loan Estimate does not pose risks or harms to consumers. A national banking trade association stated that consumers get little benefit from receiving the revised Loan Estimate earlier because a consumer has most likely completed the shopping process by the time the consumer requests a rate lock. These commenters generally asserted that the benefit to consumers, if any, of receiving the revised disclosure earlier does not outweigh the costs associated with the requirement to provide redisclosures by the next business day.

Final Rule

The Bureau is adopting proposed § 1026.19(e)(3)(iv)(D), modified to extend the timing requirement to no later than three business days after the date the interest rate is locked. The Bureau also is making conforming modifications to proposed comments 19(e)(3)(iv)(D)–1 and 19(e)(4)(i)–2, which provide illustrations of the timing requirement.

The Bureau considered the comments received and determined that extending the timing requirement to no later than three business days after the interest rate is locked will reduce the burden on industry and facilitate compliance without harming consumers, and also may provide benefits to consumers. The Bureau believes that creditors would experience operational challenges in providing redisclosures by the next business day that could be alleviated by extending the timing requirement for redisclosure to three business days. Moreover, extending the redisclosure deadline to three business days after the rate is locked harmonizes the timing requirement in § 1026.19(e)(3)(iv)(D) with the other timing requirements for redisclosure. Harmonizing the redisclosure requirements could facilitate compliance and compliance monitoring and could reduce consumer confusion. Furthermore, allowing creditors to have three business days from the date the rate is locked to issue a revised disclosure would enable small creditors with limited staffing levels to prepare and review revised disclosures without the difficulties and challenges that may have arisen under the proposed rule.

The Bureau does not believe a risk of potential consumer harm arises in extending the period for redisclosure to three business days. While the Bureau expressed, in the preambles to the 2012 TILA–RESPA Proposal and the 2013 TILA–RESPA Final Rule, a concern about potential rent-seeking behavior through rate arbitrage (*e.g.,* delaying the rate lock in order to increase the interest rate offered to the consumer or otherwise increase the spread between market interest rates and the rate offered the consumer), the Bureau also acknowledged that it had seen no evidence nor received any data or reports suggesting such a practice under the existing Regulation X disclosure practice, which employs a three-business-day deadline. The Bureau has not identified any risks to consumers—nor were any raised by commenters in response to the Bureau's request for comment on potential risks to consumers.

Accordingly, the Bureau is adopting § 1026.19(e)(3)(iv)(D) to state that, no later than three business days after the date the interest rate is locked, the creditor shall provide a revised version of the disclosures required under § 1026.19(e)(1)(i) to the consumer with the revised interest rate, the points disclosed pursuant to § 1026.37(f)(1), lender credits, and any other interest rate dependent charges and terms. The Bureau also is adopting modified versions of proposed comments 19(e)(3)(iv)(D)–1 and 19(e)(4)(i)–2 to reflect this change.

Section 1026.36—Prohibited Acts or Practices and Certain Requirements for Credit Secured by a Dwelling

36(g) Name and NMLSR ID on Loan Documents

36(g)(2)

36(g)(2)(ii)

The Bureau proposed to amend § 1026.36(g)(2)(ii) to conform to the requirements adopted by the 2013 Loan Originator Final Rule. Section 1026.36(g)(2) lists the specific loan documents that must contain the loan originator's name and NMLSR ID. When the Bureau issued the 2013 Loan Originator Final Rule in January 2013, it reserved § 1026.36(g)(2)(ii) for references to the integrated disclosures the Bureau was expecting to adopt in the final rule implementing the 2012 TILA–RESPA Proposal. The disclosures referenced are those required by § 1026.19(e) and (f) as adopted by the 2013 TILA–RESPA Final Rule.

The Bureau proposed amending § 1026.36(g)(2)(ii) to include the disclosures described in § 1026.19(e) and (f), as adopted by the 2013 TILA–RESPA Final Rule. The Bureau received comments from industry and trade associations in support of this proposed change and none that opposed it or suggested further modifications. Accordingly, the Bureau is adopting § 1026.36(g)(2)(ii) as proposed.

Section 1026.37—Content of Disclosure for Certain Mortgage Transactions (Loan Estimate)

37(m) Other Considerations

Proposed Rule

The Bureau proposed adding § 1026.37(m)(8) to provide for a statement notifying the consumer that a revised disclosure may be provided for a construction loan in a transaction involving new construction where the creditor reasonably expects settlement to occur more than 60 days after the provision of the initial Loan Estimate.[34] As explained in the proposal, § 1026.19(e)(3)(iv)(F) provides that a creditor may issue revised disclosures at any time prior to 60 days before consummation if the original disclosure clearly and conspicuously states that a revised disclosure may be provided.

[34] Transactions covered by this provision are described in § 1026.19(e)(3)(iv)(F) and comment 19(e)(3)(iv)(F)–1.

Except as provided by § 1026.19(f), the creditor may not issue a revised disclosure if the original disclosure did not contain such a statement.

The Bureau proposed to add new § 1026.37(m)(8), under the master heading ''Additional Information About This Loan'' and the heading ''Other Considerations,'' and new comment 37(m)(8)–1 to state that placement of the language in this section of the form satisfies the ''clear and conspicuous'' standard set forth in § 1026.19(e)(3)(iv)(F). The Bureau stated that it believes the § 1026.19(e)(3)(iv)(F) language is appropriately placed in this part of the disclosure mandated by § 1026.37, but sought comment on whether the language would be more appropriately placed elsewhere on the form.

Comments

The Bureau received comments from trade associations, creditors, and a technology vendor. All commenters supported the proposal. Commenters generally stated that including the language concerning construction loans in transactions that involve a new construction on the Loan Estimate should facilitate construction lending. Most agreed with the proposed content and placement of the language. A few commenters made minor suggestions for additional clarity or suggested alternative placement on the form. For example, two trade associations recommended that the Bureau provide additional clarifying language on the nature of the disclosure, as well as additional clarification regarding placement on the form or provision of a sample disclosure illustrating this language on the form.

Final Rule

The Bureau has considered the comments and is adopting § 1026.37(m)(8) and comment 37(m)(8)–1 as proposed, with minor wording changes for clarification. The Bureau believes that the proposed language and its placement is appropriate and allows creditors to preserve their ability to redisclose estimates for construction loans in transactions that involve a new construction, as provided in § 1026.19(e)(3)(iv)(F). With respect to the requests for additional clarifying language or a sample disclosure illustrating the language on the form, the Bureau does not believe that additional language or a new sample disclosure is necessary. The Bureau notes that proposed § 1026.37(m)(8) and comment 37(m)(8)–1 contain language already promulgated under § 1026.19(e)(3)(iv)(F) and would not require any additional consumer testing. Further, comment 37(m)(8)–1 provides that placement of the new construction language in this section of the Loan Estimate satisfies the clear and conspicuous standard set forth in § 1026.19(e)(3)(iv)(F).

Section 1026.38—Content of Disclosure for Certain Mortgage Transactions (Closing Disclosure)

38(g) Closing Cost Details; Other Costs

38(g)(2) Prepaids

Section 1026.38(g)(2) requires creditors to disclose certain prepaid items disclosed on the Loan Estimate pursuant to § 1026.37(g)(2), including prepaid interest. Neither the regulation nor the model Closing Disclosure forms in appendix H provide for disclosure of the interest rate for prepaid interest. Rather, the model forms provide that prepaid interest is to be disclosed on the Closing Disclosure as a per diem sum amount along with a range of dates, without disclosing the applicable interest rate, prescribed as: ''Prepaid Interest (___per day from _____to _____).''

One industry commenter noted that comment 38(g)(2)–4, which describes the interest rate that should be used to calculate per diem interest, implies that the interest rate must be disclosed pursuant to § 1026.38(g)(2). This commenter recommended that the Bureau clarify that creditors are not required to disclose an interest rate for purposes of this disclosure.

The Bureau agrees that the interest rate should not be disclosed in the prepaid interest disclosure pursuant to § 1026.38(g)(2). Rather, creditors should disclose amounts of prepaid interest as per diem sum amounts based on the interest rate disclosed under § 1026.38(b), which is determined by § 1026.37(b). Accordingly, the Bureau is amending comment 38(g)(2)–4 to clarify that the comment addresses the interest rate that is used to determine amounts of prepaid interest, but does not require disclosure of the interest rate itself.

VI. Dodd-Frank Act Section 1022(b)(2)

A. Overview

In developing this rule, the Bureau has considered potential benefits, costs, and impacts.[35] The Bureau has consulted, or offered to consult with, the prudential regulators, the Securities and Exchange Commission, HUD, the Federal Housing Finance Agency, the Federal Trade Commission, the U.S. Department of Veterans Affairs, the U.S. Department of Agriculture, and the Department of the Treasury, including regarding consistency with any prudential, market, or systemic objectives administered by such agencies.

The Bureau is adding or amending two main provisions in this rule. First, the Bureau is amending § 1026.19(e)(3)(iv)(D) which, as adopted by the 2013 TILA–RESPA Final Rule, requires creditors to provide a revised version of the disclosures required under paragraph § 1026.19(e)(1)(i) to the consumer with the revised interest rate, the points disclosed pursuant to § 1026.37(f)(1), lender credits, and any other interest rate dependent charges and terms, on the date the rate is locked. As discussed in the section-by-section analysis above, the Bureau believes that this requirement, if unchanged, is likely to result in at least some creditors imposing cut-off times that only allow consumers to lock their interest rates only on business days and during preset hours due to the costs associated with providing the disclosure to the consumer on the date when the interest rate is locked. The Bureau believes that consumers are unlikely to choose creditors based on the creditors' policies regarding interest rate locks and, moreover, that consumers would be unlikely to know whether their creditors will allow interest rate locks at flexible times until the consumer actually attempts to lock the rate. Thus, consumers of creditors who will not allow locks at flexible times will experience inconvenience. Given that consumers are unlikely to know of this practice until they attempt to lock the rate, this practice is unlikely to be corrected or influenced by market competition.

Given these concerns, the Bureau proposed to relax the same-day timing requirement and give creditors until the next business day after the rate is locked to provide a revised version of the disclosures to consumers. As described in the section-by-section analysis above, in light of the comments received, the Bureau is instead finalizing an amendment to the provision that affords creditors three business days after the rate is locked to provide a revised version of the disclosures.

In response to the proposal, several commenters noted that the proposed next-business-day requirement presents many of the same operational challenges

[35] Specifically, section 1022(b)(2)(A) of the Dodd-Frank Act calls for the Bureau to consider the potential benefits and costs of a regulation to consumers and covered persons, including the potential reduction of access by consumers to consumer financial products or services; the impact on depository institutions and credit unions with $10 billion or less in total assets as described in section 1026 of the Dodd-Frank Act; and the impact on consumers in rural areas.

to industry as a same-day redisclosure requirement. These commenters suggested that three business days would provide adequate time for creditors to issue revised disclosures, but that one business day would not. No commenters suggested that extending the timing requirement beyond the next business day would impact consumers adversely.

The Bureau is adopting proposed § 1026.19(e)(3)(iv)(D), modified to extend the timing requirement to no later than three business days after the date the interest rate is locked. The change will harmonize the timing requirement in § 1026.19(e)(3)(iv)(D) with the other timing requirements for redisclosure and thus may facilitate compliance and compliance monitoring and also may reduce consumer confusion. Small creditors, in particular, may find it easier to comply with a three-day redisclosure timing requirement. Finally, the Bureau believes that the next-business-day requirement might not give creditors adequate time to confirm the consumer's intentions where the consumer's attempts to lock the rate through an incorrect channel, or the communication requesting a rate lock (*e.g.,* a voicemail or email left with the creditor) is ambiguous. The Bureau does not possess the data necessary to estimate the impact of the change to three full business days quantitatively.

Second, the Bureau is adding a new provision that allows for a specific statement related to construction loans in transactions involving new construction to be placed on the Loan Estimate. For these loans, the 2013 TILA–RESPA Final Rule requires that creditors include a statement on the Loan Estimate in order to preserve their ability to redisclose estimates prior to settlement. However, this language is found only in § 1026.19(e)(3)(iv)(F), which governs timing and procedure, and no corresponding provision exists in the section that governs the content of the disclosures. Without this new provision, creditors will have lower incentives to originate these construction loans, especially if they believe that the Loan Estimate might need to be revised. Consumers either will not be able to get a commitment to fund construction loans until most of the uncertainty about the terms is resolved or creditors will price in a premium, to account for the creditor's inability to redisclose estimates after the initial 60 days.

The Bureau believes that both amendments, extending the time for rate lock redisclosure and adding language on new construction loans, provide options that a financial institution is free to undertake or not to undertake, and thus present no cost to creditors. The Bureau believes that both provisions present some benefits to creditors. The Bureau believes that the first provision could present both benefits and costs to consumers, while the second provision presents benefits to consumers.

B. Potential Benefits and Costs to Consumers and Covered Persons Relaxing the Same-day Redisclosure Requirement for Interest Rate Locks

This amendment provides an option to creditors: creditors may continue to provide revised disclosures on the date the rate is locked if they so choose. Therefore, some creditors will benefit from this amendment by not having to redisclose on the date the rate is locked, while other creditors may continue to redisclose on the date the rate is locked if they so choose, and are as well off as they would have been without this amendment. All creditors will enjoy increased flexibility. No creditors will face increased costs.

Under the current rule, the Bureau believes that some creditors could continue offering flexible time periods for interest rate locks, but others, for example, might choose to impose cut-off times that only permit consumers to lock interest rates on business days and at times early in the day in order to ease their compliance costs. Other creditors might change their existing practices and allow consumers to request a rate lock at any time, but only contractually lock the interest rate on the business day after the consumer requests a rate lock, instead of on the date the rate lock is requested. Consumers of these creditors could benefit from this amendment through the increased convenience of being able to lock the interest rate at more flexible times.

Consumers of creditors that would continue to allow flexibility in locking interest rates might experience a cost from the amendment: their revised Loan Estimate may not be provided until up to three business days later. However, some of these creditors may still provide a revised Loan Estimate on the date that the interest rate is locked, for example, because they have already put in place the system to provide the redisclosures on the date the rate is locked and do not want to change their systems. If the creditor does not provide the revised Loan Estimate until up to three business days later, then the potential consumer harm is the time difference between when the consumer would receive the revised disclosures.

While the Bureau does not possess any data, and is not aware of a source to obtain data, that would enable it to report the quantitative effects of this amendment, it believes any harm to consumers from the extension of the rate-lock-redisclosure timing requirement is minor. Under current law and practice pursuant to § 1024.7(f)(5), creditors have three business days from rate lock to redisclose, and the Bureau has not received any data or reports of consumer harm resulting from a three business day turnaround time for redisclosure.[36]

Specific Language on Construction Loans' Loan Estimates

The Bureau believes that without this new provision, creditors that ordinarily originate construction loans in transactions involving a new construction would be forced either to originate only those construction loans for which the creditor is certain that no redisclosure prior to settlement will be necessary, or to price in the risk of having to cure any amounts charged over the estimates initially provided more than 60 days before settlement, absent some other type of a redisclosure triggering event. Creditors that choose the second option, including the estimated cost of cure in their pricing, risk miscalibrating the pricing and losing consumers to less risk-averse competitors or facing unanticipated costs if they are required to cure any amounts that the consumer is charged for settlement charges that exceed the initial estimated amounts. In all events, creditors risk losing consumers to other options. Accordingly, this new provision presents benefits to the creditors that decide to originate these construction loans and presents no costs.

As noted above, under the current rule, a consumer who needs a construction loan may only be able to obtain a construction loan where the creditor has priced in the risk of having to cure any amounts charged over the estimates initially provided over 60 days before settlement, which would be a cost to consumers. On the other hand, without this new provision, the Loan Estimate would have provided consumers more certainty concerning loan terms and settlement costs because creditors would be limited in their ability to redisclose and change the terms or costs of the loan. Where creditors misgauged the initial Loan Estimate, consumers might be entitled to receive a cure. However, the Bureau

[36] See 77 FR 51116, 51173 (Aug. 23, 2012).

believes that these benefits to consumers are marginal, given that construction loans are inherently volatile and subject to events beyond the creditor's control. As a result, the Bureau believes that creditors barred from redisclosing a Loan Estimate provided more than 60 days prior to consummation would be less likely to originate such loans and that any increased certainty, where creditors were willing to commit to new construction loans well in advance of consummation, would come at the price of increased costs to consumers.

The Bureau does not possess any data, and is not aware of a source to obtain data, that would enable it to report the number of transactions affected or to quantify the extent of creditor and consumer benefits.

C. Impact on Covered Persons With No More Than $10 Billion in Assets

The amendment regarding interest rate locks could have two particular effects on covered persons with no more than $10 billion in assets. First, covered persons with no more than $10 billion in assets are more likely to benefit from this provision to the extent that redisclosure of the Loan Estimate on the date the interest rate is locked may require software and business processes upgrade costs. Larger covered persons are more likely to originate a sufficient number of transactions to make it worth implementing these changes, as opposed to choosing to offer interest rate locks to consumers only at set times during business hours.

In addition, creditors located in more than one time zone might have to offer a shorter preset adjustment time to some customers (for example, if the location of the rate lock operation is in the Eastern Time zone), but covered persons with no more than $10 billion in assets are more likely to be located in a single time zone. From this perspective, covered persons with no more than $10 billion in assets are less likely to benefit from this amendment. The Bureau does not possess data to quantify either of the two possible aforementioned effects of the provision on covered persons with no more than $10 billion in assets.

The Bureau believes that covered persons with no more than $10 billion in assets will not be differentially affected by the new provision regarding construction loans.

D. Impact on Access to Credit

The Bureau does not believe that there will be an adverse impact on access to credit resulting from either of the changes adopted by this final rule. There may be an expansion of access to credit, if the second provision facilitates the making of construction loans as the Bureau anticipates.

E. Impact on Rural Areas

The Bureau believes that rural areas might benefit more than urban areas from the provision for construction loans and the amendment to the existing provision for rate lock redisclosure. Competition may drive creditors to originate construction loans despite the possible redisclosure issues and to provide interest rate locks throughout the day despite the same-day redisclosure requirement. Thus, rural areas are more likely to benefit from these two provisions, to the extent that there are fewer creditors operating in rural areas than in urban areas and to the extent that competition would affect these issues.

VII. Regulatory Flexibility Analysis

The Regulatory Flexibility Act (the RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996, requires each agency to consider the potential impact of its regulations on small entities, including small businesses, small governmental units, and small nonprofit organizations. The RFA defines a ''small business'' as a business that meets the size standard developed by the Small Business Administration pursuant to the Small Business Act. The RFA generally requires an agency to conduct an initial regulatory flexibility analysis (IRFA) and a final regulatory flexibility analysis (FRFA) of any rule subject to notice-and-comment rulemaking requirements, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The Bureau also is subject to certain additional procedures under the RFA involving the convening of a panel to consult with small business representatives prior to proposing a rule for which an IRFA is required.

An IRFA is not required for this rule because it will not have a significant economic impact on any small entities. The Bureau does not expect the rule to impose costs on covered persons. All methods of compliance under current law will remain available to small entities when these provisions become effective. Thus, a small entity that is in compliance with current law need not take any additional action.

Accordingly, the undersigned certifies that this final rule will not have a significant economic impact on a substantial number of small entities.

VIII. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501 *et seq.*), Federal agencies are generally required to seek the Office of Management and Budget (OMB) approval for information collection requirements prior to implementation. The collections of information related to Regulations Z and X have been previously reviewed and approved by OMB in accordance with the PRA and assigned OMB Control Numbers 3170–0015 (Regulation Z) and 3170–0016 (Regulation X). Under the PRA, the Bureau may not conduct or sponsor and, notwithstanding any other provision of law, a person is not required to respond to an information collection unless the information collection displays a valid control number assigned by OMB.

The Bureau has determined that this final rule would not impose any new or revised information collection (recordkeeping, reporting, or disclosure) requirements on covered entities or members of the public that would constitute collections of information requiring OMB approval under the PRA.

List of Subjects

12 CFR Part 1024

Condominiums, Consumer protection, Housing, Mortgage servicing, Mortgages, Reporting and recordkeeping requirements.

12 CFR Part 1026

Advertising, Consumer protection, Credit, Credit unions, Mortgages, National banks, Recordkeeping and recordkeeping requirements, Reporting, Savings associations, Truth in lending.

Authority and Issuance

For the reasons set forth in the preamble, the Bureau amends Regulation X, 12 CFR part 1024, and Regulation Z, 12 CFR part 1026, as set forth below:

PART 1024—REAL ESTATE SETTLEMENT PROCEDURES ACT (REGULATION X)

■ 1. The authority citation for part 1024 continues to read as follows:

Authority: 12 U.S.C. 2603–2605, 2607, 2609, 2617, 5512, 5532, 5581.

Subpart A—General Provisions

■ 2. Section 1024.5 is amended by revising paragraph (d) introductory text to read as follows:

§ 1024.5 Coverage of RESPA.

* * * * *

(d) *Partial exemptions for certain mortgage loans.* Sections 1024.6, 1024.7, 1024.8, 1024.10, and 1024.33(a) do not apply to a federally related mortgage loan:

* * * * *

PART 1026—TRUTH IN LENDING (REGULATION Z)

■ 3. The authority citation for part 1026 continues to read as follows:

Authority: 12 U.S.C. 2601, 2603–2605, 2607, 2609, 2617, 5511, 5512, 5532, 5581; 15 U.S.C. 1601 *et seq.*

Subpart C—Closed-End Credit

■ 4. Section 1026.19 is amended by revising paragraph (e)(3)(iv)(D) to read as follows:

§ 1026.19 Certain mortgage and variable-rate transactions.

* * * * *

(e) * * *

(3) * * *

(iv) * * *

(D) *Interest rate dependent charges.* The points or lender credits change because the interest rate was not locked when the disclosures required under paragraph (e)(1)(i) of this section were provided. No later than three business days after the date the interest rate is locked, the creditor shall provide a revised version of the disclosures required under paragraph (e)(1)(i) of this section to the consumer with the revised interest rate, the points disclosed pursuant to § 1026.37(f)(1), lender credits, and any other interest rate dependent charges and terms.

* * * * *

Subpart E—Special Rules for Certain Home Mortgage Transactions

■ 5. Section 1026.36 is amended by adding paragraph (g)(2)(ii) to read as follows:

§ 1026.36 Prohibited acts or practices and certain requirements for credit secured by a dwelling.

* * * * *

(g) * * *

(2) * * *

(ii) The disclosures required by § 1026.19 (e) and (f);

* * * * *

■ 6. Section 1026.37 is amended by adding paragraph (m)(8) and revising paragraph (o)(4)(i)(A) to read as follows:

§ 1026.37 Content of disclosures for certain mortgage transactions (Loan Estimate).

* * * * *

(m) * * *

(8) *Construction loans.* In transactions involving new construction, where the creditor reasonably expects that settlement will occur more than 60 days after the provision of the loan estimate, at the creditor's option, a clear and conspicuous statement that the creditor may issue a revised disclosure any time prior to 60 days before consummation, pursuant to § 1026.19(e)(3)(iv)(F).

* * * * *

(o) * * *

(4) * * *

(i) * * *

(A) The dollar amounts required to be disclosed by paragraphs (b)(6) and (7), (c)(1)(iii), (c)(2)(ii) and (iii), (c)(4)(ii), (f), (g), (h), (i), and (l) of this section shall be rounded to the nearest whole dollar, except that the per diem amount required to be disclosed by paragraph (g)(2)(iii) of this section and the monthly amounts required to be disclosed by paragraphs (g)(3)(i) through (iii) and (g)(3)(v) of this section shall not be rounded.

* * * * *

■ 7. Section 1026.38 is amended by revising paragraphs (e)(3)(iii)(A), (e)(4)(ii), (j)(2)(iv), (k)(2)(v), (k)(2)(vi), and (t)(4)(ii) to read as follows:

§ 1026.38 Content of disclosures for certain mortgage transactions (Closing Disclosure).

* * * * *

(e) * * *

(3) * * *

(iii) * * *

(A) If the amount disclosed under paragraph (e)(3)(ii) of this section is different than the amount disclosed under paragraph (e)(3)(i) of this section (unless the difference is due to rounding), a statement of that fact, along with a statement that the consumer paid such amounts prior to consummation of the transaction; or

* * * * *

(4) * * *

(ii) Under the subheading ''Final,'' the total amount of payoffs and payments made to third parties disclosed pursuant to paragraph (t)(5)(vii)(B) of this section, to the extent known, disclosed as a negative number;

* * * * *

(j) * * *

(2) * * *

(iv) The amount of any existing loans that the consumer is assuming, or any loans subject to which the consumer is taking title to the property, labeled ''Existing Loan(s) Assumed or Taken Subject to'';

* * * * *

(k) * * *

(2) * * *

(v) The amount of any loan secured by a first lien on the property that will be paid off as part of the real estate closing, labeled ''Payoff of First Mortgage Loan'';

(vi) The amount of any loan secured by a second lien on the property that will be paid off as part of the real estate closing, labeled ''Payoff of Second Mortgage Loan'';

* * * * *

(t) * * *

(4) * * *

(ii) *Percentages.* The percentage amounts required to be disclosed under paragraphs (b), (f)(1), (n), and (o)(5) of this section shall not be rounded and shall be disclosed up to two or three decimal places. The percentage amount required to be disclosed under paragraph (o)(4) of this section shall not be rounded and shall be disclosed up to three decimal places. If the amount is a whole number then the amount disclosed shall be truncated at the decimal point.

* * * * *

■ 8. Appendix H to part 1026 is amended by revising the *Description* in H–24(G) to read as follows.

Appendix H to Part 1026—Closed-End Forms and Clauses

* * * * *

H–24(G) Mortgage Loan Transaction Loan Estimate—Modification to Loan Estimate for Transaction Not Involving Seller—Model Form

Description: This is a blank model Loan Estimate that illustrates the application of the content requirements in § 1026.37, with the optional alternative tables permitted by § 1026.37(d)(2) and (h)(2) for transactions without a seller. This form provides one variation of page one, four variations of page two, and four variations of page three, reflecting the variable content requirements in § 1026.37.

* * * * *

■ 9. In Supplement I to part 1026:

■ a. Under *Section 1026.19—Certain Mortgage and Variable-Rate Transactions:*

■ i. Under paragraph 19(e)(3)(iv)(D), paragraph 1 is revised.

■ ii. Under paragraph 19(e)(4)(i), paragraph 2 is revised.

■ b. Under *Section 1026.37—Content of Disclosures for Certain Mortgage Transactions (Loan Estimate):*

■ i. Under paragraph 37(b)(6), paragraph 1 is revised.

■ ii. Under paragraph 37(c)(2)(ii), paragraph 2 is revised.

■ ii. Under paragraph 37(c)(2)(iii), paragraph 1 is revised.

■ iii. Under paragraph 37(c)(4)(iv), paragraph 2 is revised.

■ iv. Under paragraph 37(h)(1)(ii), paragraph 1 is revised.

■ v. Under paragraph 37(m), the subheading *37(m)(8) Construction loans* and paragraph 1 are added.
■ vi. Under paragraph 37(n), paragraph 2 is revised.
■ c. Under *Section 1026.38—Content of Disclosures for Certain Mortgage Transactions (Closing Disclosure):*
■ i. Under paragraph 38(a)(3)(vi), paragraph 2 is added.
■ ii. Under paragraph 38(e)(1)(iii)(A), paragraph 1 is revised.
■ iii. Under paragraph 38(e)(2)(iii)(A), paragraph 3 is added.
■ iv. Under paragraph 38(g)(2), paragraph 4 is revised.

The revisions and additions read as follows:

Supplement I to Part 1026—Official Interpretations

* * * * *

Subpart C—Closed-End Credit

* * * * *

Section 1026.19—Certain Mortgage and Variable-Rate Transactions

* * * * *

19(e)(3)(iv)(D) Interest Rate Dependent Charges

1. *Requirements.* If the interest rate is not locked when the disclosures required by § 1026.19(e)(1)(i) are provided, a valid reason for revision exists when the interest rate is subsequently locked. No later than three business days after the date the interest rate is locked, § 1026.19(e)(3)(iv)(D) requires the creditor to provide a revised version of the disclosures required under § 1026.19(e)(1)(i) reflecting the revised interest rate, the points disclosed pursuant to § 1026.37(f)(1), lender credits, and any other interest rate dependent charges and terms. The following examples illustrate this requirement:

i. Assume a creditor sets the interest rate by executing a rate lock agreement with the consumer. If such an agreement exists when the original disclosures required under § 1026.19(e)(1)(i) are provided, then the actual points and lender credits are compared to the estimated points disclosed pursuant to § 1026.37(f)(1) and lender credits included in the original disclosures provided under § 1026.19(e)(1)(i) for the purpose of determining good faith pursuant to § 1026.19(e)(3)(i). If the consumer enters into a rate lock agreement with the creditor after the disclosures required under § 1026.19(e)(1)(i) were provided, then § 1026.19(e)(3)(iv)(D) requires the creditor to provide, no later than three business days after the date that the consumer and the creditor enter into a rate lock agreement, a revised version of the disclosures required under § 1026.19(e)(1)(i) reflecting the revised interest rate, the points disclosed pursuant to § 1026.37(f)(1), lender credits, and any other interest rate dependent charges and terms. Provided that the revised version of the disclosures required under § 1026.19(e)(1)(i) reflect any revised points disclosed pursuant to § 1026.37(f)(1) and lender credits, the actual points and lender credits are compared to the revised points and lender credits for the purpose of determining good faith pursuant to § 1026.19(e)(3)(i).

* * * * *

19(e)(4)(i) General Rule

* * * * *

2. *Relationship to § 1026.19(e)(3)(iv)(D).* If the reason for the revision is provided under § 1026.19(e)(3)(iv)(D), notwithstanding the three-business-day rule set forth in § 1026.19(e)(4)(i), § 1026.19(e)(3)(iv)(D) requires the creditor to provide a revised version of the disclosures required under § 1026.19(e)(1)(i) no later than three business days after the date the interest rate is locked. *See* comment 19(e)(3)(iv)(D)–1.

* * * * *

Subpart E—Special Rules for Certain Home Mortgage Transactions

* * * * *

Section 1026.37—Content of Disclosures for Certain Mortgage Transactions (Loan Estimate)

* * * * *

37(b)(6) Adjustments After Consummation

1. *Periods not in whole years.* For guidance on how to disclose increases after consummation that occur after a number of months less than 24 but that do not equate to a number of whole years or within a number of days less than a week, see the guidance provided in comment 37(a)(10)–3. For increases that occur after more than 24 months, see the guidance provided in comment 37(b)(8)–1.

* * * * *

Paragraph 37(c)(2)(ii)

* * * * *

2. *Relationship to principal and interest disclosure.* The creditor discloses mortgage insurance premiums pursuant to § 1026.37(c)(2)(ii) on the same periodic basis that payments for principal and interest are disclosed pursuant to § 1026.37(c)(2)(i), even if mortgage insurance premiums are actually paid on some other periodic basis.

Paragraph 37(c)(2)(iii)

1. *Escrow disclosure.* The disclosure described in § 1026.37(c)(2)(iii) is required only if the creditor will establish an escrow account for the payment of some or all of the charges described in § 1026.37(c)(4)(ii). If no escrow account for the payment of some or all such charges will be established, the creditor discloses the escrow amount as ''0.'' If an escrow account is established for the payment of amounts described in § 1026.37(c)(4)(ii), but no escrow payment is required with a particular periodic payment (such as with a final balloon payment) or range of payments, the escrow payment should be disclosed as ''—.''

* * * * *

Paragraph 37(c)(4)(iv)

* * * * *

2. *Amounts paid by the creditor using escrow account funds.* Section 1026.37(c)(4)(iv) requires the creditor to disclose an indication of whether the amounts disclosed pursuant to § 1026.37(c)(4)(ii) will be paid by the creditor using escrow account funds. If the amount disclosed pursuant to § 1026.37(c)(4)(ii) requires the creditor to disclose a description of more than one amount and only some of those amounts will be paid by the creditor using escrow account funds, the creditor may indicate that only some of those amounts will be paid using escrow account funds, such as by using the word ''some.''

* * * * *

37(h)(1)(ii) Closing Costs Financed

1. *Calculating amount.* The amount of closing costs financed disclosed under § 1026.37(h)(1)(ii) is determined by subtracting the estimated total amount of payments to third parties not otherwise disclosed pursuant to § 1026.37(f) and (g) from the total loan amount disclosed pursuant to § 1026.37(b)(1). If the result of the calculation is a positive number, that amount is disclosed as a negative number under § 1026.37(h)(1)(ii), but only to the extent that it does not exceed the total amount of closing costs disclosed under § 1026.37(g)(6). If the result of the calculation is zero or negative, the amount of $0 is disclosed under § 1026.37(h)(1)(ii).

* * * * *

37(m)(8) Construction Loans

1. *Clear and conspicuous statement regarding redisclosure for construction loans.* For construction loans in transactions involving new construction, where the creditor reasonably expects the settlement date to be 60 days or more after the provision of the disclosures required under § 1026.19(e)(1)(i), providing the statement, ''You may receive a revised Loan Estimate at any time prior to 60 days before consummation'' under the master heading ''Additional Information About This Loan'' and the heading ''Other Considerations'' pursuant to § 1026.37(m)(8) satisfies the requirements set forth in § 1026.19(e)(3)(iv)(F) that the statement be made clearly and conspicuously on the disclosure.

37(n) Signature Statement

* * * * *

2. *Multiple consumers.* If there is more than one consumer who will be obligated in the transaction, the first consumer signs as the applicant and each additional consumer signs as a co-applicant. If there is not enough space under the heading ''Confirm Receipt'' to provide signature lines for every consumer in the transaction, the creditor may add additional signature pages, as needed, at the end of the form for the remaining consumers' signatures. However, the creditor is required to disclose the heading and statement required by § 1026.37(n)(1) on such additional pages.

* * * * *

Section 1026.38—Content of Disclosures for Certain Mortgage Transactions (Closing Disclosure)

* * * * *

38(a)(3)(vi) Property

* * * * *

2. *Multiple properties.* Where more than one property secures the credit transaction, § 1026.38(a)(3)(vi) requires disclosure of all property addresses. If the addresses of all properties securing the transaction do not fit in the space allocated on the Closing Disclosure, an additional page with the addresses of all such properties may be appended to the end of the form.

* * * * *

Paragraph 38(e)(1)(iii)(A)

1. *Statements of increases or decreases.* Section 1026.38(e)(1)(iii)(A) requires a statement of whether the amount increased or decreased from the estimated amount. The statement, ''This amount increased,'' in which the word ''increased'' is in boldface font and is replaced with the word ''decreased'' as applicable, complies with this requirement.

* * * * *

Paragraph 38(e)(2)(iii)(A)

* * * * *

3. *Statements regarding excess amount and any credit to the consumer.* Section 1026.38(e)(2)(iii)(A) requires a statement that an increase in closing costs exceeds legal limits by the dollar amount of the excess and a statement directing the consumer to the disclosure of lender credits under § 1026.38(h)(3) if a credit is provided under § 1026.19(f)(2)(v). See form H–25(F) in appendix H to this part for examples of such statements.

* * * * *

38(g)(2) Prepaids

* * * * *

4. *Interest rate for prepaid interest.* The dollar amounts disclosed pursuant to § 1026.38(g)(2) must be based on the interest rate disclosed under § 1026.38(b), as required by § 1026.37(b)(2).

* * * * *

Dated: January 18, 2015.

Richard Cordray,

Director, Bureau of Consumer Financial Protection.

[FR Doc. 2015–01321 Filed 2–18–15; 8:45 am]

BILLING CODE 4810–AM–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

15 CFR Part 922

[Docket No. 120809321–4999–03]

RIN 0648–BC26

Gulf of the Farallones and Monterey Bay National Marine Sanctuaries Regulations on Introduced Species

AGENCY: Office of National Marine Sanctuaries (ONMS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce (DOC).

ACTION: Final rule.

SUMMARY: On March 18, 2013, NOAA proposed to prohibit the introduction of introduced species into the state waters of Gulf of the Farallones and Monterey Bay national marine sanctuaries (GFNMS and MBNMS, respectively). The proposed prohibition included exceptions for the catch and release of striped bass and for introduced species of shellfish as part of commercial aquaculture activities in the Tomales Bay region of GFNMS (the only geographic area within sanctuaries offshore of California where aquaculture occurs). On March 27, 2014, NOAA amended the proposal to allow GFNMS and MBNMS to consider authorizing the introduction of certain introduced species of shellfish, those considered to be non-invasive, from commercial aquaculture culture projects in all state waters of the sanctuaries. NOAA's final action allows MBNMS to authorize state of California permits or leases for commercial aquaculture projects in state waters involving introduced species of shellfish that a) the state management agencies and NOAA have determined to be non-invasive, and b) will not have significant adverse impacts to sanctuary resources or qualities. For GFNMS, NOAA will not adopt authorization authority for similar projects in state waters at this time and will revert to the proposal from March 2013, which prohibits introduction of introduced species, exempts state permitted commercial shellfish aquaculture activities within Tomales Bay only, and provides an exception for the catch and release of striped bass.

DATES: *Effective Date:* Pursuant to section 304(b) of the National Marine Sanctuaries Act (NMSA) (16 U.S.C. 1434(b)), the revised designation and regulations shall take effect and become final after the close of a review period of forty-five days of continuous session of Congress beginning on February 19, 2015. NOAA will publish an announcement of the effective date of the final regulations in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: Dave Lott, Regional Operations Coordinator, West Coast Region, Office of National Marine Sanctuaries, 99 Pacific Street, STE 100F, Monterey, CA 93940. (831) 647–1920.

SUPPLEMENTARY INFORMATION:

I. Background

On November 20, 2008, NOAA issued a final rule associated with the Joint Management Plan Review (JMPR) of GFNMS, MBNMS, and Cordell Bank National Marine Sanctuary (73 FR 70488). Among other things, the rule prohibited the introduction of introduced species within or into both the federal and state waters of GFNMS and MBNMS, except for the catch and release of striped bass in both sanctuaries and from existing commercial aquaculture activities within the Tomales Bay region of

GFNMS. In December 2008, the Governor of California, acting pursuant to the National Marine Sanctuaries Act (16 U.S.C. 1434(b)(1)), certified that certain changes to each sanctuary's terms of designation for regulating the introduction of introduced species were unacceptable for the state waters portions of GFNMS and MBNMS. As a result of that determination, NOAA's prohibitions on introduced species currently apply only in the federal waters of MBNMS and GFNMS.

On March 18, 2013, following discussions with the state of California, NOAA re-proposed the prohibition on the introduction of introduced species within or into the state waters of GFNMS and MBNMS to provide regulatory consistency in all waters of those two sanctuaries and across the four national marine sanctuaries along the California coast (78 FR 16622). The proposal would have expanded into state waters the exception for the catch and release of striped bass and would have exempted state-permitted mariculture activities in Tomales Bay. A 60-day comment period on the proposed rule closed on May 17, 2013. (**Note:** MBNMS regulations use the term ''aquaculture'' and GFNMS regulations use the term ''mariculture'' to refer to the same activity; accordingly, both of these terms are used in this final rulemaking.)

NOAA received approximately 14 comments from the public and the MBNMS and GFNMS Sanctuary Advisory Councils in support of the March 2013 draft proposal. NOAA also received comments from both the California Department of Fish and Wildlife (CDFW) and aquaculture industry raising concerns that ONMS's broad definition of ''introduced species'' did not recognize that a number of introduced species of shellfish have been cultivated for over 100 years in Tomales Bay, within GFNMS, without significant adverse impacts to native resources. The Final Environmental Impact Statement for the 2008 Joint Management Plan Review recognized that non-native oyster species cultivated in Tomales Bay had not spread outside the aquaculture areas. Both the CDFW and aquaculture industry also commented that the proposed regulation did not allow NOAA to consider potential future permit requests from the industry for cultivation of such species. The state believed that if NOAA exercised the authority to permit such operations, in close cooperation and collaboration with state resource management entities—CDFW, California Fish and Game Commission (CFGC), and California Coastal Commission (CCC)—this would offer an opportunity for aquaculture operators and the state to demonstrate that expanding existing or developing new shellfish aquaculture operations involving introduced species of shellfish that are non-invasive would not harm sanctuary resources. Both CDFW and the aquaculture industry also expressed the view that this approach would be more consistent with Executive Order 13112 on the management of introduced species.

In response to these concerns, on March 27, 2014, NOAA amended its proposal to provide MBNMS and GFNMS the regulatory authority to authorize state permits or leases for commercial aquaculture projects in state waters involving introduced species of shellfish that the state management agencies and NOAA have determined to be non-invasive and thus would not have significant adverse impacts to sanctuary resources or qualities (79 FR 17073). Representatives from state agencies agreed with NOAA that introduced species should be managed uniformly throughout all state waters of the two sanctuaries.

NOAA received 16 comments on this revised proposal, virtually all in opposition to granting GFNMS the regulatory authority to authorize state permits for such aquaculture projects. There were no comments received objecting to this authority for MBNMS.

NOAA and the state of California have both expressed interest in entering into a Memorandum of Agreement (MOA) to define the roles of various state agencies (CDFW, CFGC, and CCC) and ONMS in a prescribed, collaborative process to determine whether an introduced species of shellfish could be considered non-invasive and potentially approved for cultivation within the state waters of either national marine sanctuary. The MOA would not supersede the legal authority of any participating agency; rather it would guide the collaborative interagency process and decision making timelines. The MOA would be necessary in response to the process outlined in NOAA's proposed rule published on March 2013 (78 FR 16622) regarding consultations for aquaculture projects in Tomales Bay, or for the process described in the March 2014 proposed rule (79 FR 17073) regarding the permit authorization process for the two national marine sanctuaries.

II. Summary of the Revisions to GFNMS Terms of Designation and Regulations

NOAA received few comments on the March 2013 proposed rulemaking regarding the introduced species regulation related to GFNMS. Both the GFNMS Advisory Council and several members of the public commented in strong support of the proposed rule and complimented the state agencies for recognizing the value in collaborating with NOAA to ensure state waters had additional protection from introduced species. However, the subsequent March 2014 proposed rule received considerable criticism from the public due to the proposal to allow GFNMS to authorize other agency permits, leases or licenses for new or expanded commercial shellfish aquaculture projects involving non-invasive introduced species. GFNMS does not presently have this permit authority and many commenters objected to providing that authority and increasing the risk of an invasion by an introduced shellfish species in state waters of GFNMS. In a separate rulemaking to expand GFNMS boundaries (79 FR 20981), the state of California also requested that NOAA not provide GFNMS authorization authority at this time and that NOAA conduct a separate process to allow time for local input and education regarding such a regulatory change.

As a result, NOAA will move forward with the regulatory proposals for GFNMS that were described in the March 2013 proposed rule. Specifically for GFNMS, this final rule extends the introduced species prohibition to all of GFNMS state waters, but exempts catch and release of striped bass and any existing or future commercial aquaculture project involving introduced species approved by the state of California in sanctuary waters of Tomales Bay after consulting GFNMS. NOAA's final rule is responsive to public support; eliminates the authorization authority for GFNMS that had generated considerable public concern; is consistent with the state of California's request to consider authorization authority for GFNMS in a separate process; and allows existing aquaculture projects to continue in Tomales Bay, the only area of either sanctuary where such activity presently occurs.

Presently 23.6 percent of GFNMS—all of the state waters in sanctuary (301.5 square statute miles)—is at risk from the introduction of introduced species. With this action, the vast majority of the sanctuary would be protected from such introductions of introduced species, except for less than 1 percent (10.3 square statute miles) in sanctuary waters of Tomales Bay, where commercial aquaculture of introduced species of shellfish approved by the state after consulting with NOAA, would be allowed. All other vectors of

introduction of introduced species are prohibited in Tomales Bay.

Accordingly, NOAA is amending the GFNMS terms of designation to ensure that the introduction or release of an introduced species applies to the state waters of the sanctuary regardless of the means of introduction. The revised terms of designation under Article IV Scope of Regulations, Section 1 Activities Subject to Regulation, Activity (e) will read as follows (new text in quotes and deleted text in brackets and italics):

Article IV. Scope of Regulations

Section 1. Activities Subject to Regulation

* * *

(e) Introducing or otherwise releasing from within or into [*the federal waters of*] the Sanctuary an introduced species

NOAA is also changing the second sentence of Article V in the terms of designation to ensure that the intent NOAA has consistently described—to regulate introduced species consistently across all four national marine sanctuaries along the coast California, in both state and federal waters—is achieved. Additionally, NOAA's final rule removes the time limitation needed to grandfather existing state-approved mariculture projects in Tomales Bay. Therefore, Article V. Relation to Other Regulatory Programs, Section 1, will read as follows (new text in quotes and deleted text in brackets and italics):

Article V. Relation to Other Regulatory Programs

Section 1. Fishing and Waterfowl Hunting

The regulation of fishing, including fishing for shellfish and invertebrates, and waterfowl hunting, is not authorized under Article IV. However, fishing vessels may be regulated with respect to vessel operations in accordance with Article IV, section 1, paragraphs (b) and (h), and mariculture activities involving alterations of or construction on the seabed, or ''introduction or'' release of introduced species by mariculture activities [*not covered by a valid lease from the State of California and in effect on the effective date of the final regulation*], can be regulated in accordance with Article IV, section 1, paragraph (c) and (e). All regulatory programs pertaining to fishing, and to waterfowl hunting, including regulations promulgated under the California Fish and Game Code and Fishery Management Plans promulgated under the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801 *et seq.,* will remain in effect, and all permits, licenses, and other authorizations issued pursuant thereto will be valid within the Sanctuary unless authorizing any activity prohibited by any regulation implementing Article IV. The term ''fishing'' as used in this Article includes mariculture.

In addition, for the purpose of this regulation NOAA is codifying the northern geographical extent of Tomales Bay via the same demarcation line that is already used in the International Regulations for Preventing Collision at Sea 1972 (COLREGS): the line runs from Avalis Beach east to Sand Point. These geographic coordinates have been added as Appendix D to Subpart H of Part 922. Parts of the western and southern shoreline of Tomales Bay solely within Point Reyes National Seashore are not subject to this regulation.

Last, as described in new § 922.85, NOAA intends to enter into a Memorandum of Agreement (MOA) with the state of California to implement the Department of Fish and Wildlife's commitment to consult with NOAA whenever a future commercial shellfish aquaculture project permit application within Tomales Bay is received and being considered by the state.

III. Summary of the Revisions to MBNMS Terms of Designation and Regulations

NOAA received few comments on the March 2013 proposed rulemaking regarding the introduced species regulation related to MBNMS. The MBNMS Advisory Council and several members of the public commented in strong support of the proposed rule. The comments received for the March 2014 proposed rule generally focused on the GFNMS regulations, however the aquaculture industry commented in support of allowing MBNMS (as well as GFNMS) to consider a permit authorization for future commercial shellfish aquaculture projects involving non-invasive introduced species.

NOAA is implementing the regulatory proposals for MBNMS that were described in the March 2014 proposed rule. As with GFNMS, NOAA believes there is urgency and need to extend from federal waters into state waters the full protection of sanctuary regulations prohibiting the introduction or release of introduced species. Accordingly, NOAA is modifying the MBNMS terms of designation and regulations to prohibit the introduction or other release of introduced species from within or into the state waters of the sanctuary. The revised terms of designation under Article IV Scope of Regulations, Section 1 Activities Subject to Regulation, Activity (l) will read as follows (deleted text in brackets and italics):

Article IV. Scope of Regulations

Section l. Activities Subject to Regulation

* * *

(l) Introducing or otherwise releasing from within or into [*the federal waters of*] the Sanctuary an introduced species.

This final rule also provides MBNMS with the authority to authorize a valid permit, license or other authorization issued by the state of California for commercial shellfish aquaculture activities conducted in state waters of MBNMS involving introduced species of shellfish that NOAA and the state have determined are non-invasive and that will not cause significant adverse effects to sanctuary resources or qualities. MBNMS regulations already allow the ONMS Director the ability to authorize state of California (or other agency) permits for certain activities that are otherwise prohibited in the sanctuary. This authority is delegated from the ONMS Director to the sanctuary Superintendent.

NOAA intends to enter into an MOA with the state of California to describe how NOAA and the state agencies—CFGC, CDFW and CCC—will coordinate on any future proposal to develop any commercial shellfish aquaculture project in state waters of MBNMS involving a non-invasive introduced species. Similar to other MOAs with state agencies, this MOA requirement will be reflected in MBNMS regulations (see § 922.134(a)).

IV. Response to Comments

NOAA conducted two comment periods on separate proposed rules between March 2013 and March 2014 and received a total of 29 comments from 33 groups, agencies or individuals. The comments and responses have been segregated below to reflect the two different proposed rules.

Comments and Responses Submitted on the March 2013 Proposed Rule

General Support for the Proposed Rule

1. *Comment:* Commenters generally supported the 2013 proposal, noting the cooperation of NOAA and the state agencies in coming to terms that would protect the national marine sanctuaries from the threat of introduced species.

Response: NOAA agrees there was ongoing need to address the unresolved issue of leaving the state waters portions of the two national marine sanctuaries

vulnerable to introduction of introduced species. This final rule incorporates aspects of both the 2013 and 2014 proposed rules, and relies on increased collaboration among the state of California agencies and NOAA. The final rule specifically includes the ability for aquaculture operators to seek a permit from the state (within Tomales Bay in GFNMS) and from the state and NOAA (within MBNMS).

The Proposed Rule Does Not Recognize That Some Introduced Species Are Non-Invasive

2. *Comment:* NOAA should revise the proposed rule to recognize that some introduced species are not a threat to sanctuary resources because they do not reproduce or otherwise affect the natural ecosystem of the sanctuary if released. NOAA should consider provisions for allowing culturing of introduced shellfish species approved by the state of California and proven to pose no significant threat to native ecological processes within the sanctuaries.

Response: National marine sanctuaries are designated, in part, to maintain ''natural biological communities . . . and to protect, and where appropriate, restore and enhance natural habitats, populations, and ecological processes'' (16 U.S.C. 1431(b)(3)). In short, national marine sanctuaries are mandated by law to preserve the natural character of national marine sanctuary ecosystems, similar to the manner that terrestrial ecosystems have been preserved and protected by the national parks system. Any proposed alteration of the natural biological community (*e.g.* introduction of a foreign species) is contrary to the purpose of sanctuary designation. Therefore, the proposed introduction of species not native to a national marine sanctuary places the burden of proof on the project sponsor to demonstrate to NOAA and state management agencies that no significant harm will result from any such proposal. NOAA acknowledges that there have been some introduced species of shellfish cultivated in GFNMS which have not, to date, had significant adverse effects on sanctuary resources. In discussions with the three state management entities with regulatory control over aquaculture projects in state waters—the Department of Fish and Wildlife, the Fish and Game Commission and the California Coastal Commission—it is clear to NOAA that state management entities are also concerned about the impact invasive, introduced species can have on an ecosystem. These agencies have taken steps to eliminate, or at least greatly reduce the risk of an invasion from such species grown in aquaculture projects.

Based on these comments and further analysis, NOAA issued a revised proposed rule in March 2014 which proposed to allow the ONMS Director to consider authorization of state permits or leases for a very limited scope of aquaculture projects—state-approved aquaculture in state waters of GFNMS (including Tomales Bay) or MBNMS involving an introduced species of shellfish that the state and NOAA determined would not be invasive or otherwise damage sanctuary resources (authority to issue an authorization is delegated from the ONMS director to a sanctuary superintendent). NOAA proposed to develop an MOA with the state agencies to lay out how such joint review would take place for any future aquaculture project. MBNMS already has authorization authority, but cannot issue a permit for an introduced species projects. GFNMS does not have authorization authority, so this would have been new authority for GFNMS.

The final rule expands MBNMS's existing authorization authority to include this limited scope of regulatory action—the potential authorization of state permits or leases that would allow development of new aquaculture projects in state waters involving introduced shellfish species the state and NOAA have determined are non-invasive and will not harm sanctuary resources or qualities. For GFNMS, NOAA has adjusted the final rule to conform to a request from the state of California as part of a separate rulemaking on boundary expansion of that sanctuary to not include authorization authority in GFNMS at this time. NOAA intends to begin implementing a separate public process, including consultation with affected agencies, on the topic of authorization after the finalization of the sanctuary expansion action.

Future Growth of Shellfish Industry

3. *Comment:* The proposed rule eliminates sites for future growth of the shellfish industry in California, conflicts with other federal policies and goals, and should be withdrawn for further consideration and revision.

Response: NOAA disagrees. The final rule does not prohibit aquaculture. It prohibits the introduction of introduced species within or into nationally protected marine ecosystems. The final rule now allows the consideration of non-invasive introduced species as part of a commercial shellfish aquaculture operation in state waters of MBNMS, provided that both the state and NOAA determine cultivation of the species would have no significant adverse effects to sanctuary resources or qualities. Furthermore, the final rule includes no regulatory restrictions by GFNMS for any new or expanded aquaculture project cultivating introduced species in Tomales Bay, the only area of either sanctuary where such activity is currently conducted. Expansion would be possible in Tomales Bay, provided applicants received appropriate state permits or leases. The final rule specifically includes the ability for aquaculture operators to seek a permit from the state (within Tomales Bay in GFNMS) and from the state and NOAA (within MBNMS).

Exempting Tomales Bay Increases Permitting Burden

4. *Comment:* The proposed exemption of Tomales Bay from ONMS regulations would cause undue and additional regulatory burden on aquaculture operators seeking new permits from the state. The proposed Memorandum of Agreement between NOAA and the state agencies would cause undue delay.

Response: NOAA disagrees. The exemption to the introduced species regulation for mariculture in Tomales Bay will not cause a burden on an operator proposing a new or expanded aquaculture project. The MOA will outline and clarify agency roles and anticipated timelines in the consultation process that state agencies would normally conduct with other agencies, in this case GFNMS.

Proposed Rule Eliminates Jobs

5. *Comment:* The proposed rule will result in elimination of green jobs and sustainable small businesses associated with shellfish aquaculture, and create a greater seafood trade imbalance.

Response: The final rule will not eliminate any existing aquaculture operation or associated green jobs in GFNMS, and exempts from sanctuary regulation the only area in that sanctuary where aquaculture presently occurs. For MBNMS, the final rule allows the sanctuary superintendent to consider authorization of a state permit or lease for a future commercial shellfish aquaculture project in state waters cultivating an introduced species that NOAA and the state determine is non-invasive and will not adversely affect sanctuary resources or qualities. Presently there are no such introduced species aquaculture projects in MBNMS and hence no jobs that could be lost due to the final rule.

Proposed Action Is More Consistent With Coastal Act

6. *Comment:* The proposed rule is more consistent with the past decision by the California Coastal Commission regarding the final rule NOAA submitted to the state in 2008. (The current status is inconsistent with that decision, with the state waters completely unprotected from introduction of introduced species.)

Response: NOAA agrees.

Effect of Regulation on Research on Introduced Species

7. *Comment:* Clarify how the proposed regulation affects research on introduced species.

Response: The final rule applies to state waters of both GFNMS and MBNMS and would make the restrictions on introduction of introduced species consistent within state and federal waters of those sanctuaries. Specifically, sanctuary regulations will prohibit introducing or otherwise releasing an introduced species into the sanctuary, and thus any research that includes or results in the release or other introduction of an introduced species would not be allowed. Regulations for both sites would not allow a superintendent to issue a permit for such research. Research on introduced species already existing within the sanctuary would not generally be prohibited unless such research involved relocation, moving, or otherwise distributing individuals or propagules of the existing introduced species.

Memorandum of Agreement

8. *Comment:* The MOA between NOAA and the state of California regarding introduced species aquaculture should be circulated for public comment so the public can be assured that the MOA's design adequately satisfies the intent of the proposed rule.

Response: Interagency MOA are not generally circulated for public review before they are signed. The MOA will establish procedures for the agencies to work collaboratively pursuant to and consistent with the respective legal authorities of each participating agency. In no case will the MOA supersede NOAA's regulatory authority. The final, signed agreement will be available to the public.

Comments and Responses Submitted for Second Proposed Rule, March 2014

No Introduced Species Should Be Allowed

9. *Comment:* Introduced species pose a threat to native species diversity and endangered species, ecosystem integrity, and the composition and resilience of natural biological communities as well as the commercial and recreational uses that depend on these resources. GFNMS and MBNMS should revise sanctuary regulations to consistently protect all sanctuary and associated state marine waters and habitats from negative ecological and socio-economic impacts caused by the introduction of introduced species.

Response: NOAA agrees. The introduction of introduced species to marine waters can disrupt native ecological processes, resulting in altered trophic relationships and habitat modification. Introduced species can spread unabated in areas where no natural predators exist, and eradication of these species may become impossible once they disperse. Propagation of invasive introduced species can lead to socio-economic impacts, such as changes in fisheries, fouling of infrastructure and seawater intakes, and aesthetic changes that impact tourism. The final rule prohibits all forms of introducing or releasing an introduced species into state waters of both sanctuaries, with three exceptions: (1) Within both sanctuaries, catch and release of an introduced species, striped bass, already established in marine waters and part of an active recreational fishery. State-imposed size limits could result in striped bass being caught and released while fishing in either sanctuary; (2) within GFNMS, existing commercial shellfish aquaculture operations in Tomales Bay permitted by the state that cultivate introduced species which have not, to date, invaded native ecosystems and caused significant adverse harm to sanctuary resources and qualities; and, (3) within MBNMS, introduction of introduced species from commercial shellfish aquaculture projects in state waters that NOAA and the state have determined are non-invasive and will not cause adverse harm to sanctuary resources and qualities. NOAA will work very closely with the state resource management entities to ensure any new, expanded or future aquaculture project will not result in a release of an invasive species that will cause harm to sanctuary, and state, resources. All other forms of introduction or release of an introduced species will be strictly prohibited.

Catch and Release of State Approved Non-Native Species

10. *Comment:* Regulation of introduced species by MBNMS and GFNMS should include provisions for continued catch and release of striped bass (*Marone saxatilis*), a fish stock historically managed by the California Department of Fish and Wildlife (CDFW).

Response: As in the original final rule issued on November 20, 2008, catch and release of striped bass (*Marone saxatilis*) in both state and federal waters of GFNMS and MBNMS is exempt from this regulation (73 FR 70488).

General Opposition to the Amended Rule

11. *Comment:* The proposal to allow authorization of state-permitted commercial shellfish aquaculture operations in GFNMS would give deference to the aquaculture industry over the national marine sanctuaries' resource protection mandate.

Response: As a result of the Governor's objection in 2008, there are currently no sanctuary regulations protecting state waters of these two national marine sanctuaries from the introduction of introduced species. This final rule closes that regulatory gap and prohibits the introduction of introduced species in the state waters of the sanctuaries from all other pathways of introductions except for the three exceptions described in response to comment 9 above. For GFNMS, the final rule does not add authorization authority to that sanctuary's regulations. However, any expanded or new aquaculture operation within Tomales Bay in GFNMS would have to be permitted by several state resource management agencies, who would consult with GFNMS before issuing any permit. In addition, the authority to authorize another agency's permit, which MBNMS could exercise through this final rule, gives complete discretion to the MBNMS superintendent to approve with conditions or deny a potential future aquaculture project in state waters of MBNMS cultivating introduced shellfish species that NOAA and the state have found to be non-invasive and to not adversely affect sanctuary resources and qualities.

Authorization Authorities

12. *Comment:* NOAA should not adopt the proposed authorization authority because it provides essentially a rubber stamp approval to future activities involving introduced species.

Response: NOAA disagrees. The final regulation allows MBNMS to consider

the authorization of aquaculture operations within very narrow parameters (to approve, condition, or deny state issued permits for commercial shellfish aquaculture in state waters of MBNMS determined by NOAA and state management agencies to be not invasive and not cause significant adverse effects to sanctuary resources or qualities). Authorization authority has existed in MBNMS and five other national marine sanctuaries for many years and has been used successfully and consistent with the purposes and policies of the NMSA.

13. *Comment:* The authority to authorize other agencies' permits found in 15 CFR 922.49 is deficient in that it lacks administrative procedure for public oversight and comment, and for public appeals, and it is not directly connected to the conditions for sanctuary permits found in 15 CFR 922.83 and 15 CFR 922.133

Response: The final rule does not add permit authorization authority to GFNMS regulations at this time. For MBNMS, which has had authorization authority since 1992, the issues of public review have not arisen in large part because projects MBNMS has considered for authorization have had extensive public review by another local, state or federal agencies.

14. *Comment:* NOAA should not adopt authorization authority because this adds another layer of bureaucracy to an already-complicated, multi-state agency review process, impeding future growth of the industry.

Response: NOAA disagrees that the authorization process adds another layer of bureaucracy. The authorization process is intended to improve administrative efficiency by allowing NOAA to review and approve, deny or condition other agencies' permits. This simplifies the application process for a permit applicant and promotes cooperative efforts among NOAA and other regulatory agencies.

Grandfathering Existing State Leases

15. *Comment:* NOAA should not ''grandfather'' existing or heretofore undisclosed leases, permits, and pending modifications of existing activities within Tomales Bay. NOAA should obtain full and complete copies of those leases before the effective date of the regulation, and they should be identified in the **Federal Register** announcement at the time the final rule is published.

Response: The grandfathering of existing aquaculture leases has been removed from the final rule and will not occur within GFNMS. Instead, NOAA is exempting from regulation the sanctuary waters of Tomales Bay, where existing aquaculture projects occur, as described in the 2013 proposed rule. In MBNMS there are no existing aquaculture operations, thus there are no undisclosed leases or permits and no projects will be grandfathered. The existing state review process continues in these areas and any major state action on an aquaculture operation in Tomales Bay will proceed consistent with existing public review processes, including public hearings before the California Fish and Game Commission or the California Coastal Commission.

Memorandum of Agreement

16. *Comment:* The MOA between NOAA and the state of California, and NOAA's authorization authority regarding introduced species aquaculture, should in no way expand from bivalve mariculture to finfish aquaculture.

Response: NOAA agrees. The authorization authority for MBNMS is narrowly defined to only allow MBNMS to consider authorizing state of California permits or leases for commercial shellfish aquaculture projects in state waters involving introduced species of shellfish that the state management agencies and NOAA have determined will not have significant adverse impacts to sanctuary resources or qualities. For Tomales Bay, the state will continue to have primary jurisdictional authority for aquaculture, consulting with GFNMS before issuing any new permits or leases. All other introductions of introduced species in state and federal waters of GFNMS and MBNMS, except for the catch and release of striped bass, are prohibited. Furthermore, the state of California has a current legislative prohibition on non-native finfish aquaculture in state waters.

Collaboration Between State and Federal Agencies

17. *Comment:* Too much of the proposal is predicated on promises of future collaborations and agreements. Recent history suggests that the state is incapable of shared jurisdictional authority when managing aquaculture.

Response: NOAA believes the collaborative process developed for both GFNMS and MBNMS will allow the state and NOAA to work cooperatively to prevent the introduction of introduced species into state waters of the sanctuaries. The state will consult with GFNMS prior to issuing any new permits in Tomales Bay. However, in all other state waters of GFNMS, introduced species aquaculture will not be allowed. In MBNMS, the state and NOAA will each have jurisdiction over commercial aquaculture projects in state waters involving introduced species of shellfish.

Scientific Data

18. *Comment:* NOAA should not adopt the proposed rule (March 2014) to consider permitting aquaculture projects in GFNMS with non-invasive, introduced species because lack of scientific data on the significant impacts of invasive species, a lack of data on native and non-native species abundance and condition, and on cross-vector influences.

Response: NOAA agrees that impacts from introduced species can pose a major threat to sanctuary resources and qualities. However, in Tomales Bay, the only location in sanctuaries offshore of California where commercial cultivation of introduced species currently occurs, state management agencies have regulated these types of aquaculture operations for many years. In this final rule, NOAA is not expanding the ability to develop new introduced species aquaculture projects in GFNMS beyond Tomales Bay and will defer to state management agencies for aquaculture projects within Tomales Bay.

NEPA Compliance

19. *Comment:* NOAA has not adequately complied with the National Environmental Policy Act for proposed rule because it relied on analysis from 2008, and did not conduct a new environmental review.

Response: NOAA is relying on the FEIS as prepared for the 2008 JMPR because the baseline conditions have not changed. That is, there has been no change in the number of mariculture operations or leases in Tomales Bay and NOAA is unaware of any change in the environmental effects of those species in Tomales Bay. With this rule, the introduction of introduced species, including the use of non-native shellfish in commercial aquaculture operations, is being prohibited in state waters of both sanctuaries, with the exception of Tomales Bay. The 2008 FEIS specifically identified that the prohibition of the introduction of introduced species would lead to beneficial impacts to Biological Resources and Water Quality Resources and would not cause any adverse impacts to existing shellfish aquaculture operations.

The final rule adopts a regulatory regime slightly different from that reviewed in 2008 because it will allow commercial shellfish aquaculture to continue using introduced species in Tomales Bay that have been shown to be

non-invasive and will allow the State of California to demonstrate on a case-by-case basis with NOAA concurrence that commercial shellfish operations using certain non-invasive shellfish species may be safely established in state waters of MBNMS. NOAA believes this action is within the range of alternatives considered in 2008 and will result in nearly the same level of beneficial impacts that were identified in 2008. Further, NOAA is adopting final regulations that would not affect existing aquaculture projects in Tomales Bay that are conducted pursuant to a valid lease, permit, license or other authorization issued by the state of California.

NOAA has added authorization authority for MBNMS to consider authorizing state of California permits or leases for commercial aquaculture projects in state waters involving introduced species of shellfish that the state management agencies and NOAA have determined will not have significant adverse impacts to sanctuary resources or qualities. This process will require additional NEPA and California Environmental Quality Act (CEQA) review to be triggered on a case by case basis if new aquaculture projects were to be proposed in the state waters of MBNMS. NOAA has complied with NEPA for this action.

Species May Become Invasive Over Time Due to Climate Change

20. *Comment:* Some commenters expressed concerns that cultivated species currently not considered by the state of California to be invasive, such as Pacific oysters (*Crassostrea gigas*), have the potential to be invasive in other environments and situations, and may become invasive in California under global climate change scenarios where warmer waters allow unassisted reproduction.

Response: NOAA is also concerned about how climate change will impact introduced species aquaculture. In this action, NOAA is implementing a final rule which does not allow introduced species aquaculture in state waters of GFNMS except in Tomales Bay and only with a state lease or permit. Aquaculture operators will be required to follow the state's public process through the CA Fish and Game Commission and the CA Coastal Commission. The results of studies in the United States and elsewhere as to how species may become invasive will be considered by the state and NOAA in making any future determinations.

Parasites and Other Impacts

21. *Comment:* NOAA's final action needs to account for the likelihood that these shellfish species would themselves attract or carry other exotic species, thereby causing environmentally detrimental impacts.

Response: In GFNMS, only those aquaculture operations in Tomales Bay with a valid lease or permit from the state of California would be exempt. If a commercial shellfish aquaculture project involving introduced species is proposed in MBNMS, as part of the permit authorization state management agencies and NOAA must determine the project will not have significant adverse impacts to sanctuary resources or qualities. In this review process, NOAA and state management agencies will consider not only the proposed introduced species themselves, but also the threats from parasites, project siting, the financial capability of the applicant, among other factors.

Monitoring and Management

22. *Comment:* NOAA should clarify how it or the state will monitor and prevent accidental introductions of diseases, parasites and hitch-hikers on aquaculture species within sanctuary waters. No protocol for monitoring or management of new or expanded aquaculture operations is referenced in the proposed regulation amendment.

Response: For Tomales Bay in GFNMS, commercial shellfish aquaculture will remain under the primary management authority of state management agencies and their public processes at this time. The MOA will outline how GFNMS can raise concerns to the state and seek their inclusion of permit conditions that ensure adequate enforcement and monitoring. For state waters of MBNMS, ONMS may condition or deny a potential permit authorization request if NOAA finds the applicant and the state management agencies do not adequately monitor and manage a proposed commercial shellfish aquaculture project involving introduced species. Monitoring and enforcement protocols could be added to permit conditions as part of an authorization, and would ideally be discussed, reviewed, and planned for on a case by case basis, and considered during the NEPA and CEQA process.

Other Federal Jurisdictions

23. *Comment:* NOAA's proposed rule does not recognize the regulatory role of the National Park Service (NPS). NPS national policy prohibits introductions of non-native species in NPS waters, including waters which overlap with national marine sanctuaries, the introduction of non-native species within national parks is inconsistent with the NPS Organic Act of 1916 (as amended and supplemented).

Response: NOAA and NPS have some jurisdictional overlap in GFNMS. Where there is jurisdictional overlap, NOAA's final regulations in this action do not usurp other federal regulations, including those of the National Park Service. As discussed in the preamble to this rule above, due to the previous Governor's objection in December 2008, there are currently no sanctuary regulations regarding introduced species in state waters of GFNMS and MBNMS (including waters adjacent to national parks). NOAA believes this final action will close that regulatory gap by prohibiting virtually all of the mechanisms that could result in the introduction of an introduced species. The final rule will only allow introduced species shellfish aquaculture within sanctuary waters of Tomales Bay operating with a valid permit of lease from the state. This final action will support the goals of the National Park Service to prevent the introduction of introduced species.

Weakens ONMS Authority

24. *Comment:* NOAA's proposed action weakens the authority of the national marine sanctuaries to control invasive non-native species that potentially may be introduced by new aquaculture operations. In so doing, NOAA delegates to the state the authority to define invasive species and bypasses a process for environmental review and compliance, including the participation of other potentially impacted federal agencies, such as national parks as well as the public.

Response: NOAA disagrees. Currently, there are no introduced species regulations in state waters of GFNMS or MBNMS and this final rule provides that regulatory protection by prohibiting the introduction of introduced species in all state waters of MBNMS and nearly all state waters of GFNMS. Any state review of an existing, expanded or new aquaculture project in Tomales Bay in GFNMS will include compliance with CEQA, consultation with affected agencies, and public review, including hearings, as prescribed by agency procedures when issuing leases and permits. Any new project in MBNMS will also require compliance with NEPA. While the final rule exempts the need for a permit authorization from GFNMS in Tomales Bay it includes extensive consultation with GFNMS prior to the state's issuing permits or leases as outlined in the

MOA. Therefore, additional public review consistent with state and federal law and procedures will be provided and comments considered on any such action in either sanctuary, if proposed in the future.

Existing Operations

25. *Comment:* NOAA should require ONMS review for any change to an existing lease where the grower proposes to cultivate new non-native shellfish species on their farm.

Response: The grandfathering option for GFNMS discussed in the March 2013 proposal was adopted by NOAA and will exempt existing and future commercial shellfish aquaculture operations in Tomales Bay with a valid state of California permit or lease. The MOA will outline how the state will consult with GFNMS on expansion of existing leases or future proposals to cultivate new species.

Extending the Public Comment Period

26. *Comment:* NOAA should extend the short comment period of the amended proposed rule. The release of the **Federal Register** notice reopening this issue, and the subsequent comment deadline for this reversal by the agency was conducted in such manner as to preclude the public from having timely access to the necessary information and supporting documents, and the necessary time for review.

Response: The comment period for the March 2013 proposed rule was 60 days and generated very few public comments. The comments received in 2013 were mostly in support—including those received from the GFNMS and MBNMS Sanctuary Advisory Councils—of NOAA's proposed action which is being implemented for GFNMS in this final rule. Based on this information, NOAA did not anticipate receiving many public comments for the March 27, 2014 amended proposed rule, and therefore NOAA established a 15 day comment period. Upon receiving a request for an extension, NOAA re-opened the comment period for an additional 24 days until May 5, 2017. Based on the comments received during these two comment periods, NOAA believes this final rule-making has provided the public with timely involvement and the opportunity to review and comment on this action.

Programmatic Environmental Impact Report (pEIR)

27. *Comment:* The rule is premature because this current NOAA comment period predates a pending state of California Programmatic Environmental Impact Report (pEIR) on aquaculture issues expected to be inclusive of many of the same types of invasive species questions brought forward by expanded aquaculture proposals in state waters.

Response: This comment is beyond the scope of this rulemaking. The state's programmatic environmental impact report being prepared pursuant to CEQA is unrelated to this final action promulgated by NOAA. This regulation has a long history, and is designed to extend existing sanctuary introduced species prohibitions from federal waters into state waters of GFNMS and MBNMS. Future state action may further assist the state and federal regulatory agencies in protecting coastal waters from the invasive impacts of introduced species.

GFNMS Boundary Expansion

28. *Comment:* NOAA should not take any action on the introduced species rule until the public hearings and written comments on the draft environmental impact Statement (DEIS) and accompanying regulations for boundary expansion for GFNMS has been subjected to sufficient public review.

Response: This comment is beyond the scope of this rulemaking. However, we note the proposed rule for GFNMS expansion recognizes that there is a separate rulemaking process the introduced species. The rules will be codified accordingly, in the order they are finalized.

Oil Drilling

29. *Comment:* NOAA should specifically exclude oil drilling from the list of otherwise prohibited activities that could be authorized by NOAA (922.132(1)) within GFNMS.

Response: This comment is beyond the scope of this rulemaking. Nevertheless, as noted previously, the Final Rule does not add authorization authority to GFNMS regulations.

V. Miscellaneous Rulemaking Requirements

A. National Marine Sanctuaries Act

Section 301 of the NMSA (16 U.S.C. 1434) provides authority for comprehensive and coordinated conservation and management of national marine sanctuaries in coordination with other resource management authorities. When changing a term of designation of a National Marine Sanctuary, section 304 of the NMSA requires the preparation of a draft environmental impact statement (DEIS), as provided by the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and that the DEIS be made available to the public. NOAA prepared a draft and final management plan and a draft and final EIS on the initial proposal and final rule for the Joint Management Plan Review (JMPR). Copies are available at the address and Web site listed in the **ADDRESSES** section of this proposed rule. Responses to comments received on March 18, 2013 proposed rule and on the March 27, 2014 proposed revision to the regulations have been analyzed and published in the preamble to this final rule and discussed in the record of decision. NOAA has made available the 2008 final environmental impact statement (FEIS) for the JMPR that was previously available to the public, and which analyzes the environmental effects of the introduced species regulations as they are now finalized by this action. (For a copy of the FEIS, please visit *www.sanctuaries.noaa.gov/jointplan*.)

B. National Environmental Policy Act

In the 2008 FEIS for the JMPR, NOAA identified a preferred action which was to modify the terms of designation and regulations for GFNMS and MBNMS to, among other things, prohibit the introduction of introduced species (with limited exceptions) throughout the sanctuaries, and NOAA endorses that action as re-proposed and as amended in the notices of proposed rulemaking associated with this final rule. The 2008 FEIS specifically identified that the prohibition of the introduction of introduced species would lead to beneficial impacts to Biological Resources and Water Quality Resources and would not cause any adverse impacts to existing shellfish aquaculture operations. The final rule adopts a regulatory regime slightly different from that reviewed in 2008, however, this action is within the range of alternatives considered in 2008 and will result in nearly the same level of beneficial impacts that were identified in 2008. Further, NOAA is adopting final regulations that would not affect existing aquaculture projects in Tomales Bay that are conducted pursuant to a valid lease, permit, license or other authorization issued by the state of California. NOAA further believes there has not been a significant change to the environmental conditions or the potential environmental effects of the preferred alternative. NOAA has determined that a supplement to the FEIS is not required for this final action.

Pursuant to a MOA that would be executed, the state would consult with NOAA prior to any new or amended state-issued lease and permits. In addition, through this action NOAA

would exercise limited authorization authority with respect to commercial shellfish aquaculture activities in state waters of MBNMS involving cultivation of introduced species of shellfish that NOAA and the State have determined are non-invasive and would not cause significant adverse effects. Any future proposal or amendments to existing state leases for an aquaculture project involving cultivation of introduced shellfish species would undergo environmental review pursuant to the California Environmental Quality Act (CEQA) and NEPA for MBNMS and CEQA for GFNMS on a case-by-case basis to consider project-specific effects of that action. NOAA may refuse to authorize a project in MBNMS that would not comply with terms or conditions required by NOAA. 15 CFR 922.49(a).

Copies of the FEIS, the record of decision and other related materials that are specific to this action are available at *http://sanctuaries.noaa.gov/jointplan/feis/feis.html,* or by contacting NOAA at the address listed in the **FOR FURTHER INFORMATION** section of this final rule. Comments regarding the introduction of introduced species portion of the original FEIS are analyzed and responded to above, in the Response to Comments section.

C. Executive Order 12866: Regulatory Impact

This rule has been determined to be not significant for purposes of Executive Order 12866.

D. Executive Order 13132: Federalism Assessment

NOAA has concluded that this regulatory action falls within the definition of ''policies that have federalism implications'' within the meaning of Executive Order 13132. NOAA's previous proposed rule and subsequent amended proposed rule were conducted in cooperation with the State of California, and pursuant to Section 304(b) of the NMSA. Since the proposed rule was issued on March 18, 2013, further consultations have occurred with the State of California, and the proposed changes contained in the March 27, 2014 notice reflect cooperative negotiations reached in those consultations. It is NOAA's view that, due to these negotiations, the state will not object to the amended regulations finalized in this action. In keeping with the intent of the Executive Order, NOAA consulted with a number of entities within the state which participated in development of the initial rule, including but not limited to, the California Coastal Commission, the California Department of Fish and Wildlife, and the California Natural Resources Agency.

E. Regulatory Flexibility Act

The Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration at the proposed rule stage that this rule would not have a significant economic impact on a substantial number of small entities. The factual basis for this certification was discussed in the proposed rule issued on March 18, 2013, and the March 27, 2014 amended proposal, where the conclusion remained the same. No comments were received on that certification. No other law requires a regulatory flexibility analysis so none is required and none has been prepared.

F. Paperwork Reduction Act

This final rule does not contain information collections that are subject to the requirements of the Paperwork Reduction Act. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

List of Subjects in 15 CFR Part 922

Administrative practice and procedure, Aquaculture, Catch and release, Environmental protection, Fish, Harbors, Introduced species, Mariculture, Marine pollution, Marine resources, Natural resources, Non-invasive, Penalties, Recreation and recreation areas, Research, Water pollution control, Water resources, Wildlife.

W. Russell Callender,

Acting Assistant Administrator, National Ocean Service, National Oceanic and Atmospheric Administration.

Accordingly, for the reasons set forth above, 15 CFR part 922 is amended as follows:

PART 922—[AMENDED]

■ 1. The authority citation for Part 922 continues to read as follows:

Authority: 16 U.S.C. 1431 *et seq.*

■ 2. In § 922.82, revise paragraph (a)(10) to read as follows:

§ 922.82 Prohibited or otherwise regulated activities.

(a) * * *

(10) Introducing or otherwise releasing from within or into the Sanctuary an introduced species, except:

(i) Striped bass (*Morone saxatilis*) released during catch and release fishing activity; or

(ii) Species cultivated by commercial shellfish mariculture activities in Tomales Bay pursuant to a valid lease, permit, license or other authorization issued by the state of California. Tomales Bay is defined in § 922.80. The coordinates for the northern terminus of Tomales Bay are listed in appendix D to this subpart.

* * * * *

■ 3. Add new § 922.85 to read as follows:

§ 922.85 Review of State permits and leases for certain mariculture projects.

NOAA has described in a Memorandum of Agreement (MOA) with the State of California how the State will consult and coordinate with NOAA to review any new, amended or expanded lease or permit application for mariculture projects in Tomales Bay involving introduced species.

■ 4. Add Appendix D to subpart H of part 922, to read as follows:

Appendix D to Subpart H of Part 922—Northern Extent of Tomales Bay

For the purpose of § 922.82(a)(10)(ii), NOAA is codifying the northern geographical extent of Tomales Bay via a line running from Avalis Beach (Point 1) east to Sand Point (Point 2). Coordinates listed in this Appendix are unprojected (geographic) and based on the North American Datum of 1983.

Point ID No. Tomales Bay boundary	Latitude	Longitude
1	38.23165	−122.98148
2	38.23165	−122.96955

■ 5. Revise § 922.132, paragraph (e) to read as follows:

§ 922.132 Prohibited or otherwise regulated activities.

* * * * *

(e) The prohibitions in paragraphs (a)(2) through (a)(8) of this section, and (a)(12) of this section regarding any introduced species of shellfish that NOAA and the State of California have determined is non-invasive and will not cause significant adverse effects to sanctuary resources or qualities, and that is cultivated in state waters as part of commercial shellfish aquaculture activities, do not apply to any activity authorized by any lease, permit, license, approval, or other authorization issued after the effective date of Sanctuary

designation (January 1, 1993) and issued by any Federal, State, or local authority of competent jurisdiction, provided that the applicant complies with 15 CFR 922.49, the Director notifies the applicant and authorizing agency that he or she does not object to issuance of the authorization, and the applicant complies with any terms and conditions the Director deems necessary to protect Sanctuary resources and qualities. Amendments, renewals, and extensions of authorizations in existence on the effective date of designation constitute authorizations issued after the effective date of Sanctuary designation.

* * * * *

■ 6. In § 922.134, revise the section heading and add new paragraph (a) to read as follows:

§ 922.134 Review of certain State permits and leases.

(a)(1) NOAA has described in a Memorandum of Agreement (MOA) with the State of California how NOAA will coordinate review of any introduction of non-invasive introduced species from a proposed shellfish aquaculture project when considering an authorization under § 922.132(e).

(2) The MOA specifies how the process of 15 CFR 922.49 will be administered within State waters within the sanctuary in coordination with State permit and lease programs as administered by the California Fish and Game Commission, the Department of Fish and Wildlife and the California Coastal Commission.

* * * * *

[FR Doc. 2015–03486 Filed 2–18–15; 8:45 am]

BILLING CODE 3510–NK–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket No. USCG–2015–0025]

Safety Zone, Sag Harbor COC Winter Harbor Frost Fireworks, Sag Harbor, NY

AGENCY: Coast Guard, DHS.

ACTION: Notice of enforcement of regulation.

SUMMARY: The Coast Guard will enforce one safety zone for a fireworks display in the Sector Long Island Sound area of responsibility on the dates and times listed in the table below. This action is necessary to provide for the safety of life on navigable waterways during the event. During the enforcement period, no person or vessel may enter the safety zone without permission of the Captain of the Port (COTP) Sector Long Island Sound or designated representative.

DATES: The regulations in 33 CFR 165.151 will be enforced on February 28 (rain date March 1), 2015 from 6:15 p.m. to 6:45 p.m.

FOR FURTHER INFORMATION CONTACT: If you have questions on this notice, call or email Petty Officer Ian Fallon, Waterways Management Division, U.S. Coast Guard Sector Long Island Sound; telephone 203–468–4565, email *Ian.M.Fallon@uscg.mil.*

SUPPLEMENTARY INFORMATION: The Coast Guard will enforce the safety zone listed in 33 CFR 165.151 on the specified date and time as indicated in the following Table. If the event is delayed by inclement weather, the regulation will be enforced on the rain date indicated in the Table.

TABLE

Sag Harbor COC Winter Harbor Frost Fireworks	• Date: February 28, 2015. • Rain Date: March 1, 2015. • Time: 6:15 p.m. to 6:45 p.m. • Location: Waters of Sag Harbor off Long Wharf St. Pier in Sag Harbor, NY in approximate position 41°00′16.82″ N, 072°17′43.78″ W (NAD 83).

Under the provisions of 33 CFR 165.151, the fireworks display listed above in **DATES** is established as a safety zone. During the enforcement period, persons and vessels are prohibited from entering into, transiting through, mooring, or anchoring within the safety zone unless they receive permission from the COTP or designated representative.

This document is issued under authority of 33 CFR 165 and 5 U.S.C. 552 (a). In addition to this notification in the **Federal Register**, the Coast Guard will provide the maritime community with advance notification of this enforcement period via the Local Notice to Mariners or marine information broadcasts. If the COTP determines that the safety zone need not be enforced for the full duration stated in this document, a Broadcast Notice to Mariners may be used to grant general permission to enter the regulated area.

Dated: February 3, 2015.

E.J. Cubanski, III,

Captain, U.S. Coast Guard, Captain of the Port Sector Long Island Sound.

[FR Doc. 2015–03333 Filed 2–18–15; 8:45 am]

BILLING CODE 9110–04–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 51

[EPA–HQ–OAR–2004–0489; FRL–9922–27–OAR]

RIN 2060–AR29

Revisions to the Air Emissions Reporting Requirements: Revisions to Lead (Pb) Reporting Threshold and Clarifications to Technical Reporting Details

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: This action finalizes changes to the Environmental Protection Agency's (EPA) emissions inventory reporting requirements. This action lowers the threshold for reporting lead (Pb) emissions sources as point sources, eliminates the requirement for reporting emissions from wildfires and prescribed fires, and replaces a requirement for reporting mobile source emissions with a requirement for reporting the input parameters that can be used to run the EPA models that generate emissions estimates. This action also reduces the reporting burden on state, local, and tribal agencies by removing the requirements to report daily and seasonal emissions in their submissions under this rule, while clarifying the requirement to report these emissions under pollutant-specific regulations. Lastly, this action modifies some emissions reporting requirements which we believe are not necessary for inclusion in the Air Emissions Reporting Requirements (AERR) rule or

are not clearly aligned with current inventory terminology and practices.

DATES: This final rule is effective on February 19, 2015.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2004–0489. All documents in the docket are listed on the *http://www.regulations.gov* Web site. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *http://www.regulations.gov* or in hard copy at the Air Emissions Reporting Requirements Docket, EPA/DC, WJC West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: Mr. Ron Ryan, Office of Air Quality Planning and Standards, Air Quality Assessment Division, Emissions Inventory and Analysis Group (C339–02), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; telephone number: (919) 541–4330; email: *ryan.ron@epa.gov.*

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I. General Information

A. Does this action apply to me?

Categories and entities potentially regulated by this action include:

Category	CAICS code [a]	Examples of regulated entities
State/local/tribal government.	92411	State, territorial, and local government air quality management programs. Tribal governments are not affected, unless they have sought and obtained treatment as state status under the Tribal Authority Rule and, on that basis, are authorized to implement and enforce the Air Emissions Reporting Requirements rule.

[a] North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action.[1] This action requires states to report their emissions to us. It is possible that some states will require facilities within their jurisdictions to report emissions to the states. To determine whether your facility would be regulated by this action, you should examine the applicability criteria in 40 CFR 51.1. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final rule will also be available on the Worldwide Web (WWW) through the Technology Transfer Network (TTN). Following the Administrator's signature, a copy of this final rule will be posted on the TTN's policy and guidance page for promulgated rules at the following address: *http://www.epa.gov/ttn/chief/.* The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the TTN is needed, call the TTN HELP Line at (919) 541–4814.

C. Judicial Review

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of this final rule is available by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by April 20, 2015. Under section 307(d)(7)(B) of the CAA, only an objection to this final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review.

[1] As prescribed by the Tribal Authority Rule (63 FR 7253, February 12, 1998), codified at 40 CFR part 49, subpart A, tribes may elect to seek Treatment as State (TAS) status and obtain approval to implement rules such as the AERR through a Tribal Implementation Plan (TIP), but tribes are under no obligation to do so. However, those tribes that have obtained TAS status are subject to the AERR to the extent allowed in their TIP. Accordingly, to the extent a tribal government has applied for and received TAS status for air quality control purposes and is subject to the AERR under its TIP, the use of the term state(s) in the AERR shall include that tribal government and use of the term State Implementation Plan(s) or SIP(s) shall include that TIP.

Likewise, to the extent that air quality requirements are addressed by a local air agency instead of a state air agency and that local air agency is subject to the AERR under its SIP, the use of the term state(s) in the AERR shall include that local air agency.

Moreover, under section 307(b)(2) of the CAA, the requirements established by this action may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce these requirements.

II. Background

The EPA proposed amendments to the AERR on June 20, 2013 (78 FR 37164). In today's action, the EPA is amending the emissions inventory reporting requirements in 40 CFR part 51, subpart A, and in 40 CFR 51.122. This action aligns the point source reporting threshold for Pb emissions sources in the AERR with the National Ambient Air Quality Standard (NAAQS) for Lead (73 FR 66964, November 12, 2008) and the associated Revisions to Lead Ambient Air Monitoring Requirements (75 FR 81126, December 27, 2010). These amendments further improve the rule to both reduce burden on air agencies as well as make minor technical corrections that reflect what has been put into practice through existing electronic reporting implementation.

Emissions inventories are critical for the efforts of state and federal agencies to attain and maintain the NAAQS for criteria pollutants, such as ozone, particulate matter (PM) and carbon monoxide (CO). To assist these efforts, the EPA initiated an effort in the early 1990's to develop a central repository of inventory data for all states that is now known as the National Emissions Inventory (NEI). Emissions inventory data reported electronically under this rule are stored in the Emissions Inventory System (EIS) database and are used by the EPA and by states for air quality modeling, tracking progress in meeting CAA requirements, setting policy, and answering questions from the public. States often use the NEI as a starting point in developing emission inventories for support of state implementation plans (SIPs).

Pursuant to its authority under sections 110 and 172 of the CAA, the EPA has required SIPs to include inventories containing information regarding criteria pollutant emissions and their precursors (*e.g.,* volatile organic compounds (VOC)). The EPA codified these inventory requirements in subpart Q of 40 CFR part 51 in 1979 and amended them in 1987.

The 1990 Amendments to the CAA revised many of the CAA provisions related to the attainment of the NAAQS and the protection of visibility in Class I areas. These revisions established new periodic emission inventory requirements applicable to certain areas that were designated nonattainment for certain pollutants. For example, section 182(a)(3)(A) required states to submit an emission inventory every 3 years for Moderate ozone nonattainment areas beginning in 1993. Similarly, section 187(a)(5) required states to submit an inventory every 3 years for Moderate CO nonattainment areas.

Prior regulations supporting the annual reporting needed for the NEI included the Consolidated Emissions Reporting Rule (CERR), which was promulgated by EPA in 2002, and codified in 40 CFR part 51, subpart A. These requirements replaced the requirements previously contained in subpart Q of 40 CFR part 51, expanding their geographic and pollutant coverages, while simplifying them in other ways. The CERR was the precursor to the AERR. The original AERR was promulgated in 2008 with the intent of streamlining various reporting requirements including those of section 182(a)(3)(A) for ozone nonattainment areas and section 187(a)(5) for CO nonattainment areas, those under the NO_X SIP Call (40 CFR 51.122), and the annual reporting requirements of the CERR.

III. Summary of Revisions

This action lowers the threshold for reporting Pb emissions sources as point sources, eliminates the requirement for reporting emissions from wildfires and prescribed fires, and replaces a requirement for reporting mobile source emissions with a requirement for reporting the input parameters that can be used to run the EPA models that generate mobile source emissions estimates. This action also reduces the reporting burden on state, local, and tribal agencies by removing the requirements to report daily and seasonal emissions as part of their AERR submissions, while clarifying the requirement to report these emissions under pollutant-specific regulations (*i.e.,* the NO_X SIP Call, the Ozone Implementation Rule, and relevant CO maintenance plans). This action also modifies some emissions reporting requirements which we believe are not necessary or are not clearly aligned with current inventory terminology and practices.

A. Lower Point Source Threshold for Pb Emitters

With this action, the EPA is lowering the point source threshold for Pb emissions to 0.5 tons per year (tpy) of actual emissions. The purpose of this change is to match requirements of the Pb Ambient Air Monitoring Requirements rule (75 FR 81126), which required monitoring agencies to install and operate source-oriented ambient monitors near Pb sources emitting 0.50 tpy or more by December 27, 2011. The EPA considers that the ambient monitoring rule threshold is 0.5 tons of actual emissions, therefore, this criterion is based on actual emissions rather than the potential-to-emit approach taken for other criteria pollutant and precursor thresholds. All criteria pollutants and precursors will continue to be required to be reported for any source meeting this new threshold for Pb.

B. Elimination of Reporting for Wildfires and Prescribed Fires and Clarification for Reporting Agricultural Fires

With this action, the EPA is removing the requirement for reporting emissions for wildfire and prescribed fires. States may report these emissions voluntarily as event sources in the EIS, but states no longer have the option of reporting these emissions as nonpoint (countywide) sources. The EPA already provides nationwide estimates for wildfires and prescribed fires using information it has, so requiring states to also report these data is not necessary. States are encouraged to review and comment on the EPA's estimates, or to report their own estimates if they so choose.

This action also clarifies that agricultural fires continue to be required to be reported, and that these sources must be reported as nonpoint sources. Agricultural fires cannot be reported as point sources or as event sources.

C. Reporting Emission Model Inputs for Onroad and Nonroad Sources

With this action, the EPA is finalizing its proposal that states will no longer be required to submit mobile source emission estimates, but instead will submit the inputs for emissions models of onroad and nonroad mobile sources. This change applies to all states except California. Because California uses other models to reflect their additional regulatory requirements not reflected by the EPA models, California is required to report emissions values. The EPA models in use at the time of this action are the Motor Vehicle Emissions Simulator (MOVES) and the nonroad equipment model called NONROAD. The change to require model inputs from all states except California allows the EPA to use these data to run the latest version of the applicable models, even if those versions have been finalized after the model input data were collected. It also allows the EPA to generate consistent base year and future year emissions estimates, which the EPA needs to accurately assess benefits for new regulations and to make other

regulatory decisions that use air quality modeling. In addition, this action makes voluntary the reporting of emissions values for onroad and nonroad mobile sources for all states except California.

D. Removal of Requirements To Report Daily and Seasonal Emissions

With this action, the EPA is removing the requirements from the AERR that states report daily and seasonal emissions, while still permitting states to submit such data voluntarily to the EIS. States may still elect to meet the emissions reporting requirements of the NO_X SIP Call (40 CFR 51.122), the Ozone Implementation Rule (40 CFR part 51, subpart X), or the CO reporting required by the relevant CO maintenance plans through the AERR, but they are no longer required to do so. Each of these three underlying provisions already requires states to show and track consistency with the emissions projections contained in the approved SIP submissions, which can include daily or seasonal data, and also contains requirements for public review of SIP revisions. The EPA has eliminated a requirement in the AERR that, given specific public review and documentation requirements of those rules, made compliance with those rules through AERR submissions difficult. Thus, in implementing this change, the EPA is reducing burden for states that were having difficulty meeting both those SIP requirements and the previous additional AERR requirements, which were intended to meet the SIP requirements, but did not do so in all cases. States may continue to meet these SIP requirements separately or use the AERR submission to do so, as long as the AERR submission can meet these SIP requirements.

However, as explained more fully below, in light of comments received, we have determined that additional changes to some of the underlying SIP implementation provisions are necessary to ensure that the requirement to report the necessary daily and seasonal emissions is included in those underlying rules. Specifically, while the final AERR revision rule removes ozone season emissions and summer day emissions definitions and associated reporting requirements from the AERR provisions in 40 CFR Subpart A, we are also finalizing changes that will move the relevant definitions and reporting requirement for summer day emissions to the ozone reporting requirements in the Ozone Implementation Rule (40 CFR 51.900 (definitions) and 51.915 (inventory requirements)) and for ozone season emissions and summer day emissions to the NO_X SIP Call reporting requirements in 40 CFR 51.122.

E. Revisions To Simplify Reporting and Provide Consistency With EIS

The previous version of the AERR was finalized prior to the EPA finalizing the design details of the EIS data system that is used to collect and store the required data. With this action, the EPA is changing the tables of pollutants and data elements included in Appendix A to be consistent with the EIS through removals, name changes, and additions. Overall, these changes reduce burden for states, though, as noted below in the summary of EPA's responses to comments on the proposed rule (which is based on the comprehensive Response to Comments document that is available in the docket for this rule), some changes may add a small amount of additional burden for some states.

1. Revised Formats for Appendix A Tables

The EIS data system was designed such that data elements that had not changed from one reporting period to the next did not need to be re-submitted, and only data elements that changed needed to be reported. This streamlined reporting structure, along with the terminology changes, requirements deletions, and other consistency revisions described above, created a need for the EPA to revise Tables 1, 2a, 2b and 2c in Appendix A of the AERR. Table 1 still defines the emissions thresholds that determine the Type A point source emissions required to be reported each year. In addition, Table 1 now includes the thresholds used to determine the Type B sources required to be reported as point sources every third year. These Type B point source thresholds had previously been included as part of the definition of the term ''point source.'' In the revised Table 1, we have clarified the name of the two PM pollutants by including ''primary.'' This is consistent with the existing list of required pollutants described in 40 CFR 51.15.

Table 2a has been revised to include only the point source facility inventory data elements that are required to be in EIS, without regard to either the every-year or every third year reporting cycles, since these elements need only be reported for any new point source or when any change occurs at an existing point source. The emissions data element requirements for point sources from Table 2a have been combined with the emissions requirements for the other three emissions source types in Table 2b. These changes have allowed the information previously contained in Table 2c to move to Table 2b and for Table 2c to be eliminated. We have also eliminated the separate columns for ''Every-year reporting'' and ''Three-year reporting'' from Tables 2a and 2b. Those reporting cycle distinctions were only applicable to Type A point sources, and with the revisions, Table 1 now describes all of the necessary distinctions.

2. Addition of New Facility Inventory Elements

This action adds Facility Site Status, Release Point Status, and Unit Status data elements to the Facility Inventory data elements listed in Table 2a, along with the year in which any of these three data elements change from one status to another. The operating status is used by the states to indicate whether emissions reports should continue to be expected for a facility, emissions unit, or a release point, or the reason why emissions will not be reported after the year indicated.

We are also adding Aircraft Engine Type, Unit Type, and Release Point Apportionment Percent to Table 2a. The addition of Aircraft Engine Type is to support the EPA's interest in the EPA's calculating and using point source emissions from aircraft at airports. This change does not imply a requirement for states to submit aircraft as point sources. The EPA provides landing and takeoff data for state review and encourages the states to review and update those data in support of EPA's calculation of aircraft emissions. Such review would meet the states' reporting obligation for aircraft emissions. However, the states' requirement can also be met by submitting aircraft emissions as nonpoint sources. If states choose to submit their own point source estimates, this change means they would have to provide the Aircraft Engine Type code and the source classification code (SCC) to completely specify the emitting process.

Unit Type is being added to more easily and explicitly identify the type of emission unit producing the emissions than can be inferred from the SCC alone. To reduce burden associated with this new field, we have also limited the existing requirement for reporting the Unit Design Capacity for all units to only reporting capacities for a limited number of key unit types (*e.g.,* boilers). The Unit Type data element is necessary for the EIS data system to be able to confirm the presence of a value for the Unit Design Capacity element, since the Unit Design Capacity element is required only for certain Unit Types (*e.g.,* boilers).

The Release Point Apportionment Percent is being added to officially implement a feature added to the EIS at the request of some state data reporters. This data element allows states to split the emissions from a single emission process to multiple release points by reporting the percentage of emissions going to each release point.

3. Addition of New Emissions Elements

This action adds five new data elements to Table 2b, of which four are minor extensions or clarifications of existing requirements necessary to avoid ambiguity in the EIS data system. The EPA believes that these new items will not add a significant new information collection burden. As described in the response to comments summary below and the comprehensive Response to Comments document that is available in the docket for this rule, the EPA provides options to states to greatly reduce any burden for these additional data elements. The four data elements are: Shape Identifiers, Emission Type, Reporting Period Type, and Emission Operating Type.

Shape Identifiers are a more detailed method of identifying the geographic area for which emissions are being reported for nonpoint sources, instead of using the entire county. The EPA believes that they are needed for a small number of nonpoint source types, such as rail lines, ports, and underway vessels, which occur only in a small and identifiable portion of a full county. Although states are still required to report emissions for these sources, this action also adds an option for states to meet the reporting requirement by accepting the EPA's estimates for the sources for which the EPA makes calculations. For the nonpoint sources needing the more geographically-detailed emissions with Shape Identifiers, the EPA provides tables describing the geographic entities and their Shape Identifiers and has emissions estimates for each of the entities. If states choose to submit their own estimates, they must now provide the extra geographic detail described by the Shape Identifiers.

Emission Type is a code that is a further level of detail of the existing required element SCC, which describes the emitting processes. We have also revised the definition of this term in 40 CFR 51.50, since the previous definition erroneously described the Reporting Period Type and not the Emission Type.

Reporting Period Type is a code that identifies whether the emissions being reported are an annual total or one of the seasonal or daily type emissions that we are proposing to make optional, although reporting of such emissions may still be required as part of the state's implementation of a NAAQS. This addition replaces the erroneous use of the name ''Emission Type'' to describe this data element in the previous version of the AERR, as described above. The Reporting Period Type is necessary for states to distinguish the required annual emissions from the optional sub-annual emissions.

Emission Operating Type is a data element for point sources that indicates whether the emissions are associated with routine operations, or a shutdown, startup, or upset. It is necessary for the data system to distinguish between the minimally required routine emissions and the other optional operating types that the EIS can also accept.

This action also adds the Emissions Calculation Method as an additional fifth data element to the Table 2b emissions requirements. This element is required for point and nonpoint sources. It is a code that indicates how each emissions value was estimated or determined (*e.g.,* by continuous emissions monitor, by a stack test, or by an average emission factor). The EPA has determined that this element is needed to evaluate the adequacy of any emissions value for the stated purposes of the NEI and to allow the EPA to select the most reliable emissions value where more than one is available. State reporters should have this value easily available to them because they are selecting the calculation method, so adding it to their electronic submittals should cause only a minimal amount of added burden.

4. Clarification of Element Names and Usage for Controls

This action revises the data element names and clarifies the usage conventions for four data elements related to emissions control devices for the point source facility inventory elements. The single Percent Control Approach Capture Efficiency and a Percent Control Measures Reduction Efficiency for each pollutant are now required, where controls exist. These elements replace the previously required Primary Capture and Control Efficiency and Total Capture and Control Efficiency elements. The Percent Control Approach Capture Efficiency is now reported once as a stand-alone element, rather than being combined with each pollutant's Reduction Efficiency. This change reflects how the EIS data system addresses the situation and we believe it is a more practical and reasonable approach, since it allows states to report the individual reduction efficiencies as separate data elements rather than reporting only combined values that are computed from the separate reduction efficiencies.

In addition, this action adds a new Control Pollutant data element, which allows states to indicate the pollutant for which the Control Measure Reduction Efficiency is provided. This action also revises the names of previously required point source elements. Control Device Type and Rule Effectiveness have been renamed to Control Measure and Percent Control Approach Effectiveness, respectively.

This action also finalizes similar terminology and usage conventions for the nonpoint sources emission control data elements. Consistent with point sources, Control Measure and Control Pollutant are now also required for nonpoint sources. Finally, the former nonpoint data element Total Capture and Control Efficiency is now renamed to Percent Control Measures Reduction Efficiency, and Rule Effectiveness is renamed Percent Control Approach Effectiveness, consistent with the point source names.

5. Revisions to Other Facility Inventory Element Names

This action finalizes revisions to some of the terms in the point source facility inventory Table 2a to clarify their meaning and promote consistency with the EIS data system names. We are renaming the element FIPs Code to State and County FIPs Code and are permitting a Tribal Code element to be reported rather than the State and County FIPs Code when applicable. For each of the five existing stack and exit gas data elements, we are adding ''Release Point'' to the names to be consistent with EIS names. We are adding five Unit of Measure data elements, one for each of the existing numerical stack and exit gas data elements, in order to formalize the only reasonable interpretation of the prior rule requirements. The rule now requires reporting of the units of measure along with the numerical values. In addition, the Emission Type data element in the prior rule's Table 2a is now renamed Emission Operating Type and is now moved to Table 2b since it describes the emissions reported, not the facility. This action also clarifies that the requirement for Physical Address is implemented in the EIS data system through the use of four separate data elements: Location Address, Locality Name, State Code, and Postal Code.

6. Revisions To Simplify Reporting and Reduce Burden

This action revises some data elements in the point source facility inventory in Table 2a to simplify reporting and reduce burden. Either the Exit Gas Velocity or Exit Gas Flow Rate is now required, but not both. Because the Release Point Stack Diameter is also required, it is possible for users to derive the velocity or the flow rate from the other value, and so it is not necessary for states to report both. This action now requires the X Facility Coordinate (longitude) and the Y Facility Coordinate (latitude) rather than the previous requirement for X Stack Coordinate (longitude) and Y Stack Coordinate (latitude). Burden is reduced by requiring only a single facility location rather than locations for each stack or release point. It has been the EPA's experience that most states do not have accurate location values for each individual release point within a facility; instead they frequently report the same locations for all stacks within a facility. Furthermore, the vast majority of facilities are geographically small enough that such a simplification does not reduce the usefulness of the data for most inventory purposes. Although we are finalizing the requirement that only facility locations need to be reported, we encourage states voluntarily to report stack locations where those data are available. The EPA may also add individual stack locations where the agency believes it has accurate data (*e.g.,* when provided in Information Collection Requests).

Lastly, to reduce burden, this action eliminates the requirement to report several data elements: Inventory Start Date and End Date; Contact Name and Phone Number; and the four seasonal throughput percents. States may optionally report this information. In addition, for the point, nonpoint, and nonroad source types, we have removed the requirement to report three operating schedule elements: Hours per Day, Days per Week, and Weeks per Year. Also for the point source type, we have removed the requirement to report the following data elements: Heat Content, Ash Content, Sulfur Content, Method Accuracy Description Codes, and Maximum Generator Nameplate Capacity. The EPA believes that the usefulness of the remaining data is not significantly impacted by not collecting these data from the states, but we note that states still have the option to report them if those data are available.

Three additional data elements are now voluntary rather than required under the AERR for all four emissions source types, for the reasons described in section D above: Summer Day Emissions, Ozone Season Emissions, and Winter Work Weekday Emissions. However, all of the data elements that are no longer required to be reported under the AERR may still be voluntarily reported to the EIS data system.

IV. Response to Comments

In response to our notice of proposed rulemaking, we received comments from 11 commenters: 10 state agencies and one corporation. The EPA carefully considered all comments in developing the final amendments. The EPA has provided a comprehensive Response to Comments document that is available in the docket for this rule. This section provides a high-level summary of significant comments and the EPA's responses to those comments.

A. Lower Point Source Threshold for Pb Emitters

We proposed to change the reporting threshold for point sources of Pb from 5 tpy to 0.5 tpy of Pb potential emissions. The EPA received comments supporting the proposal, as well as comments recommending alternative approaches. Some comments requested that the EPA consider that the ambient monitoring rule threshold is 0.5 tons of actual emissions, and thus the goal of aligning with that rule would be better met using a 0.5 tpy threshold for actual emissions rather than potential emissions. After considering all comments, the EPA is finalizing a 0.5 tpy of actual emissions threshold for reporting Pb emissions as point sources to better reflect available state emissions inventories.

B. Elimination of Reporting for Wildfires and Prescribed Fires and Clarification for Reporting Agricultural Fires

The EPA proposed to eliminate the requirement for reporting emissions from wildfires and prescribed fires, to eliminate the reporting of these sources as nonpoint sources, and to clarify that agricultural fires must be reported as nonpoint sources. These proposed changes would reduce the reporting burden for states, because the EPA already calculates emissions from these sources, using national, satellite-based methods. Seven commenters supported the proposed elimination of the requirement to report emissions from wildfires and prescribed fires. One of these commenters further requested that the EPA retain the option for states to submit their fire emissions. Another commenter recommended that prescribed fires be allowed to be reported to the nonpoint data category. The EPA agrees that states should have the option of reporting fire emissions and the proposal allowed for that possibility. We do not believe that allowing both event-based and nonpoint reporting for prescribed fires is a viable approach, because such an approach would increase complexity of the inventory process by requiring the EPA to prevent double-counting across event-based and nonpoint-based submissions. After consideration of the comments, the EPA is finalizing this section of the rule as proposed.

C. Reporting Emission Model Inputs for Onroad Sources

We proposed to require model inputs from all states (except California) for the onroad mobile sources model MOVES, rather than require emissions values, and to permit the optional additional reporting of emissions values. Six commenters supported this approach. One state objected to the requirement for inputs for MOVES, noting that its approaches to modeling onroad emissions exceed the detail that the EPA would be able to replicate using the MOVES inputs alone, and recommended that EPA should allow either model inputs or emissions values for states to fulfill their reporting requirements.

The EPA believes that allowing emissions values instead of model inputs does not sufficiently address the EPA's needs for such onroad model input data. The MOVES model provides a large degree of flexibility regarding how to run the model, and while different run approaches can result in different estimates of emissions values, no one approach is superior to the others. The commenting state's use of finely resolved modeling approaches is no different from that of many states with nonattainment areas, for which detailed approaches are being used for state implementation plans. As we noted in the proposal, and also explain in the comprehensive Response to Comments document that is available in the docket for this rule, providing model inputs will meet a number of the EPA's needs that are essential to overall air quality responsibilities, including improving the accuracy and timeliness of the EPA's air quality planning efforts, allowing the EPA to use the latest versions of the applicable models to generate the most accurate emissions values, which are used in a variety of required implementation and planning activities, and allowing the EPA to generate consistent base year and future year emissions estimates, which are necessary for performing accurate benefits estimates for new rules (see 78

FR 37167). Thus, this final rule includes a requirement for all states, except California, to report their onroad model input data, requires California to report emissions values (because California's EPA-approved model uniquely supports California onroad mobile regulations), and allows emissions values data to be reported optionally in addition for all other states.

D. Reporting Emission Model Inputs for Nonroad Sources

We additionally proposed to require all states (except California) to provide inputs for the EPA-developed nonroad mobile sources model such as the National Mobile Inventory Model (NMIM), rather than require emissions values, and to permit the optional additional reporting of emissions values. Six commenters supported this approach. One state objected to the requirement for inputs for NONROAD, noting that they developed an improved nonroad emissions approach. They further commented that states should be able to meet their nonroad reporting requirement by reporting emissions values or model inputs.

The EPA disagrees with the comment that emissions values should be allowed in place of model inputs for several reasons. First, ongoing changes to the EPA-approved nonroad modeling to use MOVES means that all states will have to adapt to new formats in upcoming AERR every third year cycles. Second, the EPA's approved nonroad approaches are considered valid for all states except California, where state-specific nonroad source regulations cannot be modeled by the EPA model(s). Thus, even if states voluntarily develop their own approaches, the EPA's nonroad approach is still a valid approach in those states and inputs can be prepared. Third, the suggestion to submit only emissions values does not address the EPA need to have inputs for estimating consistent base and future-year emissions. Finally, for states that believe their emissions values from their own approaches are better than values that might be created by the EPA by using the inputs, those states may optionally submit those emissions values as well for use by the EPA. Thus, this final rule (1) requires all states, except California, to provide nonroad model inputs in the formats supported by the latest EPA nonroad models in accordance with guidance provided for a given every third year NEI cycle, (2) requires California to report nonroad emissions values (because state-specific nonroad source regulations cannot be modeled by the EPA models), and (3) allows additional emissions values data to be reported optionally for all other states.

E. Removal of Requirements To Report Daily and Seasonal Emissions

The EPA proposed to remove requirements to submit daily and seasonal emissions from the AERR because those requirements are duplicative in light of similar requirements of the underlying pollutant-specific implementation rules (including CO maintenance plans). These underlying rules already require states to show and track consistency with the emissions projections contained in the approved SIP submissions, and also contain requirements for public review of SIP revisions. Two commenters stated support for the proposed changes, with one of those noting inconsistencies with proposed changes to the ozone implementation rule. Four commenters disagreed with the EPA's proposed change to remove the summer day emissions requirement, with some of those commenters also noting that the definition of summer day emissions in the AERR was referenced by the proposed ozone implementation rule. One commenter stated that AERR submissions can be used as a way to demonstrate milestone year compliance for ozone or CO nonattainment areas. Another commenter indicated that since the NO_X SIP Call does not contain specific data reporting requirements and instead refers to the AERR for those requirements (see 40 CFR 51.122(f)), deleting the summer day emissions reporting in the AERR would not allow for proper implementation of the NO_X SIP Call. In addition, a commenter noted that the proposed AERR did not explicitly list the NO_X SIP call as an optional source of submitted data intended to meet compliance with that rule.

As a result of these comments, the EPA intends to ensure that the requirements for the ozone implementation rule and NO_X SIP Call are clear and that terms for mandatory emissions fields are defined in a pollutant-specific regulation, or in the relevant maintenance plan for CO. The EPA believes that the appropriate place for addressing pollutant-specific daily and seasonal reporting requirements is not the general AERR, but rather the underlying pollutant-specific implementation rules. Thus, we are not including those definitions or requirements in the final AERR. In addition, the EPA notes that while summer and winter daily emissions and seasonal emissions are no longer required by the AERR, air agencies may voluntarily report such data to EPA. Allowing such voluntary submissions will continue to support areas that would like to use those submissions to meet the requirements of other rules or plans.

When we proposed this revision, we assumed that the requirement to report specific daily and seasonal emissions was also addressed in the underlying pollutant-specific implementation rules, as well as the AERR. However, in light of these comments, we realize that the requirement to report these daily and seasonal emissions is not also contained in some of the underlying SIP implementation rules. The EPA continues to believe it is not necessary to require reporting of these emissions as part of the AERR and that it makes more sense to define and require reporting of the emissions required for compliance with specific SIP implementation rules within those rules themselves, or within the relevant maintenance plan. As a logical outgrowth of these comments and the fact that we did not propose to remove completely these pollutant-specific requirements—only to remove unnecessary duplication in the AERR—we are making additional changes to the underlying ozone implementation and NO_X SIP Call rules. Accordingly, this final rule removes the ozone season emissions and summer day emissions definitions and reporting requirements from the AERR provisions in 40 CFR Subpart A, while also finalizing changes that will move the relevant definitions and reporting requirement to address summer day emissions to the ozone reporting requirements in 40 CFR 51.900 and 51.915 and to address ozone season emissions and summer day emissions in the NO_X SIP Call reporting requirements in 40 CFR 51.122. As for CO winter work weekday emissions, since all CO areas have been redesignated to maintenance areas as of September 27, 2010, any requirements to report those emissions will exist in the relevant CO maintenance plans. As no comments identified specific CO-related deficiencies, especially as related to CO regulations or maintenance plans that would be impacted by these revisions, there is no indication that similar changes to underlying regulations are needed to address winter work day emissions.

F. Revisions To Simplify Reporting and Provide Consistency With EIS

The EPA proposed to remove required data elements from Tables 2a, 2b, and 2c. One commenter stated support for these changes. Another commenter stated support but also suggested the

EPA maintain the requirements for parameters related to state end dates and other operating schedule parameters to reduce the assumptions that reported emissions occurred over the entire year. The EPA acknowledges that the operating parameters can be useful information for certain non-annual sources. However, the vast majority of sources operate on a fairly predictable pattern for the entire year, with only a small portion operating a partial year or with an unusual schedule. While the operating parameter information can be voluntarily reported for such sources, the EPA disagrees that requiring such fields for all sources makes sense in light of the low prevalence of non-annual sources.

The EPA also proposed to add new emissions elements. One commenter supported the addition of Aircraft Engine Type, Unit Type, and Release Point Apportionment Percent to the Facility Inventory data element tables. One commenter expressed concern over these additions, noting additional burden associated with reporting details about airport emissions. Two commenters did not support the requirement for using Shape Identifiers for some nonpoint categories because of the additional resource burden. Other commenters had various minor comments related to these changes. The EPA clarifies that the addition of fields that support the reporting of airport emissions as point sources does not change the sources that will need to be reported as point sources. Most airports still do not need to be reported as point sources because their stationary source emissions will not exceed the potential-to-emit thresholds in this rule. Furthermore, the EPA notes that we provide air agencies with all of the information about aircraft engine types to use in considering their airport emissions estimates, which should reduce any burdens associated with this change.

Regarding the change to require Shape Identifiers, we acknowledge there is some increased level of detail associated with reporting shapes rather than county totals. However, the EPA has minimized the resource burden overall by providing agencies with a table of factors to easily allocate from county emissions to shapes, based on the EPA's estimated geographic allocations. The EPA also provides assistance to air agencies that might prefer to submit county estimates, by helping to prepare allocations and data files for states to submit. Thus, the EPA is finalizing the changes as proposed.

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulations and Regulatory Review

This action is not a ''significant regulatory action'' under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993) and is, therefore, not subject to review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011).

B. Paperwork Reduction Act (PRA)

The Office of Management and Budget (OMB) has approved the information collection requirements contained in this rule under the provisions of the *Paperwork Reduction Act,* 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2170.05. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

The ICR collects air emissions and related information from state and local agencies for emissions sources of oxides of nitrogen, carbon monoxide, sulfur dioxide, volatile organic compounds, particulate matter less than or equal to 10 micrometers in diameter, particulate matter less than or equal to 2.5 micrometers in diameter, and ammonia.

Every 3 years, state and local air agencies are required to submit a point source inventory, as well as a statewide stationary nonpoint, onroad mobile, and nonroad mobile source inventory for all criteria pollutants and their precursors. The emissions data submitted for the annual and 3-year cycle inventories are used by EPA's Office of Air Quality Planning and Standards to assist in developing the NEI, performing regional modeling for various regulatory purposes, and preparing national trends assessments and other special analyses and reports. Additionally, states are required to report larger point sources annually, using emissions thresholds set in the reporting rule.

Respondents/affected entities: State and local air agencies.

Respondent's obligation to respond: Mandatory as per 40 CFR part 51.

Estimated number of respondents: 104.

Frequency of response: Annual, with additional requirements triennially.

Total estimated burden: 69,140 hours (per year in triennial years). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: $5,567,043 (per year), includes $1,166,480 annualized capital or operation & maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any new requirements on small entities. This action corrects and clarifies emissions reporting requirements and provide states with additional flexibility in how they collect and report their emissions data, thereby reducing overall collection and reporting burdens and their associated costs.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. This action imposes no requirements on tribal governments. The amendments correct and clarify emissions reporting requirements and provide states with additional flexibility in how they collect and report their emissions data. Under the Tribal Authority Rule, tribes are not required to report their emissions to us, except in cases in which a tribal government voluntarily elected to apply for and received ''Treatment as State'' status for air quality control purposes and is subject to the AERR under its Tribal Implementation Plan. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

This action is not subject to Executive Order 13045 because it does not concern

an environmental health risk or safety risk. The amendments correct and clarify emissions reporting requirements and provide states with additional flexibility in how they collect and report their emissions data.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a ''significant energy action'' because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. This action corrects and clarifies emissions reporting requirements and provides states with additional flexibility in how they collect and report their emissions data.

I. National Technology Transfer and Advancement Act

This action does not involve technical standards.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. This action establishes information reporting procedures for emissions of criteria air pollutants from stationary and mobile sources.

K. Congressional Review Act

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 51

Environmental protection, Administrative practices and procedure, Air pollution control, Intergovernmental relations, Nitrogen oxides, Ozone, Particulate matter, Regional haze, Reporting and recordkeeping requirements, Sulfur dioxide.

Dated: February 6, 2015.

Gina McCarthy,

Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 51 of the Code of Federal Regulations is amended as follows:

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 51 continues to read as follows:

Authority: 23 U.S.C. 101; 42 U.S.C. 7401–7671q.

Subpart A—Air Emissions Reporting Requirements

§ 51.10 [Removed and reserved]

■ 2. Remove and reserve § 51.10.

■ 3. In § 51.15:

■ a. Revise paragraphs (a)(2), (a)(3), (a)(4), (b)(2), (b)(3), (b)(4), and the first sentence in paragraphs (c) and (d).

■ b. Remove paragraphs (a)(5) and (e).

The revisions read as follows:

§ 51.15 What data does my state need to report to EPA?

(a) * * *

(2) A state may, at its option, choose to report NO_X and VOC summer day emissions (or any other emissions) as required under the Ozone Implementation Rule or report CO winter work weekday emissions for CO nonattainment areas or CO attainment areas with maintenance plans to the Emission Inventory System (EIS) using the data elements described in this subpart.

(3) A state may, at its option, choose to report ozone season day emissions of NO_X as required under the NO_X SIP Call and summer day emissions of NO_X that may be required under the NO_X SIP Call for controlled sources to the EIS using the data elements described in this subpart.

(4) A state may, at its option, include estimates of emissions for additional pollutants (such as hazardous air pollutants) in its emission inventory reports.

(b) * * *

(2) *Nonpoint.* States may choose to meet the requirements for some of their nonpoint sources by accepting the EPA's estimates for the sources for which the EPA makes calculations. In such instances, states are encouraged to review and update the activity values or other calculational inputs used by the EPA for these sources.

(3) *Onroad and Nonroad mobile.* (i) Emissions for onroad and nonroad mobile sources must be reported as inputs to the latest EPA-developed mobile emissions models, such as the Motor Vehicle Emissions Simulator (MOVES) for onroad sources or the NMIM for nonroad sources. States using these models may report, at their discretion, emissions values computed from these models in addition to the model inputs.

(ii) In lieu of submitting model inputs for onroad and nonroad mobile sources, California must submit emissions values.

(iii) In lieu of submitting any data, states may accept existing EPA emission estimates.

(4) Emissions for wild and prescribed fires are not required to be reported by states. If states wish to optionally report these sources, they must be reported to the events data category. The events data category is a day-specific accounting of these large-scale but usually short duration emissions. Submissions must include both daily emissions estimates as well as daily acres burned values. In lieu of submitting this information, states may accept the EPA estimates or they may submit inputs (*e.g.,* acres burned, fuel loads) for us to use in the EPA's estimation approach.

(c) *Supporting information.* You must report the data elements in Tables 2a and 2b in Appendix A of this subpart. * * *

(d) *Confidential data.* We do not consider the data in Tables 2a and 2b in Appendix A of this subpart confidential, but some states limit release of these types of data. * * *

■ 4. In § 51.20, revise paragraphs (b) and (d) to read as follows:

§ 51.20 What are the emission thresholds that separate point and nonpoint sources?

* * * * *

(b) Sources that meet the definition of point source in this subpart must be reported as point sources. All pollutants specified in § 51.15(a) must be reported for point sources, not just the pollutant(s) that qualify the source as a point source.

* * * * *

(d) All stationary source emissions that are not reported as point sources must be reported as nonpoint sources. Episodic wind-generated particulate matter (PM) emissions from sources that are not major sources may be excluded, for example dust lifted by high winds from natural or tilled soil. Emissions of nonpoint sources should be aggregated to the resolution required by the EIS as described in the current National Emission Inventory (NEI) inventory year plan posted at *http://www.epa.gov/ttn/chief/eiinformation.html.* In most cases, this is county level and must be separated and identified by source classification code (SCC). Nonpoint source categories or emission events reasonably estimated by the state to represent a de minimis percentage of

total county and state emissions of a given pollutant may be omitted.

(1) The reporting of wild and prescribed fires is encouraged but not required and should be done via only the ''Events'' data category.

(2) Agricultural fires (also referred to as crop residue burning) must be reported to the nonpoint data category.

■ 5. Revise § 51.30 to read as follows:

§ 51.30 When does my state report which emissions data to EPA?

All states are required to report two basic types of emission inventories to the EPA: An every-year inventory; and a triennial inventory.

(a) *Every-year inventory.* See Tables 2a and 2b of Appendix A of this subpart for the specific data elements to report every year.

(1) All states are required to report every year the annual (12-month) emissions data described in § 51.15 from Type A (large) point sources, as defined in Table 1 of Appendix A of this subpart. The first every-year cycle inventory will be for the 2009 inventory year and must be submitted to the EPA within 12 months, *i.e.,* by December 31, 2010.

(2) In inventory years that fall under the triennial inventory requirements, the reporting required by the triennial inventory satisfies the every-year reporting requirements of paragraph (a) of this section.

(b) *Triennial inventory.* See Tables 2a and 2b to Appendix A of subpart A for the specific data elements that must be reported for the triennial inventories.

(1) All states are required to report for every third inventory year the annual (12-month) emissions data as described in § 51.15. The first triennial inventory will be for the 2011 inventory and must be submitted to the EPA within 12 months, *i.e.,* by December 31, 2012. Subsequent triennial inventories (2014, 2017, etc.) will be due 12 months after the end of the inventory year, *i.e.,* by December 31 of the following year.

(2) [Reserved]

■ 6. Revise § 51.35 to read as follows:

§ 51.35 How can my state equalize the emission inventory effort from year to year?

(a) Compiling a triennial inventory means more effort every 3 years. As an option, your state may ease this workload spike by using the following approach:

(1) Each year, collect and report data for all Type A (large) point sources (this is required for all Type A point sources).

(2) Each year, collect data for one-third of your sources that are not Type A point sources. Collect data for a different third of these sources each year so that data has been collected for all of the sources that are not Type A point sources by the end of each 3-year cycle. You must save 3 years of data and then report all emissions from the sources that are not Type A point sources on the triennial inventory due date.

(3) Each year, collect data for one-third of the nonpoint, nonroad mobile, and onroad mobile sources. You must save 3 years of data for each such source and then report all of these data on the triennial inventory due date.

(b) For the sources described in paragraph (a) of this section, your state will have data from 3 successive years at any given time, rather than from the single year in which it is compiled.

(c) If your state chooses the method of inventorying one-third of your sources that are not Type A point sources and triennial inventory nonpoint, nonroad mobile, and onroad mobile sources each year, your state must compile each year of the 3-year period identically. For example, if a process has not changed for a source category or individual plant, your state must use the same emission factors to calculate emissions for each year of the 3-year period. If your state has revised emission factors during the 3 years for a process that has not changed, you must compute previous years' data using the revised factor. If your state uses models to estimate emissions, you must make sure that the model is the same for all 3 years.

■ 7. Revise § 51.40 to read as follows:

§ 51.40 In what form and format should my state report the data to EPA?

You must report your emission inventory data to us in electronic form. We support specific electronic data reporting formats, and you are required to report your data in a format consistent with these. The term ''format'' encompasses the definition of one or more specific data fields for each of the data elements listed in Tables 2a and 2b in Appendix A of this subpart; allowed code values for certain data fields; transmittal information; and data table relational structure. Because electronic reporting technology may change, contact the EPA Emission Inventory and Analysis Group (EIAG) for the latest specific formats. You can find information on the current formats at the following Internet address: *http://www.epa.gov/ttn/chief/eis/2011nei/xml_data_eis.pdf.* You may also call the air emissions contact in your EPA Regional Office or our Info CHIEF help desk at (919) 541–1000 or send email to *info.chief@epa.gov.*

■ 8. Revise § 51.50 to read as follows:

§ 51.50 What definitions apply to this subpart?

Aircraft engine type means a code defining a unique combination of aircraft and engine used as an input parameter for calculating emissions from aircraft.

Annual emissions means actual emissions for a plant, point, or process that are measured or calculated to represent a calendar year.

Control measure means a unique code for the type of control device or operational measure (*e.g.,* wet scrubber, flaring, process change, ban) used to reduce emissions.

Emission calculation method means the code describing how the emissions for a pollutant were calculated, *e.g.,* by stack test, continuous emissions monitor, EPA emission factor, etc.

Emission factor means the ratio relating emissions of a specific pollutant to an activity throughput level.

Emission operating type means the operational status of an emissions unit for the time period for which emissions are being reported, *i.e.,* Routine, Startup, Shutdown, or Upset.

Emission process identifier means a unique code for the process generating the emissions.

Emission type means the type of emissions produced for onroad and nonroad sources or the mode of operation for marine vessels.

Emissions year means the calendar year for which the emissions estimates are reported.

Facility site identifier means the unique code for a plant or facility treated as a point source, containing one or more pollutant-emitting units. The EPA's reporting format allows for state submittals to use either the state's data system identifiers or the EPA's Emission Inventory System identifiers.

Facility site name means the name of the facility.

Lead (Pb) means lead as defined in 40 CFR 50.12. Emissions of Pb which occur either as elemental Pb or as a chemical compound containing Pb should be reported as the mass of the Pb atoms only.

Mobile source means a motor vehicle, nonroad engine or nonroad vehicle, where:

(1) A *motor vehicle* is any self-propelled vehicle used to carry people or property on a street or highway;

(2) A *nonroad engine* is an internal combustion engine (including fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not affected by sections 111 or 202 of the CAA; and

(3) A *nonroad vehicle* is a vehicle that is run by a nonroad engine and that is

not a motor vehicle or a vehicle used solely for competition.

NAICS means North American Industry Classification System code. The NAICS codes are U.S. Department of Commerce's codes for categorizing businesses by products or services and have replaced Standard Industrial Classification codes.

Nitrogen oxides (NO_X) means nitrogen oxides (NO_X) as defined in 40 CFR 60.2 as all oxides of nitrogen except N_2O. Nitrogen oxides should be reported on an equivalent molecular weight basis as nitrogen dioxide (NO_2).

Nonpoint sources collectively represent individual sources that have not been inventoried as specific point or mobile sources. These individual sources treated collectively as nonpoint sources are typically too small, numerous, or difficult to inventory using the methods for the other classes of sources.

Particulate matter (PM) is a criteria air pollutant. For the purpose of this subpart, the following definitions apply:

(1) *Filterable $PM_{2.5}$ or Filterable PM_{10}:* Particles that are directly emitted by a source as a solid or liquid at stack or release conditions and captured on the filter of a stack test train. Filterable $PM_{2.5}$ is particulate matter with an aerodynamic diameter equal to or less than 2.5 micrometers. Filterable PM_{10} is particulate matter with an aerodynamic diameter equal to or less than 10 micrometers.

(2) *Condensable PM:* Material that is vapor phase at stack conditions, but which condenses and/or reacts upon cooling and dilution in the ambient air to form solid or liquid PM immediately after discharge from the stack. Note that all condensable PM, if present from a source, is typically in the $PM_{2.5}$ size fraction and, therefore, all of it is a component of both primary $PM_{2.5}$ and primary PM_{10}.

(3) *Primary $PM_{2.5}$:* The sum of filterable $PM_{2.5}$ and condensable PM.

(4) *Primary PM_{10}:* The sum of filterable PM_{10} and condensable PM.

(5) *Secondary PM:* Particles that form or grow in mass through chemical reactions in the ambient air well after dilution and condensation have occurred. Secondary PM is usually formed at some distance downwind from the source. Secondary PM should not be reported in the emission inventory and is not covered by this subpart.

Percent control approach capture efficiency means the percentage of an exhaust gas stream actually collected for routing to a set of control devices.

Percent control approach effectiveness means the percentage of time or activity throughput that a control approach is operating as designed, including the capture and reduction devices. This percentage accounts for the fact that controls typically are not 100 percent effective because of equipment downtime, upsets and decreases in control efficiencies.

Percent control approach penetration means the percentage of a nonpoint source category activity that is covered by the reported control measures.

Percent control measures reduction efficiency means the net emission reduction efficiency across all emissions control devices. It does not account for capture device efficiencies.

Physical address means the location address (street address or other physical location description), locality name, state, and postal zip code of a facility. This is the physical location where the emissions occur; not the corporate headquarters or a mailing address.

Point source means large, stationary (non-mobile), identifiable sources of emissions that release pollutants into the atmosphere. A point source is a facility that is a major source under 40 CFR part 70 for one or more of the pollutants for which reporting is required by § 51.15 (a)(1). This does not include the emissions of hazardous air pollutants, which are not considered in determining whether a source is a point source under this subpart. The minimum point source reporting thresholds are shown in Table 1 of Appendix A.

Pollutant code means a unique code for each reported pollutant assigned by the reporting format specified by the EPA for each inventory year.

Release point apportionment percent means the average percentage(s) of an emissions exhaust stream directed to a given release point.

Release point exit gas flow rate means the numeric value of the flow rate of a stack gas.

Release point exit gas temperature means the numeric value of the temperature of an exit gas stream in degrees Fahrenheit.

Release point exit gas velocity means the numeric value of the velocity of an exit gas stream.

Release point identifier means a unique code for the point where emissions from one or more processes release into the atmosphere.

Release point stack diameter means the inner physical diameter of a stack.

Release point stack height means physical height of a stack above the surrounding terrain.

Release point type code means the code for physical configuration of the release point.

Reporting period type means the code describing the time period covered by the emissions reported, *i.e.,* Annual, 5-month ozone season, summer day, or winter.

Source classification code (SCC) means a process-level code that describes the equipment and/or operation which is emitting pollutants.

State and county FIPS code means the system of unique identifiers in the Federal Information Placement System (FIPS) used to identify states, counties and parishes for the entire United States, Puerto Rico, and Guam.

Throughput means a measurable factor or parameter that relates directly or indirectly to the emissions of an air pollution source during the period for which emissions are reported. Depending on the type of source category, activity information may refer to the amount of fuel combusted, raw material processed, product manufactured, or material handled or processed. It may also refer to population, employment, or number of units. Activity throughput is typically the value that is multiplied against an emission factor to generate an emissions estimate.

Type A source means large point sources with a potential to emit greater than or equal to any of the thresholds listed in Table 1 of Appendix A of this subpart. If a source is a Type A source for any pollutant listed in Table 1, then the emissions for all pollutants required by § 51.15 must be reported for that source.

Unit design capacity means a measure of the size of a point source, based on the reported maximum continuous throughput or output capacity of the unit.

Unit identifier means a unique code for the unit that generates emissions, typically a physical piece of equipment or a closely related set of equipment.

VOC means volatile organic compounds. The EPA's regulatory definition of VOC is in 40 CFR 51.100.

■ 9. In Appendix A to subpart A of part 51:

■ a. Revise tables 1, 2a, and 2b.

■ b. Remove table 2c.

The revisions read as follows:

Appendix A to Subpart A of Part 51—Tables

TABLE 1 TO APPENDIX A OF SUBPART A—EMISSION THRESHOLDS [1] BY POLLUTANT FOR TREATMENT AS POINT SOURCE UNDER 40 CFR 51.30

Pollutant	Every-year (Type A sources) [2]	Triennial	
		Type B sources	NAA sources [3]
(1) SO_2	≥2500	≥100	≥100.
(2) VOC	≥250	≥100	O_3 (moderate) ≥100.
			O_3 (serious)≥50.
			O_3 (severe) ≥25.
			O3 (extreme) ≥10.
(3) NO_X	≥2500	≥100	≥100.
(4) CO	≥2500	≥1000	O_3 (all areas) ≥100.
			CO (all areas) ≥100.
(5) Lead		≥0.5 (actual)	≥0.5 (actual).
(6) Primary PM_{10}	≥250	≥100	PM_{10} (moderate) ≥100.
			PM_{10} (serious) ≥70.
(7) Primary $PM_{2.5}$	≥250	≥100	≥100.
(8) NH_3 [4]	≥250	≥100	≥100.

[1] Thresholds for point source determination shown in tons per year of potential to emit as defined in 40 CFR part 70, with the exception of lead. Reported emissions should be in actual tons emitted for the required time period.
[2] Type A sources are a subset of the Type B sources and are the larger emitting sources by pollutant.
[3] NAA = Nonattainment Area. The point source reporting thresholds vary by attainment status for VOC, CO, and PM_{10}.
[4] NH_3 threshold applies only in areas where ammonia emissions are a factor in determining whether a source is a major source, *i.e.,* where ammonia is considered a significant precursor of $PM_{2.5}$.

TABLE 2a TO APPENDIX A OF SUBPART A—FACILITY INVENTORY [1] DATA ELEMENTS FOR REPORTING EMISSIONS FROM POINT SOURCES, WHERE REQUIRED BY 40 CFR 51.30

Data elements
(1) Emissions Year.
(2) State and County FIPS Code or Tribal Code.
(3) Facility Site Identifier.
(4) Unit Identifier.
(5) Emission Process Identifier.
(6) Release Point Identifier.
(7) Facility Site Name.
(8) Physical Address (Location Address, Locality Name, State and Postal Code).
(9) Latitude and Longitude at facility level.
(10) Source Classification Code.
(11) Aircraft Engine Type (where applicable).
(12) Facility Site Status and Year.

TABLE 2a TO APPENDIX A OF SUBPART A—FACILITY INVENTORY [1] DATA ELEMENTS FOR REPORTING EMISSIONS FROM POINT SOURCES, WHERE REQUIRED BY 40 CFR 51.30—Continued

Data elements
(13) Release Point Stack Height and Unit of Measure.
(14) Release Point Stack Diameter and Unit of Measure.
(15) Release Point Exit Gas Temperature and Unit of Measure.
(16) Release Point Exit Gas Velocity or Release Point Exit Gas Flow Rate and Unit of Measure.
(17) Release Point Status and Year.
(18) NAICS at facility level.
(19) Unit Design Capacity and Unit of Measure (for some unit types).
(20) Unit Type.
(21) Unit Status and Year.

TABLE 2a TO APPENDIX A OF SUBPART A—FACILITY INVENTORY [1] DATA ELEMENTS FOR REPORTING EMISSIONS FROM POINT SOURCES, WHERE REQUIRED BY 40 CFR 51.30—Continued

Data elements
(22) Release Point Apportionment Percent.
(23) Release Point Type.
(24) Control Measure and Control Pollutant (where applicable).
(25) Percent Control Approach Capture Efficiency (where applicable).
(26) Percent Control Measures Reduction Efficiency (where applicable).
(27) Percent Control Approach Effectiveness (where applicable).

[1] Facility Inventory data elements need only be reported once to the EIS and then revised if needed. They do not need to be reported for each triennial or every-year emissions inventory.

TABLE 2b TO APPENDIX A OF SUBPART A—DATA ELEMENTS FOR REPORTING EMISSIONS FROM POINT, NONPOINT, ONROAD MOBILE AND NONROAD MOBILE SOURCES, WHERE REQUIRED BY 40 CFR 51.30

Data elements	Point	Nonpoint	Onroad	Nonroad
(1) Emissions Year	Y	Y	Y	Y
(2) FIPS code	Y	Y	Y	Y
(3) Shape Identifiers (where applicable)		Y		
(4) Source Classification Code		Y	Y	Y
(5) Emission Type (where applicable)		Y	Y	Y
(8) Emission Factor	Y	Y		
(9) Throughput (Value, Material, Unit of Measure, and Type)	Y	Y	Y	
(10) Pollutant Code	Y	Y	Y	Y
(11) Annual Emissions and Unit of Measure	Y	Y	Y	Y
(12) Reporting Period Type (Annual)	Y	Y	Y	Y
(13) Emission Operating Type (Routine)	Y			
(14) Emission Calculation Method	Y	Y		
(15) Control Measure and Control Pollutant (where applicable)		Y		
(16) Percent Control Measures Reduction Efficiency (where applicable)		Y		
(17) Percent Control Approach Effectiveness (where applicable)		Y		
(18) Percent Control Approach Penetration (where applicable)		Y		

Subpart G—Control Strategy

■ 10. In § 51.122:
■ a. Revise paragraphs (a), (c)(1)(i), (c)(2), (c)(3), (f), and (g).
■ b. Remove and reserve paragraph (d).
The revisions read as follows:

§ 51.122 Emissions reporting requirements for SIP revisions relating to budgets for NO_X emissions.

(a) As used in this section, words and terms shall have the meanings set forth in § 51.50. In addition, the following terms shall apply to this section:

(1) Ozone season emissions means emissions during the period from May 1 through September 30 of a year.

(2) Summer day emissions means an average day's emissions for a typical summer work weekday. The state will select the particular month(s) in summer and the day(s) in the work week to be represented.

* * * * *

(c) * * *

(1) * * *

(i) The state must report to EPA emissions data from all NO_X sources within the state for which the state specified control measures in its SIP submission under § 51.121(g), including all sources for which the state has adopted measures that differ from the measures incorporated into the baseline inventory for the year 2007 that the state developed in accordance with § 51.121(g).The state must also report to EPA ozone season emissions of NO_X and summer day emissions of NO_X from any point, nonpoint, onroad mobile, or nonroad mobile source for which the state specified control measures in its SIP submission under § 51.121(g).

* * * * *

(2) For the 3-year cycle reporting, each plan must provide for triennial (*i.e.,* every third year) reporting of NO_X emissions data from all sources within the state. The state must also report to EPA ozone season emissions of NO_X and summer day emissions of NO_X from all point sources, nonpoint sources, onroad mobile sources, and nonroad mobile sources.

(3) The data availability requirements in § 51.116 must be followed for all data submitted to meet the requirements of paragraphs (c)(1) and (2) of this section.

(d) [Reserved]

* * * * *

(f) *Reporting schedules.* Data collection is to begin during the ozone season 1 year prior to the state's NO_X SIP Call compliance date.

(g) The state shall report emissions as point sources according to the point source emissions thresholds of the Air Emissions Reporting Rule (AERR), 40 CFR part 51, subpart A. The detail of the emissions inventory shall be consistent with the data elements required by 40 CFR part 51, subpart A. When submitting a formal NO_X Budget Emissions Report and associated data, states shall notify the appropriate EPA Regional Office.

Subpart X—Provisions for Implementation of 8-hour Ozone National Ambient Air Quality Standard

■ 11. In § 51.900, add paragraph (v) to read as follows:

§ 51.900 Definitions.

* * * * *

(v) *Summer day emissions* means an average day's emissions for a typical summer work weekday. The state will select the particular month(s) in summer and the day(s) in the work week to be represented. The selection of conditions should be coordinated with the conditions assumed in the development of RFP plans, ROP plans and demonstrations, and/or emissions budgets for transportation conformity, to allow comparability of daily emission estimates.

■ 12. Revise § 51.915 to read as follows:

§ 51.915 What emissions inventory requirements apply under the 8-hour NAAQS?

For each nonattainment area subject to subpart 2 in accordance with § 51.903, the emissions inventory requirements in sections 182(a)(1) and 182(a)(3) of the Act shall apply, and such SIP shall be due no later 2 years after designation. For each nonattainment area subject only to title I, part D, subpart 1 of the Act in accordance with § 51.902(b), the emissions inventory requirement in section 172(c)(3) of the Act shall apply, and an emission inventory SIP shall be due no later 3 years after designation. The state must report to the EPA summer day emissions of NO_X and VOC from all point sources, nonpoint sources, onroad mobile sources, and nonroad mobile sources. The state shall report emissions as point sources according to the point source emissions thresholds of the Air Emissions Reporting Rule (AERR), 40 CFR part 51, subpart A. The detail of the emissions inventory shall be consistent with the data elements required by 40 CFR part 51, subpart A.

[FR Doc. 2015–03470 Filed 2–18–15; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 60, 61, and 63

[EPA–R06–OAR–2007–1205; FRL9923–05–Region 6]

New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants; Delegation of Authority to Albuquerque-Bernalillo County Air Quality Control Board

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule; delegation of authority.

SUMMARY: The Albuquerque-Bernalillo County Air Quality Control Board (ABCAQCB) has submitted updated regulations for receiving delegation of the Environmental Protection Agency (EPA) authority for implementation and enforcement of New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs) for all sources (both part 70 and non-part 70 sources). The delegation of authority under this action applies only to sources located in Bernalillo County, New Mexico, and does not extend to sources located in Indian Country. EPA is providing notice that it is updating the delegation of certain NSPS to ABCAQCB, and taking direct final action to approve the delegation of certain NESHAPs to ABCAQCB.

DATES: This rule is effective on April 20, 2015 without further notice, unless EPA receives relevant adverse comment by March 23, 2015. If EPA receives such comment, EPA will publish a timely withdrawal in the **Federal Register** informing the public that the updated NESHAPs delegation will not take effect; however, the NSPS delegation will not be affected by such action.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R06–OAR–2007–1205, by one of the following methods:

- *www.regulations.gov.* Follow the on-line instructions.
- Email: Mr. Rick Barrett at barrett.richard@*epa.gov.* Please also send a copy by email to the person listed in the **FOR FURTHER INFORMATION CONTACT** section below.
- Mail or delivery: Mr. Rick Barrett, Air Permits Section (6PD–R), Environmental Protection Agency, 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202–2733.

Instructions: Direct your comments to Docket No. EPA–R06–OAR–2007–1205. EPA's policy is that all comments received will be included in the public

docket without change and may be made available online at *http://www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information through *http://www.regulations.gov* or email, if you believe that it is CBI or otherwise protected from disclosure. The *http://www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through *http://www.regulations.gov,* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment along with any disk or CD–ROM submitted. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters and any form of encryption and be free of any defects or viruses. For additional information about EPA's public docket, visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm.*

Docket: The index to the docket for this action is available electronically at *www.regulations.gov* and in hard copy at EPA Region 6, 1445 Ross Avenue, Suite 700, Dallas, Texas. While all documents in the docket are listed in the index, some information may be publicly available only at the hard copy location (*e.g.,* copyrighted material), and some may not be publicly available at either location (*e.g.,* CBI).

FOR FURTHER INFORMATION CONTACT: Mr. Rick Barrett, (214) 665–7227, *barrett.richard@epa.gov.* To inspect the hard copy materials, please schedule an appointment with Mr. Barrett or Mr. Bill Deese at (214) 665–7253.

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I. What does this action do?

EPA is providing notice that it is delegating authority for implementation and enforcement of certain NSPS to ABCAQCB. EPA is also taking direct final action to approve the delegation of certain NESHAPs to ABCAQCB. With this delegation, ABCAQCB has the primary responsibility to implement and enforce the delegated standards.

II. What is the authority for delegation?

Section 111(c)(1) of the Clean Air Act (CAA) authorizes EPA to delegate authority to any state agency which submits adequate regulatory procedures for implementation and enforcement of the NSPS program. In addition, a state may authorize a local agency to carry out a plan (program) within the local agency's jurisdiction under certain conditions. See 40 CFR 60.26(e). The NSPS standards are codified at 40 CFR part 60.

Section 112(l) of the CAA and 40 CFR part 63, subpart E, authorizes EPA to delegate authority to any state or local agency which submits an adequate regulatory program for implementation and enforcement of emission standards for hazardous air pollutants. The hazardous air pollutant standards are codified at 40 CFR parts 61 and 63.

III. What criteria must ABCAQCB's programs meet to be approved?

In order to receive delegation of NSPS a state must develop and submit to the EPA a procedure for implementing and enforcing the NSPS in the state, or in the local agency's jurisdiction as discussed above, and their regulations and resources must be adequate for the implementation and enforcement of the NSPS. EPA initially approved the ABCAQCB program for the delegation of NSPS on December 20, 1989 (54 FR 52031). EPA reviewed the rules and regulations of the ABCAQCB and determined the ABCAQCB's procedures, regulations and resources adequate for the implementation and enforcement of the Federal standards. The NSPS delegation was most recently updated on December 9, 2005 (70 FR 73138). This action notifies the public that EPA is updating ABCAQCB's delegation to implement and enforce certain additional NSPS.

As to the NESHAP standards in 40 CFR parts 61 and 63, section 112(l)(5) of the CAA enables EPA to approve state air toxics programs or rules to operate in place of the Federal air toxics program or rules. 40 CFR part 63, subpart E governs EPA's approval of State programs or rules under section 112(l).

EPA will approve the State's submittal of a program for implementation and enforcement of the NESHAPs if we find that:

(1) The State program is ''no less stringent'' than the corresponding Federal program or rule;

(2) The State has adequate authority and resources to implement the program;

(3) The schedule for implementation and compliance is sufficiently expeditious; and

(4) The program otherwise complies with Federal guidance.

In order to obtain approval of its program to implement and enforce Federal section 112 rules as promulgated without changes (straight delegation), a State must demonstrate that it meets the approval criteria of 40 CFR 63.91(d). 40 CFR 63.91(d)(3) provides that interim or final Title V program approval will satisfy the criteria of 40 CFR 63.91(d) for part 70 sources (sources required to obtain Title V operating permits pursuant to the Clean Air Act).

IV. How did ABCAQCB meet the approval criteria?

As to the NSPS standards in 40 CFR part 60, ABCAQCB adopted the Federal standards via incorporation by reference. The ABCAQCB regulations are, therefore, at least as stringent as EPA's rules. See 40 CFR 60.10(a). Also, in the EPA initial approval of NSPS delegation, we determined that ABCAQCB developed procedures for implementing and enforcing the NSPS in Bernalillo County, and that ABCAQCB's regulations and resources are adequate for the implementation and enforcement of the Federal standards. See 54 FR 52031 (December 20, 1989).

As to the NESHAP standards in 40 CFR parts 61 and 63, as part of its Title V submission ABCAQCB stated that it intended to use the mechanism of incorporation by reference to adopt unchanged Federal section 112 standards into its regulations. This commitment applied to both existing and future standards as they applied to part 70 sources. EPA's final interim approval of ABCAQCB's Title V operating permits program delegated the authority to implement certain NESHAPs on March 10, 1995 (60 FR

13046). On November 26, 1996, EPA promulgated final full approval of the ABCAQCB's operating permits program. (61 FR 60032). These interim and final title V program approvals satisfy the upfront approval criteria of 40 CFR 63.91(d). Under 40 CFR 63.91(d)(2), once a state has satisfied the up-front approval criteria, it needs only to reference the previous demonstration and reaffirm that it still meets the criteria for any subsequent submittals for delegation of the section 112 standards. ABCAQCB has affirmed that it still meets the up-front approval criteria.

V. What is being delegated?

By letter dated December 14, 2006, EPA received a request from ABCAQCB to update their NSPS delegation and NESHAPs delegation. With certain exceptions noted in section VI below, ABCAQCB's request included NSPS in 40 CFR part 60, and NESHAPs in 40 CFR parts 61 and 63, as amended between July 2, 2004 and October 28, 2006.

By letter dated January 16, 2009, EPA received a second request from ABCAQCB to update their NSPS delegation and NESHAPs delegation. With certain exceptions noted in section VI below, ABCAQCB's request included NSPS in 40 CFR part 60, and NESHAPs in 40 CFR parts 61 and 63, as amended between October 29, 2006 and August 1, 2008.

By letter dated November 18, 2011, EPA received a third request from ABCAQCB to update their NSPS delegation and NESHAPs delegation. With certain exceptions noted in section VI below, ABCAQCB's request included NSPS in 40 CFR part 60, and NESHAPs in 40 CFR parts 61 and 63, as amended between August 2, 2008, and August 29, 2011.

By letter dated January 15, 2014, EPA received a fourth request from ABCAQCB to update ABCAQCB's NSPS delegation and NESHAPs delegation. With certain exceptions noted in section VI below, ABCAQCB's request included NSPS in 40 CFR part 60, and NESHAPs in 40 CFR parts 61 and 63, as amended between August 30, 2011, and September 13, 2013.

VI. What is not being delegated?

The following part 60, 61 and 63 authorities listed below are not delegated. All of the inquiries and requests concerning implementation and enforcement of the excluded standards for the ABCAQCB should be directed to the EPA Region 6 Office.

- 40 CFR Part 60, Subpart AAA (Standards of Performance for New Residential Wood Heaters);
- 40 CFR Part 61, Subpart B (National Emission Standards for Radon Emissions from Underground Uranium Mines);
- 40 CFR Part 61, Subpart H (National Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities);
- 40 CFR Part 61, Subpart I (National Emission Standards for Radionuclide Emissions from Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H);
- 40 CFR Part 61, Subpart K (National Emission Standards for Radionuclide Emissions from Elemental Phosphorus Plants);
- 40 CFR Part 61, Subpart Q (National Emission Standards for Radon Emissions from Department of Energy facilities);
- 40 CFR Part 61, Subpart R (National Emission Standards for Radon Emissions from Phosphogypsum Stacks);
- 40 CFR Part 61, Subpart T (National Emission Standards for Radon Emissions from the Disposal of Uranium Mill Tailings); and
- 40 CFR Part 61, Subpart W (National Emission Standards for Radon Emissions from Operating Mill Tailings).

In addition, EPA cannot delegate to a State or local authority any of the Category II Subpart A authorities set forth in 40 CFR 63.91(g)(2). These include the following provisions: § 63.6(g), Approval of Alternative Non-Opacity Standards; § 63.6(h)(9), Approval of Alternative Opacity Standards; § 63.7(e)(2)(ii) and (f), Approval of Major Alternatives to Test Methods; § 63.8(f), Approval of Major Alternatives to Monitoring; and § 63.10(f), Approval of Major Alternatives to Recordkeeping and Reporting. Also, some Part 63 standards have certain provisions that cannot be delegated to the States. Therefore, any Part 63 standard that EPA is delegating to ABCAQCB that provides that certain authorities cannot be delegated are retained by EPA and not delegated. Furthermore, no authorities are delegated that require rulemaking in the **Federal Register** to implement, or where Federal overview is the only way to ensure national consistency in the application of the standards or requirements of CAA section 112. Finally, section 112(r), the accidental release program authority, is not being delegated by this approval.

In addition, this delegation to ABCAQCB to implement and enforce certain NSPS and NESHAPs does not extend to sources or activities located in Indian country, as defined in 18 U.S.C. 1151. Under this definition, EPA treats as reservations, trust lands validly set aside for the use of a Tribe even if the trust lands have not been formally designated as a reservation. Consistent with previous federal program approvals or delegations, EPA will continue to implement the NSPS and NESHAPs in Indian country because ABCAQCB has not submitted information to demonstrate authority over sources and activities located within the exterior boundaries of Indian reservations and other areas in Indian country.

VII. How will applicability determinations be made?

In approving the NSPS delegation, ABCAQCB will obtain concurrence from EPA on any matter involving the interpretation of section 111 of the CAA or 40 CFR part 60 to the extent that application, implementation, administration, or enforcement of these provisions have not been covered by prior EPA determinations or guidance. See 54 FR 52031 (December 20, 1989).

In approving the NESHAPs delegation, ABCAQCB will obtain concurrence from EPA on any matter involving the interpretation of section 112 of the CAA or 40 CFR parts 61 and 63 to the extent that application, implementation, administration, or enforcement of these provisions have not been covered by prior EPA determinations or guidance.

VIII. What authority does EPA have?

We retain the right, as provided by CAA section 111(c)(2), to enforce any applicable emission standard or requirement under section 111.

We retain the right, as provided by CAA section 112(l)(7), to enforce any applicable emission standard or requirement under section 112. EPA also has the authority to make certain decisions under the General Provisions (subpart A) of part 63. We are granting ABCAQCB some of these authorities, and retaining others, as explained in sections V and VI above. In addition, EPA may review and disapprove determinations by State and local authorities and subsequently require corrections. (*See* 40 CFR 63.91(g) and 65 FR 55810, 55823, September 14, 2000, as amended at 70 FR 59887, October 13, 2005; 72 FR 27443, May 16, 2007.)

Furthermore, we retain any authority in an individual emission standard that may not be delegated according to

provisions of the standard. Also, listed in the footnotes of the part 63 delegation table at the end of this rule are the authorities that cannot be delegated to any State or local agency which we therefore retain.

Finally, we retain the authorities stated in the initial notice of delegation of authority. See 54 FR 52031 (December 20, 1989).

IX. What information must ABCAQCB provide to EPA?

Under 40 CFR 60.4(b), all notifications under NSPS must be sent to both EPA and to ABCAQCB. Please send notifications and reports to Chief, Air/Toxics Inspection and Coordination Branch at the EPA Region 6 office.

ABCAQCB must provide any additional compliance related information to EPA, Region 6, Office of Enforcement and Compliance Assurance, within 45 days of a request under 40 CFR 63.96(a). In receiving delegation for specific General Provisions authorities, ABCAQCB must submit to EPA Region 6, on a semi-annual basis, copies of determinations issued under these authorities. For 40 CFR parts 61 and 63 standards, these determinations include: Section 63.1, Applicability Determinations; Section 63.6(e), Operation and Maintenance Requirements—Responsibility for Determining Compliance; Section 63.6(f), Compliance with Non-Opacity Standards—Responsibility for Determining Compliance; Section 63.6(h), Compliance with Opacity and Visible Emissions Standards—Responsibility for Determining Compliance; Sections 63.7(c)(2)(i) and (d), Approval of Site-Specific Test Plans; Section 63.7(e)(2)(i), Approval of Minor Alternatives to Test Methods; Section 63.7(e)(2)(ii) and (f), Approval of Intermediate Alternatives to Test Methods; Section 63.7(e)(iii), Approval of Shorter Sampling Times and Volumes When Necessitated by Process Variables or Other Factors; Sections 63.7(e)(2)(iv), (h)(2), and (h)(3), Waiver of Performance Testing; Sections 63.8(c)(1) and (e)(1), Approval of Site-Specific Performance Evaluation (Monitoring) Test Plans; Section 63.8(f), Approval of Minor Alternatives to Monitoring; Section 63.8(f), Approval of Intermediate Alternatives to Monitoring; Section 63.9 and 63.10, Approval of Adjustments to Time Periods for Submitting Reports; Section 63.10(f), Approval of Minor Alternatives to Recordkeeping and Reporting; Section 63.7(a)(4), Extension of Performance Test Deadline.

X. What is EPA's oversight role?

EPA must oversee ABCAQCB's decisions to ensure the delegated authorities are being adequately implemented and enforced. We will integrate oversight of the delegated authorities into the existing mechanisms and resources for oversight currently in place. If, during oversight, we determine that ABCAQCB made decisions that decreased the stringency of the delegated standards, then ABCAQCB shall be required to take corrective actions and the source(s) affected by the decisions will be notified, as required by 40 CFR 63.91(g)(1)(ii). We will initiate withdrawal of the program or rule if the corrective actions taken are insufficient.

XI. Should sources submit notices to EPA or ABCAQCB?

All of the information required pursuant to the Federal NSPS and NESHAPs (40 CFR parts 60, 61 and 63) should be submitted by sources located inside the boundaries of Bernalillo County and areas outside of Indian country, directly to the ABCAQCB at the following address: City of Albuquerque, Albuquerque Environmental Health Department, P.O. Box 1293, Albuquerque, NM 87103. The ABCAQCB is the primary point of contact with respect to delegated NSPS and NESHAPs. Sources do not need to send a copy to EPA. EPA Region 6 waives the requirement that notifications and reports for delegated standards be submitted to EPA in addition to ABCAQCB, in accordance with 40 CFR 63.9(a)(4)(ii) and 63.10(a)(4)(ii). Also, see 51 FR 20648 (June 6, 1986). For those standards that are not delegated, sources must continue to submit all appropriate information to EPA.

XII. How will unchanged authorities be delegated to ABCAQCB in the future?

In the future, ABCAQCB will only need to send a letter of request to update their delegation to EPA, Region 6, for those NSPS which they have adopted by reference. EPA will amend the relevant portions of the Code of Federal Regulations showing which NSPS standards have been delegated to ABCAQCB. Also, in the future, ABCAQCB will only need to send a letter of request for approval to EPA, Region 6, for those NESHAPs regulations that ABCAQCB has adopted by reference. The letter must reference the previous up-front approval demonstration and reaffirm that it still meets the up-front approval criteria. We will respond in writing to the request stating that the request for delegation is either granted or denied. A **Federal Register** action will be published to inform the public and affected sources of the delegation, indicate where source notifications and reports should be sent, and to amend the relevant portions of the Code of Federal Regulations showing which NESHAP standards have been delegated to ABCAQCB.

XIII. Final Action

The public was provided the opportunity to comment on the proposed interim approval (60 FR 2570) and direct final interim approval (60 FR 2527) of ABCAQCB's Title V operating permit program, and mechanism for delegation of section 112 standards as they apply to part 70 sources, on January 10, 1995. On March 10, 1995, EPA published an informational notice in the **Federal Register** informing the public that the direct final interim approval would remain final. (60 FR 13046). In today's action, the public is given the opportunity to comment on the approval of ABCAQCB's request for delegation of authority to implement and enforce certain section 112 standards for all sources (both part 70 and non-part 70 sources) which have been adopted by reference into ABCAQCB's regulations. However, the Agency views the approval of these requests as a noncontroversial action and anticipates no adverse comments. Therefore, EPA is publishing this rule without prior proposal. However, in the ''Proposed Rules'' section of today's **Federal Register** publication, EPA is publishing a separate document that will serve as the proposal to approve the program and NESHAPs delegation of authority described in this action if adverse comments are received. This action will be effective April 20, 2015 without further notice unless the Agency receives relevant adverse comments by March 23, 2015.

If EPA receives relevant adverse comments, we will publish a timely withdrawal in the **Federal Register** informing the public the rule will not take effect with respect to the updated NESHAPs delegation. We will address all public comments in a subsequent final rule based on the proposed rule. The EPA will not institute a second comment period on this action. Any parties interested in commenting must do so at this time. Please note that if we receive relevant adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, we may adopt as final those provisions of the rule that are not the subject of a relevant adverse comment.

XIV. Statutory and Executive Order Reviews

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the delegation is not approved to apply in Indian country located in the State, and the EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law. This action also does not have Federalism implications because it does not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action merely approves a state request to receive delegation of certain Federal standards, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing delegation submissions, EPA's role is to approve submissions, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the state to use voluntary consensus standards (VCS), EPA has no authority to disapprove a delegation submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA to use VCS in place of a delegation submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by April 20, 2015. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2)).

List of Subjects

40 CFR Part 60

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Reporting and recordkeeping requirements.

40 CFR Part 61

Environmental protection, Administrative practice and procedure, Air pollution control, Arsenic, Benzene, Beryllium, Hazardous substances, Mercury, Intergovernmental relations, Reporting and recordkeeping requirements, Vinyl chloride.

40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: January 28, 2015.

Samuel Coleman,

Acting Regional Administrator, Region 6.

For the reasons stated in the preamble, 40 CFR parts 60, 61, and 63 are amended as follows:

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

■ 1. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart A—General Provisions

■ 2. Section 60.4 is amended by revising paragraph (e)(3) to read as follows:

§ 60.4 Address.

* * * * *

(e) * * *

(3) *Albuquerque-Bernalillo County Air Quality Control Board.* The Albuquerque-Bernalillo County Air Quality Control Board has been delegated all part 60 standards promulgated by EPA, except subpart AAA—Standards of Performance for New Residential Wood Heaters, as amended in the **Federal Register** through September 13, 2013.

PART 61—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

■ 3. The authority citation for part 61 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart A—General Provisions

■ 4. Section 61.04 is amended by revising paragraph (c)(6)(vi) to read as follows:

§ 61.04 Address.

* * * * *

(c) * * *

(6) * * *

(vi) *Albuquerque-Bernalillo County, New Mexico.* The Albuquerque-Bernalillo County Air Quality Control Board (ABCAQCB) has been delegated the following part 61 standards promulgated by EPA, as amended in the **Federal Register** through September 13, 2013. The (X) symbol is used to indicate each subpart that has been delegated.

DELEGATION STATUS FOR NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (PART 61 STANDARDS) FOR ALBUQUERQUE-BERNALILLO COUNTY AIR QUALITY CONTROL BOARD

[Excluding Indian Country] [1]

Subpart	Source category	ABCAQCB
A	General Provisions	X
B	Radon Emissions From Underground Uranium Mines	
C	Beryllium	X
D	Beryllium Rocket Motor Firing	X
E	Mercury	X
F	Vinyl Chloride	X
G	(Reserved)	
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities	
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H.	
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X
K	Radionuclide Emissions From Elemental Phosphorus Plants	
L	Benzene Emissions From Coke By-Product Recovery Plants	X
M	Asbestos	X
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	X
O	Inorganic Arsenic Emissions From Primary Copper Smelters	X
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	X
Q	Radon Emissions From Department of Energy Facilities	
R	Radon Emissions From Phosphogypsum Stacks	
S	(Reserved)	
T	Radon Emissions From the Disposal of Uranium Mill Tailings	
U	(Reserved)	
V	Equipment Leaks (Fugitives Emission Sources)	X
W	Radon Emissions From Operating Mill Tailings	
X	(Reserved)	
Y	Benzene Emissions From Benzene Storage Vessels	X
Z–AA	(Reserved)	
BB	Benzene Emissions From Benzene Transfer Operations	X
CC–EE	(Reserved)	
FF	Benzene Waste Operations	X

[1] Program delegated to Albuquerque-Bernalillo County Air Quality Control Board (ABCAQCB).

* * * * *

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 5. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart E—Approval of State Programs and Delegation of Federal Authorities

■ 6. Section 63.99 is amended by revising paragraph (a)(32)(i) to read as follows:

§ 63.99 Delegated Federal authorities.

(a) * * *

(32) * * *

(i) The following table lists the specific part 63 standards that have been delegated unchanged to state and local air pollution agencies in New Mexico. The ''X'' symbol is used to indicate each subpart that has been delegated. The delegations are subject to all of the conditions and limitations set forth in Federal law, regulations, policy, guidance, and determinations. Some authorities cannot be delegated and are retained by EPA. These include certain General Provisions authorities and specific parts of some standards. Any amendments made to these rules after September 13, 2013, are not delegated.

DELEGATION STATUS FOR PART 63 STANDARDS—STATE OF NEW MEXICO

[Excluding Indian Country]

Subpart	Source category	NMED [1 2]	ABCAQCB [1 3]
A	General Provisions	X	X
D	Early Reductions	X	X
F	Hazardous Organic NESHAP (HON)—Synthetic Organic Chemical Manufacturing Industry (SOCMI).	X	X
G	HON—SOCMI Process Vents, Storage Vessels, Transfer Operations and Wastewater.	X	X
H	HON—Equipment Leaks	X	X
I	HON—Certain Processes Negotiated Equipment Leak Regulation	X	X
J	Polyvinyl Chloride and Copolymers Production	(4)	(4)
K	(Reserved)		
L	Coke Oven Batteries	X	X
M	Perchloroethylene Dry Cleaning	X	X
N	Chromium Electroplating and Chromium Anodizing Tanks	X	X
O	Ethylene Oxide Sterilizers	X	X

DELEGATION STATUS FOR PART 63 STANDARDS—STATE OF NEW MEXICO—Continued

[Excluding Indian Country]

Subpart	Source category	NMED [1 2]	ABCAQCB [1 3]
P	(Reserved)		
Q	Industrial Process Cooling Towers	X	X
R	Gasoline Distribution	X	X
S	Pulp and Paper Industry	X	X
T	Halogenated Solvent Cleaning	X	X
U	Group I Polymers and Resins	X	X
V	(Reserved)		
W	Epoxy Resins Production and Non-Nylon Polyamides Production	X	X
X	Secondary Lead Smelting	X	X
Y	Marine Tank Vessel Loading	X	X
Z	(Reserved)		
AA	Phosphoric Acid Manufacturing Plants	X	X
BB	Phosphate Fertilizers Production Plants	X	X
CC	Petroleum Refineries	X	X
DD	Off-Site Waste and Recovery Operations	X	X
EE	Magnetic Tape Manufacturing	X	X
FF	(Reserved)		
GG	Aerospace Manufacturing and Rework Facilities	X	X
HH	Oil and Natural Gas Production Facilities	X	X
II	Shipbuilding and Ship Repair Facilities	X	X
JJ	Wood Furniture Manufacturing Operations	X	X
KK	Printing and Publishing Industry	X	X
LL	Primary Aluminum Reduction Plants	X	X
MM	Chemical Recovery Combustion Sources at Kraft, Soda, Sulfide, and Stand-Alone Semichemical Pulp Mills.	X	X
NN	(Reserved)		
OO	Tanks-Level 1	X	X
PP	Containers	X	X
QQ	Surface Impoundments	X	X
RR	Individual Drain Systems	X	X
SS	Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process.	X	X
TT	Equipment Leaks—Control Level 1	X	X
UU	Equipment Leaks—Control Level 2 Standards	X	X
VV	Oil—Water Separators and Organic—Water Separators	X	X
WW	Storage Vessels (Tanks)—Control Level 2	X	X
XX	Ethylene Manufacturing Process Units Heat Exchange Systems and Waste Operations.	X	X
YY	Generic Maximum Achievable Control Technology Standards	X	X
ZZ–BBB	(Reserved)		
CCC	Steel Pickling—HCl Process Facilities and Hydrochloric Acid Regeneration	X	X
DDD	Mineral Wool Production	X	X
EEE	Hazardous Waste Combustors	X	X
FFF	(Reserved)		
GGG	Pharmaceuticals Production	X	X
HHH	Natural Gas Transmission and Storage Facilities	X	X
III	Flexible Polyurethane Foam Production	X	X
JJJ	Group IV Polymers and Resins	X	X
KKK	(Reserved)		
LLL	Portland Cement Manufacturing	X	X
MMM	Pesticide Active Ingredient Production	X	X
NNN	Wool Fiberglass Manufacturing	X	X
OOO	Amino/Phenolic Resins	X	X
PPP	Polyether Polyols Production	X	X
QQQ	Primary Copper Smelting	X	X
RRR	Secondary Aluminum Production	X	X
SSS	(Reserved)		
TTT	Primary Lead Smelting	X	X
UUU	Petroleum Refineries—Catalytic Cracking Units, Catalytic Reforming Units and Sulfur Recovery Plants.	X	X
VVV	Publicly Owned Treatment Works (POTW)	X	X
WWW	(Reserved)		
XXX	Ferroalloys Production: Ferromanganese and Silicomanganese	X	X
AAAA	Municipal Solid Waste Landfills	X	X
CCCC	Nutritional Yeast Manufacturing	X	X
DDDD	Plywood and Composite Wood Products	[5] X	[5] X
EEEE	Organic Liquids Distribution	X	X
FFFF	Misc. Organic Chemical Production and Processes (MON)	X	X
GGGG	Solvent Extraction for Vegetable Oil Production	X	X
HHHH	Wet Formed Fiberglass Mat Production	X	X
IIII	Auto & Light Duty Truck (Surface Coating)	X	X

DELEGATION STATUS FOR PART 63 STANDARDS—STATE OF NEW MEXICO—Continued

[Excluding Indian Country]

Subpart	Source category	NMED [1 2]	ABCAQCB [1 3]
JJJJ	Paper and other Web (Surface Coating)	X	X
KKKK	Metal Can (Surface Coating)	X	X
MMMM	Misc. Metal Parts and Products (Surface Coating)	X	X
NNNN	Surface Coating of Large Appliances	X	X
OOOO	Fabric Printing Coating and Dyeing	X	X
PPPP	Plastic Parts (Surface Coating)	X	X
QQQQ	Surface Coating of Wood Building Products	X	X
RRRR	Surface Coating of Metal Furniture	X	X
SSSS	Surface Coating for Metal Coil	X	X
TTTT	Leather Finishing Operations	X	X
UUUU	Cellulose Production Manufacture	X	X
VVVV	Boat Manufacturing	X	X
WWWW	Reinforced Plastic Composites Production	X	X
XXXX	Rubber Tire Manufacturing	X	X
YYYY	Combustion Turbines	X	X
ZZZZ	Reciprocating Internal Combustion Engines (RICE)	X	X
AAAAA	Lime Manufacturing Plants	X	X
BBBBB	Semiconductor Manufacturing	X	X
CCCCC	Coke Ovens: Pushing, Quenching and Battery Stacks	X	X
DDDDD	Industrial/Commercial/Institutional Boilers and Process Heaters	[6] X	[6] X
EEEEE	Iron and Steel Foundries	X	X
FFFFF	Integrated Iron and Steel	X	X
GGGGG	Site Remediation	X	X
HHHHH	Miscellaneous Coating Manufacturing	X	X
IIIII	Mercury Cell Chlor-Alkali Plants	X	X
JJJJJ	Brick and Structural Clay Products Manufacturing	([7])	([7])
KKKKK	Clay Ceramics Manufacturing	([7])	([7])
LLLLL	Asphalt Roofing and Processing	X	X
MMMMM	Flexible Polyurethane Foam Fabrication Operation	X	X
NNNNN	Hydrochloric Acid Production, Fumed Silica Production	X	X
OOOOO	(Reserved)		
PPPPP	Engine Test Facilities	X	X
QQQQQ	Friction Products Manufacturing	X	X
RRRRR	Taconite Iron Ore Processing	X	X
SSSSS	Refractory Products Manufacture	X	X
TTTTT	Primary Magnesium Refining	X	X
UUUUU	Coal and Oil-Fired Electric Utility Steam Generating Units	[8] X	[8] X
VVVVV	(Reserved)		
WWWWW	Hospital Ethylene Oxide Sterilizers	X	X
XXXXX	(Reserved)		
YYYYY	Electric Arc Furnace Steelmaking Area Sources	X	X
ZZZZZ	Iron and Steel Foundries Area Sources	X	X
AAAAAA	(Reserved)		
BBBBBB	Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities	X	X
CCCCCC	Gasoline Dispensing Facilities	X	X
DDDDDD	Polyvinyl Chloride and Copolymers Production Area Sources	X	X
EEEEEE	Primary Copper Smelting Area Sources	X	X
FFFFFF	Secondary Copper Smelting Area Sources	X	X
GGGGGG	Primary Nonferrous Metals Area Source: Zinc, Cadmium, and Beryllium	X	X
HHHHHH	Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources	X	X
IIIIII	(Reserved)		
JJJJJJ	Industrial, Commercial, and Institutional Boilers Area Sources	X	X
KKKKKK	(Reserved)		
LLLLLL	Acrylic and Modacrylic Fibers Production Area Sources	X	X
MMMMMM	Carbon Black Production Area Sources	X	X
NNNNNN	Chemical Manufacturing Area Sources: Chromium Compounds	X	X
OOOOOO	Flexible Polyurethane Foam Production and Fabrication Area Sources	X	X
PPPPPP	Lead Acid Battery Manufacturing Area Sources	X	X
QQQQQQ	Wood Preserving Area Sources	X	X
RRRRRR	Clay Ceramics Manufacturing Area Sources	X	X
SSSSSS	Glass Manufacturing Area Sources	X	X
TTTTTT	Secondary Nonferrous Metals Processing Area Sources	X	X
UUUUUU	(Reserved)		
VVVVVV	Chemical Manufacturing Area Sources	X	X
WWWWWW	Plating and Polishing Operations Area Sources	X	X
XXXXXX	Metal Fabrication and Finishing Area Sources	X	X
YYYYYY	Ferroalloys Production Facilities Area Sources	X	X
ZZZZZZ	Aluminum, Copper, and Other Nonferrous Foundries Area Sources	X	X
AAAAAAA	Asphalt Processing and Asphalt Roofing Manufacturing Area Sources	X	X
BBBBBBB	Chemical Preparation Industry Area Sources	X	X
CCCCCCC	Paints and Allied Products Manufacturing Area Sources	X	X

DELEGATION STATUS FOR PART 63 STANDARDS—STATE OF NEW MEXICO—Continued

[Excluding Indian Country]

Subpart	Source category	NMED [1 2]	ABCAQCB [1 3]
DDDDDDD	Prepared Feeds Areas Sources	X	X
EEEEEEE	Gold Mine Ore Processing and Production Area Sources	X	X
FFFFFFF–GGGGGGG	(Reserved)		
HHHHHHH	Polyvinyl Chloride and Copolymers Production Major Sources	X	X

[1] Authorities which may not be delegated include: § 63.6(g), Approval of Alternative Non-Opacity Emission Standards; § 63.6(h)(9), Approval of Alternative Opacity Standards; § 63.7(e)(2)(ii) and (f), Approval of Major Alternatives to Test Methods; § 63.8(f), Approval of Major Alternatives to Monitoring; § 63.10(f), Approval of Major Alternatives to Recordkeeping and Reporting; and all authorities identified in the subparts (*e.g.,* under ''Delegation of Authority'') that cannot be delegated.

[2] Program delegated to New Mexico Environment Department (NMED) for standards promulgated by EPA, as amended in the **Federal Register** through August 29, 2013.

[3] Program delegated to Albuquerque-Bernalillo County Air Quality Control Board (ABCAQCB) for standards promulgated by EPA, as amended in the **Federal Register** through September 13, 2013.

[4] The NMED was previously delegated this subpart on February 9, 2004 (68 FR 69036). The ABCAQCB has adopted the subpart unchanged and applied for delegation of the standard. The subpart was vacated and remanded to EPA by the United States Court of Appeals for the District of Columbia Circuit. See, *Mossville Environmental Action Network* v. *EPA,* 370 F. 3d 1232 (D.C. Cir. 2004). Because of the DC Court's holding this subpart is not delegated to NMED or ABCAQCB at this time.

[5] This subpart was issued a partial vacatur on October 29, 2007 (72 FR 61060) by the United States Court of Appeals for the District of Columbia Circuit.

[6] Final rule. See 78 FR 7138 (January 31, 2013).

[7] This subpart was vacated and remanded to EPA by the United States Court of Appeals for the District of Columbia Circuit on March 13, 2007. See, *Sierra Club* v. *EPA,* 479 F. 3d 875 (D.C. Cir. 2007). Because of the DC Court's holding this subpart is not delegated to NMED or ABCAQCB at this time.

[8] Initial Final Rule on February 16, 2012 (77 FR 9304). Final on reconsideration of certain new source issues on April 24, 2013 (78 FR 24073). Portions of this subpart are in proposed reconsideration pending final action on June 25, 2013 (78 FR 38001).

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[FR Doc. 2015–03482 Filed 2–18–15; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 300

[Docket No. 130703588–5112–02]

RIN 0648–BD44

International Fisheries; Western and Central Pacific Fisheries for Highly Migratory Species; Fishing Restrictions Regarding the Oceanic Whitetip Shark, the Whale Shark, and the Silky Shark

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: NMFS issues regulations under authority of the Western and Central Pacific Fisheries Convention Implementation Act (WCPFC Implementation Act) to implement decisions of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (Commission or WCPFC) on fishing restrictions related to the oceanic whitetip shark (*Carcharhinus longimanus*), the whale shark (*Rhincodon typus*), and the silky shark (*Carcharhinus falciformis*). The regulations apply to owners and operators of U.S. fishing vessels used for commercial fishing for highly migratory species (HMS) in the area of application of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (Convention). The regulations for oceanic whitetip sharks and silky sharks prohibit the retention, transshipment, storage, or landing of oceanic whitetip sharks or silky sharks, and require the release of any oceanic whitetip shark or silky shark as soon as possible after it is caught, with as little harm to the shark as possible. The regulations for whale sharks prohibit setting a purse seine on a whale shark and specify certain measures to be taken and reporting requirements in the event a whale shark is encircled in a purse seine net. This action is necessary for the United States to satisfy its obligations under the Convention, to which it is a Contracting Party.

DATES: This rule is effective March 23, 2015.

ADDRESSES: Copies of supporting documents prepared for this final rule, including the regulatory impact review (RIR) and the Environmental Assessment (EA), as well as the proposed rule, are available via the Federal e-Rulemaking Portal, at *www.regulations.gov* (search for Docket ID NOAA–NMFS–2014–0086). Those documents, and the small entity compliance guide prepared for this final rule, are also available from NMFS at the following address: Michael D. Tosatto, Regional Administrator, NMFS, Pacific Islands Regional Office (PIRO), 1845 Wasp Blvd., Building 176, Honolulu, HI 96818. The initial regulatory flexibility analysis (IRFA) and final regulatory flexibility analysis (FRFA) prepared under the authority of the Regulatory Flexibility Act (RFA) are included in the proposed rule and this final rule, respectively.

Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in this final rule may be submitted to Michael D. Tosatto, Regional Administrator, NMFS PIRO (see **ADDRESSES**) and by email to *OIRA_Submission@omb.eop.gov* or fax to 202–395–7285.

FOR FURTHER INFORMATION CONTACT: Rini Ghosh, NMFS PIRO, 808–725–5033.

SUPPLEMENTARY INFORMATION: On August 22, 2014, NMFS published a proposed rule in the **Federal Register** (79 FR 49745) to implement decisions of the Commission on the oceanic whitetip shark, the whale shark, and the silky shark. The proposed rule was open for public comment through October 6, 2014.

This final rule is issued under the authority of the WCPFC Implementation Act (16 U.S.C. 6901 *et seq.*), which authorizes the Secretary of Commerce, in consultation with the Secretary of State and the Secretary of the Department in which the United States Coast Guard is operating (currently the Department of Homeland Security), to promulgate such regulations as may be necessary to carry out the obligations of

the United States under the Convention, including the decisions of the Commission. The authority to promulgate regulations has been delegated to NMFS.

This final rule implements the WCPFC's ''Conservation and Management Measure for Oceanic Whitetip Shark'' (CMM 2011–04), ''Conservation and Management Measure for Protection of Whale Sharks from Purse Seine Fishing Operations'' (CMM 2012–04), and ''Conservation and Management Measure for Silky Sharks'' (CMM 2013–08). The preamble to the proposed rule provides background information on a number of matters, including the Convention and the Commission, the provisions of the WCPFC decisions being implemented in this rule, and the bases for the proposed regulations, which is not repeated here.

New Requirements

The final rule includes six elements—three regarding the oceanic whitetip shark and silky shark and three regarding the whale shark.

Oceanic Whitetip Shark and Silky Shark Elements

For the oceanic whitetip shark and silky shark, the first element prohibits the crew, operator, and owner of a fishing vessel of the United States used for commercial fishing for HMS from retaining on board, transshipping, storing, or landing any part or whole carcass of an oceanic whitetip shark or silky shark that is caught in the Convention Area. The second element requires the crew, operator, and owner to release any oceanic whitetip shark or silky shark caught in the Convention Area as soon as possible after the shark is caught and brought alongside the vessel and take reasonable steps for its safe release, without compromising the safety of any persons. The third element takes into consideration that, notwithstanding the other two oceanic whitetip and silky shark elements of the rule, WCPFC observers may collect samples of oceanic whitetip sharks or silky sharks that are dead when brought alongside the vessel and the crew, operator, or owner of the vessel must allow and assist them to collect samples in the Convention Area, if requested to do so. Observers deployed by NMFS or the Pacific Islands Forum Fisheries Agency are currently considered WCPFC observers, as those programs have completed the required authorization process to become part of the WCPFC Regional Observer Programme.

CMM 2011–04 and CMM 2013–08, for the oceanic whitetip shark and the silky shark, respectively, apply to the entire Convention Area, including, for the United States, state and territorial waters. The WCPFC Implementation Act states that regulations promulgated under the act shall apply within the boundaries of any of the States of the United States and any commonwealth, territory or possession of the United States (hereafter ''State'') bordering on the Convention Area if the Secretary of Commerce has provided notice to the State, the State does not request an agency hearing, and the Secretary of Commerce has determined that the State has not, within a reasonable period of time after the promulgation of regulations, enacted laws or promulgated regulations that implement the recommendations of the WCPFC within the boundaries of the State; or has enacted laws or promulgated regulations that implement the recommendations of the WCPFC that are less restrictive than the regulations promulgated under the WCPFC Implementation Act or are not effectively enforced (16 U.S.C. 6907(e)). Some of the fisheries affected by the oceanic whitetip shark and silky shark elements of the rule operate within the waters of American Samoa, Guam, Hawaii, and the Commonwealth of the Northern Mariana Islands (CNMI). NMFS furnished copies of the proposed rule to these States at the time of publication in the **Federal Register** and will furnish copies of the final rule as well. NMFS is available to discuss ways to ensure that the conservation and management measures implemented in this rulemaking can be consistently applied to Federal, state, and territorial managed fisheries.

Whale Shark Elements

For the whale shark, the first element of the final rule prohibits owners, operators, and crew of fishing vessels from setting or attempting to set a purse seine in the Convention Area on or around a whale shark if the animal is sighted prior to the commencement of the set or the attempted set. CMM 2012–04 includes language making the prohibition specific to ''a school of tuna associated with a whale shark.'' However, it is unclear exactly what this phrase means. Thus, NMFS believes it is appropriate to apply this prohibition to any purse seine set or attempted set on or around a whale shark that has been sighted prior to commencement of the set or attempted set. This prohibition would not apply to sets made in the territorial seas or archipelagic waters of any nation or in the exclusive economic zones (EEZs) of the Parties to the Nauru Agreement (PNA). The final rule includes a definition of the PNA as the Pacific Island countries that are parties to the Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Interest, as specified on the Web site of the Parties to the Nauru Agreement at *www.pnatuna.com.* The PNA currently includes the following countries: Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Palau, Papua New Guinea, Solomon Islands, and Tuvalu. Vessel owners and operators may be subject to similar prohibitions regarding the whale shark in the EEZs of the PNA, if implemented by one or more PNA countries.

The second element for the whale shark in the final rule requires the crew, operator, and owner of a fishing vessel to release any whale shark that is encircled in a purse seine net in the Convention Area, and to take reasonable steps to ensure its safe release, without compromising the safety of any persons. This element does not apply in the territorial seas or archipelagic waters of any nation, but does apply in all EEZs, including the EEZs of the PNA.

The third and final element for the whale shark in the final rule requires the owner and operator of a fishing vessel that encircles a whale shark with a purse seine in the Convention Area to ensure that the incident is recorded by the end of the day on the catch report form, or Regional Purse Seine Logsheet (RPL), maintained pursuant to 50 CFR 300.34(c)(1), in the format specified by the NMFS Pacific Islands Regional Administrator. The NMFS Pacific Islands Regional Administrator would provide vessel owners and operators with specific instructions for how to record whale shark encirclements on the RPL.

Comments and Responses

NMFS received comments from 38 individuals on the proposed rule, as well as three comment letters from groups or organizations. The comments have been grouped together, where appropriate, in the summaries below.

Comment 1: Four commenters provided general statements of support for the rule and five additional commenters expressed support for the rule stating that oceanic whitetip sharks, whale sharks, and silky sharks need to be protected from the fishing industry as they are at risk of extinction.

Response: NMFS acknowledges these comments.

Comment 2: One commenter stated that there is no sustainable way to fish for these sharks. Their lengthy gestation

and low reproduction rate make them vulnerable to environmental changes.

Response: NMFS notes that U.S. vessel owners and operators subject to this final rule are generally not fishing for these sharks, as there is no directed commercial shark fishery in the U.S. Pacific Islands region.

Comment 3: Six commenters discussed how they view sharks as important parts of a healthy ocean and that loss of sharks would be detrimental to the environment. Two of these commenters suggested that preserving sharks could help the shark diving industry, and one of them provided a photo they had taken of an oceanic whitetip shark.

Response: NMFS acknowledges these comments and the photo.

Comment 4: Ten commenters called for protections from fishing for all shark species; half of these commenters asked for broad protections for other species, including cetaceans. Most discussed the importance of sharks to the ecosystem and some discussed their vulnerability to fishing and environmental changes.

Response: The final rule establishes regulations that prohibit the retention, transshipment, storage, and landing of oceanic whitetip sharks and silky sharks, and require the release of any oceanic whitetip shark or silky shark as soon as possible after it is caught, with as little harm to the shark as possible. The final rule also establishes regulations that prohibit setting a purse seine on a whale shark and specify certain measures to be taken in the event a whale shark is encircled in a purse seine net, as well as a requirement to report the incident to NMFS. As described in the EA, other domestic and international management measures, such as the U.S. Shark Conservation Act of 2010 (Pub. L. 111–348), are in place to mitigate the impacts of fishing on shark species. NMFS, as well as international organizations and other countries are actively considering additional management for sharks. For example, the WCPFC's CMM 2010–07 provides management measures for sharks, and the WCPFC is considering additional shark management measures.

Comment 5: One commenter recommended that the proposed regulations be adopted. The commenter stated that these shark species face many man-made perils and need any beneficial regulations that can keep them from becoming endangered. According to the commenter, the proposed regulations would provide a legal framework for the agency to take action against any offenses. The commenter stated that enforcement will likely be challenging but that it is good to have something for which to strive. It is in a fisherman's best interest to help protect the fragile ecosystem he or she relies upon.

Response: NMFS acknowledges the comment.

Comment 6: One commenter stated that oceanic whitetip sharks scour the open ocean which is devoid of most life, so when they encounter potential food, they may test it to see if it is edible. According to the commenter, the bad reputation of sharks comes from being opportunistic. However, thousands of people have swum with these sharks without injury. The sharks need to survive in a harsh, barren environment and they excel at it, so we should let them live.

Response: NMFS acknowledges the comment.

Comment 7: One commenter stated that it is unconscionable to not implement stronger protections for these sharks. According to the commenter, studies have shown declines in oceanic whitetip shark populations in the Gulf of Mexico. Silky shark populations are estimated to have also declined dramatically. The International Union for Conservation of Nature (IUCN) lists the oceanic whitetip shark as vulnerable, the silky shark as near threatened, and the whale shark as vulnerable. Many countries have recognized the fragility of whale shark populations and have legislated full protection for them. None of these species can sustain ongoing depletion.

Response: Please see the response to Comment 4.

Comment 8: One commenter asked NMFS to reconsider implementing the proposed rule, so that abuse of the ocean's beautiful creatures would stop.

Response: We understand this comment to mean that the commenter believes the rule would lead to increased abuse of living marine resources. However, please see the response to Comment 4, above, for a summary of the regulations being implemented in this rule.

Comment 9: One commenter requested NMFS to provide better protection for sharks.

Response: As stated above in the response to Comment 4, the final rule implements WCPFC decisions for the conservation and management of three shark species.

Comment 10: One commenter asked why everyone wants to kill these shark species, since they are simply fantastic and keep the ocean healthy.

Response: As described above in the response to Comment 4, the final rule implements WCPFC decisions for the conservation and management of three shark species.

Comment 11: Three commenters stated that they fully support the regulation of shark finning and more responsible fishing, as specified in the proposed rule. They also stated that these animals are critical members of the ecosystem and should be protected and that these regulations should be strictly enforced.

Response: Please see the response to Comment 4, above, for a description of the elements of the final rule. The final rule does not regulate the practice of finning sharks, but other existing laws and regulations do so (*e.g.,* the Shark Conservation Act of 2010 (Pub. L. 111–348)).

Comment 12: One commenter supported the proposed rule and hopes that the United States will set an example for other countries. The commenter also provided background information on the status and importance of these sharks. However, the commenter asked NMFS to review the whale shark provisions of the proposed rule, recommending that nets should not be allowed in the water if a whale shark is seen and the regulations should clarify what would happen if a purse seine net is already in the water when a whale shark is sighted. The commenter also expressed concern over the lack of clarity in the definition of a ''school of tuna associated with a whale shark'' and suggested that it be rewritten.

Response: The regulations in this final rule prohibit setting or attempting to set a purse seine in the Convention Area on or around a whale shark if the animal is sighted prior to the commencement of the set or the attempted set. Should a whale shark be sighted after commencement of the set when the net is already in the water, it is not certain that the whale shark would become encircled in the net or that retrieving the net immediately would avoid encircling the whale shark. However, the regulations also require the crew, operator, and owner of a fishing vessel to release any whale shark that is encircled in a purse seine net and take reasonable steps for its safe release without compromising the safety of any persons. CMM 2012–04 includes language prohibiting vessels from setting a purse seine on a ''school of tuna associated with a whale shark'' if the animal is sighted prior to the commencement of the set or the attempted set. As stated in the proposed rule, it is unclear exactly what the phrase ''school of tuna associated with a whale shark,'' as used in the CMM, means. Thus, NMFS is implementing

broad regulations to prohibit any purse seine set or attempted set on or around a whale shark that has been sighted prior to the commencement of the set or the attempted set. NMFS believes that this interpretation of the CMM is practical for the crew, operators, and owners of fishing vessels to implement and for enforcement officials to enforce.

Comment 13: One commenter stated that as an officer in the U.S. distant water purse seine fleet one of his responsibilities is to act as a medical officer. The commenter strongly encourages the word ''safely'' to be added to the language requiring the release of oceanic whitetip sharks and silky sharks as soon as possible. Captured sharks can cause serious injuries to the crewmen trying to release them alive. Risking crew injury is unacceptable.

Response: NMFS agrees that the safety of crew members is of paramount importance. The regulations in this final rule for oceanic whitetip sharks and silky sharks require the crew, operator, and owner: ''to release any oceanic whitetip shark or silky shark caught in the Convention Area as soon as possible after the shark is caught and brought alongside the vessel and take reasonable steps for its safe release, without compromising the safety of any persons.''

Comment 14: One commenter who has managed a U.S. built and owned purse seine vessel that has operated out of Pago Pago, American Samoa, since 1981 expressed concerns over the proposal and stated that U.S. vessels already practice the regulations being implemented. The commenter believes that piecemeal protections for various species are inefficient and generate excess paperwork. The commenter suggested that the United States instead propose a full purse seine closure period for all Commission Members, Cooperating Non-Members, and Participating Territories (WCPFC members), similar to what is in effect in the eastern Pacific Ocean.

Response: The final rule implements specific WCPFC decisions on oceanic whitetip sharks, whale sharks, and silky sharks. The United States, as a member of the WCPFC, regularly considers conservation and management measures that could be adopted by the WCPFC for purse seine fisheries, but such measures are outside the scope of this rulemaking.

Comment 15: One group of commenters who submitted their comments jointly supported the regulations, especially in regard to silky sharks, and provided background information on silky sharks. The commenters proposed that NMFS modify the regulations to include a reporting requirement for silky shark bycatch to monitor the effectiveness of the regulations and for collecting additional data. The commenters also suggested that NMFS provide a better definition for the phrase ''as little harm as possible,'' which is part of the provisions of CMM 2013–08 regarding the release of any silky sharks caught in the Convention Area, to ensure the safety of silky sharks and provide fair enforcement. According to the commenters, allowing the operators of individual fishing vessels to determine what level of harm is acceptable would increase the risk of the regulations being applied arbitrarily. The commenters requested NMFS to consult with experts to develop a more thorough definition or establish guidelines for allowable and prohibited conduct when releasing silky sharks.

Response: WCPFC CMM 2010–07 identifies the silky shark as a key shark species and requires retained and discarded catches to be reported by each WCPFC member in its annual report to the Commission. NMFS believes that additional reporting for silky shark catches, including discards, is not needed at this time. The final regulations specify that crew, operators, and owners must release silky sharks caught in the Convention Area as soon as possible after the shark is caught and brought alongside the vessel, taking reasonable steps for its safe release, without compromising the safety of any persons. NMFS believes that this is a reasonable interpretation of CMM 2013–08's phrase ''as little harm as possible'' that can be implemented and enforced. The WCPFC Scientific Committee has considered appropriate guidelines for the safe release of encircled animals, such as whale sharks in purse seine nets, but the WCPFC has not yet adopted uniform guidelines. NMFS will establish additional shark handling requirements if and when needed should the WCPFC adopt further measures in this regard. NMFS does not believe issuance of these regulations should be postponed in order to develop such handling guidelines or requirements.

Comment 16: One organization provided comments expressing support for the proposed regulations and noting that the implementation deadlines in CMM 2011–04, CMM 2012–04, and CMM 2013–08 have already passed. The commenter indicated the need for rapid completion of the implementation of the measures to ensure that the United States is in full compliance with its WCPFC obligations for shark conservation and management. The commenter also provided background information on the stock status and importance of the three shark species. The commenter urged NMFS to extend the applicability of the oceanic whitetip shark and silky shark regulations to all fisheries, including non-commercial fisheries, that the United States manages in the western and central Pacific Ocean (WCPO) to enhance conservation and enforcement ability. The commenter expressed agreement with NMFS' interpretation of CMM 2012–04's phrase ''school of tuna associated with a whale shark.''

Response: The final regulations for oceanic whitetip sharks and silky sharks apply to all U.S. commercial HMS fisheries operating in the Convention Area. NMFS interprets the WCPFC decisions for the oceanic whitetip shark and the silky shark as being applicable only to commercial HMS fisheries, and therefore believes that the inclusion of other fisheries in the rule, as requested by the commenter, would not be appropriate. Should NMFS determine that oceanic whitetip shark and silky shark conservation measures are needed in other fisheries, NMFS would be able to implement such measures through other processes, such as those under the Magnuson-Stevens Fishery Conservation and Management Act.

Comment 17: One organization provided comments expressing its strong support for the proposed rule. The letter approved of NMFS's interpretation of the WCPFC measures to protect whale sharks, and noted the complementary nature of these regulations to similar regulations that recently went into effect in the eastern Pacific Ocean.

Response: NMFS acknowledges these comments.

Changes From the Proposed Rule

The phrase ''areas under the national jurisdiction of the Parties to the Nauru Agreement'' is used in the regulatory text to refer to the EEZs of the PNA. For clarification purposes, a definition of areas under the national jurisdiction of the Parties to the Nauru Agreement has been added to the regulatory text.

The new paragraph under 50 CFR 300.218 has been relabeled as (h) to accommodate another addition to 50 CFR 300.218 under a separate rulemaking. The new paragraphs under 50 CFR 300.222 have been relabeled as (ss), (tt), (uu), (vv), and (ww) to accommodate another addition to 50 CFR 300.222 under a separate rulemaking.

Classification

The Administrator, Pacific Islands Region, NMFS, has determined that this final rule is consistent with the WCPFC Implementation Act and other applicable laws.

Executive Order 12866

This final rule has been determined to be not significant for purposes of Executive Order 12866.

Regulatory Flexibility Act

A FRFA was prepared. The FRFA incorporates the IRFA prepared for the proposed rule. The analysis in the IRFA is not repeated here in its entirety.

A description of the action, why it is being considered, and the legal basis for this action are contained in the preamble of the proposed rule and in the **SUMMARY** and **SUPPLEMENTARY INFORMATION** sections of this final rule, above. The analysis follows.

Significant Issues Raised by Public Comments in Response to the IRFA

NMFS did not receive any comments specifically on the IRFA. Two of the public comments received on the proposed rule touched on the economic impacts of the proposed action; see Comments #5 and #14, and NMFS' responses to those comments, above.

Description of Small Entities to Which the Rule Will Apply

Small entities include ''small businesses,'' ''small organizations,'' and ''small governmental jurisdictions.'' The Small Business Administration (SBA) has established size standards for all major industry sectors in the United States, including commercial finfish harvesters (NAICS code 114111). A business primarily involved in finfish harvesting is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates), and has combined annual receipts not in excess of $20.5 million for all its affiliated operations worldwide.

The final rule will apply to owners and operators of U.S. fishing vessels used to fish for HMS for commercial purposes in the Convention Area. This includes vessels in the purse seine, longline, tropical troll (including those in American Samoa, the CNMI, Guam, and Hawaii), Hawaii handline, Hawaii pole-and-line, and west coast-based albacore troll fleets. The estimated number of affected fishing vessels is as follows, broken down by fleet: 40 purse seine vessels (based on the number of purse seine vessels licensed under the South Pacific Tuna Treaty as of March 2014); 165 longline vessels (based on the number of longline vessels permitted to fish as of July 2014 under the Fishery Ecosystem Plan for Pacific Pelagic Fisheries of the Western Pacific Region, which includes vessels based in Hawaii (a total of 164 Hawaii Longline Limited Entry permits are available), American Samoa (a total of 60 American Samoa Longline Limited Entry permits are available), and the Mariana Islands); 2,089 tropical troll and 572 Hawaii handline vessels (based on the number of active troll and handline vessels in American Samoa, Guam, the CNMI, and Hawaii in 2012, the latest year for which complete data are available); 1 tropical pole-and-line vessel (based on the number of active vessels in 2012), and 13 albacore troll vessels (based on the number of albacore troll vessels authorized to fish on the high seas in the Convention Area as of July 2014). Thus, the total estimated number of vessels that would be subject to the rule is approximately 2,880.

Based on (limited) available financial information about the affected fishing fleets and the SBA's definition of a small finfish harvester (*i.e.,* gross annual receipts of less than $20.5 million, independently owned and operated, and not dominant in its field of operation), and using individual vessels as proxies for individual businesses, NMFS believes that all of the affected fish harvesting businesses are small entities. As stated above, there are currently 40 purse seine vessels in the affected purse seine fishery. Neither gross receipts nor ex-vessel price information specific to the 40 vessels are available to NMFS. Average annual receipts for each of the 40 vessels during the last 3 years for which reasonably complete data are available (2010–2012) were estimated as follows. The vessel's reported retained catches of skipjack tuna, yellowfin tuna, and bigeye tuna in each year were each multiplied by an indicative Asia-Pacific regional cannery price for that species and year (developed by the Pacific Islands Forum Fisheries Agency and available at *https://www.ffa.int/node/425#attachments*); the products were summed across species for each year; and the sums were averaged across the 3 years. The estimated average annual receipts for each of the 40 vessels were less than the $20.5 million threshold used to classify businesses as small entities under the SBA size standard for finfish harvesting businesses.

Recordkeeping, Reporting, and Other Compliance Requirements

The final rule will establish one new reporting requirement within the meaning of the Paperwork Reduction Act, as well as additional requirements, as described in the **SUPPLEMENTARY INFORMATION** section of this final rule, above. The classes of small entities subject to the requirements and the costs of complying with the requirements are described below for each of the six elements of the final rule—three elements regarding the oceanic whitetip shark and silky shark, and three elements regarding the whale shark.

Oceanic Whitetip Shark and Silky Shark Element (1): Prohibit the crew, operator, and owner of a fishing vessel from retaining on board, transshipping, storing, or landing any oceanic whitetip shark or silky shark. This element prohibits the crew, operator, and owner of a fishing vessel of the United States used for commercial fishing for HMS from retaining on board, transshipping, storing, or landing any part or whole carcass of an oceanic whitetip shark or silky shark that is caught in the Convention Area. This requirement would not impose any new reporting or recordkeeping requirements. It is not expected to require any professional skills that the affected vessel owners, operators and crew do not already possess. This requirement would apply to owners, operators and crew of any vessel used to fish for HMS for commercial purposes in the Convention Area. Accordingly, it would apply to all vessels identified above. Based on the best available data, oceanic whitetip shark and silky shark are not caught in the Hawaii handline fishery, the Hawaii pole-and-line fishery, or the albacore troll fishery. Thus, compliance costs are expected only in the purse seine, longline, and tropical troll fleets. This requirement forecloses harvesting businesses' opportunity to retain and sell or otherwise make use of the two species. The compliance cost for each entity can be approximated by the ex-vessel value of the amount of the two species that would be expected to be retained if it were allowed (under no action). Price data for specific shark species and in specific fisheries is lacking, so this analysis assumes that the ex-vessel value of both species in all affected fisheries is $1.50/kg, which is the 2011 ex-vessel price (converted to 2013 dollars) for sharks generally in Hawaii's commercial pelagic fisheries (which do not include the purse seine fishery, in which the fate and value of retained sharks are not known). Expected retained amounts of each of the two species in each fishery (under no action) are based on the recent level of fishing effort multiplied by the recent retention rate per unit of fishing effort.

For all fisheries except the purse seine fishery, the average of the last 5 years for which complete data are available, 2008–2012, is used. The analysis of impacts for the purse seine fishery uses fishing effort and the retention rate averaged over 2010 and 2011 because the fleet was substantially smaller than the current 40-vessel size in years previous to 2010, 100% observer coverage started in 2010, and 2011 is the last year for which near-complete data are available. Fishing effort estimates are based on vessel logbook data, except in the case of the American Samoa, CNMI, and Guam troll fisheries, for which creel survey data are used. Recent retention rates in the purse seine and longline fisheries are estimated from vessel observer data. In the Hawaii troll fishery, vessel logbook data are used, and in the American Samoa, CNMI, and Guam troll fisheries, creel survey data are used. Fish numbers are converted to weights based on vessel observer data for each fishery, except for the troll fisheries, for which weight data are lacking and the average weights in the Hawaii deep-set longline fishery are used. The average weights used are, for oceanic whitetip shark and silky shark, respectively: purse seine—23 kg and 32 kg; Hawaii deep-set longline—27 kg and 28 kg; Hawaii shallow-set longline—27 kg and 28 kg; American Samoa longline—26 kg and 18 kg; and tropical troll—27 kg (the two species cannot be accurately distinguished in the data and are combined for the purpose of this analysis).

In the purse seine fishery, in which about 40 vessels are expected to participate in the near future, it is estimated that 0.1 oceanic whitetip shark and 2.9 silky shark would be retained (under no action) per vessel per year, on average. Applying the average weights and price given above, these amounts equate to estimated lost annual revenue of about $140 per vessel, on average.

As indicated above, about 165 vessels are expected to participate in the affected longline fisheries in the near future. The longline fisheries operating in the Convention Area include the Hawaii-based fisheries, which include a tuna-targeting deep-set fishery and swordfish-targeting shallow set fishery, and the American Samoa-based fishery. Occasionally there is also longline fishing by vessels based in the Mariana Islands, where participation is typically fewer than three vessels in any given year. No vessel observer data are available specifically for the Mariana Islands longline fishery, making it difficult to analyze shark catch rates, but shark catch rates in the other longline fisheries might be reasonable proxies for catch rates in the Mariana Islands fishery. In that case, to the extent either oceanic whitetip shark or silky shark is caught and retained in the Mariana Islands longline fishery in the future, the effects of the final rule can be expected to be about the same—on a per-unit of fishing effort basis—as those in the other longline fisheries, as described here. In the Hawaii and American Samoa longline fisheries, it is estimated that 0.2 oceanic whitetip shark and 0.1 silky shark would be retained (under no action) per vessel per year, on average. These amounts equate to estimated lost annual revenue of about $12 per vessel, on average.

Catch and retention rates of the two shark species in the tropical troll fisheries are difficult to estimate for several reasons. For example, in the Hawaii troll fishery, there is no species code for silky shark, so any catches of that species are recorded as unidentified sharks. In the troll fisheries of the three territories, because the two carcharhinid species are retained only infrequently, it is difficult to generate estimates of total catches of the two species with much certainty using the creel surveys that sample only a subset of all fishing trips. Because of these and other limitations, only very approximate estimates can be made. For this analysis, all unidentified sharks in the data are assumed to be oceanic whitetip shark or silky shark, so the resulting estimates are upper-bound estimates. In the Hawaii troll fishery, it is estimated that 9 sharks would be retained (under no action) per year, on average, for the fishery as a whole. With approximately 1,694 vessels expected to participate in the fishery (based on the number active in 2012), this equates to about 0.01 sharks per vessel per year, and an estimated lost annual revenue of less than one dollar per vessel. The Guam troll fishery, with about 351 vessels expected to participate in the near future, is expected to retain about 2 sharks per year (under no action), on average, for the fleet as a whole. This equates to about 0.01 sharks per vessel per year, and an estimated annual compliance cost of less than one dollar per vessel. In the American Samoa troll fishery, it is estimated that about 0.3 sharks would be retained, on average, per year (under no action). With about 9 vessels expected to participate in the fishery, this equates to about 0.03 sharks per vessel per year, and an estimated annual compliance cost of less than one dollar per vessel. The creel survey encountered no retained sharks in the CNMI troll fishery in 2008–2012, so the best estimate of lost annual revenue for each of the approximately 35 vessels expected to participate in this fishery is zero.

Oceanic Whitetip Shark and Silky Shark Element (2): Require the crew, operators, and owners of U.S. fishing vessels used for commercial fishing for HMS in the Convention Area to release any oceanic whitetip shark or silky shark caught in the Convention Area. This element requires the vessel crew, operator, and owner to release any oceanic whitetip shark or silky shark caught in the Convention Area as soon as possible after the shark is caught and brought alongside the vessel and take reasonable steps to ensure its safe release, without compromising the safety of any persons. This requirement would not impose any new reporting or recordkeeping requirements. It is not expected to require any professional skills that the affected vessel owners, operators and crew do not already possess. This requirement could bring costs in the form of reduced efficiency of fishing operations, but it is difficult to assess the costs because it is not possible to predict whether or how vessel operators and crew would change their release/discard practices relative to what they do currently. For purse seine vessels, it is expected that in most cases, the fish would be released after it is brailed from the purse seine and brought on deck. In these cases, the labor involved would probably be little different than current practice for discarded sharks. If the vessel operator and crew determine that it is possible to release the fish before it is brought on deck, this would likely involve greater intervention and time on the part of crew members, with associated labor costs. For longline and troll vessels, it is expected that the fish would be quickly released as it is brought to the side of the vessel, such as by cutting the line or removing the hook. In these cases, no costs would be incurred. In some cases, the vessel operator and crew might determine that it is necessary to bring the fish on board the vessel before releasing it. This would involve greater labor than releasing the fish from alongside the vessel, but the release methods used in these cases might be the same as those used under the status quo, in which case no new costs would be incurred.

Oceanic Whitetip Shark and Silky Shark Element (3): Require the crew, operators, and owners of U.S. fishing vessels used for commercial fishing for HMS in the Convention Area to allow and assist observers in the collection of oceanic whitetip shark or silky shark samples. This element requires the vessel crew, operator, and owner to

allow and assist a WCPFC observer to collect samples of dead oceanic whitetip sharks or silky sharks when requested to do so by the observer. In such cases, and in any case in which the observer collects a sample of an oceanic whitetip shark or silky shark, the crew, operator, and owner would be relieved of the two requirements listed above. Under existing regulations, operators and crew of vessels with WCPFC Area Endorsements (*i.e.,* vessels authorized to be used for commercial fishing for HMS on the high seas in the Convention Area) are already required to assist observers in the collection of samples. This would effectively expand that requirement—for just these two shark species—to vessels not required to have WCPFC Area Endorsements. This requirement would not impose any new reporting or recordkeeping requirements. It is not expected to require any professional skills that the affected vessel owners, operators and crew do not already possess. Although this element would relieve vessel owners, operators and crew from the requirements of the first two elements described above in those cases where the vessel observer collects a sample of an oceanic whitetip shark or silky shark, it would not be expected to relieve fishing businesses of the costs identified above for the no-retention requirement, since the samples would be kept by the observer and would not be available for sale or other use by the fishing business. This element could also bring additional costs to fishing businesses because it would require the owner, operator, and crew to assist the observer in the collection of samples if requested to do so by the observer. Observers would be under instructions to collect samples only if they do so as part of a program that has been specifically authorized by the WCPFC Scientific Committee, and only from sharks that are dead when brought alongside the vessel. It is not possible to project how often observers would request assistance in collecting samples. When it does occur, it is not expected that sample collection would be so disruptive as to substantially delay or otherwise impact fishing operations, but the fishing business could bear small costs in terms of crew labor, and possibly the loss of storage space that could be used for other purposes.

Whale Shark Element (1): Prohibit owners, operators, and crew of U.S. fishing vessels used for commercial fishing for HMS in the Convention Area from setting or attempting to set a purse seine on or around a whale shark. This requirement prohibits owners, operators and crew of fishing vessels from setting or attempting to set a purse seine in the Convention Area on or around a whale shark if the animal is sighted prior to the commencement of the set or the attempted set. This requirement applies to all U.S. purse seine vessels fishing on the high seas and in the EEZs in the Convention Area, except the EEZs of the PNA. This requirement does not impose any new reporting or recordkeeping requirements. It is not expected to require any professional skills that the affected vessel owners, operators and crew do not already possess.

In the event that a whale shark is sighted in the vicinity of a purse seine vessel prior to a desired set, complying with the final rule could cause forgone fishing opportunities and result in economic losses. It is difficult to project the frequency of pre-set whale shark-sighting events because such events are not recorded. Historical data on whale shark catches are available, but catches are not equivalent to pre-set whale shark sightings, for two reasons. On the one hand, presumably not all whale sharks within ''sightable'' distance of a set are actually caught (thus, in this respect, whale shark catch data under-represent pre-set whale shark sighting events). On the other hand, according to anecdotal information from purse seine vessel operators, not all captured whale sharks are seen before the set commences (thus, in this respect, the whale shark catch data over-represent pre-set whale shark-sighting events). Nonetheless, historical whale shark catch rates can provide a rough indicator of the frequency of pre-set whale shark sighting events in the future.

Based on unpublished vessel observer data from the FFA observer program, the average whale shark catch rate in 2010–2011 for the U.S. purse seine fishery in the Convention Area, excluding the EEZs of the PNA, was approximately 2 fish per thousand fishing days. The average catch rate during that period in the Convention Area as a whole (including the waters of the PNA EEZs) was about 5 fish per thousand fishing days. For this analysis, this range of 2–5 events per thousand fishing days is used as an estimate of pre-set whale shark-sighting events in the future. Based on the average levels of U.S. purse seine fishing effort in the Convention Area outside the EEZs of the PNA in 2010 and 2011 (462 and 842 fishing days, respectively; NMFS unpublished data), it can be expected that approximately 652 fishing days per year will be spent by the fleet in that area in the future. At that level of fishing effort, if pre-set whale shark-sighting events occurred in 2 to 5 per thousand fishing days, as described above, they would occur 1.3 to 3.3 times per year, on average, for the fleet as a whole, or 0.03 to 0.08 times per year for each of the 40 vessels in the fleet, on average.

In those instances that a whale shark is sighted prior to an intended set, the vessel operator would have to wait and/or move the vessel to find the next opportunity to make a set. The consequences in terms of time lost and distance travelled and associated costs cannot be projected with any certainty. At best, the operator would find an opportunity to make a set soon after the event, and only trivial costs would be incurred. At worst, the vessel operator would lose the opportunity to make a set for the remainder of the day. Under this worst-case assumption, a vessel could lose the net benefits associated with 0.03 to 0.08 fishing days per year, on average. Those lost net benefits cannot be estimated because of a lack of fishing cost data, but information on gross receipts can provide an upper-bound estimate. Using regional cannery prices in 2012 for each of the three marketable tuna species, and the U.S. fleet's average catches and fishing days in 2011–2012, the expected gross receipts per fishing day would be about $60,000. Thus, an upper-bound estimate of the loss in gross revenue that could occur to a vessel as a result of losing 0.03 to 0.08 fishing days is approximately $1,800 to $4,800 per year.

Whale Shark Element (2): Require the crew, operator, and owner of U.S. fishing vessels used for commercial fishing for HMS in the Convention Area to release any whale shark that is encircled in a purse seine net. This element would require the crew, operator, and owner of a fishing vessel to release any whale shark that is encircled in a purse seine net in the Convention Area, and to do so in a manner that results in as little harm to the shark as possible, without compromising the safety of any persons. This requirement would apply to all U.S. purse seine vessels fishing on the high seas and in the EEZs of the Convention Area, including the EEZs of the PNA. This requirement would not impose any new reporting or recordkeeping requirements. It is not expected to require any professional skills that the affected vessel owners, operators and crew do not already possess. Unpublished historical vessel observer data from the FFA observer program indicates that all whale sharks captured in the U.S. WCPO purse seine fishery are released; that is, they are not retained or marketed. The release requirement, therefore, is not expected

to have any effect on fishing operations or to bring any compliance costs. The requirement to release the sharks in a manner that results in as little harm to the shark as possible without compromising the safety of any persons would be a new and potentially burdensome requirement, but it is not possible to quantitatively assess the cost for two reasons. First, it is not clear how often whale sharks would be encircled. As indicated above, the average annual rate by U.S. purse seine vessels in the Convention Area in 2010 and 2011 was about 5 encirclements per thousand fishing days. But the rate in the future is expected to be reduced as a result of the setting prohibition described in the first whale shark element, above. Nonetheless, if 5 encirclements per thousand fishing days is considered an upper-bound projection, then at a future fishing effort rate of 7,991 fishing days per year in the Convention Area (based on the average spent in 2010 and 2011) and 40 vessels in the fleet, an upper-bound projection of the rate of encirclements per vessel is one per year, on average. The second reason for the difficulty in assessing the compliance costs of this requirement is that current vessel practices regarding whale shark releases are not known in detail. Although data on the condition of each captured whale shark is available (*e.g.,* based on unpublished FFA observer data for 2010 and 2011, 68 percent of captured whale sharks were released alive, 2 percent were released dead, and the condition of the remainder was unknown), these data do not reveal anything about whether the condition of the released whale sharks could have been better, or what the vessel crew would have had to have done to improve the sharks' condition. In conclusion, this requirement might bring some costs to purse seine vessel operations, in the form of the crew potentially having to spend more time handling encircled whale sharks (at most, one per year per vessel, on average) in order to release them with as little harm as possible.

Whale Shark Element (3): Require the owner and operator of a fishing vessel that encircles a whale shark to record the incident on a catch report form. This requirement would require the owner and operator of a fishing vessel that encircles a whale shark with a purse seine net in the Convention Area to ensure that the incident is recorded by the end of the day on the catch report form, or Regional Purse Seine Logsheet (RPL) maintained pursuant to 50 CFR 300.34(c)(1), in the format specified by the NMFS Pacific Islands Regional Administrator. This requirement would apply to all U.S. purse seine vessels fishing on the high seas and in the EEZs of the Convention Area, including the EEZs of the PNA. Because catch and effort logbooks are already required to be maintained and submitted in the purse seine fishery, there would be no additional cost associated with submitting the logbook, but vessels would be required to record additional information associated with whale shark encirclements. The required information for each incident would include a description of the steps taken to minimize harm and an assessment of its condition upon its release. This additional information requirement would be added to the information required to be reported under a current information collection (OMB control number 0648–0218; see the section on the Paperwork Reduction Act below for more information). As indicated for the previous element, it is not possible to project the rate of encirclements with certainty, but one encirclement per vessel per year, on average, is an upper-bound projection. NMFS estimates that it would take about 10 minutes to record the required information for each encirclement. At an estimated labor cost of $25 per hour, the annual cost per vessel would be about $4.

Disproportionate Impacts

There would be no disproportionate economic impacts between small and large vessel-operating entities resulting from this final rule. Furthermore, there would be no disproportionate economic impacts based on vessel size, gear, or home port, as all the vessels in the fleets would be subject to the same requirements and NMFS has not identified any factors related to vessel size, gear, or home port that would lead to disproportionate impacts.

Steps Taken To Minimize the Significant Economic Impacts on Small Entities

For the oceanic whitetip shark and silky shark elements of the final rule, NMFS did not identify any alternatives—other than the no-action alternative—that would minimize economic impacts on affected entities.

For the whale shark elements of the final rule, NMFS considered several alternatives. As discussed above, the first element of the final rule for the whale shark prohibits owners, operators, and crew of fishing vessels from setting or attempting to set a purse seine in the Convention Area on or around a whale shark if the animal is sighted prior to the commencement of the set or the attempted set. This element applies on the high seas and in the EEZs of the Convention Area, except for the EEZs of the PNA. CMM 2012–04 states that WCPFC members ''shall prohibit their flagged vessels from setting a purse seine on a school of tuna associated with a whale shark if the animal is sighted prior to the commencement of the set''. NMFS considered developing alternative means of implementing the prohibition on setting on a school of tuna, such as specifying a minimum distance for the prohibition (*e.g.,* no setting within half a mile of a whale shark sighting) or a minimum time period for the prohibition (*e.g.,* no setting within 10 minutes of sighting a whale shark). However, NMFS did not identify any such alternative for this element that would be reasonable and feasible. After a whale shark is sighted, it is unclear where and when it will be sighted next, since sharks do not have to return to the surface regularly to breathe. Therefore, NMFS determined that there is only one reasonable and feasible manner of implementing this element of the final rule.

CMM 2012–04 states that for fishing activities in the EEZs of WCPFC members north of 30° N. latitude, WCPFC members shall implement either the provisions of CMM 2012–04 or compatible measures consistent with the obligations under CMM 2012–04. The U.S. purse seine fleet does not fish north of 30° N. latitude in the WCPO. Thus, rather than attempting to develop a separate set of ''compatible measures'' for EEZs of WCPFC members north of 30 °N. latitude that may or may not be triggered by any actual U.S. purse seine operations, NMFS decided to implement the provisions of CMM 2012–04 for all EEZs in the Convention Area (with the exception of the first element not being applicable to the EEZs of the PNA, as described above).

NMFS did not identify any other alternatives for any of the elements of the final rule.

Taking no action could result in lesser adverse economic impacts than the final action for many affected entities. The economic impacts that would be avoided by taking no action are described above, including quantitative estimates—to the extent possible—for the first oceanic whitetip shark element and the first and third whale shark elements of the final rule. However, NMFS has determined that the no-action alternative would fail to accomplish the objectives of the WCPFC Implementation Act, including satisfying the obligations of the United States as a Contracting Party to the

Convention. The no-action alternative is rejected for this reason.

Small Entity Compliance Guide

Section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996 states that, for each rule or group of related rules for which an agency is required to prepare a FRFA, the agency shall publish one or more guides to assist small entities in complying with the rule, and shall designate such publications as ''small entity compliance guides.'' The agency shall explain the actions a small entity is required to take to comply with a rule or group of rules. As part of this rulemaking process, a small entity compliance guide has been prepared. The guide will be sent to permit and license holders in the affected fishery. The guide and this final rule will also be available at *www.fpir.noaa.gov* and by request from NMFS PIRO (see **ADDRESSES**).

Paperwork Reduction Act

This final rule contains a collection-of-information requirement subject to the Paperwork Reduction Act (PRA) that has been approved by the Office of Management and Budget (OMB) under control number 0648–0218, ''South Pacific Tuna Act''. The public reporting burden for the catch report form (also known as the RPL) under that collection-of-information was estimated to average one hour per response (*i.e.,* per fishing trip), including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The whale shark encirclement reporting requirement under this final rule changes the catch report element of the collection-of-information. Under this final rule, in the event that a whale shark is encircled in a purse seine net, information about that event would be required to be included in the catch report form. Providing this additional information will increase the reporting burden by approximately 10 minutes per encirclement, which, given an estimated one encirclement per year and five fishing trips per year, on average, equates to approximately 2 minutes per fishing trip or per response. Therefore, the new estimated burden per response (*i.e.,* per fishing trip) for the catch report form is 62 minutes. No comments were received on this collection-of-information requirement in response to the proposed rule. Send comments regarding this burden estimate, or any other aspect of this data collection, including suggestions for reducing the burden, to Michael D. Tosatto, Regional Administrator, NMFS PIRO (see **ADDRESSES**) and by email to *OIRA_Submission@omb.eop.gov* or fax to 202–395–7285.

Notwithstanding any other provision of the law, no person is required to respond to, and no person shall be subject to penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB control number.

List of Subjects in 50 CFR Part 300

Administrative practice and procedure, Fish, Fisheries, Fishing, Marine resources, Reporting and recordkeeping requirements, Treaties.

Dated: February 12, 2015.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 300 is amended as follows:

PART 300—INTERNATIONAL FISHERIES REGULATIONS

Subpart O—Western and Central Pacific Fisheries for Highly Migratory Species

■ 1. The authority citation for 50 CFR part 300, subpart O, continues to read as follows:

Authority: 16 U.S.C. 6901 *et seq.*

■ 2. In § 300.211, the definitions of ''Areas under the national jurisdiction of the Parties to the Nauru Agreement'' and ''Parties to the Nauru Agreement'' are added, in alphabetical order, to read as follows:

§ 300.211 Definitions.

* * * * *

Areas under the national jurisdiction of the Parties to the Nauru Agreement means the exclusive economic zones of the Parties to the Nauru Agreement.

* * * * *

Parties to the Nauru Agreement means the parties to the Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Interest, as specified on the Web site of the Parties to the Nauru Agreement at *www.pnatuna.com.*

* * * * *

■ 3. In § 300.218, paragraph (h) is added to read as follows:

§ 300.218 Reporting and recordkeeping requirements.

* * * * *

(h) *Whale shark encirclement reports.* The owner and operator of a fishing vessel of the United States used for commercial fishing in the Convention Area that encircles a whale shark (*Rhincodon typus*) with a purse seine in the Convention Area shall ensure that the incident is recorded by the end of the day on the catch report forms maintained pursuant to § 300.34(c)(1), in the format specified by the Pacific Islands Regional Administrator. This paragraph does not apply to the territorial seas or archipelagic waters of any nation, as defined by the domestic laws and regulations of that nation and recognized by the United States.

■ 4. In § 300.222, paragraphs (ss), (tt), (uu), (vv), and (ww) are added to read as follows:

§ 300.222 Prohibitions.

* * * * *

(ss) Fail to submit, or ensure submission of, a whale shark encirclement report as required in § 300.218(h).

(tt) Set or attempt to set a purse seine on or around a whale shark (*Rhincodon typus*) in contravention of § 300.223(g).

(uu) Fail to release a whale shark encircled in a purse seine net of a fishing vessel as required in § 300.223(h).

(vv) Use a fishing vessel to retain on board, transship, store, or land any part or whole carcass of an oceanic whitetip shark (*Carcharhinus longimanus*) or silky shark (*Carcharhinus falciformis*) in contravention of § 300.226(a).

(ww) Fail to release an oceanic whitetip shark or silky shark as required in § 300.226(b).

■ 5. In § 300.223, paragraphs (g) and (h) are added to read as follows:

§ 300.223 Purse seine fishing restrictions.

* * * * *

(g) Owners, operators, and crew of fishing vessels of the United States used for commercial fishing for HMS in the Convention Area shall not set or attempt to set a purse seine in the Convention Area on or around a whale shark (*Rhincodon typus)* if the animal is sighted at any time prior to the commencement of the set or the attempted set. This paragraph does not apply to the territorial seas or archipelagic waters of any nation, as defined by the domestic laws and regulations of that nation and recognized by the United States, or to areas under the national jurisdiction of the Parties to the Nauru Agreement.

(h) The crew, operator, and owner of a fishing vessel of the United States used for commercial fishing for HMS in the Convention Area must release any whale shark that is encircled in a purse seine net in the Convention Area, and

take reasonable steps for its safe release, without compromising the safety of any persons. This paragraph does not apply to the territorial seas or archipelagic waters of any nation, as defined by the domestic laws and regulations of that nation and recognized by the United States.

■ 6. Section 300.226 is added to read as follows:

§ 300.226 Oceanic whitetip shark and silky shark.

(a) The crew, operator, and owner of a fishing vessel of the United States used for commercial fishing for HMS cannot retain on board, transship, store, or land any part or whole carcass of an oceanic whitetip shark (*Carcharhinus longimanus*) or silky shark (*Carcharhinus falciformis*) that is caught in the Convention Area, unless subject to the provisions of paragraph (c) of this section.

(b) The crew, operator, and owner of a fishing vessel of the United States used for commercial fishing for HMS must release any oceanic whitetip shark or silky shark caught in the Convention Area as soon as possible after the shark is caught and brought alongside the vessel, and take reasonable steps for its safe release, without compromising the safety of any persons, unless subject to the provisions of paragraph (c) of this section.

(c) Paragraphs (a) and (b) of this section do not apply in the event that a WCPFC observer collects, or requests the assistance of the vessel crew, operator, or owner in the observer's collection of, samples of oceanic whitetip shark or silky shark in the Convention Area.

(d) The crew, operator, and owner of a fishing vessel of the United States used for commercial fishing for HMS in the Convention Area must allow and assist a WCPFC observer to collect samples of oceanic whitetip shark or silky shark in the Convention Area, if requested to do so by the WCPFC observer.

[FR Doc. 2015–03388 Filed 2–18–15; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 130925836–4174–02]

RIN 0648–XD714

Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Cod by Vessels Using Pot Gear in the Central Regulatory Area of the Gulf of Alaska

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for Pacific cod by vessels using pot gear in the Central Regulatory Area of the Gulf of Alaska (GOA). This action is necessary to prevent exceeding the A season allowance of the 2015 Pacific cod total allowable catch apportioned to vessels using pot gear in the Central Regulatory Area of the GOA.

DATES: Effective 1200 hours, Alaska local time (A.l.t.), February 16, 2015, through 1200 hours, A.l.t., June 10, 2015.

FOR FURTHER INFORMATION CONTACT: Obren Davis, 907–586–7228.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the GOA exclusive economic zone according to the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679. Regulations governing sideboard protections for GOA groundfish fisheries appear at subpart B of 50 CFR part 680.

The A season allowance of the 2015 Pacific cod total allowable catch (TAC) apportioned to vessels using pot gear in the Central Regulatory Area of the GOA is 8,036 metric tons (mt), as established by the final 2014 and 2015 harvest specifications for groundfish of the GOA (79 FR 12890, March 6, 2014) and inseason adjustment (80 FR 192, January 5, 2015).

In accordance with § 679.20(d)(1)(i), the Administrator, Alaska Region, NMFS (Regional Administrator) has determined that the A season allowance of the 2015 Pacific cod TAC apportioned to vessels using pot gear in the Central Regulatory Area of the GOA will soon be reached. Therefore, the Regional Administrator is establishing a directed fishing allowance of 8,026 mt and is setting aside the remaining 10 mt as bycatch to support other anticipated groundfish fisheries. In accordance with § 679.20(d)(1)(iii), the Regional Administrator finds that this directed fishing allowance has been reached. Consequently, NMFS is prohibiting directed fishing for Pacific cod by vessels using pot gear in the Central Regulatory Area of the GOA. After the effective date of this closure the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA (AA), finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the directed fishing closure of Pacific cod for vessels using pot gear in the Central Regulatory Area of the GOA. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of February 12, 2015.

The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by § 679.20 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: February 13, 2015.

Alan D. Risenhoover,

Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2015–03447 Filed 2–13–15; 4:15 pm]

BILLING CODE 3510–22–P

Proposed Rules

Federal Register
Vol. 80, No. 33
Thursday, February 19, 2015

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 930

[Doc. No. AMS–FV–14–0077; FV14–930–2 PR]

Tart Cherries Grown in the States of Michigan, et al.; Free and Restricted Percentages for the 2014–15 Crop Year for Tart Cherries

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Proposed rule.

SUMMARY: This proposed rule would implement a recommendation from the Cherry Industry Administrative Board (Board) to establish free and restricted percentages for the 2014–15 crop year under the marketing order for tart cherries grown in the states of Michigan, New York, Pennsylvania, Oregon, Utah, Washington, and Wisconsin (order). The Board locally administers the marketing order and is comprised of producers and handlers of tart cherries operating within the production area. This action would establish the proportion of tart cherries from the 2014 crop which may be handled in commercial outlets at 80 percent free and 20 percent restricted. In addition, this action would increase the carry-out volume of fruit to 50 million pounds for this season. These percentages should stabilize marketing conditions by adjusting supply to meet market demand and help improve grower returns.

DATES: Comments must be received by March 23, 2015.

ADDRESSES: Interested persons are invited to submit written comments concerning this proposal. Comments must be sent to the Docket Clerk, Marketing Order and Agreement Division, Fruit and Vegetable Program, AMS, USDA, 1400 Independence Avenue SW., STOP 0237, Washington, DC 20250–0237; Fax: (202) 720–8938; or Internet: *http://www.regulations.gov.* All comments should reference the document number and the date and page number of this issue of the **Federal Register** and will be made available for public inspection in the Office of the Docket Clerk during regular business hours, or can be viewed at: *http://www.regulations.gov.* All comments submitted in response to this proposal will be included in the record and will be made available to the public. Please be advised that the identity of the individuals or entities submitting the comments will be made public on the internet at the address provided above.

FOR FURTHER INFORMATION CONTACT: Jennie M. Varela, Marketing Specialist, or Christian D. Nissen, Regional Director, Southeast Marketing Field Office, Marketing Order and Agreement Division, Fruit and Vegetable Program, AMS, USDA; Telephone: (863) 324–3375, Fax: (863) 291–8614, or Email: *Jennie.Varela@ams.usda.gov* or *Christian.Nissen@ams.usda.gov.*

Small businesses may request information on complying with this regulation by contacting Jeffrey Smutny, Marketing Order and Agreement Division, Fruit and Vegetable Program, AMS, USDA, 1400 Independence Avenue SW., STOP 0237, Washington, DC 20250–0237; Telephone: (202) 720–2491, Fax: (202) 720–8938, or Email: *Jeffrey.Smutney@ams.usda.gov.*

SUPPLEMENTARY INFORMATION: This proposal is issued under Marketing Agreement and Order No. 930, both as amended (7 CFR part 930), regulating the handling of tart cherries produced in the States of Michigan, New York, Pennsylvania, Oregon, Utah, Washington and Wisconsin, hereinafter referred to as the ''order.'' The order is effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601–674), hereinafter referred to as the ''Act.''

The Department of Agriculture (USDA) is issuing this proposed rule in conformance with Executive Orders 12866, 13563, and 13175.

This proposal has been reviewed under Executive Order 12988, Civil Justice Reform. Under the order provisions now in effect, free and restricted percentages may be established for tart cherries handled during the crop year. This proposed rule would establish free and restricted percentages for tart cherries for the 2014–15 crop year, beginning July 1, 2014, through June 30, 2015.

The Act provides that administrative proceedings must be exhausted before parties may file suit in court. Under section 608c(15)(A) of the Act, any handler subject to an order may file with USDA a petition stating that the order, any provision of the order, or any obligation imposed in connection with the order is not in accordance with law and request a modification of the order or to be exempted therefrom. A handler is afforded the opportunity for a hearing on the petition. After the hearing, USDA would rule on the petition. The Act provides that the district court of the United States in any district in which the handler is an inhabitant, or has his or her principal place of business, has jurisdiction to review USDA's ruling on the petition, provided an action is filed not later than 20 days after the date of the entry of the ruling.

This proposed rule invites comments on the establishment of free and restricted percentages for the 2014–15 crop year. This action would establish the proportion of tart cherries from the 2014 crop which may be handled in commercial outlets at 80 percent free and 20 percent restricted. In addition, this action would increase the carry-out volume of fruit to 50 million pounds for calculation purposes for this season. This action should stabilize marketing conditions by adjusting supply to meet market demand and help improve grower returns. The change in carry-out was recommended by the Board at a meeting on June 26, 2014, and the final percentages were recommended by the Board at a meeting on September 11, 2014.

Section 930.51(a) of the order provides authority to regulate volume by designating free and restricted percentages for any tart cherries acquired by handlers in a given crop year. Section 930.50 prescribes procedures for computing an optimum supply based on sales history and for calculating these free and restricted percentages. Free percentage volume may be shipped to any market, while restricted percentage volume must be held by handlers in a primary or secondary reserve, or be diverted or used for exempt purposes as prescribed in §§ 930.159 and 930.162 of the regulations. These activities include, in part, the development of new products, sales into new markets, the

development of export markets, and charitable contributions.

Under § 930.52, only those districts with an annual average production of at least six million pounds are subject to regulation and any district producing a crop which is less than 50 percent of its annual average is exempt. The regulated districts for the 2014–2015 crop year would be: District 1—Northern Michigan; District 2—Central Michigan; District 3—Southern Michigan; District 4—New York; District 7—Utah; District 8—Washington; and District 9—Wisconsin. Districts 5 and 6 (Oregon and Pennsylvania, respectively) would not be regulated for the 2014–15 season.

Demand for tart cherries and tart cherry products tend to be relatively stable from year to year. Conversely, annual tart cherry production can vary greatly. In addition, tart cherries are processed and can be stored and carried over from crop year to crop year, further impacting supply. As a result, supply and demand for tart cherries are rarely in balance.

Because demand for tart cherries is inelastic, total sales volume is not very responsive to changes in price. However, prices are very sensitive to changes in supply. As such, an oversupply of cherries would have a sharp negative effect on prices, driving down grower returns. The Board, aware of this economic relationship, focuses on using the volume control provisions in the order to balance supply and demand to stabilize industry returns.

Pursuant to § 930.50 of the order, the Board meets on or about July 1 to review sales data, inventory data, current crop forecasts and market conditions for the upcoming season and, if necessary, to recommend preliminary free and restricted percentages if anticipated supply would exceed demand. After harvest is complete, but no later than September 15, the Board meets again to update their calculations using actual production data, consider any necessary adjustments to the preliminary percentages, and determine if final free and restricted percentages should be recommended to the Secretary.

The Board uses sales history, inventory, and production data to determine whether there is a surplus, and if so, how much volume should be restricted to maintain optimum supply. The optimum supply represents the desirable volume of tart cherries that should be available for sale in the coming crop year. Optimum supply is defined as the average free sales of the prior three years plus desirable carry-out inventory. Desirable carry-out is the amount of fruit needed by the industry to be carried into the succeeding crop year to meet marketing demand until the new crop is available. Desirable carry-out is set by the Board after considering market circumstances and needs. Section 930.50(a) specifies that desirable carry-out can range from zero to a maximum of 20 million pounds, but also authorizes the Board to establish an alternative carry-out figure with the approval of the Secretary.

After the Board determines optimum supply and desirable carry-out, it must examine the current year's available volume to determine whether there is an oversupply situation. Available volume includes carry-in inventory (any inventory available at the beginning of the season) along with that season's production. If production is greater than the optimum supply minus carry-in, the difference is considered surplus. This surplus tonnage is divided by the sum of production in the regulated districts to reach a restricted percentage. This percentage must be held in reserve or used for approved diversion activities, such as exports.

The Board met on June 26, 2014, and computed an optimum supply of 218 million pounds for the 2014–15 crop year using the average of free sales for the three previous seasons and a desirable carry-out of 20 million pounds. The Board then subtracted the estimated carry-in of 81 million pounds from the optimum supply to calculate the production needed from the 2014–15 crop to meet optimum supply. This number, 137 million pounds, was subtracted from USDA's estimated 2014–15 production of 264 million pounds to calculate a surplus of 127 million pounds of tart cherries. The surplus minus the market growth factor was then divided by the expected production in the regulated districts (261 million pounds) to reach a preliminary restricted percentage of 41 percent for the 2014–15 crop year.

In discussing the calculations, industry participants commented that a carry-out of 20 million pounds would not meet their needs at the end of the season before the new crop is available. To address that concern, the Board recommended increasing the desirable carry-out to 50 million pounds for the 2014–2015 season. This change increased the optimum supply to 248 million pounds, reducing the surplus to 97 million pounds.

The Board also discussed whether the three-year average was an accurate estimate of supply needed for the coming season considering the substantial loss of supply in 2012 due to weather. Including the use of reserves, sales in 2012–13 reached only 123 million pounds, nearly 100 million pounds less than 2013–14 sales. Using data from earlier seasons, the Board agreed that 250 million pounds of free supply is needed in a typical season and voted to make an economic adjustment of 52 million pounds to reach that level.

In addition, USDA's ''Guidelines for Fruit, Vegetable, and Specialty Crop Marketing Orders'' specify that 110 percent of recent years' sales should be made available to primary markets each season before recommendations for volume regulation are approved. This requirement is codified in § 930.50(g) of the order, which specifies that in years when restricted percentages are established, the Board shall make available tonnage equivalent to an additional 10 percent of the average sales of the prior three years for market expansion (market growth factor). The Board complied with this requirement by adding 20 million pounds (198 million times 10 percent, rounded) to the free supply.

The economic adjustment and market growth factor further reduced the preliminary surplus to 25 million pounds. After these adjustments, the preliminary restricted percentage was recalculated as 10 percent (25 million pounds divided by 261 million pounds).

The Board met again on September 11, 2014, to consider establishing final volume regulation percentages for the 2014–15 season. The final percentages are based on the Board's reported production figures and the supply and demand information available in September. The total production for the 2014–15 season was 297.7 million pounds, 34 million pounds above USDA's June estimate. In addition, growers diverted 0.2 million pounds in the orchard, leaving 297.5 million pounds available to market. Using the actual production numbers, and accounting for the recommended increase in desirable carry-out and economic adjustment, as well as the market growth factor, the restricted percentage was recalculated.

The Board subtracted the carry-in figure used in June of 81 million pounds from the optimum supply of 248 million pounds to determine 167 million pounds of 2014–15 production would be necessary to reach optimum supply. The Board subtracted the 167 million pounds from the actual production of 298 million pounds, resulting in a surplus of 131 million pounds of tart cherries. The surplus was then reduced by subtracting the economic adjustment of 52 million pounds and the market growth factor of 20 million pounds, resulting in an adjusted surplus of 59 million pounds. The Board then divided this final surplus by the actual

production in the regulated districts (295 million pounds) to calculate a restricted percentage of 20 percent with a corresponding free percentage of 80 percent for the 2014–15 crop year, as outlined in the following table:

	Millions of pounds
Final Calculations:	
(1) Average sales of the prior three years	198
(2) Plus desirable carry-out	50
(3) Optimum supply calculated by the Board	248
(4) Carry-in as of July 1, 2014	81
(5) Adjusted optimum supply (item 3 minus item 4)	167
(6) Board reported production	298
(7) Surplus (item 6 minus item 5)	131
(8) Total economic adjustments	52
(9) Market growth factor	20
(10) Adjusted Surplus (item 7 minus items 8 and 9)	59
(11) Crop estimate for regulated districts	295
Final Percentages:	Percent
Restricted (item 10 divided by item 11 × 100)	20
Free (100 minus restricted percentage)	80

The primary purpose of setting restricted percentages is an attempt to bring supply and demand into balance. If the primary market is oversupplied with cherries, grower prices decline substantially. Restricted percentages have benefited grower returns and helped stabilize the market as compared to those seasons prior to the implementation of the order. The Board believes the available information indicates that a restricted percentage should be established for the 2014–15 crop year to avoid oversupplying the market with tart cherries. Consequently, based on its discussion of this issue and the result of the above calculations, the Board recommended final percentages of 80 percent free and 20 percent restricted by a vote of 16 in favor and 2 against.

Of the two Board members who opposed the recommendation, one stated that the industry should focus on sales rather than restriction and the other expressed concerns that some segments would be more impacted by the restriction than others.

Regarding maximizing sales, one member noted that even storm-damaged fruit had been bought for processing, signaling that the processors still needed fruit toward the end of harvest. Other members, however, noted the extra sales some farmers experienced may have simply been due to gaps left by the areas that had damage, which reduced the amount of fruit available to fully supply their processors. Additionally, the economic adjustment and market growth factor included in the recommended restriction would make additional fruit available for sales.

A member also noted that some processors, such as those making pie filling, are not likely to purchase excess fruit and would have to restrict their sales. Another believed this level of restriction would signal to the ingredient market that processed fruit may be hard to obtain. However, others stated that a preliminary restriction was announced before harvest and all processors, regardless of product segment, are familiar with the process. Also, though the restricted percentage has increased since the preliminary announcement in June, the total volume of fruit available to the market remains unchanged.

Finally, there were also some comments regarding incorporating sales of imported fruit into the demand considerations and that rigid interpretation of the supply formula does not allow the Board to react to the current market conditions. As the order does not provide for reporting processing of imported fruit or regulating such fruit, there are no reliable data on the issue. Others noted that with the increased recommended carry-out, the market growth factor, and adjustment to the demand calculations, the Board has taken steps toward making enough fruit available to continue current growth and have fruit in reserve in case of another crop disaster.

After reviewing the available data, and considering the concerns expressed, the Board determined that a 20 percent restriction with a carry-out volume of 50 million pounds would meet sales needs and establish some reserves without oversupplying the market. Thus, the Board recommended establishing final percentages of 80 percent free and 20 percent restricted.

Initial Regulatory Flexibility Analysis

Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA) (5 U.S.C. 601–612), the Agricultural Marketing Service (AMS) has considered the economic impact of this action on small entities. Accordingly, AMS has prepared this initial regulatory flexibility analysis.

The purpose of the RFA is to fit regulatory actions to the scale of businesses subject to such actions in order that small businesses will not be unduly or disproportionately burdened. Marketing orders issued pursuant to the Act, and rules issued thereunder, are unique in that they are brought about through group action of essentially small entities acting on their own behalf.

There are approximately 600 producers of tart cherries in the regulated area and approximately 40 handlers of tart cherries who are subject to regulation under the order. Small agricultural producers are defined by the Small Business Administration (SBA) as those having annual receipts of less than $750,000 and small agricultural service firms have been defined as those having annual receipts of less than $7,000,000 (13 CFR 121.201).

According to the National Agricultural Statistics Service (NASS) and Board data, the average annual grower price for tart cherries during the 2013–14 season was $0.35 per pound, and total shipments were around 289 million pounds. Therefore, average receipts for tart cherry producers were around $168,800, well below the SBA threshold for small producers. In 2014, The Food Institute estimated an f.o.b. price of $0.96 per pound for frozen tart

cherries, which make up the majority of processed tart cherries. Using this data, average annual handler receipts were about $6.9 million, which is also below the SBA threshold for small agricultural service firms. Assuming a normal distribution, the majority of producers and handlers of tart cherries may be classified as small entities.

The tart cherry industry in the United States is characterized by wide annual fluctuations in production. According to NASS, tart cherry production in 2011 was 232 million pounds, 85 million pounds in 2012, and in 2013, production was 294 million pounds. Because of these fluctuations, the supply and demand for tart cherries are rarely equal.

Demand for tart cherries is inelastic, meaning changes in price have a minimal effect on total sales volume. However, prices are very sensitive to changes in supply, and grower prices vary widely in response to the large swings in annual supply, with prices ranging from a low of 7.3 cents in 1987 to a high of 46.4 cents in 1991.

Because of this relationship between supply and price, oversupplying the market with tart cherries would have a sharp negative effect on prices, driving down grower returns. The Board, aware of this economic relationship, focuses on using the volume control authority in the order in an effort to balance supply and demand in order to stabilize industry returns. This authority allows the industry to set free and restricted percentages as a way to bring supply and demand into balance. Free percentage cherries can be marketed by handlers to any outlet, while restricted percentage volume must be held by handlers in reserve, diverted or used for exempted purposes.

This proposal would establish free and restricted percentages using an increased carry-out volume of 50 million pounds for the 2014–15 crop year under the order for tart cherries. This action would control the supply of tart cherries by establishing percentages of 80 percent free and 20 percent restricted for the 2014–15 crop year. These percentages should stabilize marketing conditions by adjusting supply to meet market demand and help improve grower returns. The action would regulate tart cherries handled in Michigan, New York, Utah, Washington, and Wisconsin. The authority for this action is provided for in §§ 930.51(a) and 930.52 of the order. The Board recommended this action at a meeting on September 11, 2014.

This action would result in some fruit being diverted from the primary domestic markets. However, as mentioned earlier, the USDA's ''Guidelines for Fruit, Vegetable, and Specialty Crop Marketing Orders'' specify that 110 percent of recent years' sales should be made available to primary markets each season before recommendations for volume regulation are approved. The quantity that would be available under this rule is greater than 110 percent of the quantity shipped in the prior three years.

In addition, there are secondary uses available for restricted fruit, including the development of new products, sales into new markets, the development of export markets, and being placed in reserve. While these alternatives may provide different levels of return than the sales to primary markets, they play an important role for the industry. The areas of new products, new markets, and the development of export markets utilize restricted fruit to develop and expand the markets for tart cherries. In 2011–12, the last season there was a restriction, these activities accounted for more 39 million pounds in sales, 14 million of which were exports.

Placing tart cherries into reserves is also a key part of balancing supply and demand. Although the industry must bear the handling and storage costs for fruit in reserve, reserves stored in large crop years are used to supplement supplies in short crop years. The reserves allow the industry to mitigate the impact of oversupply in large crop years, while allowing the industry to maintain and supply markets in years where production falls below demand. Further, storage and handling costs are more than offset by the increase in price when moving from a large crop to a short crop year.

In addition, the Board recommended an increased carry-out of 50 million pounds and made a demand adjustment of 52 million pounds in order to make the regulation less restrictive. Even with the recommended restriction, over 300 million pounds of fruit would be available to the domestic market. Consequently, it is not anticipated that this action would unduly burden growers or handlers.

While this action could result in some additional costs to the industry, these costs are more than outweighed by the benefits. The purpose of setting restricted percentages is to attempt to bring supply and demand into balance. If the primary market (domestic) is oversupplied with cherries, grower prices decline substantially. Without volume control, the primary market would likely be oversupplied, resulting in lower grower prices.

The three districts in Michigan, along with the districts in New York, Utah, Washington, and Wisconsin are the restricted areas for this crop year with a combined total production of 295 million pounds. A 20 percent restriction means 236 million pounds would be available to be shipped to primary markets from these five states. The 236 million pounds from the restricted districts, nearly 3 million pounds from the unrestricted districts (Oregon and Pennsylvania), and the 81 million pound carry-in inventory would make a total of 320 million pounds available as free tonnage for the primary markets. In comparison, the 12 percent restriction in 2011–2012 made just under 262 million pounds available.

Prior to the implementation of the order, grower price often did not come close to covering the cost of production. The most recent costs of production determined by representatives of Michigan State University are an estimated $0.33 per pound. To assess the impact that volume control has on the prices growers receive for their product, an econometric model has been developed. Based on the model, the use of volume control would have a positive impact on grower returns for this crop year. With volume control, grower prices are estimated to be approximately $0.03 per pound higher than without restrictions.

In addition, absent volume control, the industry could start to build large amounts of unwanted inventories. These inventories would have a depressing effect on grower prices. The econometric model shows for every 1 million-pound increase in carry-in inventories, a decrease in grower prices of $0.0037 per pound occurs.

Retail demand is assumed to be highly inelastic, which indicates that changes in price do not result in significant changes in the quantity demanded. Consumer prices largely do not reflect fluctuations in cherry supplies. Therefore, this action should have little or no effect on consumer prices and should not result in a reduction in retail sales.

The free and restricted percentages established by this rule would provide the market with optimum supply and apply uniformly to all regulated handlers in the industry, regardless of size. As the restriction represents a percentage of a handler's volume, the costs, when applicable, are proportionate and should not place an extra burden on small entities as compared to large entities.

The stabilizing effects of this action would benefit all handlers by helping them maintain and expand markets, despite seasonal supply fluctuations. Likewise, price stability positively

impacts all growers and handlers by allowing them to better anticipate the revenues their tart cherries would generate. Growers and handlers, regardless of size, would benefit from the stabilizing effects of this restriction. In addition, the increased carry-out should provide processors enough supply to meet market needs going into the next season.

The Board considered some alternatives in its preliminary restriction discussions that affected this recommended action. The first alternative concerned the average sales in estimating demand for the coming season, and the second alternative regarded the recommended carry-out figure.

Regarding demand, the Board began with the actual sales average of 198 million pounds. There was concern, however that this value, which incorporated the weather-related crop failure of 2012, would result in an over-restrictive calculation. After considering options in the range of 24 to 52 million pounds, the Board determined that an adjustment of 52 million pounds, to reach an average demand of 250 million pounds, was most appropriate for the industry. Thus the other alternatives were rejected and the Board recommended the 52 million pound economic adjustment.

Regarding the carry-out value, the Board considered keeping this value at the order's 20 million pound maximum. However, many noted that the industry now regularly carries over more volume than in the past to keep its expanded product lines supplied at the end of the season. One member noted that even at the end of the disaster season, there were 17 million pounds carried out. Another noted that the 81 million pound carry-in this season was seen as burdensome. Others were concerned that in addition to the previous adjustment, too high of a carry-out figure might discourage using reserves to protect the industry from another disaster. The Board considered 60 million pounds and 30 million pounds, but these were considered respectively too large and too restrictive and thus were rejected. The Board then reached a consensus and recommended the Secretary increase the maximum carry-out to 50 million pounds for the 2014–2015 season alone.

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35), the order's information collection requirements have been previously approved by the Office of Management and Budget (OMB) and assigned OMB No. 0581–0177, Tart Cherries Grown in the States of MI, NY, PA, OR, UT, WA, and WI. No changes in those requirements as a result of this action are necessary. Should any changes become necessary, they would be submitted to OMB for approval.

This action would not impose any additional reporting or recordkeeping requirements on either small or large tart cherry handlers. As with all Federal marketing order programs, reports and forms are periodically reviewed to reduce information requirements and duplication by industry and public sector agencies.

AMS is committed to complying with the E-Government Act, to promote the use of the internet and other information technologies to provide increased opportunities for citizen access to Government information and services, and for other purposes.

USDA has not identified any relevant Federal rules that duplicate, overlap or conflict with this proposed rule.

In addition, the Board's meeting was widely publicized throughout the tart cherry industry and all interested persons were invited to attend the meeting and participate in Board deliberations on all issues. Like all Board meetings, the June 26, 2014, and September 11, 2014, meetings were public meetings and all entities, both large and small, were able to express views on this issue. Finally, interested persons are invited to submit comments on this proposed rule, including the regulatory and informational impacts of this action on small businesses.

A small business guide on complying with fruit, vegetable, and specialty crop marketing agreements and orders may be viewed at: *http://www.ams.usda.gov/MarketingOrdersSmallBusinessGuide.* Any questions about the compliance guide should be sent to Jeffrey Smutny at the previously mentioned address in the **FOR FURTHER INFORMATION CONTACT** section.

A 30-day comment period is provided to allow interested persons to respond to this proposal. Thirty days is deemed appropriate because this proposed rule would need to be in place as soon as possible since handlers are already shipping tart cherries from the 2014–15 crop. All written comments timely received will be considered before a final determination is made on this matter.

List of Subjects in 7 CFR Part 930

Marketing agreements, Reporting and recordkeeping requirements, Tart cherries.

For the reasons set forth in the preamble, 7 CFR part 930 is proposed to be amended as follows:

PART 930—TART CHERRIES GROWN IN THE STATES OF MICHIGAN, NEW YORK, PENNSYLVANIA, OREGON, UTAH, WASHINGTON, AND WISCONSIN

■ 1. The authority citation for 7 CFR part 930 continues to read as follows:

Authority: 7 U.S.C. 601–674.

■ 2. Section 930.151 is added to read as follows:

§ 930.151 Desirable carry-out inventory

For the crop year beginning on July 1, 2014, the desirable carry-out inventory, for the purposes of determining an optimum supply volume, will be 50 million pounds.

■ 3. Section 930.256 is added to read as follows:

§ 930.256 Free and restricted percentages for the 2014–15 crop year.

The percentages for tart cherries handled by handlers during the crop year beginning on July 1, 2014, which shall be free and restricted, respectively, are designated as follows: Free percentage, 80 percent and restricted percentage, 20 percent.

Dated: February 11, 2015.

Rex A. Barnes,

Associate Administrator, Agricultural Marketing Service.

[FR Doc. 2015–03406 Filed 2–18–15; 8:45 am]

BILLING CODE P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2006–26235; Directorate Identifier 2006–CE–065–AD]

RIN 2120–AA64

Airworthiness Directives; SOCATA Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for SOCATA Model TBM 700 airplanes (type certificate previously held by EADS SOCATA) that would revise AD 2007–04–13. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe

condition as cracks found on the main landing gear cylinders. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by April 6, 2015.

ADDRESSES: You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Fax:* (202) 493–2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact SOCATA, Direction des Services, 65921 Tarbes Cedex 9, France; telephone: 33 (0)5 62.41.73.00; fax: 33 (0)5 62.41.76.54; or SOCATA North America, North Perry Airport, 7501 S Airport Rd., Pembroke Pines, Florida 33023, telephone: (954) 893–1400; fax: (954) 964–4141; Internet: *http://www.socata.com.* You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2006–26235; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647–5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Albert J. Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329–4119; fax: (816) 329–4090; email: *albert.mercado@faa.gov.*

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2006–26235; Directorate Identifier 2006–CE–065–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to *http://regulations.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On February 8, 2007, we issued AD 2007–04–13, Amendment 39–14945 (72 FR 7576, February 16, 2007). That AD requires actions intended to address an unsafe condition on SOCATA Model TBM 700 airplanes (type certificate previously held by EADS SOCATA) and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country.

Since we issued AD 2007–04–13, Amendment 39–14945 (72 FR 7576, February 16, 2007), it has been determined that the time between repetitive inspections should be extended and an optional terminating action for the repetitive inspections is now available.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No. 2006–0085R2, dated January 16, 2015 (referred to after this as ''the MCAI''), to correct an unsafe condition for the specified products. The MCAI states:

> Cracks on several main landing gear (MLG) cylinders have been reported in service.
>
> This condition, if not to detected and corrected, could lead to fatigue cracks in the shock strut cylinder of the MLG, which could result in a collapsed MLG during take-off or landing runs, and possibly reduce the structural integrity of the aeroplane.
>
> To address this unsafe condition, EASA issued AD 2006–0085 to require repetitive special detailed inspections (SDI) for cracks of the MLG shock strut cylinder and, depending on findings, relevant investigative and corrective actions.
>
> After that AD was issued, SOCATA performed an analysis to demonstrate that the inspection interval could be extended, and developed a reinforced MLG less prone to fatigue, which is embodied in production through SOCATA modification (MOD) 70–0190–32 and can be introduced in service through SOCATA Service Bulletin (SB) 70–130–32 at Revision 03.
>
> Prompted by these developments, EASA issued AD 2006–0085R1 to increase the inspection interval and to introduce the installation of a reinforced MLG on the right hand (RH) side and left hand (LH) side as an optional terminating action for the repetitive SDI required by this AD.
>
> Since that AD was issued, it was found that aeroplanes MSN 639 to 683 (inclusive) are not affected by this AD. The applicability has therefore been revised to remove those MSN.

You may examine the MCAI on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2006–26235.

Relevant Service Information Under 1 CFR Part 51

SOCATA has issued DAHER–SOCATA TBM Aircraft Mandatory Service Bulletin SB 70–130, Revision 3, dated December 2014. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI. The DAHER–SOCATA TBM Aircraft Mandatory Service Bulletin SB 70–130, Revision 3, dated December 2014, describes procedures for repetitively inspecting the main landing gear (MLG) for cracks and replacing cracked MLG with a reinforced MLG as a terminating action for the repetitive inspections. This service information is reasonably available; see **ADDRESSES** for ways to access this service information.

FAA's Determination and Requirements of the Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD will affect 431 products of U.S. registry. We also estimate that it would take about 3 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is $85 per work-hour.

Based on these figures, we estimate the cost of the proposed AD on U.S.

operators to be $109,905, or $255 per product.

In addition, we estimate that any necessary follow-on actions would take about 4 work-hours and require parts costing $6,000, for a cost of $6,340 per product. We have no way of determining the number of products that may need these actions.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. ''Subtitle VII: Aviation Programs,'' describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in ''Subtitle VII, Part A, Subpart III, section 44701: General requirements.'' Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a ''significant regulatory action'' under Executive Order 12866,

(2) Is not a ''significant rule'' under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by removing Amendment 39–14945 (72 FR 75776, February 16, 2007), and adding the following new AD:

SOCATA (type certificate previously held by EADS SOCATA): Docket No. FAA–2006–26235; Directorate Identifier 2006–CE–065–AD.

(a) Comments Due Date

We must receive comments by April 6, 2015.

(b) Affected ADs

This AD revises AD 2007–04–13, Amendment 39–14945, (72 FR 75776, February 16, 2007) (''AD 2007–04–13'').

(c) Applicability

This AD applies to SOCATA Model TBM 700 airplanes, serial numbers 1 through 638 and 687, that:

(1) Are not equipped with a left-hand main landing gear (MLG) body part number (P/N) D68161 or D68161–1 and a right-hand MLG body P/N D68162 or D68162–1; and

(2) are certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 32: Landing gear.

(e) Reason

This AD was prompted by reports of cracks found on several main landing gear (MLG) cylinders. We are issuing this proposed AD to detect and correct cracks in the shock strut cylinder of the MLG, which could cause the MLG to fail. This failure could result in a collapsed MLG during takeoff or landing and possible reduced structural integrity of the airplane. We are revising AD 2007–04–13 to increase the time between the repetitive inspections and to incorporate an optional modification to terminate the required repetitive inspections.

(f) Actions and Compliance

Unless already done, do the following actions in paragraphs (f)(1) through (f)(4) of this AD:

(1) As of March 23, 2007 (the effective date retained from AD 2007–04–13), for MLG with forging body totaling more than 1,750 landings but less than 3,501 landings since new:

(i) Inspect the forging body for cracks within 100 landings after March 23, 2007 (the effective date retained from AD 2007–04–13), following the Accomplishment Instructions of EADS SOCATA TBM Aircraft Mandatory Service Bulletin SB 70–130, dated January 2006, or DAHER–SOCATA TBM Aircraft Mandatory Service Bulletin SB 70–130, Revision 3, dated December 2014.

(ii) If no cracks are detected during the inspection required in paragraph (f)(1)(i) of this AD, repetitively thereafter inspect at intervals not to exceed 240 landings until a reinforced landing gear specified in paragraph E. Terminating Solution of the Accomplishment Instructions in DAHER–SOCATA TBM Aircraft Mandatory Service Bulletin SB 70–130, Revision 3, dated December 2014, is installed.

(2) As of March 23, 2007 (the effective date retained from AD 2007–04–13), for MLG with forging body totaling more than 3,500 landings since new:

(i) Inspect the forging body for cracks within 25 landings after March 23, 2007 (the effective date retained from AD 2007–04–13), following the Accomplishment Instructions of EADS SOCATA TBM Aircraft Mandatory Service Bulletin SB 70–130, dated January 2006, or DAHER–SOCATA TBM Aircraft Mandatory Service Bulletin SB 70–130, Revision 3, dated December 2014.

(ii) If no cracks are detected during the inspection required in paragraph (f)(2)(i) of this AD, repetitively thereafter inspect at intervals not to exceed 240 landings until a reinforced landing gear specified in paragraph E. Terminating Solution of the Accomplishment Instructions in DAHER–SOCATA TBM Aircraft Mandatory Service Bulletin SB 70–130, Revision 3, dated December 2014, is installed.

(3) If any cracks are detected during any inspection required in paragraphs (f)(1) through (f)(2) of this AD, including all subparagraphs:

(i) Before further flight, remove the affected landing gear leg and confirm the presence of the crack with dye penetrant inspection or fluorescent penetrant inspection.

(ii) If the crack is confirmed, before further flight, contact SOCATA at the address in paragraph (h) of this AD to coordinate the FAA-approved landing gear repair/replacement and implement any FAA-approved repair/replacement instructions obtained from SOCATA, or replace the cracked landing gear with a reinforced landing gear specified in paragraph E. Terminating Solution of the Accomplishment Instructions in DAHER–SOCATA TBM Aircraft Mandatory Service Bulletin SB 70–130, Revision 3, dated December 2014. This replacement terminates the repetitive inspections required by this AD.

(4) If you do not know the number of landings, follow the instructions in the Compliance section of EADS SOCATA TBM Aircraft Mandatory Service Bulletin SB 70–130, dated January 2006.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Albert J. Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329–4119; fax: (816) 329–4090; email: *albert.mercado@faa.gov.* Before using any approved AMOC on any

airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) *Airworthy Product:* For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2006–0085R2, dated January 16, 2015. You may examine the MCAI on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2006–26235. For service information related to this AD, contact SOCATA, Direction des Services, 65921 Tarbes Cedex 9, France; telephone: 33 (0)5 62.41.73.00; fax: 33 (0)5 62.41.76.54; or SOCATA North America, North Perry Airport, 7501 S Airport Rd., Pembroke Pines, Florida 33023, telephone: (954) 893–1400; fax: (954) 964–4141; Internet: *http://www.socat.com.* You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

Issued in Kansas City, Missouri, on February 6, 2015.

Robert Busto,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2015–03163 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 100

[Docket Number USCG–2015–0018]

RIN 1625–AA08

Special Local Regulation; Charleston Race Week, Charleston Harbor, Charleston, SC

AGENCY: Coast Guard, DHS.

ACTION: Notice of Proposed Rulemaking.

SUMMARY: The Coast Guard proposes to issue a special local regulation on the waters of Charleston Harbor in Charleston, SC during the Charleston Race Week on April 17, 2015 through April 19, 2015. This special local regulation is necessary to ensure the safety of participants, spectators, and the general public during the event. The special local regulation would temporarily restrict vessel traffic in a portion of Charleston Harbor, preventing non-participant vessels from entering, transiting through, anchoring in, or remaining within the regulated area unless authorized by the Captain of the Port Charleston or a designated representative.

DATES: Comments and related material must be received by the Coast Guard on or before March 23, 2015.

ADDRESSES: You may submit comments identified by docket number using any one of the following methods:

(1) *Federal eRulemaking Portal: http://www.regulations.gov.*

(2) *Fax:* 202–493–2251.

(3) *Mail or Delivery:* Docket Management Facility (M–30), U.S. Department of Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590–0001. Deliveries accepted between 9 a.m. and 5 p.m., Monday through Friday, except federal holidays. The telephone number is 202–366–9329.

See the ''Public Participation and Request for Comments'' portion of the **SUPPLEMENTARY INFORMATION** section below for further instructions on submitting comments. To avoid duplication, please use only one of these three methods.

FOR FURTHER INFORMATION CONTACT: If you have questions on this rule, call or email Chief Warrant Officer Christopher Ruleman, Sector Charleston Office of Waterways Management, Coast Guard; telephone (843) 740–3184, email *Christopher.L.Ruleman@uscg.mil.* If you have questions on viewing or submitting material to the docket, call Barbara Hairston, Program Manager, Docket Operations, telephone (202) 366–9826.

SUPPLEMENTARY INFORMATION:

Table of Acronyms

DHS Department of Homeland Security
FR Federal Register
NPRM Notice of Proposed Rulemaking

A. Public Participation and Request for Comments

We encourage you to participate in this rulemaking by submitting comments and related materials. All comments received will be posted without change to *http://www.regulations.gov* and will include any personal information you have provided.

1. Submitting Comments

If you submit a comment, please include the docket number for this rulemaking, indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online at *http://www.regulations.gov,* or by fax, mail, or hand delivery, but please use only one of these means. If you submit a comment online, it will be considered received by the Coast Guard when you successfully transmit the comment. If you fax, hand deliver, or mail your comment, it will be considered as having been received by the Coast Guard when it is received at the Docket Management Facility. We recommend that you include your name and a mailing address, an email address, or a telephone number in the body of your document so that we can contact you if we have questions regarding your submission.

To submit your comment online, go to *http://www.regulations.gov,* type the docket number USCG–2015–0018 in the ''SEARCH'' box and click ''SEARCH.'' Click on ''Submit a Comment'' on the line associated with this rulemaking.

If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the Facility, please enclose a stamped, self-addressed postcard or envelope. We will consider all comments and material received during the comment period and may change the rule based on your comments.

2. Viewing Comments and Documents

To view comments, as well as documents mentioned in this preamble as being available in the docket, go to *http://www.regulations.gov,* type the docket number USCG–2015–0018 in the ''SEARCH'' box and click ''SEARCH.'' Click on Open Docket Folder on the line associated with this rulemaking. You may also visit the Docket Management Facility in Room W12–140 on the ground floor of the Department of Transportation West Building, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

3. Privacy Act

Anyone can search the electronic form of comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review a Privacy Act notice regarding our public dockets in the January 17, 2008, issue of the **Federal Register** (73 FR 3316).

4. Public Meeting

We do not now plan to hold a public meeting. But you may submit a request for one on or before March 15, 2015, using one of the methods specified under **ADDRESSES**. Please explain why you believe a public meeting would be beneficial. If we determine that one would aid this rulemaking, we will hold one at a time and place announced by a later notice in the **Federal Register**.

B. Basis and Purpose

The legal basis for the proposed rule is the Coast Guard's Authority to establish special local regulations: 33 U.S.C 1233. The purpose of the proposed rule is to ensure safety of life on the navigable water of the United States during the Charleston Race Week.

C. Discussion of Proposed Rule

The Coast Guard is proposing to establish special local regulations on the waters of Charleston Harbor in Charleston, South Carolina during Charleston Race Week, a series of sailboat races. The races are scheduled to take place on Friday, April 17, 2015 through Sunday, April 19, 2015. Approximately 300 sailboats are anticipated to participate in the races, and approximately 15 spectator vessels are expected to attend the event. Persons and vessels desiring to enter, transit through, anchor in, or remain within the regulated area may contact the Captain of the Port Charleston by telephone at (843) 740–7050, or a designated representative via VHF radio on channel 16, to request authorization. If authorization to enter, transit through, anchor in, or remain within the regulated area is granted by the Captain of the Port Charleston or a designated representative, all persons and vessels receiving such authorization must comply with the instructions of the Captain of the Port Charleston or a designated representative. The Coast Guard will provide notice of the special local regulation by Local Notice to Mariners, Broadcast Notice to Mariners, and on-scene designated representatives.

D. Regulatory Analyses

We developed this proposed rule after considering numerous statutes and executive orders related to rulemaking. Below we summarize our analyses based on a number of these statutes or executive orders.

1. Regulatory Planning and Review

This proposed rule is not a significant regulatory action under section 3(f) of Executive Order 12866, Regulatory Planning and Review, as supplemented by Executive Order 13563, Improving Regulation and Regulatory Review, and does not require an assessment of potential costs and benefits under section 6(a)(3) of Executive Order 12866 or under section 1 of Executive Order 13563. The Office of Management and Budget has not reviewed it under those Orders.

The economic impact of this proposed rule is not significant for the following reasons: (1) Non-participant persons and vessels may enter, transit through, anchor in, or remain within the regulated area during the enforcement periods if authorized by the Captain of the Port Charleston or a designated representative; (2) vessels not able to enter, transit through, anchor in, or remain within the regulated area without authorization from the Captain of the Port Charleston or a designated representative may operate in the surrounding areas during the enforcement period; and (3) the Coast Guard will provide advance notification of the special local regulation to the local maritime community by Local Notice to Mariners and Broadcast Notice to Mariners.

2. Impact on Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601–612), we have considered the impact of this proposed rule on small entities. The Coast Guard certifies under 5 U.S.C. 605(b) that this proposed rule will not have a significant economic impact on a substantial number of small entities. This rule may affect the following entities, some of which may be small entities: the owner or operators of vessels intending to enter, transit through, anchor in, or remain within the regulated area during the enforcement period. For the reasons discussed in Regulatory Planning and Review section above, this rule will not have a significant economic impact on a substantial number of small entities.

If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this rule would have a significant economic impact on it, please submit a comment (see **ADDRESSES**) explaining why you think it qualifies and how and to what degree this rule would economically affect it.

3. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this proposed rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT**, above. The Coast Guard will not retaliate against small entities that question or complain about this proposed rule or any policy or action of the Coast Guard.

4. Collection of Information

This proposed rule will not call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520.).

5. Federalism

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this proposed rule under that Order and determined that this rule does not have implications for federalism.

6. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places or vessels.

7. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of $100,000,000 (adjusted for inflation) or more in any one year. Though this proposed rule would not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

8. Taking of Private Property

This proposed rule would not cause a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

9. Civil Justice Reform

This proposed rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice

Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

10. Protection of Children From Environmental Health Risks

We have analyzed this proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

11. Indian Tribal Governments

This proposed rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it would not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

12. Energy Effects

This proposed rule is not a ''significant energy action'' under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use.

13. Technical Standards

This proposed rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

14. Environment

We have analyzed this rule under Department of Homeland Security Management Directive 023–01 and Commandant Instruction M16475.lD, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321–4370f), and have concluded this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. This rule involves a special local regulation issued in conjunction with a regatta or marine parade. This rule is categorically excluded from further review under paragraph 34(h) of Figure 2–1 of the Commandant Instruction. We seek any comments or information that may lead to the discovery of a significant environmental impact from this rule.

List of Subjects in 33 CFR Part 100

Marine Safety, Navigation (water), Reporting and recordkeeping requirements, Waterways.

For the reasons discussed in the preamble, the Coast Guard proposes to amend 33 CFR part 100 as follows:

PART 100—SAFETY OF LIFE ON NAVIGABLE WATERS

■ 1. The authority citation for part 100 continues to read as follows:

Authority: 33 U.S.C. 1233

■ 2. Add a temporary § 100.35T07–0018 to read as follows:

§ 100.35T07–0018 Special Local Regulation; Charleston Race Week, Charleston Harbor, Charleston, SC.

(a) *Regulated Area.* The rule establishes special local regulations on certain waters of Charleston Harbor in Charleston, South Carolina. The special local regulations will be enforced daily from 8:30 a.m. until 5:00 p.m. on April 17, 2015 through April 19, 2015. The special local regulations consist of the following three race areas.

(1) *Race Area #1.* All waters encompassed within an 800 yard radius of position 32°46′39″ N, 79°55′10″ W.

(2) *Race Area #2.* All waters encompassed within a 900 yard radius of position 32°45′48″ N, 79°54′46″ W.

(3) *Race Area #3.* All waters encompassed within a 900 yard radius of position 32°45′44″ N, 79°53′32″ W.

(b) *Definition.* The term ''designated representative'' means Coast Guard Patrol Commanders, including Coast Guard coxswains, petty officers, and other officers operating Coast Guard vessels, and Federal, state, and local officers designated by or assisting the Captain of the Port Charleston in the enforcement of the regulated areas.

(c) *Regulations.* (1) All persons and vessels, except those participating in Charleston Race Week or serving as safety vessels are prohibited from entering, transiting through, anchoring in, or remaining within the regulated area. Persons and vessels desiring to enter, transit through, anchor in, or remain within the regulated area may contact the Captain of the Port Charleston by telephone at (843) 740–7050, or a designated representative via VHF radio on channel 16, to request authorization. If authorization to enter, transit through, anchor in, or remain within the regulated area is granted by the Captain of the Port Charleston or a designated representative, all persons and vessels receiving such authorization must comply with the instructions of the Captain of the Port Charleston or a designated representative.

(2) The Coast Guard will provide notice of the regulated area by Marine Safety Information Bulletins, Local Notice to Mariners, Broadcast Notice to Mariners, and on-scene designated representatives.

(d) *Effective Date.* This rule is effective and will be enforced from 8:30 a.m. April 17, 2015 through 5:00 p.m. April 19, 2015.

Dated: January 28, 2015.

B.D. Falk,

Commander, U.S. Coast Guard. Acting Captain of the Port Charleston.

[FR Doc. 2015–03075 Filed 2–18–15; 8:45 am]

BILLING CODE 9110–04–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 59, 80, 85, 86, 600, 1037, 1043, 1051, 1054, 1060, 1065, and 1066

[EPA–HQ–OAR–2011–0135; FRL 9922–32–OAR]

RIN 2060–AS36

Amendments Related to: Tier 3 Motor Vehicle Emission and Fuel Standards, Nonroad Engine and Equipment Programs, and MARPOL Annex VI Implementation

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing this action on several amendments involving technical clarifications for different mobile source regulations. First, we are making a variety of corrections to the Tier 3 motor vehicle emission and fuel standards. These changes generally correct or clarify various provisions from the Tier 3 rule without expanding the Tier 3 program or otherwise making substantive changes. Second, we are revising the test procedures and compliance provisions for nonroad spark-ignition engines at or below 19 kW (and for the corresponding nonroad equipment) to conform to current practices. The changes to evaporative emission test procedures also apply to some degree to other types of nonroad equipment powered by volatile liquid fuels. Third, we are addressing an ambiguity regarding permissible design approaches for portable fuel containers meeting evaporative emission standards. Fourth, we are revising the regulations to more carefully align with current requirements that apply to marine vessels with diesel engines as specified under MARPOL Annex VI. Fifth, we are correcting typographical errors in

regulatory changes finalized in the Voluntary Quality Assurance Program rulemaking.

In the ''Rules and Regulations'' section of this **Federal Register**, we are taking direct final action without a prior proposed rule. If we receive no adverse comment, we will not take further action on this proposed rule.

DATES: *Comments:* Written comments must be received by April 6, 2015.

Public Hearing: If anyone contacts EPA requesting to speak at a public hearing by February 24, 2015, a public hearing will be held in Ann Arbor, Michigan on March 6, 2015. Inquire about arrangements for a public hearing as described in ''**FOR FURTHER INFORMATION CONTACT**''.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2011–0135, by one of the following methods:

- *www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *Email: A-and-R-Docket@epamail.epa.gov.*
- *Fax:* (202) 566–9744
- *Mail:* Air and Radiation Docket and Information Center, Environmental Protection Agency, Mailcode: 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460.
- *Hand Delivery:* EPA Docket Center, EPA WJC West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC 20460. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA–HQ–OAR–2011–0135. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or email. The *www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through *www.regulations.gov* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm.* For additional instructions on submitting comments, see the **SUPPLEMENTARY INFORMATION** section of this document.

Docket: All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, *e.g.,* CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at the Air and Radiation Docket and Information Center, EPA/DC, EPA WJC West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: Alan Stout, Office of Transportation and Air Quality, Assessment and Standards Division (ASD), Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105; Telephone number: (734) 214–4805; *stout.alan@epa.gov.*

SUPPLEMENTARY INFORMATION:

Why is EPA issuing this proposed rule?

This document proposes to take action on: (1) General corrections and clarifications to various provisions from the Tier 3 motor vehicle emission and fuel standards rule, (2) revisions to the test procedures and compliance provisions for nonroad spark-ignition engines and equipment at or below 19 kW, (3) addressing an ambiguity regarding permissible design approaches for portable fuel containers meeting evaporative emission standards, and (4) revisions to the regulations to more carefully align with MARPOL Annex VI requirements.

We have published a direct final rule in the ''Rules and Regulations'' section of this **Federal Register** because we view this as a noncontroversial action and anticipate no adverse comment. We have explained our reasons for this action in the preamble to the direct final rule; that document also includes draft regulations detailing all the amendments under consideration. The regulatory text from the direct final rule applies equally to this proposed rule and is not reproduced as part of this document.

If we receive no adverse comment, we will not take further action on this proposed rule. If we receive adverse comment, we will publish a timely withdrawal in the **Federal Register** informing the public that this rule, or the relevant provisions of this rule, will not take effect. We would address all public comments in any subsequent final rule based on this proposed rule.

We do not intend to institute a second comment period on this action. Any parties interested in commenting must do so at this time. For further information, please see the information provided in the **ADDRESSES** section of this document.

Does this action apply to me?

Entities potentially affected by this proposal include gasoline refiners and importers, ethanol producers, ethanol denaturant producers, butane and pentane producers, gasoline additive manufacturers, transmix processors, terminals and fuel distributors, light-duty vehicle manufacturers, manufacturers of nonroad engines and equipment, manufacturers of marine compression-ignition engines, and owners and operators of ocean-going vessels and other commercial ships, and manufacturers of portable fuel containers.

Potentially regulated categories include:

Category	NAICS [a] Code	Examples of potentially affected entities
Industry	324110	Petroleum refineries (including importers)
Industry	325110	Butane and pentane manufacturers

Category	NAICS [a] Code	Examples of potentially affected entities
Industry	325193	Ethyl alcohol manufacturing
Industry	324110, 211112	Ethanol denaturant manufacturers
Industry	211112	Natural gas liquids extraction and fractionation
Industry	325199	Other basic organic chemical manufacturing
Industry	486910	Natural gas liquids pipelines, refined petroleum products pipelines
Industry	424690	Chemical and allied products merchant wholesalers
Industry	325199	Manufacturers of gasoline additives
Industry	424710	Petroleum bulk stations and terminals
Industry	493190	Other warehousing and storage—bulk petroleum storage
Industry	336111, 336112	Light-duty vehicle and light-duty truck manufacturers
Industry	335312, 336312, 336322, 336399, 811198.	Alternative fuel converters
Industry	333618, 336120, 336211, 336312	On-highway heavy-duty engine & vehicle (>8,500 lbs GVWR) manufacturers
Industry	336611	Manufacturers of marine vessels
Industry	336612	Manufacturers of marine vessels
Industry	811310	Engine repair and maintenance
Industry	483	Water transportation, freight and passenger
Industry	424710, 424720	Petroleum Bulk Stations and Terminals; Petroleum and Petroleum Products Wholesalers
Industry	483113	Coastal and Great Lakes Freight Transportation
Industry	483114	Coastal and Great Lakes Passenger Transportation
Industry	333618	Manufacturers of new engines
Industry	333112	Manufacturers of lawn and garden tractors (home)
Industry	811112, 811198	Commercial importers of vehicles and vehicle components
Industry	326199, 332431	Portable fuel container manufacturers

[a] North American Industry Classification System (NAICS).

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this proposed action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your activities are regulated by this action, you should carefully examine the applicability criteria in the referenced regulations. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

What should I consider as I prepare my comments for EPA?

A. *Submitting CBI.* Do not submit this information to EPA through *www.regulations.gov* or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

B. *Tips for Preparing Your Comments.* When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- Follow directions—The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree, suggest alternatives, and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

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I. Introduction

In this action we are proposing several amendments that would make technical clarifications to different mobile source regulations. This section provides an overview of the organization of this preamble.

Section II describes proposed amendments to the Tier 3 motor vehicle emission standards. Section III describes proposed amendments to the 40 CFR part 80 fuel standards: including the Tier 3 gasoline sulfur standards, other part 80 fuels regulations that were amended in the Tier 3 final rule, and amendments made in the Quality Assurance Program rulemaking. Section IV describes the proposed changes to the testing and compliance provisions for nonroad spark-ignition engines, and Section V describes how we are proposing to change the evaporative test procedures for nonroad equipment. Section VI describes proposed amendments to the requirements that apply for portable fuel containers. Section VII summarizes the proposed amendments related to our implementation of requirements for marine diesel engines and vessels under MARPOL Annex VI.

II. Tier 3 Motor Vehicle Emission Standards

On April 28, 2014, we published a final rule adopting new emission

standards and fuel requirements for motor vehicles and for motor vehicle fuels (79 FR 23414). The final rule included Tier 3 emission standards to reduce exhaust and evaporative emissions from light-duty vehicles, light-duty trucks, and heavy-duty vehicles up to 14,000 pounds GVWR. In addition, the final rule specified corresponding changes to in-use fuel requirements.

The Tier 3 motor vehicle program included extensive changes to emission standards and the regulatory requirements related to certification. This included several provisions to harmonize requirements with a similar set of standards adopted by the California Air Resources Board (California ARB). It also included a wide range of alternative measures intended to facilitate each manufacturer's efforts to make an orderly transition to meeting the Tier 3 standards nationwide. The resulting Tier 3 regulations accordingly included several variations, alternatives, and ancillary provisions. We have learned since concluding the Tier 3 rulemaking that there are several instances where the regulatory text implementing the Tier 3 program requires correction or clarification to achieve the intended result. None of the proposed amendments are intended to expand the Tier 3 program or otherwise make substantive changes. We are therefore proposing to make the following amendments to the Tier 3 vehicle program regulations:

Regulatory citation	Description
§ 85.2108	Remove section to reflect a recent change to Clean Air Act section 207.
§ 86.101, § 1066.301, and § 1066.305.	Adjust the procedures for determining road-load parameters to more carefully align with current practice, including the option for manufacturers to use alternate methodologies that are consistent with the reference procedure, subject to good engineering judgment and EPA confirmatory testing. We are also restoring provisions describing how to develop road-load parameters for cold testing; the provisions from § 86.229 were inadvertently replaced with a default instruction to use the same values for both FTP testing and cold testing. We are also changing terminology from ''coastdown'' to ''road-load determination'' for consistency.
§§ 86.095–35 and 1037.135	Revise the labeling requirement for incomplete heavy-duty vehicles to require designation of maximum fuel tank capacity only in cases where the certifying manufacturer relies on a downstream manufacturer to design and install the vehicle's fuel tanks. If the certifying manufacturer designs or installs the fuel tank, there is no need for the emission control information label to identify the appropriate fuel tank capacity.
§§ 86.101 and 86.1844–01	Clarify that reporting drive-cycle metrics to confirm driver accuracy continue to be optional until vehicles are subject to Tier 3 emission standards, and revise terminology for consistency with 40 CFR 1066.425.
§ 86.101	Clarify that manufacturers may continue to certify in 2022 and later model years based on carryover of emission data generated using the procedures from 40 CFR part 86, subpart B, even though we require new testing in that time frame to use the procedures in 40 CFR part 1066.
§ 86.113	Revise the format of the volatility specification to rely primarily on psi units and secondarily on kPa units. The kPa figures for non-evaporative testing also need to be corrected to align with the specified psi units. These changes align with the test fuel specifications that were in place before the Tier 3 rule. We are also revising the table format for octane specifications to clarify that the both ASTM D2699 and ASTM D2700 apply for determining octane values and octane sensitivity values.
§ 86.201	Clarify how the migration to testing under 40 CFR part 1066 works for cold temperature testing. This is analogous to the migration provisions for general testing in § 86.101.
§ 86.213	Revise the specified tolerance for olefin concentration in the test fuel from ±0.5 percent to ±5.0 percent. This reverses an inadvertent change made in the Tier 3 final rule. We are also revising the table format for octane specifications to clarify that both ASTM D2699 and ASTM D2700 apply for determining octane values and octane sensitivity values.
§ 86.513	Correct a typographical error for the 90% point in the distillation curve for gasoline test fuel. This was erroneously published as part of the Tier 3 rule with an extra ''1'' before the specified temperature of 148.9 °C. This change restores the temperature specification to what applied before we adopted the Tier 3 rule.
§ 86.513–2004	Remove obsolete section. Fuel specifications for motorcycles are now addressed in § 86.513 (with no model year designation), so the 2004 section is removed to avoid confusion.
§ 86.1801–12	Clarify how the requirements of subpart S relate to the engine and vehicle provisions in 40 CFR part 1036 and part 1037.
§ 86.1803–01	Revise the definition of ''averaging set'' to apply to all vehicles, not only heavy-duty vehicles.
§§ 86.1805–17 and 86.1811–17.	Address provisions for LDV above 6,000 pounds GVWR. A new paragraph describes how these vehicles are subject to the same transitional provisions that apply for LDV at or below 6,000 pounds GVWR. We are also clarifying useful life provisions for LDV above 6,000 pounds GVWR. We described the useful life provisions based on a simple cutpoint of 6,000 pounds GVWR, which doesn't address a small number of LDV models that have higher GVWR values. Instead of changing the useful life values adopted for cold temperature emission standards, we are using the terms LDV and LLDT to characterize the vehicles that are subject to a useful life of 10 years or 120,000 miles. We are also clarifying that MDPVs are the only HDVs subject to standards under § 86.1818.
§ 86.1806–17	Correct the citation to California ARB's OBD regulations to refer to the entire range of relevant OBD standards.
§ 86.1810–01	Clarify that the provisions for determining NMOG from measured NMHC values also apply for Tier 2 vehicles, as specified in § 1066.635, except that manufacturers may continue to use a fixed adjustment factor of 1.04.
§ 86.1810–17	Clarify that the provisions for testing flexible fuel vehicles on more than just gasoline or diesel fuel do not apply for greenhouse gas standards.
§ 86.1811–17(b)(8)	Clarify how to calculate and use credits for manufacturers that certify some vehicles to a useful life of 120,000 miles and other vehicles to a useful life of 150,000 miles. The main point of clarification is that vehicles certified to the shorter useful life on an interim basis may exchange emission credits with vehicles certified to either useful life, but the fleet-average standard for a given set of vehicles must correspond to the averaging set. We are also listing the emission standards that correspond to a 120,000 mile useful life rather than describing how to calculate those standards.
§ 86.1811–17(b)(8)	Add a provision that Interim Tier 3 vehicles must continue to meet the 4000-mile SFTP standards for NMHC+NOx and CO from Tier 2. This requirement was included in the preamble text for the proposed rule and the final rule, but was inadvertently omitted from the regulatory text.

Regulatory citation	Description
§ 86.1811–17(b)(10)	Clarify provisions related to early credits: (1) Early credits may be used interchangeably (without adjustment) for vehicles certified to a useful life of either 120,000 miles or 150,000 miles. (2) Accumulated early credits should be used for demonstrating compliance with model year 2017 standards before doing the calculations to address proportionality relative to California emission credits. (3) Negative credits are subtracted from credit totals during the three-year period for calculating credit caps (rather than ignoring them). (4) The calculation for applying the cap/threshold relative to California credits must be corrected to use the proper baseline quantity.
§ 86.1811–17(b)(11)	Clarify provisions related to early certification to Tier 3 standards: (1) Bin 70 and cleaner vehicles are considered Tier 3 vehicles on a voluntary basis and are therefore subject to the 150,000 mile useful life. (2) The transitional aspects of the Tier 3 program apply equally to vehicles certified early to the Tier 3 standards.
§ 86.1811–17(g)	Revise the cold temperature testing specifications to clarify that CO and NMHC standards apply equally for certification and in-use testing, for low and high altitude, and for testing gasoline-only configurations of flexible-fuel vehicles.
§ 86.1813–17	Clarify that no separate fleet-average calculation is required for demonstrating compliance with high-altitude evaporative emission standards. These standards are determined as bin values relative to the standard that applies for testing at low-altitude conditions.
§ 86.1829–15	Adjust the refueling test waiver to state that it applies only for incomplete heavy-duty vehicles above 10,000 pounds GVWR, and for complete heavy-duty vehicles above 10,000 pounds GVWR with fuel tanks greater than 35 gallons, consistent with the preamble discussion in the final rule. These vehicles are the only ones that are newly subject to refueling emission standards. All smaller vehicles have already been subject to testing and certification requirements.
§ 86.1829–15	Add a paragraph to preserve the provisions related to measurement of N_2O emissions as originally adopted at § 86.1829–01(b)(2)(iii)(G).
§ 86.1829–15	Revise terminology to refer to ''durability groups'' rather than ''durability data groups'' for PM testing.
§ 86.1844–01	Specify that a manufacturer's application for certification must include a description of leak families in addition to evaporative/refueling families. Since leak families are defined broadly, many manufacturers may have only a single leak family even if they have multiple evaporative/refueling families.
§ 86.1845–01	Clarify that the PM measurement instructions are limited to vehicles subject to Tier 3 PM standards, as discussed in the final rule.
§ 86.1846–01	Adjust the exclusion of high-mileage vehicles to the terminology changes to § 86.1845–05. This change aligns with the current practice of not including the results from testing the designated high-mileage vehicle at low altitude for making an IUVP determination for the test group.
§ 86.1861–17	Clarify that the separate averaging set corresponding to 120,000 mile useful life applies only for NMOG+NOx emission standards.
§§ 600.116–12 and 1066.501	Clarify that certain portions of SAE J1711 apply separately for charge-depleting and charge-sustaining operation for hybrid-electric vehicles.
§ 600.117	Adjust the description to more clearly apply the interim allowance for using Tier 2 fuel to determine whether vehicles pass the ''litmus test'' for using derived 5-cycle testing for fuel economy, as described further below.
§ 600.117	Revise the description for test fuels to clarify that cold testing may be done with the higher-volatility fuel specified in § 86.213, and that the requirement for using a common test fuel related to 5-cycle testing refers to the ethanol content of the fuel, not the whole range of test fuel specifications.
§ 1037.103	Refer to § 86.1805 for useful life values as they apply for evaporative emission standards, rather than referring more broadly to useful life values in 40 CFR part 86 for ''criteria pollutants''.
§ 1037.104	Refer to the useful life values specified in § 86.1805 for model year 2014 vehicles for the HD GHG standards. This sets the useful life values for the HD GHG standards to a fixed value, rather than specifying a cross reference to a section of the regulations that describes changing useful life values.
§§ 1065.10 and 1066.10	Allow for a one-year lead time for upgrading to test procedure changes in 40 CFR part 86 where those changes would otherwise be required immediately with the effective date of the final rule. This is consistent with existing provisions for changes to 40 CFR part 1065 and part 1066. Note that this does not delay implementation of procedures corresponding to new emission standards.
§ 1065.610	Correct a sample calculation.
§ 1065.710	Correct the units for specifying hydrocarbon composition. These units were inadvertently changed in the Tier 3 rule from fractional to percent values. We are specifying these values in volume % to align with the associated ASTM procedure.
§ 1065.710	Revise the format of the volatility specification to include reference values in psi units.
§ 1066.125	Correct the description of calculating 1 Hz mean values.
§ 1066.125	Add a parenthetical reference to torque in pound-foot units corresponding to the primary value in Newtons.
§ 1066.420	Clarify that it is permissible to push the test vehicle onto the dynamometer to prepare for a hot-start or hot-stabilized test, as opposed to driving the vehicle onto the dynamometer.
§ 1066.605	Revise the sequence of calculations to determine a NOx result. The proper sequence is to first correct for background concentration, then to correct for intake air humidity.
§ 1066.615	Correct the equations to properly apply the NOx humidity correction factor to account for humidity in the background measurement.
§ 1066.635	Clarify that the appropriate NMOG calculation for plug-in hybrid electric vehicles is based on operation over one full UDDS.
§ 1066.701	Correct a temperature that was inadvertently identified as 20 °C instead of 20 °F.
§ 1066.710	Clarify the instructions for heat settings during cold testing to more carefully differentiate between automatic systems that operate either in manual mode or in automatic mode. Automatic systems operating in manual mode should be set to a temperature of 72 °F ''or higher'' to align with current practice.
§ 1066.801	Correct an error in the testing flowchart so that the flowchart matches the procedure described in the regulations.
§ 1066.815	Reorganize the instructions for testing with and without bag 4 to improve the clarity of the test sequence.
§ 1066.831	Revise the description for testing heavy-duty vehicles at adjusted loaded vehicle weight to exclude MDPVs, which are tested like light-duty trucks.
§ 1066.835	Add a provision allowing for keeping the vehicle-cooling fan running while the vehicle is stopped if that is necessary for keeping ambient conditions within specified parameters.

Regulatory citation	Description
§ 1066.845	Adjust the description of air conditioning settings during the AC17 test to describe how to account for systems with separate rear controls, and for systems that change default settings at key-off.
§ 1066.1005	Move the prefix ''n'' to be in the proper order.
Various	Change from ''LA–92'' to ''Hot-LA–92'' to allow us to specify that the referenced test procedure is only the first 1435 seconds of what is known as the LA–92 driving schedule. The full cycle is 1735 seconds. This change is necessary to accomplish the intended alignment with the California ARB standards.

We are also proposing various corrections for typographical errors and regulatory cross references. Note that one of these corrections is in the regulations for recreational vehicles at 40 CFR 1051.501 to maintain a proper cross reference to the driving schedules in Appendix I of 40 CFR part 86. We are also correcting a typographical error from § 86.529–98 that was published several years ago. The specified range of loaded vehicle masses corresponding to certain road-load force coefficients and inertia weights has an entry that should be listed as applying from 656 to 665 kg; the published entry mistakenly identifies the range as 565 to 665 kg.

One additional issue relates to test fuel for fuel economy testing. In the Tier 3 final rule, EPA changed the certification test fuel for the Tier 3 exhaust emission standards from a 9 psi RVP fuel with no ethanol (E0) (commonly referred to as Tier 2 fuel) to a 9 psi RVP fuel with 10 percent ethanol (E10). As an interim provision, EPA permitted vehicles certifying at levels above Bin 70 to use E0 fuel for Tier 3 certification through model year 2019. The rule also permits early certification to Tier 3 requirements using 7 psi RVP E10 test fuel, commonly referred to as LEV III fuel since the California LEV III program phase-in begins with model year 2015. The rule also provides manufacturers the option to use EPA 9RVP E0 fuel or 9RVP E10 fuel for certification for cold temperature testing since California does not specify a test fuel for that testing.

Under the fuel economy regulations, manufacturers use the results of their exhaust emission tests as the basis for calculating litmus test evaluations (see 40 CFR 600.115–11). However, in the Tier 3 rule EPA did not change the fuel economy test fuel specifications from E0 to E10 as was done for Tier 3 exhaust emissions. The preamble to the final rule recognized that the difference in the emission and fuel economy test fuels has the potential to require extra emission testing for the fuel economy evaluations. To minimize this burden, EPA included several provisions in the regulations to minimize this potential burden (see 40 CFR 600.117) and indicated a commitment to make any appropriate adjustments to the fuel economy regulations to accommodate the change to an E10 test fuel when the needed emission data become available.

As is discussed in the final rule (79 FR 23531–23533, April 28, 2014), central to the litmus test evaluation is the requirement that data be available for all five emission test cycles and that the data be generated using the same test fuel on each cycle. Some confusion has arisen as to what cold FTP test fuel should be used in the litmus evaluations for early Tier 3 certifications using LEV III test fuel and for Tier 3 certification above Bin 70 before model year 2020. This occurs because California ARB does not specify a cold FTP test fuel and, as a transitional measure, EPA permits certification to Tier 3 Bin 125 and Bin 160 using Tier 2 fuel. This proposed amendment clarifies that the fuel economy test fuel requirements govern for the litmus test evaluations. As indicated in the preamble to the final rule at 79 FR 23533, manufacturers may use LEV III fuel (California Phase 3) in lieu of Tier 3 fuel, but any cold FTP testing must be done using the Tier 3 cold FTP fuel. Thus, for purposes of the litmus test cold temperature testing, manufacturers must use the same test fuel (E10) as used for the other four cycles. For early Tier 3 certifications using LEV III test fuel, the cold FTP test data must be generated using Tier 3 cold FTP test fuel and in the case of the higher bins in the Tier 3 program as discussed above, the cold FTP must be based on the same fuel as used for the other four test cycles. The flexibility afforded for exhaust emission certification does not carry over to the litmus test evaluations.

III. 40 CFR Part 80 Fuel Standards

After promulgation of the Tier 3 final rulemaking (79 FR 23414, April 28, 2014), we discovered some typographical errors and other areas in the part 80 regulations that we believe would benefit from some additional clarity. The following sections discuss proposed amendments to remedy these concerns.

A. Performance-Based Measurement Systems (PBMS)

Section	Description of proposed change
§ 80.8(e)(1)(iii)	Amended to update IBR to most recent ASTM standard practice D5842–14 (Standard Practice for Sampling and Handling for Fuels for Volatility Measurement, approved January 15, 2014).
§ 80.46(d)	Amended to clarify that distillation precision criterion is based on the reproducibility of Table 10 Groups 2, 3 and 4 (Automated Method) contained in ASTM D86–07—clarifying note added to state that precision estimates in ASTM D86–12 do not apply.
§ 80.46(b)(1), (c)(2), (d), (e), (f)(1), and (g)(1).	Amended to clarify beginning January 1, 2016 a test method approved under § 80.47 ''must'' be used, rather than ''may'' be used, by the regulated community for demonstrating compliance measurements to EPA fuels standards.
§ 80.47(a)(7)	Amended to correct typographical error (''referee'' to ''reference'').
§ 80.47(b)(1), (c)(1), (d)(1), (e)(1), (f)(1), (g)(1), (h)(1), (i)(1), (j)(1).	Amended to correct typographical error (''emissions'' to ''omissions''); and to add the statement ''tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days''.
§ 80.47(c)(1), (c)(2)(i), (c)(2)(ii).	Amended to correct the examples listed for precision and accuracy demonstration for sulfur in butane to be consistent with the sulfur in gasoline 10 ppm average.
§ 80.47(h)(1)	Amended to: correct typographical errors; clarify that distillation precision criterion is based on the reproducibility of Table 10 Groups 2, 3 and 4 (Automated Method) contained in ASTM D86–07 (clarifying note added stating that precision estimates in D86–12 do not apply); and revise IBR of D86 to the 2007 version.
§ 80.47(i)(1)	Revised benzene precision criteria to 0.15 times R, rather than 0.3 times R to be consistent with preamble discussion.

Section	Description of proposed change
§ 80.47(l)	Amended to revise section heading and add paragraphs (l)(1)(ii) and (l)(2)(ii) to allow for Non-Voluntary Consensus Standard Based (non-VCSB) absolute fuel parameter of sulfur in gasoline and butane. Also clarifying that either a ''test facility or VCSB'' must meet the requirements of § 80.47(l).
§ 80.47(m)(6)	Amended to correct reference for the use of the term ''cross-method reproducibility'' in ASTM D6708 from ''as required'' to ''as recommended'' and replaced the term ''cross-method reproducibility'' with ''between methods reproducibility'' to be consistent with D6708–13.
§ 80.47(n)(2)(i), (o)(2)(i), (p)(3)(i).	Amended to correct references to D6299–13 with regards to use of a quality control material (paragraph 3.2.3 changed to 3.2.8), I Chart (section 7 changed to section 8) and MR charts (section A1.5.2 changed to A1.5.4).
§ 80.47(n)(2)(ii), (o)(2)(ii), (p)(3)(ii).	Amended to correct references to D6299–13 with regards to use of an I Chart (changed section 7 to section 8.7).
§ 80.47(n)(2)(iv), (o)(2)(iv), (p)(2)(iv); and (n)(1)(ii), (o)(1)(ii), (p)(1)(ii).	Amended to move the phrase ''The expanded uncertainty of the accepted reference value of consensus named fuels shall have the following accuracy qualification criterion: Accuracy qualification criterion = square root [(0.75R)^2+(0.75R)^2/L], where L = the number of single results obtained from different labs used to calculate the consensus ARV.'' from paragraphs (n)(2)(iv), (o)(2)(iv), (p)(2)(iv) to paragraphs (n)(1)(ii), (o)(1)(ii), (p)(1)(ii), respectively.
§ 80.47(o)(1)	Amended to clarify value of ARV when not provided in an Inter Laboratory Crosscheck Program, by adding the following: ''Facilities using a VCSB alternative method defined test method must use the Accepted Reference Value of the check standard as determined in a VCSB Inter Laboratory Crosscheck Program (ILCP) or a commercially available ILCP following the guidelines of ASTM D6299. If the Accepted Reference Value is not provided in the ILCP, accuracy must be assessed based upon the respective EPA designated test method using appropriate production samples.''
§ 80.47(o)(1)	Amended to clarify that ILCPs are acceptable, by adding the following: ''(Examples of ILCP: ASTM Reformulated Gasoline ILCP or ASTM motor gasoline ILCP)''.
§ 80.47(p)(1)	Amended to clarify value of ARV when not provided in ILCP, by adding the following: ''Facilities using a Non-VCSB alternative method defined test method must use the Accepted Reference Value of the check standard as determined in either a VCSB Inter Laboratory Crosscheck Program (ILCP) or a commercially available ILCP following the guidelines of ASTM D6299. If the Accepted Reference Value is not provided in the ILCP, accuracy must be assessed based upon the respective EPA designated test method using appropriate production samples.''
§ 80.47(p)(1)	Amended to address concern that reproducibility is not established with Non-VCSB test methods, by adding the following: ''The facility must construct ''MR'' and ''I'' charts with control lines as described in section 8.4 and appropriate Annex sections of this standard practice. In circumstances where the absolute difference between the mean of multiple back-to-back tests of the standard reference material and the accepted reference value of the standard reference material is greater than 0.75 times the published reproducibility of the fuel parameter's respective designated test method must be investigated by the facility.''
§ 80.47(r)(1)(i)	Amended to revise IBR of ASTM D86 to the 2007 version.
§ 80.330(b)(1)(i), (b)(1)(ii), (b)(2).	Amended to update IBR to most recent ASTM standard practice D5842–14 (Standard Practice for Sampling and Handling for Fuels for Volatility Measurement, approved January 15, 2014), and for consistency with IBR language throughout subpart O.
§ 80.584(a)(1) through (a)(3)	Amended to correct inconsistencies with PBMS in § 80.47 regarding requirements for PBMS for sulfur in diesel fuel and ECA Marine Fuel at § 80.584 with regards to frequency of testing for the precision demonstration and VCSB self-qualification starting January 1, 2016.
§ 80.584(a)(1) through (a)(3)	Amended to insert phrase ''(tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days)'' in applicable areas for diesel and ECA marine fuel to be consistent with frequency of testing for precision demonstration at § 80.47.
§ 80.585(a)	Amended to revise diesel and ECA marine fuel sulfur qualification regulations to be consistent with PBMS (i.e., starting January 1, 2016), VCSB test methods self-qualify and need not be reported to the Agency for approval.
§ 80.585(a), (e)(1), (e)(4), (f)	Amended to correct inconsistencies with PBMS in § 80.47 regarding requirements for PBMS for sulfur in diesel fuel and ECA marine fuel at § 80.584 with regards to frequency of testing for the precision demonstration and VCSB self-qualification starting January 1, 2016; and to add a new paragraph (f) for IBR.
§ 80.585(e)(1), (e)(2), (e)(4), (f).	Amended to update IBR and reference for use on ASTM D6299–13 in applicable diesel and ECA marine fuel sulfur regulations to be consistent with reference of use of ASTM D6299–13 in PBMS regulations at § 80.47, and to make minor formatting changes for IBR consistency throughout part 80.

B. Quality Assurance Program Amendments

This action also proposes minor technical amendments to regulatory changes finalized in the Voluntary Quality Assurance Program Rulemaking (''QAP Rule'', 79 FR 42078, July 18, 2014). We are proposing to revise § 80.1471(d)(1) to reflect a change that industry widely requested and the public supported. In the final rulemaking we agreed to extend the notification period by an auditor for potentially invalid RINs from ''within the next business day'' to ''within five business days.'' We inadvertently neglected to change this reference in § 80.1471(d)(1) to the new ''within five business days'' language.

In the Notice of Proposed Rulemaking for the QAP Rule, we proposed a new section at § 80.1433 that would have changed the way parties that redesignated renewable fuels for non-qualifying uses would have to retire RINs, and we proposed new product transfer document (PTD) language at § 80.1453(a)(12) to help convey the requirement to separate and/or retire RINs for parties that wished to redesignate renewable fuel for a non-qualifying use. After careful consideration of the public comments received, we chose not to finalize the proposed § 80.1433 requirements. This action proposes to remove the extraneous reference to § 80.1433 in § 80.1453.

Additionally, we are proposing to amend the PTD requirements at § 80.1453(a) to make the scope of these requirements consistent with similar requirements in other fuels programs. When we altered the scope of the PTD requirements at § 80.1453 to include both neat and blended renewable fuels, we did not intend to expand the scope of these PTD requirements to convey the

information at § 80.1453 to the consumer of such fuels, in most cases. In the preamble to the final QAP Rule, we noted that these requirements were meant to apply to regulated parties (79 FR 42105, July 18, 2014).

Historically, EPA has required applicable information on PTDs accompanying fuels to be conveyed through to retail stations and wholesale purchaser-consumers. The EPA has, in most cases, included language that exempts parties that are transferring title or custody of fuel to the ultimate consumer (*e.g.*, the PTD requirements for detergents at § 80.158 and for E15 at § 80.1503) or dispensing the fuel from a retail station or wholesale purchaser-consumer's tank to a motor vehicle or nonroad engine (*e.g.*, the PTD requirements for diesel and gasoline sulfur at §§ 80.590 and 80.1651, respectively). Requiring PTD language to convey information all the way down to consumers fueling at a retail station or homes receiving heating oil has little benefit to the effectiveness of EPA's fuels programs and could be quite costly for retail stations and home heating oil distributors. Therefore, we are proposing to add an exemption to the PTD requirements for renewable fuels dispensed into motor vehicles and nonroad vehicles, engines, and equipment (to include jet engines and home heating units) to clarify the scope of § 80.1453.

Section	Description
80.1426(c)(7)	Amended to correct typographical error ("§ 80.1451(b)(1)(ii)(T)(3)" to "§ 80.1451(b)(1)(ii)(T)(2)").
80.1453(a) introductory text	Amended for clarity in scope of requirements.
80.1453(a)(12) introductory text	Amended to remove extraneous reference to 80.1433.
80.1471(d)	Amended to add to "within five business days", consistent with the intent stated in the QAP rule preamble.

C. Tier 3 Rulemaking Provisions Minor Technical Amendments

As mentioned above, this rule proposes to correct minor typographical errors that were discovered following the promulgation of the Tier 3 final rule (both within 40 CFR part 80, subpart O, as well as additional 40 CFR part 80 provisions that were finalized as part of our regulatory streamlining efforts in the Tier 3 rulemaking). The following table contains a list of these proposed amendments and a description of the proposed change:

Section	Description of proposed change
§ 80.2(cccc)	Removed new definition of natural gas, as this definition already exists at § 80.2(tt).
§ 80.75(a)(2)(xi)(G)	Amended to correct reference from "§ 80.82(c) or (d)" to "§ 80.86(a)(3) or (a)(4)".
§ 80.82(e)(1)	Amended to clarify that the provisions of an EPA-approved State Implementation Plan (SIP) apply to butane blenders.
§ 80.85(a)	Amended introductory text to correct typographical errors ("refinery" to "refiner").
§ 80.85(i)	Amended to correct typographical errors ("they" to "it", "comply" to complies").
§ 80.86(b)(2)(iv) and (b)(3)(iii)	Amended to correct typographical errors ("complaint" to "compliant").
§ 80.86(c)	Amended to clarify that the PTD for pentane used by pentane blenders must contain the pentane producer or importer company name and facility registration number issued by EPA and the name and address of the transferor and transferee consistent with other part 80 PTD requirements.
§§ 80.315(b)(1)(iii), 80.1295(b)(1)(ii)	The Tier 3 rulemaking changed the due date for annual reports and credits from the end of February to March 31 for all 40 CFR part 80 fuels programs; these paragraphs are being amended because the February date was inadvertently left in §§ 80.315(b)(1)(iii) and 80.1295(b)(1)(ii).
§ 80.330(c)(1), (d)(2)	Amended to correct year ("December 31, 20" to "December 31, 2015").
§ 80.597(d)(3)	Amended to correct reference from paragraph (d) to paragraph (d)(3).
§ 80.1270(b)(2)	Amended to clarify that butane blenders using the provisions of § 80.82 and pentane blenders using the provisions of § 80.85 may not generate benzene credits.
§ 80.1609(a)	Amended to correct typographical error and to correct a regulatory cite.
§ 80.1611(a)(1)	Amended to improve the clarity in cases where producers of certified ethanol denaturants produce product to a lower sulfur maximum than the required 300 ppm maximum.
§ 80.1611(c) introductory text, (c)(1), and (c)(2).	Amended for improved clarity and to correct typographical errors.
§ 80.1611(d)	Amended to correct typographical error ("denaturant" instead of "oxygenate").
§ 80.1613(a)	Amended to correct typographical error ("less than 1.0" replaces "1.0 or less").
§ 80.1613(b)(3)	Added to clarify that it is a violation to exceed an additive manufacturer's recommended treatment level when doing so would contribute more than 3 ppm to the sulfur content of the resulting finished gasoline.
§ 80.1615(d)(1), (d)(2)	Revised for clarity by moving the phrase "From January 1, 2017 through December 31, 2019" to the beginning of each paragraph.
§ 80.1616(a)(4)	Amended to add a "Reserved" paragraph (a)(4) to fix numbering error.
§ 80.1616(b)(2)	Amended language to clarify that credits expire on December 31 and are reported the following March 31.
§ 80.1620(d)	Revised to correct year to 2012.
§ 80.1620(e)(1), (e)(2), (f)(1)	Revised to correct dates to 2013.
§ 80.1621(c), (d)	Reserved paragraph (c); added paragraph (d), which was inadvertently deleted from the regulations, but is referred to in the preamble and in § 80.1622(e).
§ 80.1640(a)(2)	Amended to correct reference from paragraph (a)(5) to paragraph (a)(1).
§ 80.1642(c)(3)	Amended paragraph to correct typographical errors.
§ 80.1650	Amended to remove phrase "whichever is earlier" from paragraphs specifying the dates by which reports must be submitted, as this would contradict the ability of parties to register after the initial date that parties involved in a given activity must be registered.
§ 80.1652(c)	Amended to correct word error ("producer" instead of "refiner").
§ 80.1667(c)(1)	Removed paragraph (c)(1) to match the intentions of § 80.1615(a) that refiners—including gasoline blenders (excluding those specified in § 80.1615(a)(3))—may generate Tier 3 credits beginning in 2014.

IV. Small SI Test Fuel and Bonding Provisions

On June 17, 2013, EPA modified the test procedures for measuring exhaust emissions from land-based nonroad small spark-ignition engines (small SI engines) to allow for exhaust emission certification testing with a test fuel that has 10 percent ethanol as specified by California ARB (78 FR 36370). We adopted that provision on an interim basis, through model year 2019, with the expectation that we would further evaluate the appropriate test fuel for onroad and nonroad applications. The Tier 3 motor vehicle emission standards include a new certification test fuel specification that is much like California ARB's Phase 3 test fuel in that it includes 10 percent ethanol (E10).

Small SI manufacturers have requested that we address the test fuel questions in a way that does not leave them uncertain about certification test fuel options starting in model year 2020. While the effort to adopt the new EPA nonroad test fuel specification lies ahead, we agree with the manufacturers that the new ethanol-based test fuel associated with the Tier 3 motor vehicle emission standards allows us to take the step of removing the expiration of the provision allowing for the use of the similar California ARB Phase 3 test fuel for small SI engines. In the future, we expect to go through a rulemaking to incorporate EPA's Tier 3 test fuel into the emission programs for small spark-ignition engines, including an assessment of how the changing test fuel relates to the stringency of the emission standards.

When we adopted Phase 3 exhaust emission standards for Small SI engines in 2008, we included a new set of requirements for manufacturers to post a bond as a means of ensuring compliance with regulatory requirements (73 FR 59034, October 8, 2008). Manufacturers have been complying with the bond requirements since 2010. The bond provisions are generally working as expected, but we have found several items that we are proposing to adjust or clarify to help with ongoing implementation, as follows:

- Clarify that bonds are intended to cover any improperly funded compliance obligations relative only to engines that must comply with 40 CFR part 1054. The bond provisions are not intended to extend to engines that a manufacturer certifies under other EPA programs.
- Specify that small-volume engine manufacturers and small-volume equipment manufacturers (collectively small-volume manufacturers, as defined in 40 CFR 1054.801) are subject to an alternate minimum bond value of $25,000, rather than the $500,000 minimum that applies for other manufacturers. This arrangement has been the working policy under the broader allowance specified in § 1054.635(d). Codifying these terms allows us to streamline the process and remove uncertainty for small-volume manufacturers.
- Adopt a cap on the bond value that corresponds to the applicable bond-waiver threshold. Since U.S.-based assets are roughly analogous to bond values as a measure of our ability to compel compliance (or remedy deficiencies) for the different kinds of companies, this approach provides a measure of parity or fairness between those that must post bond and those that qualify for a bond waiver based on their assets in the United States. This is consistent with the approach we took on an interim basis to specify a maximum bond value of $10 million. The new provision replaces the $10 million cap in § 1054.145(o).
- Clarify how bond values may change within a given year, and in future years: (1) Bond values may be adjusted for a given year any time before the first importation or sale for that year; (2) once a bond value is fixed for a given year, that value may not be decreased during the year, even if sales volumes are less than anticipated; and (3) bond values may be reset with each new year, but these values must reflect actual sales volumes for the preceding three years. This arrangement allows a manufacturer to take a deliberate approach to resetting bond values if sales volumes change substantially over time.
- Change the protocol for adjusting thresholds and bond values for inflation. Small, annual changes create confusion and an implementation burden, with very small incremental benefit. To streamline that process and still account for the cumulative effects of inflation, we are specifying that we will adjust the thresholds and bond values in 2020, and every ten years after that, using a less precise rounding protocol. These changes will not require rulemaking to take effect, but we will likely modify the regulation to reflect these periodic adjustments.

V. Evaporative Test Procedures for Nonroad Equipment

We specify evaporative emission standards, test procedures, and certification requirements in 40 CFR part 1060. This includes measurement procedures for fuel permeation through fuel lines and fuel tanks, and for diurnal emissions from fuel tanks. We are proposing the following changes to these regulations:

- Clarify that boat builders and other equipment manufacturers that install uncertified components are required to certify those fuel-system components as if they were component manufacturers. The original regulatory language described a requirement for equipment manufacturers to certify as equipment manufacturers if they were installing uncertified components, but we have found that the certification process is most straightforward if we treat them as component manufacturers.
- The test procedures originally allowed for manufacturers to use good engineering judgment to address technical concerns related to measuring emissions from narrow-diameter fuel lines. In 2013, SAE published a voluntary consensus standard (SAE J2996) specifying measurement procedures for these narrow-diameter fuel lines. We agree that the SAE standard reflects good engineering judgment in the effort to measure emissions and are therefore incorporating this standard by reference in § 1060.515. This alternative SAE standard was designed for Small SI products, but it may be used in other applications as well; note, however, that U.S. Coast Guard requires measurements based on SAE J1527 in some cases. We are including the following clarifications and adjustments related to the specified SAE standards for all fuel-line permeation testing: (1) The test requires emission sampling over a 14-day period; (2) Two days of non-testing per week are allowed to accommodate weekend work schedules; (3) To remove any ambiguity from the published SAE standards, we are stating in our regulations that testing must occur at 23 ± 2 °C; and (4) The final test result is based on a simple arithmetic average of measured emission values over the 14-day sampling period. These changes allow for internal consistency, and generally align with the procedures adopted by California ARB. To the extent that there are remaining differences, manufacturers may ask for approval to use different procedures under § 1060.505(c)(2) or (c)(3).
- Correct a typographical error in the kPa pressure value for preconditioning fuel tanks for a permeation measurement. The psi value in the regulation is correct.
- Correct the sample calculation for determining an emission result from a diurnal emission test.
- Adjust the procedure to account for buoyancy effects in tank permeation measurements by replacing the

requirement to use two identical tanks with a requirement to use a second tank that has a total volume that is within 5 percent of the test tank's total volume. This will allow manufacturers and test labs to rely on a smaller number of stock fuel tanks to make the necessary but minor corrections that result from fluctuating atmospheric pressure.

• Adjust and clarify diurnal test procedures: (1) Add a specification for in-tank thermocouples for tracking fuel temperature for testing marine fuel tanks; (2) Replace the hourly profile of fuel temperatures with clearer specification about tracking test fuel temperature from a specified starting point to a specified (calculated) endpoint. The vapor generation should be nearly constant between test runs as long as fuel temperature continues to increase from the low temperature to the high temperature; (3) Standardize the procedure for purging the evaporative canister to prepare for testing based on a simulation of the in-use experience; this is based on engine purge for land-based applications, and on passive (ambient) purge for marine applications. This canister preconditioning is a necessary step to establish a known starting point for designing a system that meets the diurnal emission standard; and (4) Include temperature tolerance bands for the diurnal temperature cycle. Note that we are not proposing or requesting comment on changing the test procedure for marine fuel tanks to base the temperature profile on ambient temperatures instead of fuel temperatures.

• Establish a gravimetric test method for determining mass of emissions for tanks with a diurnal emission standard of at least 2.0 grams of hydrocarbon. Emission test procedures involving an emission standard of less than 2.0 grams of hydrocarbon need the more accurate measurements available from using a flame ionization detector (FID) within a sealed enclosure.

VI. Portable Fuel Containers

On February 26, 2007, EPA adopted a set of requirements to reduce emissions from portable fuel containers (PFC) at 40 CFR part 59, subpart F (72 FR 8533). EPA review of PFC designs and discussions with PFC manufacturers suggest that the manufacturers may have read the provisions of 40 CFR 59, subpart F, too narrowly and that their interpretations may have unnecessarily constrained some design approaches that may have otherwise allowed for improved in-use performance and consumer satisfaction. EPA did not intend to impact manufacturer design approaches beyond those deemed by the manufacturer as necessary to meet the emission control requirements as otherwise specified in 40 CFR part 59, and is including language in this rule to clarify regulatory requirements that apply to PFCs. Specifically, the revised regulation states that it is allowable for manufacturers to design PFCs with vents to relieve pressure, provided that the venting device is in place during emission testing, and provided that the venting device closes automatically when not in use.

The proposed modifications to 40 CFR 59, subpart F, do not change the regulatory requirements with regard to emission standards and test procedures, but better define some elements of design and clarify how various approaches would be considered in testing. Upon seeing these modifications to the regulations, PFC manufacturers may elect to pursue design approaches they deem appropriate, which they may have thought were not available to them previously.

VII. MARPOL Annex VI Implementation

The Act to Prevent Pollution from Ships (APPS) implements the provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI for the United States (33 U.S.C. 1901–1912). EPA adopted regulations in 2010 to summarize these requirements and to describe engine certification procedures and other relevant provisions as specified in APPS (75 FR 22896, April 30, 2010). MARPOL Annex VI has been amended since issuance of that **Federal Register** notice to include designation of the North American ECA and the U.S. Caribbean Sea ECA and various other changes. We are proposing to amend 40 CFR part 1043 in this rulemaking to align the regulations with the amendments of MARPOL Annex VI to facilitate stakeholder compliance, and to correct certain technical errors.

First, the most fundamental step in the proposed updates to 40 CFR part 1043 is to cite the 2013 publication of MARPOL Annex VI and the further amendments concluded at MEPC 66 in April 2014 (see 40 CFR 1043.100). Likewise, MARPOL Annex VI was recently amended to waive the fuel-sulfur requirements for certain steamships until January 1, 2020. Part 1043 already includes such a waiver for steamships operating in the Great Lakes. We are proposing to codify the additional temporary steamship exemption in § 1043.97. Note that covered steamships would be required to comply with the relevant sulfur limits when the exemption expires on January 1, 2020.

Second, we inadvertently adopted regulatory language in 40 CFR part 1043 that differs from the language of Annex VI. For example, we originally adopted the provisions in 40 CFR part 1043 with an erroneous date, stating that the 0.10% fuel-sulfur standard applies starting January 1, 2016, which should be January 1, 2015. The Annex VI specification is enforceable with or without this correction in 40 CFR part 1043, but we are proposing this change to avoid any possible confusion. We also identified the NO_X standards based on an engine's model year; this should identify the applicability of NO_X standards based on the build date of new vessels, or on the date of major modifications in other circumstances. We are proposing to correct these errors in part 1043.

Third, we are proposing the addition of clarifying language relating to public vessels. MARPOL Annex VI exempts public vessels from engine standards and fuel requirements. Public vessels are defined as ''warships, naval auxiliary vessels, and other vessels owned or operated by a sovereign country when engaged in noncommercial service.'' We want to clarify that any vessel that has a national security exemption (for engines or fuel) is automatically considered a public vessel.

Fourth, we are proposing to clarify regulatory provisions to address whether or how emission credits apply for EPA certificates and EIAPP certificates. Engine manufacturers are interested in getting an EPA certificate under 40 CFR part 1042 and an EIAPP certificate under 40 CFR part 1043 for the same engine. This would allow them maximum flexibility in selling engines to boat builders for installation in vessels used in domestic or international service. Certification to EPA standards under 40 CFR part 1042 allows manufacturers to use emission credits to make some engines with emission levels that are above the specified standard. MARPOL Annex VI and 40 CFR part 1043 do not have such an allowance. We are proposing to modify the regulation to clarify that an engine may not be covered by both an EPA certificate and an EIAPP certificate if its certification under 40 CFR part 1042 depends on using emission credits to allow for an emission level above the specified standard. If an engine has emission levels below the specified standard and it is used to generate emission credits under 40 CFR part 1042, this would not disqualify an

engine from also getting an EIAPP certificate under 40 CFR part 1043.

Lastly, we are making clarifying edits to the fuels regulations under 40 CFR part 80 for MARPOL Annex VI implementation; the table below lists these edits. While some of these edits are purely corrections to typographical errors, we are also making edits to clarify the treatment of fuels under MARPOL Annex VI, Regulation 3 and Regulation 4. Regulation 3 authorizes trial programs that involve a permit allowing a ship operator to use fuel that exceeds the fuel-sulfur standards that would otherwise apply. Regulation 4 allows for flag states to approve the use of high-sulfur fuel for vessels that are equipped with technology that allows for an equivalent level of control. Specifically, we are amending the definition of ''ECA marine fuel'' at 40 CFR 80.2(ttt) to clarify that vessels with Regulation 3 permits or Regulation 4 equivalencies can in fact use fuel that exceeds the ECA marine fuel sulfur standard. Further, to provide producers, distributors, and marketers of fuel for use under a Regulation 3 permit or a Regulation 4 equivalency the ability to denote such fuel on their PTDs, we are amending 40 CFR 80.590 to provide these parties with express PTD statements that may be used in lieu of the statements that are currently in the regulations.

MARPOL ANNEX VI—RELATED AMENDMENTS TO 40 CFR PART 80, SUBPART I

Section	Description of change
§ 80.2(ttt)	Amended the definition of ECA marine fuel to clarify that fuel allowed by MARPOL Annex VI Regulation 3 permits or Regulation 4 equivalencies under 40 CFR part 1043 is not required to meet the ECA marine fuel requirements.
80.510 section heading	Amending to clarify that this section applies to refiners and importers.
80.510(k) and 80.511(b)(9)	Amending to clarify that fuel allowed by Regulation 3 permits or Regulation 4 equivalencies is not required to meet the ECA marine fuel requirements.
§ 80.574(b)	Amended to update the address for submitting ECA marine fuel alternative label requests.
§ 80.590(b)	Amended to allow for PTD statements for use with fuel permitted for use under MARPOL Annex VI Regulation 3, Regulation 4, or both.
§ 80.607 (a), (c), (d), (f)	Amended to remove references to ECA marine fuel, as research and development permits are separate from Regulation 3 permits under 40 CFR part 1043.
§ 80.608(d)	Amended to correct minor typographical errors.

VIII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *http://www2.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act

This action does not impose any new information collection burden under the PRA, since it merely clarifies and corrects existing regulatory language. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control numbers as noted in the table below.

Regulatory citation	Item	OMB Control No.
40 CFR part 86	Light-duty vehicle standards	2060–0104
40 CFR part 86	Heavy-duty vehicle standards	2060–0287
40 CFR part 86	In-use verification program	2060–0086
40 CFR part 80	In-use fuel standards	2060–0437
40 CFR part 1043	MARPOL Annex VI	2060–0641
40 CFR part 1054	Small SI exhaust emission standards	2060–0338
40 CFR part 1060	Nonroad SI evaporative emission standards	2060–0321, 2060–0338

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden or otherwise has a positive economic effect on the small entities subject to the rule. This rule merely clarifies and corrects existing regulatory language. We therefore anticipate no costs and therefore no regulatory burden associated with this rule. We have therefore concluded that this action will have no net regulatory burden for all directly regulated small entities.

D. Unfunded Mandates Reform Act

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments. Requirements for the private sector do not exceed $100 million in any one year.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. This rule merely corrects and clarifies regulatory provisions. Tribal governments would be affected only to the extent they purchase and use regulated vehicles or engines. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer Advancement Act

This action involves technical standards. EPA has decided to use the following voluntary consensus standards:

Organization	Standard	Available from
SAE International	SAE J2996, Small Diameter Fuel Line Permeation Test Procedure, Issued January 2013.	*www.sae.org*
ASTM International	ASTM D86–07, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, approved January 15, 2007.	*www.astm.org*
ASTM International	ASTM standard practice D4057–12, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, approved December 1, 2012.	*www.astm.org*
ASTM International	ASTM standard practice D4177–95 (Reapproved 2010), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, approved May 1, 2010..	*www.astm.org*
ASTM International	ASTM standard practice D5842–14, Standard Practice for Sampling and Handling for Fuels for Volatility Measurement, approved January 15, 2014.	*www.astm.org*
ASTM International	ASTM standard practice D6299–13, Standard Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance, approved October 1, 2013.	*www.astm.org*

This action also involves technical standards for marine diesel engines. There are no voluntary consensus documents that address these technical standards. EPA has therefore decided to use the following standards from the International Maritime Organization:

Organization	Standard	Available from
International Maritime Organization	MARPOL Annex VI, Regulations for the Prevention of Pollution from Ships, Third Edition, 2013.	*www.imo.org*
International Maritime Organization	NOx Technical Code 2008, 2013 Edition	*www.imo.org*
International Maritime Organization	Annex 12, Resolution MEPC.251(66) from the Report of the Marine Environment Protection Committee on its Sixty-Sixth Session, April 25, 2014.	*www.imo.org*

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

This action is not expected to have any adverse human health or environmental impacts; as a result, the human health or environmental risk addressed by this action will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations.

IX. Statutory Provisions and Legal Authority

Statutory authority for this action comes from 42 U.S.C. 7401–7671q and 33 U.S.C. 1901–1912.

List of Subjects

40 CFR Part 59

Environmental protection, Air pollution control, Confidential business information, Labeling, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

40 CFR Part 80

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential Business Information, Diesel fuel, Fuel additives, Gasoline, Imports, Incorporation by reference, Labeling, Motor vehicle pollution, Penalties, Petroleum, Reporting and recordkeeping requirements.

40 CFR Part 85

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential Business Information, Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Research, Warranties.

40 CFR Part 86

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential Business Information, Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 600

Environmental protection, Administrative practice and procedure, Electric power, Fuel economy, Labeling, Reporting and recordkeeping requirements.

40 CFR Part 1037

Environmental protection, Administrative practice and procedure,

Air pollution control, Confidential business information, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1043

Environmental protection, Administrative practice and procedure, Air pollution control, Imports, Incorporation by reference, Vessels, Reporting and recordkeeping requirements.

40 CFR Parts 1051 and 1054

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1060

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Incorporation by reference, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Parts 1065 and 1066

Environmental protection, Administrative practice and procedure, Reporting and recordkeeping requirements, Research.

Dated: February 2, 2015.

Gina McCarthy,

Administrator.

[FR Doc. 2015–02845 Filed 2–18–15; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–R06–OAR–2007–1205; FRL 9923–04–Region 6]

National Emission Standards for Hazardous Air Pollutants; Delegation of Authority to Albuquerque-Bernalillo County Air Quality Control Board

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Albuquerque-Bernalillo County Air Quality Control Board (ABCAQCB) submitted updated regulations for receiving delegation of the Environmental Protection Agency (EPA) authority for implementation and enforcement of New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) for all sources (both part 70 and non-part 70 sources). The delegation of authority under this action applies only to sources located in Bernalillo County, New Mexico, and does not extend to sources located in Indian Country. EPA is providing notice that it is updating the delegation of certain NSPS to ABCAQCB, and is taking direct final action to approve the delegation of certain NESHAPs to ABCAQCB.

DATES: Written comments on this proposed rule must be received on or before March 23, 2015.

ADDRESSES: Comments may be mailed to Mr. Rick Barrett, Air Permits Section (6PD–R), Environmental Protection Agency, 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202–2733. Comments may also be submitted electronically or through hand delivery/courier by following the detailed instructions in the Addresses section of the direct final rule located in the rules section of this **Federal Register**.

FOR FURTHER INFORMATION CONTACT: Mr. Rick Barrett, (214) 665–7227; email: *barrett.richard@epa.gov.*

SUPPLEMENTARY INFORMATION: In the final rules section of this **Federal Register**, EPA is approving ABCAQCB's request for delegation of authority to implement and enforce certain NSPS and NESHAP for all sources (both part 70 and non-part 70 sources). ABCAQCB has adopted certain NSPS and NESHAP by reference into ABCAQCB's regulations. In addition, EPA is waiving its notification requirements so sources will only need to send notifications and reports to ABCAQCB.

The EPA is taking direct final action without prior proposal because EPA views this as a noncontroversial action and anticipates no adverse comments. A detailed rationale for this approval is set forth in the preamble to the direct final rule. If no relevant adverse comments are received in response to this action, no further activity is contemplated. If EPA receives relevant adverse comments, the direct final rule will be withdrawn, and all public comments received will be addressed in a subsequent final rule based on this proposed rule. EPA will not institute a second comment period. Any parties interested in commenting must do so at this time. If EPA receives relevant adverse comment on an amendment, paragraph, or section of the rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment.

For additional information, see the direct final rule which is located in the Rules section of this **Federal Register**.

Dated: January 28, 2015.

Samuel Coleman,

Acting Regional Administrator, Region 6.

[FR Doc. 2015–03483 Filed 2–18–15; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 635

[Docket No. 150116050–5123–01]

RIN 0648–XD726

Atlantic Highly Migratory Species; North and South Atlantic 2015 Commercial Swordfish Quotas

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: This proposed rule would adjust the 2015 fishing season quotas for North and South Atlantic swordfish based upon 2014 commercial quota underharvests and international quota transfers consistent with International Commission for the Conservation of Atlantic Tunas (ICCAT) Recommendations 13–02 and 13–03. This proposed rule would apply to commercial and recreational fishing for swordfish in the Atlantic Ocean, including the Caribbean Sea and Gulf of Mexico. This action would implement ICCAT recommendations, consistent with the Atlantic Tunas Convention Act (ATCA), and would further domestic management objectives under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

DATES: Written comments must be received by March 23, 2015. An operator-assisted, public conference call and webinar will be held on March 3, 2015, from 1:00 p.m. to 4:00 p.m., EST.

ADDRESSES: The conference call-in phone number is 1–888–972–6893; participant pass code is 2759824. Participants are strongly encouraged to log/dial in 15 minutes prior to the meeting. NMFS will show a brief presentation via webinar followed by public comment. To join the webinar go to: *https://noaaevents2.webex.com/noaaevents2/onstage/g.php?d=995250567&t=a*, enter your name and

email address, and click the ''JOIN'' button. Participants who have not used WebEx before will be prompted to download and run a plug-in program that will enable them to view the webinar.

You may submit comments on this document, identified by NOAA–NMFS–2015–0023, by any of the following methods:

• *Electronic Submission:* Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to *www.regulations.gov/#!docketDetail;D=NOAA–NMFS-2015-0023*, click the ''Comment Now!'' icon, complete the required fields, and enter or attach your comments.

• *Mail:* Submit written comments to Margo Schulze-Haugen, NMFS/SF1, 1315 East-West Highway, National Marine Fisheries Service, SSMC3, Silver Spring, MD 20910.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (*e.g.,* name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter ''N/A'' in the required fields if you wish to remain anonymous).

The call-in information for the public hearing is phone number 1–888–972–6893; participant pass code is 2759824. We will also provide a brief presentation via webinar. Participants can join the webinar at *https://noaaevents2.webex.com/noaaevents2/onstage/g.php?d=995250567&t=a*. Enter your name and email address, and click the ''JOIN'' button. Participants that have not used WebEx before will be prompted to download and run a plug-in program that will enable them to view the webinar. Presentation materials and other supporting information will be posted on the HMS Web site at: *http://www.nmfs.noaa.gov/sfa/hms.*

Copies of the supporting documents—including the 2012 Environmental Assessment (EA), Regulatory Impact Review (RIR), and Final Regulatory Flexibility Analysis (FRFA) for North Atlantic swordfish; the 2007 EA, RIR, and FRFA for South Atlantic swordfish; and the 2006 Consolidated Atlantic Highly Migratory Species Fishery Management Plan and associated documents—are available from the HMS Management Division Web site at *http://www.nmfs.noaa.gov/sfa/hms/* or by contacting Steve Durkee by phone at 202–670–6637.

FOR FURTHER INFORMATION CONTACT: Steve Durkee by phone at 202–670–6637.

SUPPLEMENTARY INFORMATION:

Background

The U.S. Atlantic swordfish fishery is managed under the 2006 Consolidated Highly Migratory Species (HMS) Fishery Management Plan (FMP). Implementing regulations at 50 CFR part 635 are issued under the authority of the Magnuson-Stevens Act, 16 U.S.C. 1801 *et seq.,* and ATCA, 16 U.S.C. 971 *et seq.* ATCA authorizes the Secretary of Commerce (Secretary) to promulgate regulations as may be necessary and appropriate to implement ICCAT recommendations.

North Atlantic Swordfish Quota

At the 2013 ICCAT annual meeting, Recommendation 13–02 was adopted, maintaining the North Atlantic swordfish total allowable catch (TAC) of 10,301 metric tons (mt) dressed weight (dw) (13,700 mt whole weight (ww)) through 2016. Of this TAC, the United States' baseline quota is 2,937.6 mt dw (3,907 mt ww) per year. ICCAT Recommendation 13–02 also includes an 18.8 mt dw (25 mt ww) annual quota transfer from the United States to Mauritania and limits allowable 2014 underharvest carryover to 15 percent of a contracting party's baseline quota. ICCAT capped the allowable underharvest at 25 percent of a contracting party's baseline quota allocation until the 2013 recommendation reduced it to 15 percent. Therefore, the United States may carry over a maximum of 440.6 mt dw (586.0 mt ww) of underharvest from 2014 to 2015. This proposed rule would adjust the U.S. baseline quota for the 2015 fishing year to account for the annual quota transfer to Mauritania and the 2014 underharvest.

The preliminary estimate of North Atlantic swordfish underharvest for 2014 was 2,469.3 mt dw as of December 31, 2014; therefore, NMFS is proposing to carry forward 440.6 mt dw, the maximum carryover allowed per Recommendation 13–02. The 2,937.6 mt dw baseline quota would be reduced by the 18.8 mt dw annual quota transfer to Mauritania and increased by the underharvest carryover of 440.6 mt dw, resulting in a proposed adjusted North Atlantic swordfish quota for the 2015 fishing year of 3,359.4 mt dw (2,937.6 − 18.8 + 440.6 = 3,359.4 mt dw). From that proposed adjusted quota, 50 mt dw would be allocated to the reserve category for inseason adjustments and research, and 300 mt dw would be allocated to the incidental category, which includes recreational landings and landings by incidental swordfish permit holders, per § 635.27(c)(1)(i). This would result in an allocation of 3,009.4 mt dw (3,359.4 − 50 − 300 = 3,009.4 mt dw) for the directed category, which would be split equally between two seasons in 2015 (January through June, and July through December) (Table 1).

The preliminary landings used to calculate the proposed adjusted quota for North Atlantic swordfish are based on commercial dealer reports and reports by anglers in the HMS Non-Tournament Recreational Swordfish and Billfish Landings Database and the Recreational Billfish Survey received as of December 31, 2014, and do not include dead discards or late landings reports. The estimates are preliminary and have not yet undergone quality control and assurance procedures. NMFS will adjust the quotas in the final rule based on updated data, including dead discard data, if available. Note that the United States has carried over the full amount of underharvest allowed under ICCAT recommendations for the past several years, and NMFS does not expect fishing activity to vary significantly from these past years. For the final adjusted quota to deviate from the proposed quota, the sum of updated landings data (from late reports) and dead discard estimates would need to reach or exceed 2,028.7 mt dw, which is the difference between the current estimate of the 2014 underharvest (2,469.3 mt dw) and the maximum carryover cap of 440.6 mt dw (2,469.3 − 440.6 = 2,028.7 mt dw). In 2013, dead discards were estimated to equal 90.2 mt dw and late reports equaled 143.0 mt dw. Consequently, NMFS does not believe updated data and dead discard estimates would alter the proposed adjusted quota. Thus, while the 2015 proposed North Atlantic swordfish quota is subject to further adjustments and this rule notifies the public of that potential change, NMFS does not expect the final quota to change from the proposed quota.

South Atlantic Swordfish Quota

In 2013, ICCAT Recommendation 13–03 established the South Atlantic swordfish TAC at 11,278.2 mt dw (15,000 mt ww) for 2014, 2015, and 2016. Of this, the United States receives 75.2 mt dw (100 mt ww). Recommendation 13–03 limits the amount of South Atlantic swordfish

underharvest that can be carried forward, and the United States may carry forward up to 100 percent of its baseline quota (75.2 mt dw). Recommendation 13–03 also included a total of 75.2 mt dw (100 mt ww) of quota transfers from the United States to other countries. These transfers were 37.6 mt dw (50 mt ww) to Namibia, 18.8 mt dw (25 mt ww) to Côte d'Ivoire, and 18.8 mt dw (25 mt ww) to Belize.

In 2014, U.S. fishermen landed no South Atlantic swordfish according to data available as of December 31, 2014. The adjusted 2014 South Atlantic swordfish quota was 75.1 mt dw due to nominal landings the previous year. Therefore, 75.1 mt dw of underharvest is available to carry over to 2015. NMFS is proposing to carry forward 75.1 mt dw to be added to the 75.2 mt dw baseline quota. The quota would then be reduced by the 75.2 mt dw of annual international quota transfers outlined above, resulting in an adjusted South Atlantic swordfish quota of 75.1 mt dw for the 2015 fishing year.

As with the landings and proposed quota for North Atlantic swordfish, the South Atlantic swordfish landings and proposed quota are based on dealer reports received as of December 31, 2014, do not include dead discards or late landings reports, and are preliminary landings estimates that have not yet undergone quality control and assurance procedures. NMFS will adjust the quotas in the final rule based on any updated data, including dead discard data, if available. Thus, the 2015 proposed South Atlantic swordfish quota is subject to further adjustments. However, the United States has only landed South Atlantic swordfish twice in the past several years (0.2 mt dw in April 2010 and 0.1 mt dw in April 2013) and therefore does not anticipate additional landings or discard data that would change the final quota from the proposed quota.

TABLE 1—2015 NORTH AND SOUTH ATLANTIC SWORDFISH QUOTAS

North Atlantic swordfish quota (mt dw)	2014	2015
Baseline Quota	2,937.6	2,937.6
International Quota Transfer	(−)18.8 (to Mauritania).	(−)18.8 (to Mauritania)
Total Underharvest from Previous Year.+	1,337.4	2,469.3
Underharvest Carryover from Previous Year.+	(+)734.4	(+)440.6
Adjusted Quota	3,653.2	3,359.4
Quota Allocation:		
Directed Category	3,303.2	3,009.4
Incidental Category	300	300
Reserve Category	50	50
South Atlantic swordfish quota (mt dw)	**2014**	**2015**
Baseline Quota	75.2	75.2
International Quota Transfers*	(−)75.2	(−)75.2
Total Underharvest from Previous Year.+	75.1	75.1
Underharvest Carryover from Previous Year.+	75.1	75.1
Adjusted quota	75.1	75.1

+ Allowable underharvest carryover is now capped at 15 percent of the baseline quota allocation for the North Atlantic (carryover was previously capped at 25 percent) and 75.2 dw (100 mt ww) for the South Atlantic. The available 2014 underharvest is based on data current as of December 31, 2014; it does not include dead discards, late reports, or changes to the data as a result of quality control adjustments.

* Under Recommendation 13–03, the U.S. transfers 75.2 mt dw (100 mt ww) annually to Namibia (37.6 mt dw, 50 mt ww), Côte d'Ivoire (18.8 mt dw, 25 mt ww), and Belize (18.8 mt dw, 25 mt ww).

Ecological and Socioeconomic Impacts

In the EA, RIR, and FRFA prepared for the 2012 North Atlantic swordfish quota specifications final rule (July 31, 2012; 77 FR 45273), NMFS analyzed the ecological and socioeconomic impacts of harvesting substantially the same amount of annual adjusted quota being proposed here in the 2015 North Atlantic swordfish specifications). Similarly, the impacts of harvesting the amount of annual baseline quota proposed in the 2015 South Atlantic swordfish specifications were analyzed in the EA, RIR, and FRFA that were prepared for the 2007 Swordfish Quota Specification Final Rule (October 5, 2007; 72 FR 56929).

The proposed North Atlantic swordfish quota adjustments would result in an adjusted quota for 2015 substantially similar to that analyzed in the 2012 EA, RIR, and FRFA and implemented in 2013 and 2014. The quota analyzed in the 2012 EA, RIR, and FRFA was 3,559.2 mt dw and the proposed 2015 adjusted quota is 3,359.4 mt dw; a decrease of 199.8 mt dw. The 2015 North Atlantic swordfish proposed quota is not expected to increase fishing effort, protected species interactions, or environmental effects in a manner not considered in the 2012 EA and would, in fact, cap all three at a level slightly lower than that analyzed in the 2012 EA. The difference between the quota analyzed in the 2012 EA and the 2015 proposed quota is due to two reasons. First, Recommendation 13–02 reduces the underharvest carryover limit beginning in 2015 from 25 percent of the base quota to 15 percent. In the 2012 EA, the analysis took into account North Atlantic Swordfish underharvest carryovers of up to 25 percent. Since the proposed change in the underharvest carryover limit is within this range (*i.e.,* it is less than 25 percent), the quota that would be implemented consistent with the reduced carryover provision has been previously analyzed. Furthermore, once effective, the reduced underharvest carryover limit would result in a lower overall North Atlantic swordfish adjusted quota. For these reasons, the quota that would be analyzed is within the range of the previously-analyzed actions under the existing NEPA analyses, and additional National Environmental Policy Act (NEPA) analysis regarding the underharvest carryover limit is not necessary.

The second reason the 2012 quota is different than the 2015 proposed adjusted quota is Recommendation 13–02's elimination of the 112.8 mt dw quota transfer to Morocco and the introduction of a lower 18.8 mt dw quota transfer to Mauritania. No additional NEPA analysis is needed for the change in international quota transfers because in concert with the

reduction in the underharvest carryover limit, these changes are not expected to increase fishing effort, affect protected species interactions, or environmental effects beyond those considered in the existing NEPA analyses. Thus, NMFS has determined that the North Atlantic swordfish quota portion of the specifications and impacts to the human environment as a result of the proposed quota adjustments do not require additional NEPA analysis beyond that discussed in the 2012 EA.

Similarly, NMFS analyzed in the EA, RIR, and FRFA that were prepared for the 2007 Swordfish Quota Specification Final Rule (October 5, 2007; 72 FR 56929) the impacts of harvesting the same amount of annual baseline quota being proposed here in the 2015 South Atlantic swordfish specifications. The proposed South Atlantic swordfish quota adjustments would not change overall quotas and are not expected to increase fishing effort, protected species interactions, or environmental effects beyond those analyzed in the 2007 EA. While ICCAT SCRS conducted a stock assessment for South Atlantic swordfish in 2013, that assessment did not alter the stock status or TAC from when 2007 EA analyses were conducted and no additional information about the environment has become available that would alter the analyses. Therefore, because there would be no changes to the South Atlantic swordfish management measures in this proposed rule, and no changes to the affected environment or any environmental effects that have not been previously analyzed, NMFS has determined that the South Atlantic swordfish quota portion of the specifications and impacts to the human environment as a result of the proposed quota adjustments do not require additional NEPA analysis beyond that analyzed in the 2007 EA.

Request for Comments

NMFS is requesting comments on any of the measures or analyses described in this proposed rule. During the comment period, NMFS will hold one conference call and webinar for this proposed rule. The conference call and webinar will be held on March 3, 2015, from 1:00–4:00 p.m. EST. Please see the **DATES** and **ADDRESSES** headings for more information.

The public is reminded that NMFS expects participants on phone conferences to conduct themselves appropriately. At the beginning of the conference call, a representative of NMFS will explain the ground rules (*e.g.,* all comments are to be directed to the agency on the proposed action; attendees will be called to give their comments in the order in which they registered to speak; each attendee will have an equal amount of time to speak; attendees may not interrupt one another; etc.). NMFS representative(s) will structure the meeting so that all attending members of the public will be able to comment, if they so choose, regardless of the controversial nature of the subject(s). Attendees are expected to respect the ground rules, and those that do not may be removed from the conference call.

Classification

Pursuant to the Magnuson-Stevens Act, the NMFS Assistant Administrator has determined that the proposed rule is consistent with the 2006 Consolidated HMS FMP and its amendments, other provisions of the Magnuson-Stevens Act, the Atlantic Tunas Convention Act, and other applicable law, subject to further consideration after public comment.

This action is exempt from review under E.O. 12866.

Previously, NMFS determined that proposed rules to implement the North Atlantic swordfish quota framework (77 FR 25669, May 1, 2012) and South Atlantic swordfish quota framework (75 FR 35432, June 22, 2010) were consistent to the maximum extent practicable with the enforceable policies of the approved coastal management program of coastal states on the Atlantic, including the Gulf of Mexico and the Caribbean Sea. Pursuant to 15 CFR 930.41(a), NMFS provided the Coastal Zone Management Program of each coastal state a 60-day period to review the consistency determination and to advise the Agency of their concurrence. NMFS received concurrence with the consistency determinations from several states and inferred consistency from those states that did not respond within the 60-day time period. This proposed action to establish the 2015 North and South Atlantic swordfish quotas does not change the framework previously consulted upon; therefore, no additional consultation is required.

The Chief Council for Regulation of the Department of Commerce certified to the Chief Council for Advocacy of the Small Business Administration that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities because the proposed quota adjustments are the largely the same as in previous years and the United States is not expected to catch its entire quota in 2015.

As described above, this proposed rule would adjust the 2015 baseline quota for North Atlantic swordfish (January 1, 2015, through December 31, 2015) to account for 2014 underharvests, as allowable, and international quota transfers per § 635.27(c)(1)(i) and (c)(3)(ii) based on ICCAT Recommendation 13–02. The United States can carry over 2014 underharvest at a level not to exceed 15 percent of its baseline quota. Additionally, ICCAT Recommendation 13–02 stipulates that the United States transfer 18.8 mt dw (25 mt ww) of quota to Mauritania.

In 2014, U.S. fishermen landed 1,183.9 mt dw of North Atlantic swordfish as of December 31, 2014, leaving 2,469.3 mt dw of quota underharvest. This underharvest amount exceeds the maximum underharvest carryover of 440.6 mt dw; therefore, only the maximum amount of 440.6 mt dw of 2014 underharvest would be carried over and added to the 2015 baseline quota. The quota transfer of 18.8 mt dw to Mauritania would be deducted, leaving a proposed 2015 North Atlantic swordfish adjusted quota of 3,359.4 mt dw (Table 1).

This proposed rule would also adjust the 2015 baseline quota for South Atlantic swordfish (January 1, 2015, through December 31, 2015) to account for 2014 underharvests and international quota transfers per § 635.27(c)(1)(ii) and (c)(3)(ii) based on ICCAT Recommendation 13–03. The United States can carry over 2014 underharvest at a level not to exceed 100 percent of the baseline quota. Additionally, ICCAT Recommendation 13–03 stipulates that the United States transfer the following quota amounts to other countries: 37.6 mt dw (50 mt ww) to Namibia; 18.8 mt dw (25 mt ww) to Côte d'Ivoire; and 18.8 mt dw (25 mt ww) to Belize.

In 2014, U.S. fishermen landed no South Atlantic swordfish according to data available as of December 31, 2014. The adjusted 2014 South Atlantic swordfish quota was 75.1 mt dw due to nominal landings the previous year. Therefore, 75.1 mt dw of underharvest is available to carry over to 2015. NMFS is proposing to carry forward 75.1 mt dw to be added to the 75.2 mt dw baseline quota. The quota would then be reduced by the 75.2 mt dw of annual international quota transfers outlined above, resulting in an adjusted South Atlantic swordfish quota of 75.1 mt dw for the 2015 fishing year. (Table 1).

The commercial swordfish fishery is comprised of fishermen who hold one of three swordfish limited access permits (LAPs) (*i.e.,* directed, incidental, or

handgear), fishermen who hold a swordfish general commercial permit, fishermen who hold an HMS incidental squid trawl permit, fishermen who hold a commercial Caribbean small boat permit, and the related industries, including processors, bait houses, and equipment suppliers. As of October 2014, there were approximately 183 vessels with a directed swordfish LAP, 66 vessels with an incidental swordfish LAP, 77 vessels with a handgear LAP for swordfish, and 651 vessels that held a swordfish general commercial permit. Additionally, there were approximately 73 HMS incidental squid trawl permit holders, which allow vessels in the Illex squid fishery to retain up to 15 incidentally-caught swordfish while trawling for squid. NMFS considers all participants in the commercial swordfish fishery to be small entities, based on the relevant North American Industry Classification System (NAICS) codes and size standards set by the Small Business Administration (SBA).

The Small Business Administration (SBA) recently established new size criteria for all major industry sectors in the United States, including fish harvesters. On June 12, 2014, the SBA issued an interim final rule revising the small business size standards for several industries effective July 14, 2014 (79 FR 33467; June 12, 2014). The rule increased the size standard from $19.0 to $20.5 million for finfish fishing, from $5 to $5.5 million for shellfish fishing, and from $7.0 million to $7.5 million for other marine fishing, for-hire businesses, and marinas. NMFS has reviewed the analyses prepared for this action in light of the new size standards. Under the former, lower size standards, all entities subject to this action were considered small entities based on fishing revenues, thus they all would continue to be considered small under the new standards. The new size standards do not affect analyses prepared for this action.

This action is not expected to result in a significant economic impact on the small entities subject to the quota limits. Based on the 2014 average price for swordfish of $4.65/lb (based on 2014 electronic dealer data), the 2015 North and South Atlantic swordfish baseline quotas could result in gross revenues of $30,114,483 (2,937.6 mt dw (6,476,233 lbs dw) * $4.65/lb) and $770,905 (75.2 mt dw (165,786 lbs dw) * $4.65/lb), respectively, if the quotas were fully utilized. Under the adjusted quotas of 3,359.4 mt dw (7,406,133 lbs dw) for North Atlantic swordfish and 75.1 mt dw (165,565 lbs dw) for South Atlantic swordfish, the gross revenues could be $34,438,518 and $769,877, respectively, for fully utilized quotas.

Potential revenues per vessel resulting from full utilization of the adjusted quotas could be $32,799 for the North Atlantic swordfish fishery and $4,207 for the South Atlantic swordfish fishery, considering a total of 1,050 swordfish permit holders in the North Atlantic and 183 directed permit holders in the South Atlantic. The North Atlantic estimate, however, represents an average across all permit types, despite permit differences in retention limits, target species, and geographical range. For North Atlantic swordfish, directed swordfish permit holders would likely experience higher than average per-vessel ex-vessel revenues due to the use of pelagic longline gear and the lack of a per-trip retention limit, although trip expenses are likely to be relatively high. HMS incidental squid trawl permit holders would likely experience per vessel ex-vessel revenues well below those received by pelagic longline vessels due to the low retention limit per trip (15 swordfish) and because these vessels do not target swordfish and only catch them incidentally. Swordfish general commercial permit holders would likely experience lower than average per-vessel ex-vessel revenues, despite higher ex-vessel prices and lower fishing expenses. Although the proposed 2015 North Atlantic swordfish adjusted quoted is 199.8 mt dw lower than the quota analyzed in the 2012 EA, U.S. fishermen in recent years have not harvested the full North Atlantic swordfish quota. Thus, the 199.8 mt dw change in the total adjusted quota is unlikely to cause any economic impacts since that portion of the quota will likely go unutilized. In the future, if the North Atlantic swordfish fishery achieves full quota utilization, economic impacts will need to be reanalyzed. For South Atlantic swordfish, only directed swordfish permit holders can land these fish; therefore, potential revenue per vessel is higher than the average for these directed swordfish permit holders since the other permit types may not land swordfish. However, U.S. fishermen rarely catch South Atlantic swordfish. Over the past 5 years, 0.3 mt dw of South Atlantic swordfish catch has been reported. The proposed 2015 South Atlantic swordfish adjusted quota is unchanged from that analyzed in the 2007 EA, thus, no new economic impacts are expected.

Because the United States' commercial swordfish fishery is not expected to catch its entire quota in 2015, the adjustments to the quota and management measures proposed in this rule will not have a significant impact on a substantial number of small entities. As a result, no initial regulatory flexibility analysis is required, and none has been prepared.

Authority: 16 U.S.C. 971 *et seq.;* 16 U.S.C. 1801 *et seq.*

Dated: February 13, 2015.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

[FR Doc. 2015–03432 Filed 2–18–15; 8:45 am]

BILLING CODE 3510–22–P

Notices

Federal Register
Vol. 80, No. 33
Thursday, February 19, 2015

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Submission for OMB Review; Comment Request

February 11, 2015.

The Department of Agriculture has submitted the following information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1995, Public Law 104–13. Comments regarding (a) whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of burden including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility and clarity of the information to be collected; (d) ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Comments regarding this information collection received by March 23, 2015 will be considered. Written comments should be addressed to: Desk Officer for Agriculture, Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), New Executive Office Building, 725–17th Street NW., Washington, DC 20502. Commenters are encouraged to submit their comments to OMB via email to: *OIRA_Submission@OMB.EOP.GOV* or fax (202) 395–5806 and to Departmental Clearance Office, USDA, OCIO, Mail Stop 7602, Washington, DC 20250–7602. Copies of the submission(s) may be obtained by calling (202) 720–8958.

An agency may not conduct or sponsor a collection of information unless the collection of information displays a currently valid OMB control number and the agency informs potential persons who are to respond to the collection of information that such persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

Farm Service Agency

Title: United States Warehouse Act (USWA)

OMB Control Number: 0560–0120

Summary of Collection: The Secretary of Agriculture authorizes the Farm Service Agency (FSA) as specified in the USWA to license public warehouse operators that are in the business of storing agricultural products; to examine such federally-licensed warehouses and to license qualified persons to sample, inspect, weight, and classify agricultural products. The FSA licenses under the USWA cover approximately half of all commercial grain and cotton warehouse capacities in the United States. The regulations that implement the USWA governs the establishment and maintenance of systems under which documents including title documents on shipment, payment and financing, may be issued or transferred for agricultural products.

Need and Use of the Information: FSA will collect information as a basis to (1) determine whether or not the warehouse and the warehouse operator making application for licensing and/or approval meets applicable standards; (2) issue such license or approvals; and (3) determine, once licensed or approved, that the licensee or warehouse operator continues to meet such standards and is conforming to regulatory or contractual obligations. The information collected allows FSA to effectively administer the regulations, licensing, and electronic provider agreements and related reporting and recordkeeping requirements as specified in the USWA.

Description of Respondents: Business or other for-profit.

Number of Respondents: 3,000.

Frequency of Responses: Reporting: On occasion; Annually; Other (daily record).

Total Burden Hours: 8,163.

Ruth Brown,

Departmental Information Collection Clearance Officer.

[FR Doc. 2015–03394 Filed 2–18–15; 8:45 am]

BILLING CODE 3410–05–P

DEPARTMENT OF AGRICULTURE

Submission for OMB Review; Comment Request

February 11, 2015.

The Department of Agriculture has submitted the following information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1995, Public Law 104–13. Comments regarding (a) whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of burden including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility and clarity of the information to be collected; (d) ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology should be addressed to: Desk Officer for Agriculture, Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), *OIRA_Submission@omb.eop.gov* or fax (202) 395–5806 and to Departmental Clearance Office, USDA, OCIO, Mail Stop 7602, Washington, DC 20250–7602.

Comments regarding these information collections are best assured of having their full affect if received within March 23, 2015. Copies of the submission(s) may be obtained by calling (202) 720–8681.

An agency may not conduct or sponsor a collection of information unless the collection of information displays a currently valid OMB control number and the agency informs potential persons who are to respond to the collection of information that such persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

Risk Management Agency

Title: Acreage/Crop Reporting Streamlining Initiative.

OMB Control Number: 0563–0084.

Summary of Collection: Section 508(f)(3) of the Federal Crop Insurance Act (7 U.S.C. 1515); 7 U.S.C. 7333(b)(3);

7 CFR 457.8 and 7 CFR 1437.7(d) mandates the collection of acreage and production information from producers who wish to participate in certain USDA programs. The Farm Service Agency (FSA) and the Risk Management Agency (RMA) are implementing the Acreage/Crop Reporting Streamlining Initiative (ACRSI), a web-based single source reporting system to establish a single reporting and data collection.

Need and Use of the Information: This initiative is being conducted in phases by geographical area and additional commodities. Counties are selected based on their commonality of historical crop reporting, high percentage of producers participating in both RMA and FSA programs and the high level of interest of the private agricultural service industry (precision-ag and farm management) in the pilot phases. It will reengineer the procedures, processes, and standards to simplify commodity, acreage and production reporting by producers, eliminate or minimize duplication of information collection by multiple agencies and reduce the burden on producers, insurance agents and AIPs. Information being collected will consist of, but not be limited to: Producer name, location state, commodity name, commodity type or variety, location county, date planted, land location (legal description, FSA farm number, FSA track number, FSA field number), intended use, prevented planting acres, acres planted but failed, planted acres, and production of commodity produced. Failure to collect the applicable information could result in unearned Federal benefits being issued or producers being denied eligibility to program benefits.

Description of Respondents: Individuals and households.

Number of Respondents: 293,000.

Frequency of Responses: Reporting: One time.

Total Burden Hours: 358,925.

Charlene Parker,

Departmental Information Clearance Officer.

[FR Doc. 2015–03399 Filed 2–18–15; 8:45 am]

BILLING CODE 3410–08–P

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

[Doc. No. AMS–LPS–14–0044]

Sorghum Promotion, Research, and Information Program: Referendum

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Notice of Opportunity to Participate in the Sorghum Promotion, Research, and Information Referendum.

SUMMARY: The Agricultural Marketing Service (AMS) is announcing that a referendum will be conducted among eligible sorghum producers and importers regarding the Sorghum Promotion, Research, and Information Order (Order), as authorized under the Commodity Promotion, Research, and Information Act of 1996 (Act).

DATES: Sorghum producers and importers will vote in the referendum during a 4-week period beginning on March 23, 2015, and ending April 21, 2015. To be eligible to participate in the referendum, producers and importers must certify that they or the entity they are authorized to represent are subject to the assessment and were engaged in the production or importation of sorghum between January 1, 2011, and December 31, 2014. An eligible person shall be entitled to cast only one vote in the referendum.

Form LS–379, Sorghum Promotion and Research Order Referendum Ballot, may be obtained by mail, fax, or in person from the Farm Service Agency (FSA) county offices from March 23, 2015, to April 21, 2015. Form LS–379 may also be obtained via the Internet at *http://www.ams.usda.gov/lsmarketingprograms* during the same time period. Sorghum producers should return completed forms and supporting documentation to the appropriate county FSA office by fax or in person no later than close of business April 21, 2015; or if returned by mail, must be postmarked by midnight April 21, 2015, and received in the county FSA office by close of business on April 28, 2015. Sorghum importers should return completed forms and supporting documentation to: Craig Shackelford, Research and Promotion Division, Livestock, Poultry, and Seed Program, AMS, USDA, 22 Jamesport Lane, White, GA 30184; Telephone: (470) 315–4246; *craig.shackelford@ams.usda.gov* no later than close of business April 21, 2015; or if returned by mail, must be postmarked by midnight April 21, 2015, and received in the AMS office by close of business on April 28, 2015.

FOR FURTHER INFORMATION CONTACT: Kenneth R. Payne, Director, Research and Promotion Division, Livestock, Poultry, and Seed Program, AMS, USDA, Room 2608–S, 1400 Independence Avenue SW., Washington, DC 20250–0251; Telephone 202/720–5705; Fax 202/720–1125; or email to *Kenneth.Payne@ams.usda.gov,* or Craig Shackelford, Marketing Specialist, Research and Promotion Division, Livestock, Poultry, and Seed Program, AMS, USDA, 22 Jamesport Lane, White, GA 30184; Telephone: (470) 315–4246; *craig.shackelford@ams.usda.gov,* or Rick Pinkston, Field Operations Staff, FSA, USDA, at Telephone (202) 720–1857, Fax (202) 720–1096, or by email at *Rick.Pinkston@wdc.usda.gov.*

SUPPLEMENTARY INFORMATION: Pursuant to the Act (7 U.S.C. 7411–7425), it is hereby directed that a referendum be conducted to ascertain whether continuance of the Order (7 CFR part 1221) is favored by those persons who have been engaged in the production or importation of sorghum from January 1, 2011, through December 31, 2014.

The representative period for establishing voter eligibility for the referendum shall be the period from January 1, 2011, through December 31, 2014. Persons who were subject to the assessment, and engaged in the production or importation of sorghum, who provide documentation, such as a sales receipt or remittance form, showing that they were engaged in the production or importation of sorghum from January 1, 2011, through December 31, 2014, are eligible to vote. Importers who were subject to the assessment may provide U.S. Customs and Border Protection form 7501.

On March 3, 2014, the Chairman of the United Sorghum Checkoff Program Board signed a letter requesting that AMS complete the voting of the referendum by April 15, 2015. He noted that this completion date would help ensure that as many producers as possible have a chance to vote in the referendum.

Eligible voters will be provided the opportunity to vote at the county FSA office where FSA maintains and processes the eligible voter's administrative farm records. For the eligible voter not participating in FSA programs, the opportunity to vote will be provided at the FSA office serving the county where the person owns or rents land. Eligible importers will be provided the opportunity to vote through the U.S. Department of Agriculture's (USDA) AMS office located in Washington, DC. Participation in the referendum is not mandatory.

On November 18, 2010, USDA published in the **Federal Register** (75 FR 70573) a final rule that sets forth procedures that will be used in conducting the referendum. The final rule includes definitions, provisions for supervising the referendum process, eligibility, procedures for obtaining and completing the form LS–379, required

documentation showing that the person was engaged in the production or importation of sorghum from January 1, 2011, through December 31, 2014, where the referendum will be conducted, counting and reporting results, and disposition of the forms and records. Since the referendum will be conducted primarily at the county FSA offices, FSA employees will assist AMS by determining eligibility, counting requests, and reporting results.

Pursuant to the Act, USDA is conducting the required referendum from March 23, 2015 through April 21, 2015. Form LS–379 may be requested in person, by mail, or by facsimile from March 23, 2015 through April 21, 2015.

Form LS–379 may also be obtained via the Internet at: *http://www.ams.usda.gov/lsmarketingprograms* during the same 4-week period. Eligible voters would vote at the FSA office where FSA maintains and processes the person's, corporation's, or other entity's administrative farm records. For the person, corporation, or other entity eligible to vote that does not participate in FSA programs, the opportunity to vote would be provided at the FSA office serving the county where the person, corporation, or other entity owns or rents land.

Voters can determine the location of county FSA offices by contacting (1) the nearest FSA office, (2) the State FSA office, or (3) through an online search of FSA's Web site at: *http://www.fsa.usda.gov/pas/default.asp.* From the options available on this Web site select ''State Offices,'' click on your State, select ''County Offices,'' and click on the map to select a county.

Form LS–379 and supporting documentation may be returned in person, by mail, or facsimile to the appropriate county FSA office. Form LS–379 and accompanying documentation returned in person or by facsimile, must be received in the appropriate FSA office prior to the close of business on April 21, 2015. Form LS–379 and accompanying documentation returned by mail must be postmarked no later than midnight of April 21, 2015, and received in the county FSA office by close of business on April 28, 2015.

In accordance with Paperwork Reduction Act (44 U.S.C. Chapter 35), the information collection requirements have been approved under OMB number 0581–0093.

Authority: 7 U.S.C. 7411–7425.

Dated: February 11, 2015.

Rex A. Barnes,

Associate Administrator, Agricultural Marketing Service.

[FR Doc. 2015–03392 Filed 2–18–15; 8:45 am]

BILLING CODE 3410–02–P

DEPARTMENT OF AGRICULTURE

Forest Service

San Juan National Forest; Colorado; Weminuche Landscape Grazing Analysis

AGENCY: Forest Service, USDA.

ACTION: Notice of intent to prepare an Environmental Impact Statement.

SUMMARY: The Forest Service intends to prepare an Environmental Impact Statement to analyze the impacts of the proposal to continue to authorize term livestock grazing permit(s) on all or portions of the Weminuche Landscape in a manner that moves resource conditions toward desired on-the-ground conditions and is consistent with Forest Plan standards and guidelines. The Environmental Impact Statement will be prepared pursuant to the National Environmental Policy Act and agency policy. The analysis area encompasses approximately 167,000 acres on six active allotments and seven vacant allotments. The project area is located northeast of Durango, Colorado; from northern Missionary Ridge east through the Weminuche Wilderness to the Pine River; in Townships 36–40 North, Ranges 4–9 West, N.M.P.M., and is within the Columbine Ranger District, San Juan National Forest, Colorado.

The proposed action is designed to increase the flexibility of livestock grazing systems through adaptive management, which will allow quicker and more effective response to problem areas when they are revealed. Problems will be revealed through the use of short and long term monitoring. Application of adaptive management practices should result in improved soil, watershed, and vegetative conditions, and healthier wildlife populations.

DATES: If you have supplementary comments which meet the description in Scoping Process, below, they must be received by March 23, 2015. The draft Environmental Impact Statement is expected about April 2015, and the final Environmental Impact Statement is expected about July 2015. A decision is expected about November 2015.

ADDRESSES: If you have supplementary comments which meet the description in Scoping Process, below, send them in written form to Matt Janowiak, Columbine District Ranger, P.O. Box 439, Bayfield, CO 81122. Comments may also be sent via email to *comments-rocky-mountain-san-juan-columbine@fs.fed.us,* or via facsimile to 970–884–2428.

FOR FURTHER INFORMATION CONTACT: Jared Whitmer, Interdisciplinary Team Leader at 970–884–1416.

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8 a.m. and 8 p.m., Eastern Time, Monday through Friday.

SUPPLEMENTARY INFORMATION:

Preceding EA Process

A previous National Environmental Policy Act process, including public input and impacts analysis, has been conducted for this project under an Environmental Assessment. Due to scientific uncertainty regarding disease transmission between livestock and wildlife, and due to uncertainty of degree of impacts to wildlife population viability, a Finding of No Significant Impact could not be reached for the Environmental Assessment. This resulted in the initiation of this Environmental Impact Statement.

Purpose and Need for Action

The purpose of this action is administer term livestock grazing permits on all or portions of the Weminuche Landscape in a manner that moves resource conditions toward desired on-the-ground conditions and is consistent with Forest Plan standards and guidelines.

Proposed Action and Alternatives

Alternatives to be included in the Environmental Impact Statement are: 1. No Grazing, 2. Current Management, 3. Adaptive Management with Forage Reserves, and 4. Proposed Action, Adaptive Management with Vacant Allotment Closures.

Responsible Official

Columbine District Ranger.

Nature of Decision To Be Made

The Responsible Official will decide whether or not to authorize term grazing permit(s) on all or portions of the Weminuche Landscape, and if grazing is authorized, what design criteria and monitoring will be required. The Responsible Official will also document the decision and reasons for the decision in a Record of Decision. This decision will be subject to Forest Service predecisional objection procedures (36 CFR part 218, Subparts A and B).

Scope of Issues

Extensive prior public involvement has resulted in the following key issues to be analyzed in the Environmental Impact Statement: 1. Impacts of grazing on soil and water, 2. Impacts of grazing on vegetation, including riparian areas and wildflowers, 3. Impacts of grazing on recreational experiences, including grazing in a Wilderness, and hiker interactions with guard dogs, 4. Impacts of grazing on wildlife, including habitat damage and potential disease transmission, 5. Impacts of grazing on socio-economics of the local communities, and 6. Impacts of grazing on cultural resources.

Scoping Process

Written comments that were submitted during scoping and comment periods for the development of the preceding Environmental Assessment will still be considered and are still part of the project record. The Forest Service requests that you do not resubmit the same comments. Because of extensive public input during the Environmental Assessment process, the scope of issues and alternatives to be analyzed in the Environmental Impact Statement have already been well examined and the Forest Service is considering this prior public input as meeting the primary requirement for scoping for the Environmental Impact Statement.

This notice of intent initiates a supplementary scoping process, which is intended to provide the opportunity for the public to comment on the scope of issues and alternatives to be analyzed in the Environmental Impact Statement only if there is new or different information that has not been previously considered. To determine whether your comment or concern has previously been submitted, please read the Scoping Summary and Response to Comments documents found on the project Web page at *www.fs.usda.gov/projects/sanjuan/landmanagement/projects,* or call Jared Whitmer.

It is important that reviewers provide their comments at such times and in such manner that they are useful to the agency's preparation of the Environmental Impact Statement. Therefore, comments should be provided prior to the close of the comment period and should clearly articulate the reviewer's concerns.

Information regarding this project is available at the Columbine Ranger District office in Bayfield, Colorado, and on the San Juan National Forest Web site noted above. Public meetings may be scheduled at a later date to provide further information as needed. The dates of any public meetings will be announced by press releases in local papers, direct mailings, emails, and will be posted on the San Juan National Forest Web site.

Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered; however, anonymous comments will not provide the Agency with the ability to provide the respondent with subsequent environmental documents.

Dated: February 3, 2015.

Kara L. Chadwick,

Forest Supervisor.

[FR Doc. 2015–03469 Filed 2–18–15; 8:45 am]

BILLING CODE 3410–11–P

DEPARTMENT OF AGRICULTURE

Forest Service

Lewis and Clark National Forest, Montana, Castle Mountains Restoration Project

AGENCY: Forest Service, USDA.

ACTION: Notice of intent to prepare an environmental impact statement.

SUMMARY: The Lewis and Clark National Forest (LCNF) is going to prepare an environmental impact statement for vegetation management actions in the Castle Mountains located in Central Montana. The project is designed to meet the desired condition of restoring forest and grasslands ecosystems to promote landscape resiliency over time for multiple resource values while minimizing the threat of high intensity wildfire within the Willow Creek municipal watershed and areas of other valued resources and infrastructure in the 69,610 acre Castle Mountains landscape.

DATES: Comments concerning the scope of the analysis must be received by March 23, 2015. The draft environmental impact statement is expected September 2015 and the final environmental impact statement is expected March 2016.

ADDRESSES: Send written comments to Carol Hatfield White Sulphur Springs District Ranger, Lewis & Clark National Forest, 204 W. Folsom, P.O. Box A, White Sulphur Springs, MT 59645. Comments may also be sent via email to *comments-northern-lewisclark-white-sulphur-sprg@fs.fed.us,* or via facsimile to 406–547–6023.

It is important that reviewers provide their comments at such times and in such a way that they are useful to the Agency's preparation of the EIS. Therefore, comments should be provided prior to the close of the comment period and should clearly articulate the reviewer's concerns and contentions.

Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered, however.

FOR FURTHER INFORMATION CONTACT: John Casselli Project Team Lead, at 406–791–7723. Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8 a.m. and 8 p.m., Eastern Time, Monday through Friday.

SUPPLEMENTARY INFORMATION:

Purpose and Need for Action

The purpose of the project is to move toward a resilient forest and grassland ecosystem that will mimic a more historic natural fire regime to reduce the future threat of high intensity wildfire and the associated hazards to life, valued resources and infrastructure. In order to achieve this, there is a need to create a mosaic of vegetation and fuel structure more resilient to disturbance over time that includes improving the overall diversity in age classes, species, and meadow openings across the landscape. The action will provide for safer, more effective fire suppression actions when needed, reduce threats to forest users, to private residences, power corridors, agency infrastructure, water quality of Willow Creek and to valued wildlife habitat. These actions will reduce the probability of post-wildfire watershed impacts to the Willow Creek municipal watershed and associated costs.

Proposed Action

Approximately 22,124 acres are proposed for treatment which includes a combination of fuels reduction thinning, commercial harvest of trees, non-commercial thinning, and prescribed fire. Mechanical and/or hand treatment methods would be used to accomplish the treatment objectives. Proposed treatment activities include: roughly 1,911 acres of Improvement Thinning; 7,329 acres of Prescribed Fire; 313 acres of Aspen Restoration; 277 acres of Precommercial Thinning; 856 acres of White Bark Pine Restoration; 8,681 acres of meadow Restoration; 1,519 acres of Douglas-fir Thinning; and 1,236 acres of Lodgepole Pine

regeneration harvest. There would be up to 57 miles of temporary road utilized for the project with approximately 20 miles of this occurring over existing road prisms. Road maintenance or reconstruction of existing system roads to meet forestry best management practices would be necessary to implement the proposed action. No new permanent roads will be constructed. Temporary roads not on the forest road system that are utilized will be obliterated (stabilized and or restored to natural contours) upon completion of treatment operations. Roads identified in the 2007 Travel Management Record of Decision that were removed from the road system (decommissioned) would be physically stabilized or re-contoured as needed to meet the resource objectives of travel management. Site-specific amendments to the Lewis and Clark National Forest Plan standards pertaining to elk hiding cover, elk winter range, and elk thermal cover may be necessary in order to meet the project's purpose and need. To address potential impacts of proposed management activities on cheatgrass (Bromus tectorum) in meeting the project objectives, the proposal includes an integrated management approach to control the establishment and spread of this invasive grass species. The use of applicable EPA approved selective herbicides and or biological controls would be utilized in units having prescribed burning as the treatment action. Approximately 42 percent (29,498 acres) of the total project area is located within the Castles Mountains Inventoried Roadless Area (IRA). Proposed treatment activities on approximately 6,262 acres are planned within the IRA. A combination of non-commercial vegetation treatments and prescribed fire techniques are proposed. Under the proposal, road maintenance may occur but no road construction, reconstruction of system or temporary roads are planned within the IRA. The location of this project area is those sections of the Castle Mountains within the National Forest Boundary; Township 8 and 9 N, Range 8, 9 and 10 E. Principle Meridian, Meagher County, Montana.

Responsible Official

Helena and Lewis & Clark National Forests Forest Supervisor.

Nature of Decision To Be Made

The decisions to be made include: Whether to implement the proposed action or an alternative to the proposed action, what monitoring requirements would be appropriate to evaluate the implementation of this project, the timing of the project and whether a forest plan site specific amendment (exemption) would be necessary as a result of the decision for this project.

Scoping Process

This notice of intent initiates the scoping process, which guides the development of the environmental impact statement. In February 2015, a scoping notice (flyer) will be mailed to interested and affected parties directing them to the project's information which will be posted to the Lewis and Clark National Forest's projects Web page (*http://www.fs.usda.gov/lcnf/*). The Web page will contain detailed project information, including when public meetings will be scheduled, project proposal maps, and other pertinent project information.

It is important that reviewers provide their comments at such times and in such manner that they are useful to the agency's preparation of the environmental impact statement. Therefore, comments should be provided prior to the close of the comment period and should clearly articulate the reviewer's concerns and contentions. The submission of timely and specific comments can affect a reviewer's ability to participate in the administrative objection process or any judicial review.

Dated: February 11, 2015.

Robin Strathy,

Deputy Forest Supervisor.

[FR Doc. 2015–03466 Filed 2–18–15; 8:45 am]

BILLING CODE 3410–15–P

DEPARTMENT OF AGRICULTURE

Rural Utilities Service

Information Collection Activity; Comment Request

AGENCY: Rural Utilities Service, USDA.

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35, as amended), the Rural Utilities Service (RUS) invites comments on this information collection for which RUS intends to request approval from the Office of Management and Budget (OMB).

DATES: Comments on this notice must be received by April 20, 2015.

FOR FURTHER INFORMATION CONTACT: Thomas P. Dickson, Acting Director & Funds Control Officer, Program Development and Regulatory Analysis, USDA Rural Development, 1400 Independence Ave. SW., STOP 1522, Room 5164 South Building, Washington, DC 20250–1522. Telephone: (202) 690–4492. FAX: (202) 720–8435. Email: *Thomas.Dickson@wdc.usda.gov.*

SUPPLEMENTARY INFORMATION: The Office of Management and Budget's (OMB) regulation (5 CFR part 1320) implementing provisions of the Paperwork Reduction Act of 1995 (Pub. L. 104–13) requires that interested members of the public and affected agencies have an opportunity to comment on information collection and recordkeeping activities (see 5 CFR 1320.8(d)). This notice identifies an information collection that RUS is submitting to OMB for extension.

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility; (b) the accuracy of the Agency's estimate of the burden of the proposed collection of information including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology. Comments may be sent to: Thomas P. Dickson, Acting Director, Program Development and Regulatory Analysis, Rural Utilities Service, U.S. Department of Agriculture, 1400 Independence Ave. SW., STOP 1522, Room 5164 South Building, Washington, DC 20250–1522. Telephone: (202) 690–4492, FAX: (202) 720–8435. Email: *Thomas.Dickson@wdc.usda.gov.*

Title: Substantially Underserved Trust Areas.

OMB Control Number: 0572–0147.

Type of Request: Revision of a currently approved information collection.

Abstract: The RUS provides loan, loan guarantee and grant programs for rural electric, water and waste, and telecommunications and broadband infrastructure. The SUTA initiative gives the Secretary of Agriculture certain discretionary authorities relating to financial assistance terms and conditions that can enhance the financing possibilities in areas that are underserved by certain RUS electric, water and waste, and telecommunications and broadband programs. The data covered by this

collection of information are those materials necessary to allow the agency to determine applicant and community eligibility and an explanation and documentation of the high need for the benefits of the SUTA provisions. Program specific application materials, which funds are being applied for, are covered by the information collection package for the specific RUS program.

Estimate of Burden: Public reporting burden for this collection of information is estimated to average 2 hours per response.

Estimated Number of Respondents: 2.

Estimated Number of Responses per Respondent: 1.

Estimated Total Annual Burden on Respondents: 4.

Copies of this information collection can be obtained from MaryPat Daskal, Program Development and Regulatory Analysis, at (202) 720–7853, FAX: (202) 720–8435. Email: *MaryPat.Daskal@wdc.usda.gov.*

All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Dated: February 10, 2015.

Jasper Schneider,

Acting Administrator, Rural Utilities Service.

[FR Doc. 2015–03349 Filed 2–18–15; 8:45 am]

BILLING CODE P

DEPARTMENT OF AGRICULTURE

Rural Utilities Service

Basin Electric Power Cooperative: Notice of Extension of Public Comment Period for an Environmental Assessment

AGENCY: Rural Utilities Service, USDA.

ACTION: Notice of Extension of Public Comment Period for an Environmental Assessment.

SUMMARY: The Rural Utilities Service (RUS) is extending the public comment period for an Environmental Assessment (EA) related to a proposed project by Basin Electric Power Cooperative (Basin Electric). The Western Area Power Administration (Western) and the Bureau of Indian Affairs (BIA) are cooperating agencies in preparation of the EA. The proposed Big Bend to Witten Transmission Line Project (proposed action) consists of an approximately 70-mile long 230–kV single-circuit transmission line, a new Western switchyard called Lower Brule Switchyard, an addition to the existing Witten Substation, and approximately two miles of 230–kV double-circuit transmission line between Big Bend Dam and the new Lower Brule Switchyard. Communications facilities including a microwave relay tower and associated building will also be constructed at the Lower Brule Switchyard and Witten Substation. A portion of the proposed transmission line crosses Indian trust lands of the Lower Brule Sioux Tribe, and the agencies have closely cooperated with the Tribe in preparation of the EA. Basin Electric is requesting RUS financial assistance for the proposed action. To ensure that parties interested in the proposed action are provided adequate opportunity for comment, notices are being reissued and the public comment period is being extended for 30 days.

DATES: A Notice of Availability of the Environmental Assessment was published in the **Federal Register** on January 28, 2015. Written comments on this notice must now be received on or before March 30, 2015.

FOR FURTHER INFORMATION CONTACT: To obtain copies of the EA or for further information, contact Richard Fristik, Senior Environmental Protection Specialist, USDA, Rural Utilities Service, 1400 Independence Avenue SW., Stop 1571, Washington, DC 20250–1571, telephone: (202) 720–5093, or email: *richard.fristik@wdc.usda.gov;* or, or Kevin L. Solie, Basin Electric Power Cooperative, Inc., 1717 East Interstate Avenue, Bismarck, ND 58503–0564, telephone: (701) 355–5495, or email: *ksolie@bepc.com.* A copy of the EA may be viewed on line at the Agency's Web site: *http://www.rd.usda.gov/files/UWPBigBendtoWitten_EA_Nov_2014_Final.pdf* and at the following locations:

Rural Utilities Service, 1400 Independence Avenue SW., Room 2240, Washington, DC 20250

Basin Electric Power Cooperative, 1717 East Interstate Ave., Bismarck, ND 58503–0564

SUPPLEMENTARY INFORMATION: The network transmission system in South Dakota is not able to accommodate projected load growth in the next several years. This transmission line is proposed to strengthen the transmission network, improve transmission system reliability, and to help meet future demand for electricity and economic development in the region. In addition to increasing load serving ability for both Rosebud and West Central Electric Cooperatives, the Project would provide additional access to the regional high voltage transmission system. The proposed Big Bend to Witten line would enhance system reliability by providing an additional connection to the ''grid'' roughly midpoint along this east-west line. If a portion of the Fort Randall to Martin 115–kV line would be damaged by a storm, the Big Bend to Witten line could provide power to the undamaged segments of the line. The proposed line also would provide a tap point for West Central near Reliance, which would enhance the reliability and stability of the West Central system. The tap point near Reliance would provide an additional power line to the Lower Brule Sioux Indian Reservation, which currently has only one older line, and would provide reliability and stability to power on the Reservation. In addition, future wind generation facilities may be able to interconnect to the proposed line to convey power to West Central's markets. Lastly, the Project lends itself to additional build-out in support of Western's long-range plan for a 230-kV system in southern South Dakota, and it would provide an increase in the load serving capacity such that the delivery needs of the projected network load can be met in a reliable manner.

Basin Electric is seeking financing from RUS for its ownership of the proposed project. Before making a decision to provide financing, RUS is required to conduct an environmental review under NEPA in accordance with RUS's Environmental Policies and Procedures (7 CFR part 1794). AECOM, an environmental consultant, prepared an EA for RUS that describes the project and assesses the proposed project's environmental impacts. RUS has conducted an independent evaluation of the EA and believes that it accurately assesses the impacts of the proposed project. No significant impacts are expected as a result of the construction of the project.

Any final action by RUS related to the proposed action will be subject to, and contingent upon, compliance with all relevant Federal, State, and local environmental laws and regulations and completion of the environmental review requirements as prescribed in RUS's Environmental Policies and Procedures at 7 CFR part 1794.

Richard Fristik,

Acting Director, Engineering and Environmental Staff, Rural Utilities Service.

[FR Doc. 2015–03385 Filed 2–18–15; 8:45 am]

BILLING CODE P

ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD

Meetings

AGENCY: Architectural and Transportation Barriers Compliance Board.

ACTION: Notice of meetings.

SUMMARY: The Architectural and Transportation Barriers Compliance Board (Access Board) plans to hold its regular committee and Board meetings in Washington, DC, Monday through Wednesday, March 9–11, 2015 at the times and location listed below.

DATES: The schedule of events is as follows:

Monday, March 9, 2015

11:00 a.m.–4:00 p.m. Ad Hoc Committee Meetings; Closed to Public.

Tuesday, March 10, 2015

9:30–10:00 a.m. Budget Committee.
10:30—11:00 Technical Programs Committee.
11:00—Noon Planning and Evaluation Committee.
1:30—3:30 p.m. Ad Hoc Committee on Frontier Issues.

Wednesday, March 11, 2015

1:30—3:00 p.m. Board Meeting.

ADDRESSES: Meetings will be held at the Access Board Conference Room, 1331 F Street NW., Suite 800, Washington, DC 20004.

FOR FURTHER INFORMATION CONTACT: For further information regarding the meetings, please contact David Capozzi, Executive Director, (202) 272–0010 (voice); (202) 272–0054 (TTY).

SUPPLEMENTARY INFORMATION: At the Board meeting scheduled on the afternoon of Wednesday, March 11, 2015, the Access Board will consider the following agenda items:

- Approval of the draft January 14, 2015 meeting minutes (vote);
- Ad Hoc Committee Reports: Self-Service Transaction Machines; Information and Communications Technologies; Design Guidance; Public Rights-of-Way and Shared Use Paths; Passenger Vessels; Frontier Issues; Transportation Vehicles (vote); and Medical Diagnostic Equipment;
- Budget Committee;
- Planning and Evaluation Committee;
- Technical Programs Committee;
- Election Assistance Commission Report;
- Election of Officers (vote);
- Executive Director's Report.

All meetings are accessible to persons with disabilities. An assistive listening system, Communication Access Realtime Translation (CART), and sign language interpreters will be available at the Board meeting and committee meetings. Persons attending Board meetings are requested to refrain from using perfume, cologne, and other fragrances for the comfort of other participants (see *www.access-board.gov/the-board/policies/fragrance-free-environment* for more information).

David M. Capozzi,

Executive Director.

[FR Doc. 2015–03410 Filed 2–18–15; 8:45 am]

BILLING CODE 8150–01–P

DEPARTMENT OF COMMERCE

Submission for OMB Review; Comment Request

The Department of Commerce will submit to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

Agency: Minority Business Development Agency.

Title: Minority Enterprise Development (MED) Week Awards Program.

OMB Control Number: 0640–0025.

Form Number(s): None.

Type of Request: Regular submission.

Number of Respondents: 100.

Average Hours per Response: 2 hours.

Burden Hours: 200.

Needs and Uses: This request is for an extension of a current information collection. MBDA is soliciting public comments to permit the agency to receive nominations from the public for the following awards to minority businesses: Minority Construction Firm of the Year, Minority Manufacturer of the Year, Minority Export Firm of the Year, Minority Energy Firm of the Year, Minority Health Products and Services Firm of the Year, Minority Technology Firm of the Year, Minority Marketing and Communication Firm of the Year, Minority Professional Services Firm of the Year and the MBDA Minority Business Enterprise of the Year award. In addition, MBDA may recognize trailblazers and champions through the Access to Capital Award, Advocate of the Year Award, Distinguished Supplier Diversity Award, Ronald H. Brown Leadership Award, and Abe Venable Legacy Award for Lifetime Achievement.

MBDA must collect two kinds of information to make award nominations: (a) Information identifying the nominee and nominator; and (b) information explaining why the nominee should be given the award. The information will be used to determine those applicants that best meet the preannounced selection criteria. Participation in the MED Week Awards program is voluntary and the awards are strictly honorary.

Affected Public: Individuals, businesses and other for-profit organizations, not-for-profit organizations, and federal, state, local, or tribal governments.

Frequency: Annually.

Respondent's Obligation: Voluntary.

This information collection request may be viewed at *www.reginfo.gov.* Follow the instructions to view Department of Commerce collections currently under review by OMB.

Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to OIRA *Submission@omb.eop.gov* or fax to (202) 395–5806.

Dated: February 12, 2015.

Glenna Mickelson,

Management Analyst, Office of the Chief Information Officer.

[FR Doc. 2015–03347 Filed 2–18–15; 8:45 am]

BILLING CODE 3510–21–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–601]

Tapered Roller Bearings and Parts Thereof, Finished and Unfinished, From the People's Republic of China: Rescission, in Part, of Antidumping Duty Administrative Review; 2013–2014

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

DATES: *Effective Date:* February 19, 2015.

FOR FURTHER INFORMATION CONTACT: Blaine Wiltse or Steve Bailey, AD/CVD Operations, Office II, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–6345 and (202) 482–0193, respectively.

Background

On June 2, 2014, the Department published a notice of opportunity to request an administrative review of the antidumping duty order on tapered

roller bearings and parts thereof, finished and unfinished, from the People's Republic of China covering the period June 1, 2013, through May 31, 2014.[1] The Department received a number of timely requests for an antidumping duty administrative review, including one from GGB Bearing Technology (Suzhou) Co., Ltd. (GGB). On July 31, 2014, in accordance with section 751(a) of the Tariff Act of 1930, as amended (the Act), the Department published in the **Federal Register** a notice of initiation of administrative review.[2] On October 29, 2014, GGB withdrew its request for an administrative review.

Rescission of Review, in Part

Pursuant to 19 CFR 351.213(d)(1), the Secretary will rescind an administrative review, in whole or in part, if a party that requested the review withdraws the request within 90 days of the date of publication of the notice of initiation of the requested review. GGB's withdrawal of its request was submitted within the 90-day period and, thus, is timely. Because GGB's withdrawal of its request for an antidumping duty administrative review is timely and because no other party requested a review of GGB, we are rescinding this administrative review, in part, with respect to this company, in accordance with 19 CFR 351.213(d)(1).

Assessment

The Department will instruct U.S. Customs and Border Protection (CBP) to assess antidumping duties on all appropriate entries. For GGB, the company for which this review is rescinded, antidumping duties shall be assessed at rates equal to the cash deposit of estimated antidumping duties required at the time of entry, or withdrawal from warehouse, for consumption, in accordance with 19 CFR 351.212(c)(1)(i). The Department intends to issue appropriate assessment instructions to CBP 15 days after publication of this notice.

Notification to Importers

This notice serves as a reminder to importers of their responsibility under 19 CFR 351.402(f)(2) to file a certificate regarding the reimbursement of antidumping duties prior to liquidation of the relevant entries during this review period. Failure to comply with this requirement could result in the Secretary's presumption that reimbursement of antidumping duties occurred and the subsequent assessment of doubled antidumping duties.

Notification Regarding Administrative Protective Orders

This notice also serves as a reminder to parties subject to administrative protective order (APO) of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305, which continues to govern business proprietary information in this segment of the proceeding. Timely written notification of the return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

This notice is issued and published in accordance with sections 751 and 777(i)(1) of the Act, and 19 CFR 351.213(d)(4).

Dated: February 12, 2015.

Christian Marsh,

Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.

[FR Doc. 2015–03480 Filed 2–18–15; 8:45 am]

BILLING CODE 3510–DS–P

[1] *See Antidumping or Countervailing Duty Order, Finding, or Suspended Investigation; Opportunity To Request Administrative Review,* 79 FR 31303, 31304 (June 2, 2014).

[2] *See Initiation of Antidumping and Countervailing Duty Administrative Reviews,* 79 FR 44390, 44392 (July 31, 2014).

COMMODITY FUTURES TRADING COMMISSION

Agency Information Collection Activities Under OMB Review

AGENCY: Commodity Futures Trading Commission.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995 (PRA), this notice announces that the Information Collection Request (ICR) abstracted below has been forwarded to the Office of Management and Budget (OMB) for review and comment. The ICR describes the nature of the information collection and its expected costs and burden.

DATES: Comments must be submitted on or before March 23, 2015.

ADDRESSES: Comments may be submitted directly to the Office of Information and Regulatory Affairs (OIRA) in OMB, within 30 days of the notice's publication, by email at *OIRAsubmissions@omb.eop.gov.* Please identify the comments by OMB Control No. 3038–0023. Please provide the Commission with a copy of all submitted comments at the address listed below. Please refer to OMB Reference No. 3038–0023, found on *http://reginfo.gov.* Comments may also be mailed to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for the Commodity Futures Trading Commission, 725 17th Street NW., Washington, DC 20503, and Amanda Olear, Associate Director, Division of Swap Dealer and Intermediary Oversight, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581.

Comments may also be submitted, regarding the burden estimated or any other aspect of the information collection, including suggestions for reducing the burden, identified by ''Commodity Pool Operators and Commodity Trading Advisors: Amendments to Compliance Obligations'' (OMB Control No. 3038–0023), by any of the following methods:

- Agency Web site, via its Comments Online process: *http://comments.cftc.gov.* Follow the instructions for submitting comments through the Web site.
- *Mail:* Send to Christopher Kirkpatrick, Secretary of the Commission, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581.
- *Hand Delivery/Courier:* Same as Mail, above.
- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

All comments must be submitted in English, or if not, accompanied by an English translation. Comments will be posted as received to *http://www.cftc.gov.* You should submit only information that you wish to make available publicly. If you wish the Commission to consider information that is exempt from disclosure under the Freedom of Information Act, a petition for confidential treatment of the exempt information may be submitted according to the procedures set forth in § 145.9 of the Commission's regulations.[1]

The Commission reserves the right, but shall have no obligation, to review, pre-screen, filter, redact, refuse or remove any or all of your submission from *www.cftc.gov* that it may deem to be inappropriate for publication, such as obscene language. All submissions that have been redacted or removed that contain comments on the merits of this matter will be retained in the public comment file and will be considered as required under applicable laws, and

[1] Commission regulations referred to herein are found at 17 CFR Ch. 1 *et seq.* (2014).

may be accessible under the Freedom of Information Act.

FOR FURTHER INFORMATION CONTACT: Amanda Olear, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581; (202) 418–5283; email: *aolear@cftc.gov,* and refer to OMB Control No. 3038–0023. This contact can also provide a copy of the ICR.

SUPPLEMENTARY INFORMATION:

Title: ''Commodity Pool Operators and Commodity Trading Advisors: Amendments to Compliance Obligations,'' OMB Control No. 3038–0023—Extension. This is a request for extension of a currently approved information collection.

Abstract: Pursuant to the Commodity Exchange Act, as amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act (''Dodd-Frank Act''), Pub. L. 111–203, 124 Stat. 1376 (2010), the Commodity Futures Trading Commission promulgated rules and forms relating to registration with the Commission applicable to intermediaries, and employees and principals thereof, operating in the futures, options, swaps, and retail forex markets. There were no new requirements imposed; however, due to amendments to the Commodity Exchange Act made by the Dodd-Frank Act, there was an increase in registrants in certain registration categories. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the CFTC's regulations were published on December 30, 1981. *See* 46 FR 63035 (Dec. 30, 1981). The **Federal Register** notice with a 60-day comment period soliciting comments on this collection of information was published on December 16, 2014 (79 FR 241). No comments have been received.

Burden Statement: The respondent burden for this collection is estimated to average 0.09 hours per response.

Respondents/Affected Entities: 77,857.

Estimated Number of Responses: 78,109.

Estimated Total Annual Burden on Respondents: 7,029.8 hours.

Frequency of collection: Periodically.

Authority: 44 U.S.C. 3501 *et seq.*

Dated: February 13, 2015.

Christopher J. Kirkpatrick,

Secretary of the Commission.

[FR Doc. 2015–03473 Filed 2–18–15; 8:45 am]

BILLING CODE 6351–01–P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Docket ID: DoD–2014–OS–0135]

Submission for OMB Review; Comment Request

ACTION: Notice.

SUMMARY: The Department of Defense has submitted to OMB for clearance, the following proposal for collection of information under the provisions of the Paperwork Reduction Act.

DATES: Consideration will be given to all comments received by March 23, 2015.

FOR FURTHER INFORMATION CONTACT: Fred Licari, 571–372–0493.

SUPPLEMENTARY INFORMATION:

Title, Associated Form and Omb Number: 2015 Survey of Registered Voters Living Overseas; OMB Control Number 0704–TBD.

Type of Request: New

Number of Respondents: 18,000

Responses per Respondent: 1

Annual Responses: 18,000

Average Burden per Response: 10 minutes

Annual Burden Hours: 3,000

Needs and Uses: The Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) requires the States to allow Uniformed Services personnel, their family members, and overseas citizens to use absentee registration procedures and to vote by absentee ballot in general, special, primary, and runoff elections for Federal offices. The Act covers members of the Uniformed Services and the merchant marine to include the commissioned corps of the National Oceanic and Atmospheric Administration and Public Health Service and their eligible dependents, Federal civilian employees overseas, and overseas U.S. citizens not affiliated with the Federal Government. Subsequent to each Presidential election year, FVAP must report voter registration and participation rates for uniformed service voters and overseas citizens to Congress; while FVAP collects data for this report through regular surveys of uniformed service voters and other relevant UOCAVA populations, it does not currently collect data from non-military, non-government overseas civilians. The 2015 Survey of Registered Voters Living Overseas research project will serve as a pilot, examining the feasibility of collecting data from this population by surveying a sample of registered voters living overseas during the 2014 election. Collecting information from this population will also support FVAP in its purpose of ensuring that Service members, their eligible family members and overseas citizens are aware of their right to vote and have the tools and resources to successfully do so from anywhere in the world. In addition to determining the feasibility of conducting a survey of overseas civilians, the information collected will be used for overall program evaluation, management and improvement, and to compile the congressionally-mandated report to the President and Congress.

Affected Public: Individuals or households.

Frequency: On occasion.

Respondent's Obligation: Voluntary.

Omb Desk Officer: Ms. Jasmeet Seehra.

Written comments and recommendations on the proposed information collection should be sent to Ms. Jasmeet Seehra at the Office of Management and Budget, Desk Officer for DoD, Room 10236, New Executive Office Building, Washington, DC 20503.

You may also submit comments, identified by docket number and title, by the following method:

- Federal eRulemaking Portal: *http://www.regulations.gov.* Follow the instructions for submitting comments.

Instructions: All submissions received must include the agency name, docket number and title for this **Federal Register** document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at *http://www.regulations.gov* as they are received without change, including any personal identifiers or contact information.

DOD Clearance Officer: Mr. Frederick Licari.

Written requests for copies of the information collection proposal should be sent to Mr. Licari at WHS/ESD Directives Division, 4800 Mark Center Drive, East Tower, Suite 02G09, Alexandria, VA 22350–3100.

Dated: February 12, 2015.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2015–03348 Filed 2–18–15; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Docket ID: DoD–2013–OS–0176]

Proposed Collection; Comment Request

AGENCY: Defense Finance and Accounting Service (DFAS), DoD.

ACTION: Notice.

SUMMARY: In compliance with the *Paperwork Reduction Act of 1995,* the DFAS announces a proposed public information collection and seeks public comment on the provisions thereof. Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed information collection; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology.

DATES: Consideration will be given to all comments received by April 20, 2015.

ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Mail:* Federal Docket Management System Office, 4800 Mark Center Drive, East Tower, Suite 02G09, Alexandria, VA 22350–3100.

Instructions: All submissions received must include the agency name, docket number and title for this **Federal Register** document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at *http://www.regulations.gov* as they are received without change, including any personal identifiers or contact information.

FOR FURTHER INFORMATION CONTACT: To request more information on this proposed information collection or to obtain a copy of the proposal and associated collection instruments, please write to the Defense Finance and Accounting Services—Cleveland, 1240 East 9th Street, Cleveland, OH 44199, ATTN: JFBDA—Mr. Charles Moss, *charles.moss@dfas.mil,* 216–204–4426.

SUPPLEMENTARY INFORMATION:

Title; Associated Form; and OMB Number: Trustee Report, DD 2826, OMB 0730–0012.

Needs and Uses: This form is used to report on the administration of the funds received on behalf of a mentally incompetent member of the uniformed services pursuant to 37 U.S.C. 602–604.

Affected Public: Individuals or households.

Annual Burden Hours: 300 hours.

Number of Respondents: 300.

Responses per Respondent: 1.

Average Burden per Response: 1 hour.

Frequency: On occasion.

When a member of the uniformed services is declared mentally incompetent, the need arises to have a trustee appointed to act on their behalf with regard to military pay matters. Trustees will complete this form to report the administration of the funds received on behalf of the member. The requirement to complete this form helps alleviate the opportunity for fraud, waste and abuse of Government funds and member's benefits.

Dated: February 12, 2015.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2015–03357 Filed 2–18–15; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal Nos. 14–55]

36(b)(1) Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense.

ACTION: Notice.

SUMMARY: The Department of Defense is publishing the unclassified text of a section 36(b)(1) arms sales notification. This is published to fulfill the requirements of section 155 of Public Law 104–164 dated July 21, 1996.

FOR FURTHER INFORMATION CONTACT: Ms. B. English, DSCA/DBO/CFM, (703) 601–3740.

The following is a copy of a letter to the Speaker of the House of Representatives, Transmittals 14–55 with attached transmittal, policy justification, and Sensitivity of Technology.

Dated: February 12, 2015.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

DEFENSE SECURITY COOPERATION AGENCY
201 12TH STREET SOUTH, STE 203
ARLINGTON, VA 22202-5408

The Honorable John A. Boehner
Speaker of the House
U.S. House of Representatives
Washington, DC 20515

FEB 06 2015

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 14-55, concerning the Department of the Air Force's proposed Letter(s) of Offer and Acceptance to The Netherlands for defense articles and services estimated to cost $339 million. After this letter is delivered to your office, we plan to issue a press statement to notify the public of this proposed sale.

Sincerely,

J. W. Rixey
Vice Admiral, USN
Director

Enclosures:
1. Transmittal
2. Policy Justification
3. Sensitivity of Technology

Transmittal No. 14–55

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

(i) *Prospective Purchaser:* The Netherlands

(ii) *Total Estimated Value:*

Major Defense Equipment*	$108 million
Other	$231 million
TOTAL	$339 million

* as defined in Section 47(6) of the Arms Export Control Act.

(iii) *Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:*

4 MQ–9 Block 5 Reaper Remotely Piloted Aircraft
4 Mobile Ground Control Stations Block 30 (option Block 50)
6 Honeywell TPE331–10T Turboprop Engines (4 installed and 2 spares)
2 SATCOM Earth Terminal Sub-System
6 AN/DAS–1 Multi-Spectral Targeting Systems (MTS)-B
4 General Atomics Lynx (exportable) Synthetic Aperture Radar/Ground Moving Target Indicator (SAR/GMTI) Systems, w/Maritime Wide Area Search capability
2 Ruggedized Aircraft Maintenance Test Stations
20 ARC–210 RT–1939 Radio Systems
8 KY–1006 Common Crypto Modules
8 Ku-band Link-Airborne Communications Systems
4 KIV–77 Mode 4/5 Identification Friend or Foe

4 AN/APX–119 Mode 4/5 Identification Friend or Foe (IFF) Transponder (515 Model)
14 Honeywell H–764 Adaptive Configurable Embedded Global Positioning System/Inertial Guidance Units (EGI) with Selective Availability Anti-Spoofing Module (SAASM) (12 installed and 2 spares)

Also provided are an Initial Spares Package (ISP) and Readiness Spares Package (RSP) to support 3400 Flight Hours for a three (3) year period, support and test equipment, publications and technical documentation, personnel training and training equipment, U.S. Government and contractor engineering, technical and logistics support services, and other related elements of logistical and program support.

(iv) *Military Department:* Air Force (SMQ).

(v) *Prior Related Cases, if any:* None.

(vi) *Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid:* None.

(vii) *Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold:* See Attached Annex.

(viii) *Date Report Delivered to Congress:* 06 Feb 2015.

Policy Justification

The Netherlands—MQ–9 Reapers

The Government of the Netherlands has requested a possible sale of:

4 MQ–9 Block 5 Reaper Remotely Piloted Aircraft
4 Mobile Ground Control Stations Block 30 (option Block 50)
6 Honeywell TPE331–10T Turboprop Engines (4 installed and 2 spares)
2 SATCOM Earth Terminal Sub-System
6 AN/DAS–1 Multi-Spectral Targeting Systems (MTS)–B
4 General Atomics Lynx (exportable) Synthetic Aperture Radar/Ground Moving Target Indicator (SAR/GMTI) Systems, w/Maritime Wide Area Search capability
2 Ruggedized Aircraft Maintenance Test Stations
20 ARC–210 RT–1939 Radio Systems
8 KY–1006 Common Crypto Modules
8 Ku-band Link-Airborne Communications Systems
4 KIV–77 Mode 4/5 Identification Friend or Foe
4 AN/APX–119 Mode 4/5 Identification Friend or Foe (IFF) Transponder (515 Model)
14 Honeywell H–764 Adaptive Configurable Embedded Global Positioning System/Inertial Guidance Units (EGI) with Selective Availability Anti-Spoofing Module (SAASM) (12 installed and 2 spares)

Also provided are an Initial Spares Package (ISP) and Readiness Spares Package (RSP) to support 3400 Flight Hours for a three (3) year period, support and test equipment, publications and technical documentation, personnel training and training equipment, U.S. Government and contractor engineering, technical and logistics support services, and other related elements of logistical and program support. The estimated cost is $339 million.

The Netherlands is one of the major political and economic powers in Europe and NATO and an ally of the United States in the pursuit of peace and stability. It is vital to the U.S. national interest to assist the Netherlands to develop and maintain a strong and ready self-defense capability. This potential sale will enhance the intelligence, surveillance, and reconnaissance (ISR) capability of the Dutch military in support of national, NATO, UN-mandated, and other coalition operations. Commonality of ISR capabilities will greatly increase interoperability between U.S and Dutch military and peacekeeping forces.

The Netherlands requests this capability to provide for the defense of its deployed troops, regional security, and interoperability with the U.S. The proposed sale will improve the Netherland's capability to meet current and future threats by providing improved ISR coverage that promotes increased battlefield situational awareness, anticipates enemy intent, augments combat search and rescue, and provides ground troop support. The Netherlands will have no difficulty absorbing this additional capability into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractor will be General Atomics Aeronautical Systems, Inc. in San Diego, California. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale may require U.S. contractor representatives to make multiple trips to the Netherlands and potentially to deployed locations to provide initial launch, recovery, and maintenance support.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Transmittal No. 14–55

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act

Annex—Item No. vii

(vii) *Sensitivity of Technology:*

1. The MQ–9 Block 5 Reaper is a long-endurance, high-altitude, Remotely Piloted Aircraft that can be used for surveillance, military reconnaissance, and targeting missions. Real-time missions are flown under the control of a pilot in a Ground Control Station (GCS). A data link is maintained that uplinks control commands and downlinks video with telemetry data. The data link can be a C-Band Line-of-Sight (LOS) communication or Ku–Band Over-the-Horizon Satellite Communication (SATCOM). Payload imagery and data are downlinked to a GCS. Pilots can change mission parameters as often as required. The aircraft can also be handed off to other strategically placed ground- or sea-based GCSs. The MQ–9 air vehicle is a Missile Technology Control Regime (MTCR) Category 1 system, designed to carry 800 pounds of internal payload with maximum fuel and 3000 pounds of external payload. It can carry multiple mission payloads aloft with a range of 1800km. The MQ–9 will be configured for the following payloads: Electro-Optical/Infrared (EO/IR), Synthetic Aperture Radar (SAR), and laser designators. The MQ–9 systems will include the following components:

a. The GCS can be either fixed or mobile. The fixed GCS is enclosed in a customer-specified shelter. It incorporates workstations that allow operators to control and monitor the aircraft, as well as record and exploit downlinked payload data. The mobile GCS allows operators to perform the same functions and is installed on a mobile trailer. Workstations in either GCS can be tailored to meet customer requirements. The GCS, technical data, and documents are Unclassified.

b. The Lynx IIe family includes the AN/APY–8 Block 20 and AN/DPY–1 Block 30 Synthetic Aperture Radar and Ground Moving Target Radar systems, which provide all-weather surveillance, tracking and targeting for military and commercial customers from manned and unmanned vehicles. The AN/DPY–1's three- meter resolution can image up to a 10-km wide swath for wide-area surveillance. The Lynx IIe-9 (exportable) SAR/GMTI radar system and technical data/documents are Unclassified.

c. The Raytheon AN/DAS–1 Multi-Spectral Targeting System (MTS–B) is a multi-use infrared (IR), electro-optical

(EO), and laser detecting ranging-tracking set, developed and produced for use by the U.S. Air Force on the MQ–9 Reaper. This advanced EO and IR system provides long-range surveillance, high altitude, target acquisition, tracking, range finding, and laser designation for all tri-service and NATO laser-guided munitions.

d. The Honeywell H–764 Adaptive Configurable Embedded Global Positioning System/Inertial Guidance Unit (EGI) contains the Force 524D GPS Receiver card with Selective Availability Anti-Spoofing Module (SAASM). The Force 524D is a 24-channel SAASM based GPS receiver with precise positioning service capability built upon Trimble's next generation GPS technology. The Force 524D retains backward compatibility with the proven Force 5GS while adding new functionality to interface with the digital antenna electronics to significantly improve anti-jam performance. The host platform can select the radio frequency of digital antenna electronics interface. In the digital mode, the Force 524D is capable of controlling up to 16 independent beams.

2. The MQ–9 Reaper Remotely Piloted Aircraft is Unclassified. The highest level of classified information required for training, operation, and maintenance is Secret.

3. If a technologically advanced adversary were to obtain knowledge of the specific hardware or software in this proposed sale, the information could be used to develop countermeasures which might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

4. A determination has been made that the recipient country can provide the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

5. All defense articles and services listed in this transmittal have been authorized for release and export to the Government of the Netherlands.

[FR Doc. 2015–03387 Filed 2–18–15; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF EDUCATION

Applications for New Awards; Fulbright-Hays Group Projects Abroad Program—Short-Term Projects

AGENCY: Office of Postsecondary Education, Department of Education.

ACTION: Notice.

Overview Information:

Fulbright-Hays Group Projects Abroad Program—Short-Term Projects

Notice Inviting Applications for New Awards for Fiscal Year (FY) 2015

Catalog of Federal Domestic Assistance (CFDA) Number: 84.021A.

DATES:

Applications Available: February 19, 2015.

Deadline for Transmittal of Applications: March 23, 2015.

Full Text of Announcement

I. Funding Opportunity Description

Purpose of Program: The Fulbright-Hays Group Projects Abroad (Fulbright-Hays GPA) Program supports overseas projects in training, research, and curriculum development in modern foreign languages and area studies for groups of teachers, students, and faculty engaged in a common endeavor. Short-term projects may include seminars, curriculum development, or group research or study.

Priorities: This notice contains one absolute priority, three competitive preference priorities, and one invitational priority. In accordance with 34 CFR 75.105(b)(2)(ii), the absolute priority is from the regulations for this program (34 CFR 664.32). Competitive Preference Priorities 1 and 2 are from the regulations for this program (34 CFR 664.32), and Competitive Preference Priority 3 is from the notice of final priorities published in the **Federal Register** on September 24, 2010 (75 FR 59050).

Absolute Priority: For FY 2015 and any subsequent year in which we make awards from the list of unfunded applicants from this competition, this priority is an absolute priority. Under 34 CFR 75.105(c)(3), we consider only applications that meet this priority.

This priority is:

Specific Geographic Regions of the World.

A group project that focuses on one or more of the following geographic regions of the world: Africa, East Asia, South Asia, Southeast Asia and the Pacific, the Western Hemisphere (Central and South America, Mexico, and the Caribbean), East Central Europe and Eurasia, and the Near East.

Competitive Preference Priorities: Within this absolute priority, we give competitive preference to applications that address one or more of the following three priorities.

Under 34 CFR 75.105(c)(2)(i), for FY 2015, we award an additional two points to an application that meets Competitive Preference Priority 1; up to an additional three points to an application that meets Competitive Preference Priority 2; and up to an additional five points to an application that meets Competitive Preference Priority 3. An applicant can address one, two, or all three of the competitive preference priorities. We can therefore award up to an additional 10 total points to an application, depending on how well the application meets competitive preference priorities 1, 2, and 3.

Note: In order to receive preference under these competitive preference priorities, the applicant must identify the priority or priorities that it believes it meets and provide documentation supporting its claims.

These priorities are:

Competitive Preference Priority 1: Specific Geographic Regions of the World (2 Points).

Applications that focus on one or more of the following geographic regions of the world: sub-Saharan Africa (Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mayotte, Mozambique, Namibia, Niger, Nigeria, Republic of the Congo, Réunion, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe); South Asia (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka); and Southeast Asia (Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, Timor-Leste, Vietnam).

Competitive Preference Priority 2: Substantive Training and Thematic Focus on Priority Languages (Up to 3 Points).

Applications that propose short-term projects abroad that provide substantive training and thematic focus on any of the 78 priority languages selected from the U.S. Department of Education's list of Less Commonly Taught Languages: Akan (Twi-Fante), Albanian, Amharic,

Arabic (all dialects), Armenian, Azeri (Azerbaijani), Balochi, Bamanakan (Bamana, Bambara, Mandikan, Mandingo, Maninka, Dyula), Belarusian, Bengali (Bangla), Berber (all languages), Bosnian, Bulgarian, Burmese, Cebuano (Visayan), Chechen, Chinese (Cantonese), Chinese (Gan), Chinese (Mandarin), Chinese (Min), Chinese (Wu), Croatian, Dari, Dinka, Georgian, Gujarati, Hausa, Hebrew (Modern), Hindi, Igbo, Indonesian, Japanese, Javanese, Kannada, Kashmiri, Kazakh, Khmer (Cambodian), Kirghiz, Korean, Kurdish (Kurmanji), Kurdish (Sorani), Lao, Malay (Bahasa Melayu or Malaysian), Malayalam, Marathi, Mongolian, Nepali, Oromo, Panjabi, Pashto, Persian (Farsi), Polish, Portuguese (all varieties), Quechua, Romanian, Russian, Serbian, Sinhala (Sinhalese), Somali, Swahili, Tagalog, Tajik, Tamil, Telugu, Thai, Tibetan, Tigrigna, Turkish, Turkmen, Ukrainian, Urdu, Uyghur/Uigur, Uzbek, Vietnamese, Wolof, Xhosa, Yoruba, and Zulu.

Competitive Preference Priority 3: Inclusion of K–12 Educators (Up to 5 Points).

Applications that propose short-term projects abroad that develop and improve foreign language studies, area studies, or both at elementary and secondary schools by including K–12 teachers or K–12 administrators as at least 50 percent of the project participants.

Invitational Priority: For FY 2015 and any subsequent year in which we make awards based on the list of unfunded applicants from this competition, this priority is an invitational priority. Under 34 CFR 75.105(c)(1), we do not give an application that meets this invitational priority a competitive or absolute preference over other applications.

This priority is:

Applications from any one of the following:

(a) Minority-Serving Institutions (as defined in this notice).

(b) Community colleges (as defined in this notice).

(c) New applicants (as defined in this notice).

Definitions:

Minority-Serving Institution means an institution that is eligible to receive assistance under sections 316 through 320 of part A of title III, under part B of title III, or under title V of the Higher Education Act of 1965, as amended (HEA).

Community college means an institution that meets the definition in section 312(f) of the HEA (20 U.S.C. 1058(f)); or an institution of higher education (as defined in section 101 of the HEA (20 U.S.C. 1001)) that awards degrees and certificates, more than 50 percent of which are not bachelor's degrees (or an equivalent).

New applicant means any applicant who has not received a discretionary grant from the Department of Education under a program authorized by title VI of the HEA or the Fulbright-Hays Act for five years prior to the deadline date for applications under this program.

Program Authority: 22 U.S.C. 2452(b)(6).

Applicable Regulations: (a) The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 75, 77, 81, 82, 84, 86, 97, 98, and 99. (b) The OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement) in 2 CFR part 180, as adopted and amended as regulations of the Department in 2 CFR 3485. (c) The Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards in 2 CFR part 200, as adopted and amended in 2 CFR part 3474. (d) The regulations for this program in 34 CFR part 664. (e) The notice of final priorities for this program, published in the **Federal Register** on September 24, 2010 (75 FR 59050).

Note: The regulations in 34 CFR part 86 apply to institutions of higher education (IHEs) only.

II. Award Information

Type of Award: Discretionary grants.

Estimated Available Funds: $1,361,000.

Estimated Range of Awards: $50,000—$125,000.

Estimated Average Size of Awards: 80,059.

Maximum Award: We will reject any application that proposes a budget exceeding $125,000 for a single budget period of 18 months. The Assistant Secretary for Postsecondary Education may change the maximum award through a notice published in the **Federal Register.**

Estimated Number of Awards: 17.

Note: The Department is not bound by any estimates in this notice.

Project Period: Up to 18 months.

III. Eligibility Information

1. *Eligible Applicants:* (1) IHEs, (2) State departments of education, (3) Private nonprofit educational organizations, and (4) Consortia of these entities.

2. *Cost Sharing or Matching:* This program does not require cost sharing or matching.

IV. Application and Submission Information

1. *Address to Request Application Package:* You can obtain an application package via the Internet or from the Education Publications Center (ED Pubs). To obtain a copy via the Internet, use the following address: *www.Grants.gov.* To obtain a copy from ED Pubs, write, fax, or call the following: ED Pubs, U.S. Department of Education, P.O. Box 22207, Alexandria, VA 22304. Telephone, toll free: 1–877–433–7827. FAX: (703) 605–6794. If you use a telecommunications device for the deaf (TDD) or a text telephone (TTY), call, toll free: 1–877–576–7734.

You can contact ED Pubs at its Web site, also: *www.EDPubs.gov* or at its email address: *edpubs@inet.ed.gov.*

If you request an application from ED Pubs, be sure to identify this program as follows: CFDA number 84.021A.

Individuals with disabilities can obtain a copy of the application package in an accessible format (*e.g.,* braille, large print, audiotape, or compact disc) by contacting the person listed under **FOR FURTHER INFORMATION CONTACT** in section VII of this notice.

2. *Content and Form of Application Submission:* Requirements concerning the content of an application, together with the forms you must submit, are in the application package for this program.

Page Limit: The application narrative is where you, the applicant, address the selection criteria that reviewers use to evaluate your application. You must limit the application narrative (Part III) to no more than 40 pages, using the following standards:

- A ''page'' is 8.5″ x 11″, on one side only, with 1'' margins at the top, bottom, and both sides.
- Double space (no more than three lines per vertical inch) all text in the application narrative, *except* titles, headings, footnotes, quotations, references, and captions. Charts, tables, figures, and graphs in the application narrative may be single spaced and will count toward the page limit.
- Use a font that is either 12 point or larger or no smaller than 10 pitch (characters per inch). However, you may use a 10-point font in charts, tables, figures, and graphs.
- Use one of the following fonts: Times New Roman, Courier, Courier New, or Arial. An application submitted in any other font (including Times Roman and Arial Narrow) will not be accepted.
- The 40-page limit does not apply to Part I, the Application for Federal Assistance face sheet (SF 424); the

supplemental information form required by the Department of Education; Part II, Budget Information—Non-Construction Programs (ED 524); Part IV, assurances, certifications, and the response to section 427 of the General Education Provisions Act (GEPA); the table of contents; the one-page project abstract; the appendices; or the line-item budget. However, the page limit does apply to all of the application narrative (Part III). If you include any attachments or appendices not specifically requested, these items will be counted as part of the application narrative for purposes of the page-limit requirement.

We will reject your application if you exceed the page limit.

3. *Submission Dates and Times:*

Applications Available: February 19, 2015.

Deadline for Transmittal of Applications: March 23, 2015.

Applications for grants under this program must be submitted electronically using the Grants.gov Apply site (Grants.gov). For information (including dates and times) about how to submit your application electronically, or in paper format by mail or hand delivery if you qualify for an exception to the electronic submission requirement, please refer to section IV. 7. *Other Submission Requirements* of this notice.

We do not consider an application that does not comply with the deadline requirements.

Individuals with disabilities who need an accommodation or auxiliary aid in connection with the application process should contact the person listed under **FOR FURTHER INFORMATION CONTACT** in section VII of this notice. If the Department provides an accommodation or auxiliary aid to an individual with a disability in connection with the application process, the individual's application remains subject to all other requirements and limitations in this notice.

4. *Intergovernmental Review:* This program is not subject to Executive Order 12372 and the regulations in 34 CFR part 79.

5. *Funding Restrictions:* We specify unallowable costs in 34 CFR 664.33. We reference additional regulations outlining funding restrictions in the *Applicable Regulations* section of this notice.

6. *Data Universal Numbering System Number, Taxpayer Identification Number, and System for Award Management:* To do business with the Department of Education, you must—

a. Have a Data Universal Numbering System (DUNS) number and a Taxpayer Identification Number (TIN);

b. Register both your DUNS number and TIN with the System for Award Management (SAM) (formerly the Central Contractor Registry (CCR)), the Government's primary registrant database;

c. Provide your DUNS number and TIN on your application; and

d. Maintain an active SAM registration with current information while your application is under review by the Department and, if you are awarded a grant, during the project period.

You can obtain a DUNS number from Dun and Bradstreet. A DUNS number can be created within one to two business days.

If you are a corporate entity, agency, institution, or organization, you can obtain a TIN from the Internal Revenue Service. If you are an individual, you can obtain a TIN from the Internal Revenue Service or the Social Security Administration. If you need a new TIN, please allow 2–5 weeks for your TIN to become active.

The SAM registration process can take approximately seven business days, but may take upwards of several weeks, depending on the completeness and accuracy of the data entered into the SAM database by an entity. Thus, if you think you might want to apply for Federal financial assistance under a program administered by the Department, please allow sufficient time to obtain and register your DUNS number and TIN. We strongly recommend that you register early.

Note: Once your SAM registration is active, you will need to allow 24 to 48 hours for the information to be available in Grants.gov and before you can submit an application through Grants.gov.

If you are currently registered with SAM, you may not need to make any changes. However, please make certain that the TIN associated with your DUNS number is correct. Also note that you will need to update your registration annually. This may take three or more business days.

Information about SAM is available at *www.SAM.gov.* To further assist you with obtaining and registering your DUNS number and TIN in SAM or updating your existing SAM account, we have prepared a SAM.gov Tip Sheet, which you can find at: *http://www2.ed.gov/fund/grant/apply/sam-faqs.html.*

In addition, if you are submitting your application via Grants.gov, you must (1) be designated by your organization as an Authorized Organization Representative (AOR); and (2) register yourself with Grants.gov as an AOR. Details on these steps are outlined at the following Grants.gov Web page: *www.grants.gov/web/grants/register.html.*

7. *Other Submission Requirements:* Applications for grants under this program must be submitted electronically unless you qualify for an exception to this requirement in accordance with the instructions in this section.

a. *Electronic Submission of Applications.*

Applications for grants under the Fulbright-Hays GPA Program, CFDA number 84.021A, must be submitted electronically using the Governmentwide Grants.gov Apply site at *www.Grants.gov.* Through this site, you will be able to download a copy of the application package, complete it offline, and then upload and submit your application. You may not email an electronic copy of a grant application to us.

We will reject your application if you submit it in paper format unless, as described elsewhere in this section, you qualify for one of the exceptions to the electronic submission requirement and submit, no later than two weeks before the application deadline date, a written statement to the Department that you qualify for one of these exceptions. Further information regarding calculation of the date that is two weeks before the application deadline date is provided later in this section under *Exception to Electronic Submission Requirement.*

You may access the electronic grant application for the Fulbright-Hays GPA Program at *www.Grants.gov.* You must search for the downloadable application package for this program by the CFDA number. Do not include the CFDA number's alpha suffix in your search (*e.g.,* search for 84.021, not 84.021A).

Please note the following:

- When you enter the Grants.gov site, you will find information about submitting an application electronically through the site, as well as the hours of operation.
- Applications received by Grants.gov are date and time stamped. Your application must be fully uploaded and submitted and must be date and time stamped by the Grants.gov system no later than 4:30:00 p.m., Washington, DC time, on the application deadline date. Except as otherwise noted in this section, we will not accept your application if it is received—that is, date and time stamped by the Grants.gov system—after 4:30:00 p.m., Washington, DC time, on the application deadline

date. We do not consider an application that does not comply with the deadline requirements. When we retrieve your application from Grants.gov, we will notify you if we are rejecting your application because it was date and time stamped by the Grants.gov system after 4:30:00 p.m., Washington, DC time, on the application deadline date.

• The amount of time it can take to upload an application will vary depending on a variety of factors, including the size of the application and the speed of your Internet connection. Therefore, we strongly recommend that you do not wait until the application deadline date to begin the submission process through Grants.gov.

• You should review and follow the Education Submission Procedures for submitting an application through Grants.gov that are included in the application package for this program to ensure that you submit your application in a timely manner to the Grants.gov system. You can also find the Education Submission Procedures pertaining to Grants.gov under News and Events on the Department's G5 system home page at *www.G5.gov.*

• You will not receive additional point value because you submit your application in electronic format, nor will we penalize you if you qualify for an exception to the electronic submission requirement, as described elsewhere in this section, and submit your application in paper format.

• You must submit all documents electronically, including all information you typically provide on the following forms: The Application for Federal Assistance (SF 424), the Department of Education Supplemental Information for SF 424, Budget Information—Non-Construction Programs (ED 524), and all necessary assurances and certifications.

• You must upload any narrative sections and all other attachments to your application as files in a PDF (Portable Document) read-only, non-modifiable format. Do not upload an interactive or fillable PDF file. If you upload a file type other than a read-only, non-modifiable PDF or submit a password-protected file, we will not review that material.

• Your electronic application must comply with any page-limit requirements described in this notice.

• After you electronically submit your application, you will receive from Grants.gov an automatic notification of receipt that contains a Grants.gov tracking number. (This notification indicates receipt by Grants.gov only, not receipt by the Department.) The Department then will retrieve your application from Grants.gov and send a second notification to you by email. This second notification indicates that the Department has received your application and has assigned your application a PR/Award number (an ED-specified identifying number unique to your application).

• We may request that you provide us original signatures on forms at a later date.

Application Deadline Date Extension in Case of Technical Issues with the Grants.gov System: If you are experiencing problems submitting your application through Grants.gov, please contact the Grants.gov Support Desk, toll free, at 1–800–518–4726. You must obtain a Grants.gov Support Desk Case Number and must keep a record of it.

If you are prevented from electronically submitting your application on the application deadline date because of technical problems with the Grants.gov system, we will grant you an extension until 4:30:00 p.m., Washington, DC time, the following business day to enable you to transmit your application electronically or by hand delivery. You also may mail your application by following the mailing instructions described elsewhere in this notice.

If you submit an application after 4:30:00 p.m., Washington, DC time, on the application deadline date, please contact the person listed under **FOR FURTHER INFORMATION CONTACT** in section VII of this notice and provide an explanation of the technical problem you experienced with Grants.gov, along with the Grants.gov Support Desk Case Number. We will accept your application if we can confirm that a technical problem occurred with the Grants.gov system and that that problem affected your ability to submit your application by 4:30:00 p.m., Washington, DC time, on the application deadline date. The Department will contact you after a determination is made on whether your application will be accepted.

Note: The extensions to which we refer in this section apply only to the unavailability of, or technical problems with, the Grants.gov system. We will not grant you an extension if you failed to fully register to submit your application to Grants.gov before the application deadline date and time or if the technical problem you experienced is unrelated to the Grants.gov system.

Exception to Electronic Submission Requirement: You qualify for an exception to the electronic submission requirement, and may submit your application in paper format, if you are unable to submit an application through the Grants.gov system because—

• You do not have access to the Internet; or

• You do not have the capacity to upload large documents to the Grants.gov system; and

• No later than two weeks before the application deadline date (14 calendar days or, if the fourteenth calendar day before the application deadline date falls on a Federal holiday, the next business day following the Federal holiday), you mail or fax a written statement to the Department, explaining which of the two grounds for an exception prevents you from using the Internet to submit your application.

If you mail your written statement to the Department, it must be postmarked no later than two weeks before the application deadline date. If you fax your written statement to the Department, we must receive the faxed statement no later than two weeks before the application deadline date.

Address and mail or fax your statement for Fulbright-Hays GPA Short-Term Projects (CFDA 84.021A) to: Reha Mallory, Fulbright-Hays Group Projects Abroad Program, U.S. Department of Education, 1990 K Street NW., room 6100, Washington, DC 20006–8521. FAX: (202) 502–7675.

Your paper application must be submitted in accordance with the mail or hand delivery instructions described in this notice.

b. *Submission of Paper Applications by Mail.*

If you qualify for an exception to the electronic submission requirement, you may mail (through the U.S. Postal Service or a commercial carrier) your application to the Department. You must mail the original and two copies of your application, on or before the application deadline date, to the Department at the following address: U.S. Department of Education, Application Control Center,Attention: (CFDA Number 84.021A), LBJ Basement Level 1, 400 Maryland Avenue SW., Washington, DC 20202–4260.

You must show proof of mailing consisting of one of the following:

(1) A legibly dated U.S. Postal Service postmark.

(2) A legible mail receipt with the date of mailing stamped by the U.S. Postal Service.

(3) A dated shipping label, invoice, or receipt from a commercial carrier.

(4) Any other proof of mailing acceptable to the Secretary of the U.S. Department of Education.

If you mail your application through the U.S. Postal Service, we do not accept either of the following as proof of mailing:

(1) A private metered postmark.

(2) A mail receipt that is not dated by the U.S. Postal Service.

If your application is postmarked after the application deadline date, we will not consider your application.

Note: The U.S. Postal Service does not uniformly provide a dated postmark. Before relying on this method, you should check with your local post office.

c. *Submission of Paper Applications by Hand Delivery.*

If you qualify for an exception to the electronic submission requirement, you (or a courier service) may deliver your paper application to the Department by hand. You must deliver the original and two copies of your application by hand, on or before the application deadline date, to the Department at the following address: U.S. Department of Education, Application Control Center, Attention: (CFDA Number 84.021A), 550 12th Street SW., Room 7039, Potomac Center Plaza, Washington, DC 20202–4260.

The Application Control Center accepts hand deliveries daily between 8:00 a.m. and 4:30:00 p.m., Washington, DC time, except Saturdays, Sundays, and Federal holidays.

Note for Mail or Hand Delivery of Paper Applications: If you mail or hand deliver your application to the Department—

(1) You must indicate on the envelope and—if not provided by the Department—in Item 11 of the SF 424 the CFDA number, including suffix letter, if any, of the competition under which you are submitting your application; and

(2) The Application Control Center will mail to you a notification of receipt of your grant application. If you do not receive this notification within 15 business days from the application deadline date, you should call the U.S. Department of Education Application Control Center at (202) 245–6288.

V. Application Review Information

1. *General Information:* For FY 2015, short-term project applications will be reviewed by separate panels according to world area. Each panel reviews, scores, and ranks its applications separately from the applications assigned to the other world area panels. However, all applications will be ranked against each other from the highest to the lowest score for funding purposes. A rank order from highest to lowest score will be developed and will be used for funding purposes.

2. *Selection Criteria:* The selection criteria for this program are from 34 CFR 664.31 and are as follows: (a) Plan of operation (20 points); (b) Quality of key personnel (10 points); (c) Budget and cost effectiveness (10 points); (d) Evaluation plan (20 points); (e) Adequacy of resources (5 points); (f) Potential impact of the project on the development of the study of modern foreign languages and area studies in American education (15 points); (g) The project's relevance to the applicant's educational goals and its relationship to its program development in modern foreign languages and area studies (5 points); and (h) The extent to which direct experience abroad is necessary to achieve the project's objectives and the effectiveness with which relevant host country resources will be utilized (10 points). Additional information about these criteria is in the application package for this program.

3. *Review and Selection Process:* We remind potential applicants that in reviewing applications in any discretionary grant competition, the Secretary may consider, under 34 CFR 75.217(d)(3), the past performance of the applicant in carrying out a previous award, such as the applicant's use of funds, achievement of project objectives, and compliance with grant conditions. The Secretary may also consider whether the applicant failed to submit a timely performance report or submitted a report of unacceptable quality.

In addition, in making a competitive grant award, the Secretary also requires various assurances including those applicable to Federal civil rights laws that prohibit discrimination in programs or activities receiving Federal financial assistance from the Department of Education (34 CFR 100.4, 104.5, 106.4, 108.8, and 110.23).

4. *Special Conditions:* Under 2 CFR 3474.10, the Secretary may impose special conditions and, in appropriate circumstances, high-risk conditions on a grant if the applicant or grantee is not financially stable; has a history of unsatisfactory performance; has a financial or other management system that does not meet the standards in 2 CFR part 200, subpart D; has not fulfilled the conditions of a prior grant; or is otherwise not responsible.

VI. Award Administration Information

1. *Award Notices:* If your application is successful, we notify your U.S. Representative and U.S. Senators and send you a Grant Award Notification (GAN); or we may send you an email containing a link to access an electronic version of your GAN. We may notify you informally, also.

If your application is not evaluated or not selected for funding, we notify you.

2. *Administrative and National Policy Requirements:* We identify administrative and national policy requirements in the application package and reference these and other requirements in the *Applicable Regulations* section of this notice.

We reference the regulations outlining the terms and conditions of an award in the *Applicable Regulations* section of this notice and include these and other specific conditions in the GAN. The GAN also incorporates your approved application as part of your binding commitments under the grant.

3. *Reporting:* (a) If you apply for a grant under this competition, you must ensure that you have in place the necessary processes and systems to comply with the reporting requirements in 2 CFR part 170 should you receive funding under the competition. This does not apply if you have an exception under 2 CFR 170.110(b).

(b) At the end of your project period, you must submit a final performance report, including financial information, as directed by the Secretary. If you receive a multi-year award, you must submit an annual performance report that provides the most current performance and financial expenditure information as directed by the Secretary under 34 CFR 75.118. Grantees are required to use the electronic data instrument International Resource Information System (IRIS) to complete the final report. The Secretary may also require more frequent performance reports under 34 CFR 75.720(c). For specific requirements on reporting, please go to *www.ed.gov/fund/grant/apply/appforms/appforms.html.*

4. *Performance Measures:* Under the Government Performance and Results Act of 1993, the following measures will be used by the Department to evaluate the success of the GPA short-term program: percentage of GPA participants who disseminated information about or materials from their group project abroad through more than one outreach activity within six months of returning to their home institution.

The information provided by grantees in their performance reports submitted via IRIS will be the source of data for this measure. Reporting screens for institutions can be viewed at: *http://iris.ed.gov/iris/pdfs/gpa_director.pdf* and *http://iris.ed.gov/iris/pdfs/gpa_participant.pdf.*

VII. Agency Contact

FOR FURTHER INFORMATION CONTACT: Reha Mallory, Fulbright-Hays Group Projects Abroad Program, U.S. Department of Education, 1990 K Street NW., Room 6100, Washington, DC 20006–8521. Telephone: (202) 502–7605 or by email: *reha.mallory@ed.gov.*

If you use a TDD or a TTY, call the FRS, toll free, at 1–800–877–8339.

VIII. Other Information

Accessible Format: Individuals with disabilities can obtain this document and a copy of the application package in an accessible format (*e.g.,* braille, large print, audiotape, or compact disc) on request to the program contact person listed under **FOR FURTHER INFORMATION CONTACT** in section VII of this notice.

Electronic Access to This Document: The official version of this document is the document published in the **Federal Register**. Free Internet access to the official edition of the **Federal Register** and the Code of Federal Regulations is available via the Federal Digital System at: *www.gpo.gov/fdsys.* At this site, you can view this document, as well as all other documents of this Department published in the **Federal Register**, in text or Adobe Portable Document Format (PDF). To use PDF, you must have Adobe Acrobat Reader, which is available free at the site.

You may also access documents of the Department published in the **Federal Register** by using the article search feature at *www.federalregister.gov.* Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department.

Dated: February 13, 2015.

Ted Mitchell,

Under Secretary.

[FR Doc. 2015–03453 Filed 2–18–15; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF ENERGY

Fusion Energy Sciences Advisory Committee

AGENCY: Office of Science, Department of Energy.

ACTION: Notice of open meeting.

SUMMARY: This notice announces a meeting of the Fusion Energy Sciences Advisory Committee. The Federal Advisory Committee Act (Pub. L. 92–463, 86 Stat. 770) requires that public notice of these meetings be announced in the **Federal Register**.

DATES: Thursday, March 12, 2015—8:30 a.m. to 6:00 p.m., Friday, March 13, 2015—8:30 a.m. to 12:00 noon.

ADDRESSES: Hilton Gaithersburg, 620 Perry Parkway, Gaithersburg, MD 20877.

FOR FURTHER INFORMATION CONTACT: Edmund J. Synakowski, Designated Federal Officer, Office of Fusion Energy Sciences (FES); U.S. Department of Energy; SC–24/Germantown Building, 1000 Independence Avenue SW.; Washington, DC 20585–1290; Telephone: (301) 903–4941.

SUPPLEMENTARY INFORMATION:

Purpose of the Committee: To provide advice on a continuing basis to the Director, Office of Science of the Department of Energy, on the many complexes scientific and technical issues that arises in the development and implementation of the fusion energy sciences program.

Tentative Agenda Items:

- DOE/SC Perspective and FY 2016 President's Budget Request for SC
- FES Perspective and FY 2016 President's Budget Request for FES
- Report of the 2014 Committee of Visitors for FES
- New Charge for a Report about FES Science Contributions and Technology Discoveries Beyond Fusion Energy
- Update on Community Engagement Technical Workshops
- Public Comment
- Adjourn

Note: Remote attendance of the FESAC meeting will be possible via ReadyTalk. Instructions can be found on the FESAC Web site: *(http://science.energy.gov/fes/fesac/meetings/)* or by contacting Dr. Samuel J. Barish by email: *sam.barish@science.doe.gov* or by phone (301) 903–2917.

Public Participation: The meeting is open to the public. If you would like to file a written statement with the Committee, you may do so either before or after the meeting. If you would like to make an oral statement regarding any of the items on the agenda, you should contact Dr. Samuel J. Barish at (301) 903–8584 (fax) or *sam.barish@science.doe.gov* (email). Reasonable provision will be made to include the scheduled oral statements during the Public Comments time on the agenda. The Chairperson of the Committee will conduct the meeting to facilitate the orderly conduct of business. Public comment will follow the 10-minute rule.

Minutes: The minutes of the meeting will be available for public review and copying within 30 days on the Fusion Energy Sciences Advisory Committee Web site at: *http://science.energy.gov/fes/fesac/.*

Issued at Washington, DC, on February 12, 2015.

LaTanya R. Butler,

Deputy Committee Management Officer.

[FR Doc. 2015–03454 Filed 2–18–15; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP15–77–000]

Tennessee Gas Pipeline Company; Notice of Application

Take notice that on January 30, 2015, Tennessee Gas Pipeline Company (Tennessee) filed an application with the Federal Energy Regulatory Commission pursuant to sections 7(b) and 7(c) of the Natural Gas Act (NGA) requesting authority to construct and operate the Broad Run Expansion Project (Project) in Kentucky, Tennessee and West Virginia. Specifically, Tennessee requests authorization to: (i) Construct a new 10,771 hp Compressor Station 118A in Kanawha County, West Virginia; (ii) construct a new 20,500 hp Compressor Station 119A in Kanawha County, West Virginia; (iii) construct a new 16,000 hp Compressor Station 875 in Madison County Kentucky; (iv) construct a new 30,000 hp Compressor Station 563 in Davidson County, Tennessee; (v) install 32,000 hp of new compression at the existing Compressor Station 106 in Powell County, Kentucky; and (vi) install 20,500 hp of additional compression at the existing Compressor Station 114 in Boyd County, Kentucky. The project is designed to provide an additional 200,000 dekatherms per day of firm incremental transportation service for Antero Resources Corporation. A total of 29,750 hp of added compression at the two existing compressor stations in Kentucky would replace old equipment and would be referred to as the Replacement Component of the Project. The remaining balance of the added hp at the existing stations and all of the hp proposed at the new stations are referred to as the Market Component of the Project. The estimated costs for the Market and Replacement components are $337.8 million and $68.5 million respectively.

This filing is available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site web at *http://www.ferc.gov* using the ''eLibrary'' link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, contact FERC at *FERCOnlineSupport@ferc.gov* or call toll-free, (886) 208–3676 or TYY, (202) 502–8659.

Any questions regarding the application should be directed to Shannon M. Miller, Senior Regulatory Analyst, Tennessee Gas Pipeline

Company, LLC, 1001 Louisiana Street, Houston, TX 77002, by phone at (713) 420–4038 or by email at *shannon_miller@kindermorgan.com.*

Pursuant to section 157.9 of the Commission's rules, 18 CFR 157.9, within 90 days of this Notice the Commission staff will either: complete its environmental assessment (EA) and place it into the Commission's public record (eLibrary) for this proceeding; or issue a Notice of Schedule for Environmental Review. If a Notice of Schedule for Environmental Review is issued, it will indicate, among other milestones, the anticipated date for the Commission staff's issuance of the final environmental impact statement (FEIS) or EA for this proposal. The filing of the EA in the Commission's public record for this proceeding or the issuance of a Notice of Schedule for Environmental Review will serve to notify federal and state agencies of the timing for the completion of all necessary reviews, and the subsequent need to complete all federal authorizations within 90 days of the date of issuance of the Commission staff's FEIS or EA.

There are two ways to become involved in the Commission's review of this project. First, any person wishing to obtain legal status by becoming a party to the proceedings for this project should, on or before the comment date stated below file with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, a motion to intervene in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.214 or 385.211) and the Regulations under the NGA (18 CFR 157.10). A person obtaining party status will be placed on the service list maintained by the Secretary of the Commission and will receive copies of all documents filed by the applicant and by all other parties. A party must submit seven copies of filings made in the proceeding with the Commission and must mail a copy to the applicant and to every other party. Only parties to the proceeding can ask for court review of Commission orders in the proceeding.

However, a person does not have to intervene in order to have comments considered. The second way to participate is by filing with the Secretary of the Commission, as soon as possible, an original and two copies of comments in support of or in opposition to this project. The Commission will consider these comments in determining the appropriate action to be taken, but the filing of a comment alone will not serve to make the filer a party to the proceeding. The Commission's rules require that persons filing comments in opposition to the project provide copies of their protests only to the party or parties directly involved in the protest.

Persons who wish to comment only on the environmental review of this project should submit an original and two copies of their comments to the Secretary of the Commission. Environmental commentors will be placed on the Commission's environmental mailing list, will receive copies of the environmental documents, and will be notified of meetings associated with the Commission's environmental review process. Environmental commentors will not be required to serve copies of filed documents on all other parties. However, the non-party commentors will not receive copies of all documents filed by other parties or issued by the Commission (except for the mailing of environmental documents issued by the Commission) and will not have the right to seek court review of the Commission's final order.

The Commission strongly encourages electronic filings of comments, protests and interventions in lieu of paper using the ''eFiling'' link at *http://www.ferc.gov.* Persons unable to file electronically should submit an original and seven copies of the protest or intervention to the Federal Energy regulatory Commission, 888 First Street NE., Washington, DC 20426.

Comment Date: March 5, 2015.

Dated: February 12, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03437 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Docket Numbers: RP15–452–000.
Applicants: Northern Natural Gas Company.
Description: Section 4(d) rate filing per 154.204: 20150211 Negotiated Rate to be effective 2/12/2015.
Filed Date: 2/11/15.
Accession Number: 20150211–5255.
Comments Due: 5 p.m. ET 2/23/15.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

Filings in Existing Proceedings

Docket Numbers: RP15–274–001,
Applicants: ANR Pipeline Company,
Description: Compliance filing per 154.203: Compliance to RP15–274–000 to be effective 2/1/2015,
Filed Date: 2/12/15,
Accession Number: 20150212–5035,
Comments Due: 5 p.m. ET 2/24/15,

Any person desiring to protest in any of the above proceedings must file in accordance with Rule 211 of the Commission's Regulations (18 CFR 385.211) on or before 5:00 p.m. Eastern time on the specified comment date.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: February 12, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03436 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

Take notice that the Commission received the following electric corporate filings:

Docket Numbers: EC15–73–000.
Applicants: Bayonne Energy Center, LLC, Zone J Tolling Co., LLC.
Description: Application for Authorization for Disposition of Jurisdictional Facilities and Request for Expedited Action of Bayonne Energy Center, LLC, et. al.
Filed Date: 2/12/15.
Accession Number: 20150212–5127.
Comments Due: 5 p.m. ET 3/5/15.

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER10–1908–009; *ER10–1909–009; ER10–1910–009;ER10–1911–009.*

Applicants: Duquesne Keystone, LLC, Duquesne Light Company, Duquesne Power, LLC, Duquesne Conemaugh, LLC.

Description: Notice of Non-Material Change in Status of the Duquesne MBR Sellers.

Filed Date: 2/12/15.

Accession Number: 20150212–5078.

Comments Due: 5 p.m. ET 3/5/15.

Docket Numbers: ER10–2808–002.

Applicants: Freeport-McMoran Copper & Gold Energy Services, LLC.

Description: Notice of Non-Material Change in Status of Freeport-McMoran Copper & Gold Energy Services, LLC.

Filed Date: 2/11/15.

Accession Number: 20150211–5270.

Comments Due: 5 p.m. ET 3/4/15.

Docket Numbers: ER10–2964–005; *ER11–2041–005; ER11–2042–005; ER10–3193–004.*

Applicants: Innovative Energy Systems, LLC, Seneca Energy II, LLC, Selkirk Cogen Partners, L.P., Brooklyn Navy Yard Cogeneration Partners, L.P.

Description: Second Supplement to June 30, 2014 Order No. 697 Triennial Compliance Filing of Selkirk Cogen Partners, L.P., et. al.

Filed Date: 2/11/15.

Accession Number: 20150211–5271.

Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: ER12–673–006; *ER12–672–006; ER12–674–007;* ER12–670–007; ER10–2374–008; ER10–1533–010.

Applicants: Brea Generation LLC, Brea Power II, LLC, Macquarie Energy LLC, Puget Sound Energy, Inc., Rhode Island Engine Genco, LLC, Rhode Island LFG Genco, LLC.

Description: Notice of Non-Material Change in Status of Brea Generation LLC, et. al.

Filed Date: 2/12/15.

Accession Number: 20150212–5081.

Comments Due: 5 p.m. ET 3/5/15.

Docket Numbers: ER14–2657–001.

Applicants: El Paso Electric Company.

Description: Compliance filing per 35: Compliance Filing with Jan 12, 2015 Order in ER14–2657–000 to be effective 10/13/2014.

Filed Date: 2/11/15.

Accession Number: 20150211–5232.

Comments Due: 5 p.m. ET 3/4/15.

Docket Numbers: ER14–2711–000.

Applicants: Midcontinent Independent System Operator, Inc.

Description: Report Filing: 2015–02–12_Order 719 Supplement the Record to be effective N/A.

Filed Date: 2/12/15.

Accession Number: 20150212–5149.

Comments Due: 5 p.m. ET 3/5/15.

Docket Numbers: ER15–743–001.

Applicants: Appalachian Power Company.

Description: Tariff Amendment per 35.17(b): OATT—Revise Attachments K & L, TCC & TNC Rate Update Amendment to be effective 12/29/2014.

Filed Date: 2/11/15.

Accession Number: 20150211–5237.

Comments Due: 5 p.m. ET 3/4/15.

Docket Numbers: ER15–1026–000.

Applicants: Utah Red Hills Renewable Park, LLC.

Description: Initial rate filing per 35.12 Application for Market-Based Rate Authorization to be effective 5/1/2015.

Filed Date: 2/11/15.

Accession Number: 20150211–5266.

Comments Due: 5 p.m. ET 3/4/15.

Docket Numbers: ER15–1027–000.

Applicants: Southwest Power Pool, Inc.

Description: Section 205(d) rate filing per 35.13(a)(2)(iii): 2965 SWEPCO/Rayburn Country Elec Coop/ETEC Interconnect Agr. to be effective 4/13/2015.

Filed Date: 2/12/15.

Accession Number: 20150212–5055.

Comments Due: 5 p.m. ET 3/5/15.

Docket Numbers: ER15–1028–000.

Applicants: California Independent System Operator Corporation.

Description: Section 205(d) rate filing per 35.13(a)(2)(iii): 2015–02–12_AguaCalienteLGIAConcurrence to be effective 10/21/2014.

Filed Date: 2/12/15.

Accession Number: 20150212–5062.

Comments Due: 5 p.m. ET 3/5/15.

Docket Numbers: ER15–1029–000.

Applicants: Chubu TT Energy Management Inc.

Description: Initial rate filing per 35.12 Chubu TT MBRA Application to be effective 4/15/2015.

Filed Date: 2/12/15.

Accession Number: 20150212–5086.

Comments Due: 5 p.m. ET 3/5/15.

Docket Numbers: ER15–1030–000.

Applicants: PJM Interconnection, L.L.C.

Description: Section 205(d) rate filing per 35.13(a)(2)(iii): Service Agreement No. 3058; Queue Nos. U2–073/Z2–013 to be effective 1/13/2015.

Filed Date: 2/12/15.

Accession Number: 20150212–5120.

Comments Due: 5 p.m. ET 3/5/15.

Docket Numbers: ER15–1031–000.

Applicants: PJM Interconnection, L.L.C.

Description: Section 205(d) rate filing per 35.13(a)(2)(iii): Original Service Agreement No. 4086; Queue Position Y3–037 to be effective 1/13/2015.

Filed Date: 2/12/15.

Accession Number: 20150212–5130.

Comments Due: 5 p.m. ET 3/5/15.

Docket Numbers: ER15–1032–000.

Applicants: Midcontinent Independent System Operator.

Description: Section 205(d) rate filing per 35.13(a)(2)(iii): 2015–02–12_SA 1519 MDU-Tatanka 5th Rev. GIA (G132/J249) to be effective 2/13/2015.

Filed Date: 2/12/15.

Accession Number: 20150212–5147.

Comments Due: 5 p.m. ET 3/5/15.

Take notice that the Commission received the following PURPA 210(m)(3) filings:

Docket Numbers: QM15–1–000.

Applicants: Virginia Electric and Power Company.

Description: Motion for Leave to Answer and Answer to Community Energy Solar, LLC, LLC, Community Energy Renewables, LLC and Nine Affiliated Entities January 14, 2015 Answer, of Virginia Electric and Power Company.

Filed Date: 2/11/15.

Accession Number: 20150211–5272.

Comments Due: 5 p.m. ET 3/11/15.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: February 12, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03442 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Docket Numbers: RP15–441–000.

Applicants: Iroquois Gas Transmission System, L.P.
Description: Section 4(d) rate filing per 154.204: 02/09/15 Negotiated Rates—United Energy Trading, LLC (HUB) to be effective 2/6/2015.
Filed Date: 2/9/15.
Accession Number: 20150209–5096.
Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: RP15–442–000.
Applicants: Iroquois Gas Transmission System, L.P.
Description: Section 4(d) rate filing per 154.204: 02/09/15 Negotiated Rates—Sequent Energy Management (HUB) 3075–89 to be effective 2/6/2015.
Filed Date: 2/9/15.
Accession Number: 20150209–5102.
Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: RP15–443–000.
Applicants: Iroquois Gas Transmission System, L.P.
Description: Section 4(d) rate filing per 154.204: 02/09/15 Negotiated Rates—Mercuria Energy Trading Gas LLC (HUB) 7540–89 to be effective 2/6/2015.
Filed Date: 2/9/15.
Accession Number: 20150209–5105.
Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: RP15–444–000.
Applicants: American Midstream (Midla), LLC.
Description: Section 4(d) rate filing per 154.204: Midla Imbalance Resolution to be effective 4/1/2015.
Filed Date: 2/9/15.
Accession Number: 20150209–5163.
Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: RP15–445–000.
Applicants: Iroquois Gas Transmission System, L.P.
Description: Section 4(d) rate filing per 154.204: 02/09/15 Negotiated Rates—NJR Energy Services Company to be effective 2/9/2015.
Filed Date: 2/9/15.
Accession Number: 20150209–5165.
Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: RP15–446–000.
Applicants: Rockies Express Pipeline LLC.
Description: Section 4(d) rate filing per 154.204: Neg Rate 2015–02–09 ConocoPhillips to be effective 2/9/2015.
Filed Date: 2/9/15.
Accession Number: 20150209–5210.
Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: RP15–447–000.
Applicants: Gulf South Pipeline Company, LP.
Description: Section 4(d) rate filing per 154.204: Amendment to Neg Rate Agmt (Sequent 34693–27) to be effective 2/10/2015.
Filed Date: 2/10/15.
Accession Number: 20150210–5040.
Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: RP15–448–000.
Applicants: Iroquois Gas Transmission System, L.P.
Description: Section 4(d) rate filing per 154.204: 02/10/15 Negotiated Rates—ConEdison Energy Inc. (HUB) 2275–89 to be effective 2/9/2015.
Filed Date: 2/10/15.
Accession Number: 20150210–5060.
Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: RP15–449–000.
Applicants: Iroquois Gas Transmission System, L.P.
Description: Section 4(d) rate filing per 154.204: 02/10/15 Negotiated Rates—Mercuria Energy Trading Gas LLC (HUB) 7540–89 to be effective 2/9/2015.
Filed Date: 2/10/15.
Accession Number: 20150210–5141.
Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: RP15–450–000.
Applicants: Enable Gas Transmission, LLC.
Description: Section 4(d) rate filing per 154.204: Negotiated Rate Filing—February 2015—LER 0222 Att A to be effective 2/10/2015.
Filed Date: 2/10/15.
Accession Number: 20150210–5152.
Comments Due: 5 p.m. ET 2/23/15.

Docket Numbers: RP15–451–000.
Applicants: Enable Mississippi River Transmission, L.
Description: Section 4(d) rate filing per 154.204: Negotiated Rate Filing to Amend LER 5680's Attachment A_2–10–15 to be effective 2/10/2015.
Filed Date: 2/10/15.
Accession Number: 20150210–5220.
Comments Due: 5 p.m. ET 2/23/15.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: February 11, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03435 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ER15–1026–000]

Utah Red Hills Renewable Park, LLC; Supplemental Notice That Initial Market-Based Rate Filing Includes Request for Blanket Section 204 Authorization

This is a supplemental notice in the above-referenced proceeding, of Utah Red Hills Renewable Park, LLC's application for market-based rate authority, with an accompanying rate schedule, noting that such application includes a request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability.

Any person desiring to intervene or to protest should file with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant.

Notice is hereby given that the deadline for filing protests with regard to the applicant's request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability is March 4, 2015.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov.* To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically should submit an original and 5 copies of the intervention or protest to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

The filings in the above-referenced proceeding(s) are accessible in the Commission's eLibrary system by clicking on the appropriate link in the above list. They are also available for review in the Commission's Public Reference Room in Washington, DC. There is an eSubscription link on the Web site that enables subscribers to receive email notification when a document is added to a subscribed

docket(s). For assistance with any FERC Online service, please email *FERCOnlineSupport@ferc.gov,* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: February 12, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03445 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ER15–1029–000]

Chubu TT Energy Management Inc.; Supplemental Notice That Initial Market-Based Rate Filing Includes Request for Blanket Section 204 Authorization

This is a supplemental notice in the above-referenced proceeding, of Chubu TT Energy Management Inc.'s application for market-based rate authority, with an accompanying rate schedule, noting that such application includes a request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability.

Any person desiring to intervene or to protest should file with the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant.

Notice is hereby given that the deadline for filing protests with regard to the applicant's request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability is March 4, 2015.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov.* To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically should submit an original and 5 copies of the intervention or protest to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

The filings in the above-referenced proceeding(s) are accessible in the Commission's eLibrary system by clicking on the appropriate link in the above list. They are also available for review in the Commission's Public Reference Room in Washington, DC. There is an eSubscription link on the Web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email *FERCOnlineSupport@ferc.gov.* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: February 12, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03439 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ER15–1024–000]

Zone One Energy, LLC; Supplemental Notice That Initial Market-Based Rate Filing Includes Request for Blanket Section 204 Authorization

This is a supplemental notice in the above-referenced proceeding, of Zone One Energy, LLC's application for market-based rate authority, with an accompanying rate schedule, noting that such application includes a request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability.

Any person desiring to intervene or to protest should file with the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant.

Notice is hereby given that the deadline for filing protests with regard to the applicant's request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability is March 4, 2015.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov.* To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically should submit an original and 5 copies of the intervention or protest to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

The filings in the above-referenced proceeding(s) are accessible in the Commission's eLibrary system by clicking on the appropriate link in the above list. They are also available for review in the Commission's Public Reference Room in Washington, DC. There is an eSubscription link on the Web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email *FERCOnlineSupport@ferc.gov.* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: February 12, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03440 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 12514–074]

Northern Indiana Public Service Company; Notice of Application for Amendment of License, Modifying Abnormal River Conditions Under Article 405, and Reservoir Surface Elevations Under Article 403 and Soliciting Comments, Motions To Intervene and Protests

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Application Type:* Amendment of License and Modifying Abnormal River Conditions Definition.

b. *Project No:* 12514–074.

c. *Date Filed:* October 2, 2014.

d. *Applicant:* Northern Indiana Public Service Company (licensee).

e. *Name of Project:* Norway-Oakdale Hydroelectric Project.

f. *Location:* The Norway-Oakdale Project is located on the Tippecanoe River near the town of Monticello, in Carroll and White counties, Indiana.

The project consists of the upper Norway development and the lower Oakdale development each of which has a dam and powerhouse.

g. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791a–825r.

h. *Applicant Contact:* Mr. Justin Darling, Hydro Supervisor—Chemical and Environmental Compliance, Northern Indiana Public Service Company, 1414 W. Broadway, Monticello, IN 47960, 574–583–1154.

i. *FERC Contact:* Mr. Mark Pawlowski 202–502–6052, *mark.pawlowski@ferc.gov*.

j. *Deadline for filing comments, motions to intervene, and protests:* March 16, 2015.

All documents may be filed electronically via the Internet. See, 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site at *http://www.ferc.gov/docs-filing/efiling.asp.* If unable to be filed electronically, documents may be paper-filed. To paper-file, an original and seven copies should be mailed to: Secretary, Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426. Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at *http://www.ferc.gov/docs-filing/ecomment.asp.* You must include your name and contact information at the end of your comments.

Please include the project number (P–12514) on any comments, motions, or recommendations filed.

k. *Description of Request:* Northern Indiana Public Service Company, licensee for the Norway-Oakdale Hydroelectric Project, requests the Commission amend the definition of abnormal river conditions pursuant to article 405 of the project license. Under the proposed definition the licensee requests to amend article 405 to include a low flow trigger under which the licensee could deviate from the reservoir elevation requirements of article 403 of the license. Low flow conditions, also referred to herein as abnormal low flow (ALF), would be defined as a daily average river flow of ≤ 300 cubic feet per second (cfs) as measured at the United States Geological Survey (USGS) Winamac gage no. 03331753; or in the event of an equipment or operation issue at Oakdale dam unrelated to upstream flow conditions upstream, a 24-hour daily average of river flow of ≤ 570 cfs at the USGS Oakdale gage no. 03332605. In order to implement the requirements of the U.S. Fish and Wildlife Service's (FWS) August 13, 2014, Technical Assistance Letter (TAL), the licensee also requests to amend the elevation requirements of article 403 to be within 0.75 feet above and 0.25 feet below elevation 647.47 feet National Geodetic Vertical Datum (NGVD) at Lake Shafer and 0.75 feet above elevation 612.45 feet NGVD at Lake Freeman.

The TAL calls for the licensee to operate the Norway and Oakdale developments according to the following protocols under the ALF as defined above: (1) cease electric power generation at the Oakdale dam when the 24-hour daily average flow at the USGS Winamac gage no. 03331753 is ≤ 300 cfs or the 24-hour daily average flow at the USGS Oakdale gage no. 03332605 is ≤600 cfs; (2) discharge 1.9 times the flow of the previous 24-hour daily average flow measured at the USGS Winamac gage out of the Oakdale dam as measured at the USGS Oakdale gage (considered to be the run-of-river flow during the ALF); (3) continue ALF plan protocols until the 24-hour average at the USGS Winamac gage is >300 cfs; and (4) meet all monitoring and reporting requirements. Providing the required downstream flow could require the licensee to increase the release flow from Lake Freeman through drawdown of one or both lakes outside of the proposed limits (within 0.75 feet above and 0.25 feet below elevation 647.47 feet NGVD for Lake Shafer and 0.75 feet above elevation 612.45 feet NGVD for Lake Freeman). Deviations outside of these ranges would result from efforts by the licensee to maintain a minimum flow of 500 cfs downstream of the Oakdale dam to protect federally endangered mussel species and their habitat. Such reservoir level deviations could include partial or complete drawdown of the Lake Shafer and/or Lake Freeman. Operating in accordance with these requirements under abnormal river flow conditions is intended to satisfy FWS' objectives to protect downstream mussel populations against the unlawful take of an endangered species. Reservoir drawdowns would have the potential to affect aquatic, terrestrial, recreation, and cultural resources associated with the lakes, as well as potential stability issues related to seawalls, docks, and piers.

l. *Locations of the Application:* A copy of the application is available for inspection and reproduction at the Commission's Public Reference Room, located at 888 First Street NE., Room 2A, Washington, DC 20426, or by calling 202–502–8371. This filing may also be viewed on the Commission's Web site at *http://www.ferc.gov* using the ''eLibrary'' link. Enter the docket number excluding the last three digits in the docket number field to access the document. You may also register online at *http://www.ferc.gov/docs-filing/esubscription.asp* to be notified via email of new filings and issuances related to this or other pending projects. For assistance, call 866–208–3676 or email *FERCOnlineSupport@ferc.gov,* for TTY, call 202–502–8659. A copy is also available for inspection and reproduction at the address in item (h) above.

m. Individuals desiring to be included on the Commission's mailing list should so indicate by writing to the Secretary of the Commission.

n. *Comments, Protests, or Motions to Intervene:* Anyone may submit comments, a protest, or a motion to intervene in accordance with the requirements of Rules of Practice and Procedure, 18 CFR 385.210, .211, .214. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

o. *Filing and Service of Responsive Documents:* Any filing must (1) bear in all capital letters the title ''COMMENTS''; ''PROTESTS'', or ''MOTION TO INTERVENE'' as applicable; (2) set forth in the heading the name of the applicant and the project number of the application to which the filing responds; (3) furnish the name, address, and telephone number of the person protesting or intervening; and (4) otherwise comply with the requirements of 18 CFR 385.2001 through 385.2005. All comments, motions to intervene, or protests must set forth their evidentiary basis and otherwise comply with the requirements of 18 CFR 4.34(b). Agencies may obtain copies of the application directly from the applicant. A copy of any protest or motion to intervene must be served upon each representative of the applicant specified in the particular application. If an intervener files comments or documents with the Commission relating to the merits of an issue that may affect the responsibilities of a particular resource agency, they must also serve a copy of the document on that resource agency. A copy of all other filings in reference to this application must be accompanied by proof of service on all persons listed in the service list prepared by the Commission in this proceeding, in

accordance with 18 CFR 4.34(b) and 385.2010.

Dated: February 12, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03444 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. OR15–14–000]

Panola Pipeline Company, LLC; Notice of Petition for Declaratory Order

Take notice that on February 10, 2015, pursuant to Rule 207(a)(2) of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure, 18 CFR 385.207(a)(2) (2014), Panola Pipeline Company, LLC (Panola or Petitioner), filed a petition for declaratory order seeking approval of priority service and the proposed tariff rate structure and terms of service for a planned expansion of Panola's pipeline system, as more fully explained in the petition.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. Anyone filing a motion to intervene or protest must serve a copy of that document on the Petitioner.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the ''eFiling'' link at *http://www.ferc.gov.* Persons unable to file electronically should submit an original and 5 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

This filing is accessible on-line at *http://www.ferc.gov,* using the ''eLibrary'' link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an ''eSubscription'' link on the Web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email *FERCOnlineSupport@ferc.gov,* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Comment Date: 5:00 p.m. Eastern time on March 10, 2015.

Dated: February 12, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03441 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. EL13–88–000]

Northern Indiana Public Service Company v. Midcontinent Independent System Operator, Inc. and PJM Interconnection, LLC; Notice of Request for Comments

February 12, 2015.

On September 11, 2013, Northern Indiana Public Service Company (NIPSCO) filed a complaint against Midcontinent Independent System Operator, Inc. (MISO) and PJM Interconnection, LLC (PJM). NIPSCO requested that the Commission order MISO and PJM to reform the interregional planning process of the Joint Operating Agreement between MISO and PJM (MISO–PJM JOA).[1] On December 18, 2014, the Commission issued an order directing Commission staff to convene a technical conference to explore issues raised in the Complaint related to the MISO–PJM JOA and the MISO–PJM seam. The Commission also directed Commission staff to issue a request for comments on these issues prior to the technical conference to inform the technical conference discussion.[2]

Shown below is the list of questions for which Commission staff seeks comment. The questions cover the six reforms that NIPSCO recommends to the cross-border transmission planning process that occurs under the MISO–PJM JOA, as well as certain additional issues. Commenters should discuss the potential benefits and/or drawbacks, cost concerns, and technical feasibility of implementing the following reforms and how long the reforms would take to implement if adopted.

1. Require the MISO–PJM cross-border transmission planning process to run concurrently with the MISO and PJM regional transmission planning cycles, rather than after those regional planning cycles.

2. Require MISO and PJM to develop and use a single model that uses the same assumptions in the cross-border transmission planning process. Until the joint model is developed, require that there is consistency between the PJM and MISO planning analysis and that both entities are consistent in their application of reliability criteria and modeling assumptions.

3. Require MISO and PJM to use a single common set of criteria to evaluate cross-border market efficiency projects.

4. Require MISO and PJM to amend the criteria to evaluate cross-border market efficiency projects to address all known benefits, including avoidance of future market-to-market (M2M) payments made to reallocate short-term transmission capacity in the real-time operation of the system.

5. Require MISO and PJM to have a process for joint planning and cost allocation of lower voltage and lower cost cross-border upgrades.

6. Require MISO and PJM to improve the processes within the MISO–PJM JOA with respect to new generator interconnections and generation retirements.

7. Explain the relationship between the cross-border transmission planning process (and approval of new transmission projects) and persistent M2M payments being made between the RTOs. Are persistent M2M payments a good indicator of the need for new transmission?

8. NIPSCO provides an estimate of M2M payments on pages 23–24 of its Complaint. Please comment on these estimates and provide information on other estimates of M2M payments, including whether PJM, MISO and the market monitors have identified trends in M2M payments.

9. Please provide examples of transmission projects that have been considered under the cross-border transmission planning process for the purpose of mitigating congestion and/or constraints that lead to persistent M2M payments, but that have not been developed. Provide the reason the project was not developed.

Interested parties should submit comments on or before March 16, 2015. Reply comments must be filed on or before March 31, 2015. Comments should be provided by question as enumerated above.

ADDRESSES: Parties may submit comments, identified by Docket No.

[1] NIPSCO Complaint, Docket No. EL13–88–000 (filed Sept. 11, 2013).

[2] *Northern Indiana Public Service Co.* v. *Midcontinent Indep. Sys. Operator, Inc. and PJM Interconnection, LLC,* 149 FERC ¶ 61,248, at P 35 (2014).

EL13–88–000, by one of the following methods.

Agency Web site: http://www.ferc.gov/. Follow the instructions for submitting comments via the eFiling link found under the ''Documents and Filing'' tab.

Mail: Those unable to file comments electronically may mail or hand-deliver comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street NE., Washington, DC 20426.

FOR FURTHER INFORMATION CONTACT:

Jason Strong (Technical Information), Federal Energy Regulatory Commission, Office of Energy Market Regulation, 888 First Street NE., Washington, DC 20426, (202) 502–6124, *jason.strong@ferc.gov.*

Ben Foster (Technical Information) Federal Energy Regulatory Commission, Office of Energy Policy and Innovation, 888 First Street NE., Washington, DC 20426, (202) 502–6149, *ben.foster@ferc.gov.*

Lina Naik (Legal Information), Federal Energy Regulatory Commission, Office of the General Counsel, 888 First Street NE., Washington, DC 20426 (202) 502–8882, *lina.naik@ferc.gov.*

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03438 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Commission Staff Attendance

The Federal Energy Regulatory Commission (Commission) hereby gives notice that members of the Commission's staff may attend the following meeting related to the transmission planning activities of Public Service Company of Colorado, Tucson Electric Power Company, UNS Electric, Inc., Public Service Company of New Mexico, Arizona Public Service Company, El Paso Electric Company, Black Hills Power, Inc., Black Hills Colorado Electric Utility Company, LP, Cheyenne Light, Fuel, & Power Company, Nevada Power Company, and Sierra Pacific Power Company:

WestConnect Regional Planning Process Stakeholder Meeting

February 19, 2015, 12:30 p.m.–4:00 p.m. (PST)

The above-referenced meeting will be held at: NV Energy, 7155 Lindell Road, Las Vegas, NV 89118.

The above-referenced meeting will be via web conference and teleconference.

The above-referenced meeting is open to stakeholders.

Further information may be found at *http://www.westconnect.com/filestorage/02-19-15_WestConnect_Stakeholder_Meeting_Agenda.pdf.*

The discussions at the meeting described above may address matters at issue in the following proceedings:

Docket No. ER13–75, *Public Service Company of Colorado*
Docket No. ER13–1469
Docket No. ER15–416

Docket No. ER13–77, *Tucson Electric Power Company*
Docket No. ER13–1461
Docket No. ER15–433

Docket No. ER13–78, *UNS Electric, Inc.*
Docket No. ER13–1462
Docket No. ER15–434

Docket No. ER13–79, *Public Service Company of New Mexico*
Docket No. ER13–1447
Docket No. ER15–413

Docket No. ER13–82, *Arizona Public Service Company*
Docket No. ER13–1450
Docket No. ER15–411

Docket No. ER13–91, *El Paso Electric Company*
Docket No. ER13–1465
Docket No. ER15–426

Docket No. ER13–96, *Black Hills Power, Inc.*
Docket No. ER13–1472
Docket No. ER15–431

Docket No. ER13–97, *Black Hills Colorado Electric Utility Company, LP*
Docket No. ER13–1474
Docket No. ER15–430

Docket No. ER13–120, *Cheyenne Light, Fuel, & Power Company*
Docket No. ER13–1471
Docket No. ER15–432

Docket No. ER15–428, *Nevada Power Company and Sierra Pacific Power Company*
Docket No. ER13–1466
Docket No. ER15–423
Docket No. ER15–424

For more information, contact Gabe Aguilera, Office of Energy Market Regulation, Federal Energy Regulatory Commission at (202) 502–8489 or *Gabriel.Aguilera@ferc.gov.*

Dated: February 12, 2015.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2015–03443 Filed 2–18–15; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–9923–21–OA]

Notification of a Face-to-Face Meeting and a Teleconference of the Science Advisory Board Biogenic Carbon Emissions Panel

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency (EPA or Agency) Science Advisory Board (SAB) Staff Office announces a public face-to-face meeting of the SAB Biogenic Carbon Emissions Panel to review EPA's *Framework for Assessing Biogenic CO_2 Emissions from Stationary Sources (November 2014).* The SAB Staff Office also announces a public teleconference of the SAB Biogenic Carbon Emissions Panel to review its draft report on EPA's document.

DATES: The public face-to-face meeting will be held on March 25, 2015, from 9:00 a.m. to 5:00 p.m. (Eastern Time) and March 26, 2015 from 9:00 a.m. to 5:00 p.m. (Eastern Time). The teleconference will be held on May 29, 2015 from 1:00 p.m. to 4:00 p.m. (Eastern Time).

ADDRESSES: The face-to-face meeting will take place at the George Washington University, Milken Institute School of Public Health, Convening Center A and B, 950 New Hampshire Ave. NW., Washington, DC 20052. The teleconference will be held by telephone only.

FOR FURTHER INFORMATION CONTACT: Any member of the public wishing further information regarding the public meeting or public teleconference may contact Dr. Holly Stallworth, Designated Federal Officer (DFO), SAB Staff Office, by telephone/voice mail at (202) 564–2073 or via email at *stallworth.holly@epa.gov.* General information concerning the EPA Science Advisory Board can be found at the EPA SAB Web site at *http://www.epa.gov/sab.*

SUPPLEMENTARY INFORMATION:

Background: The SAB was established pursuant to the Environmental Research, Development, and Demonstration Authorization Act (ERDAA) codified at 42 U.S.C. 4365, to

provide independent scientific and technical peer review, advice, consultation, and recommendations to the EPA Administrator on the technical basis for EPA actions. As a Federal Advisory Committee, the SAB conducts business in accordance with the Federal Advisory Committee Act (FACA) (5 U.S.C. App. 2) and related regulations. Pursuant to FACA and EPA policy, notice is hereby given that the SAB Biogenic Carbon Emissions Panel will hold a public meeting to review EPA's *Framework for Assessing Biogenic CO_2 Emissions from Stationary Sources (November 2014)* and a public teleconference to review its draft report on EPA's document. The SAB will comply with the provisions of FACA and all appropriate SAB Staff Office procedural policies.

In 2011, EPA's Office of Atmospheric Programs (OAP) in EPA's Office of Air and Radiation requested SAB review of EPA's first draft accounting framework. A final report from the Science Advisory Board was transmitted to the EPA Administrator on September 28, 2012 and may be found posted at *http://yosemite.epa.gov/sab/sabproduct.nsf/c91996cd39a82f648525742400690127/57B7A4F1987D7F7385257A87007977F6/$File/EPA-SAB-12-011-unsigned.pdf.* The upcoming face-to-face meeting on March 25 and 26, 2015 and teleconference on May 29, 2015 are planned for a review of EPA's revised framework (November 2014) cited above. Background on the current advisory activity can be found on the SAB Web site at *http://yosemite.epa.gov/sab/sabproduct.nsf/fedrgstr_activites/Biogenic%20CO2%20Framework?OpenDocument.*

Availability of the meeting materials: Agendas will be posted on the SAB Web site prior to the March 25 and 26, 2015 face-to-face meeting and the May 29, 2015 teleconference. To locate these materials, go to *epa.gov/sab* and click on the calendar and then the respective meeting dates. EPA's review document, charge to the Panel and other background materials are also available at the URL above. For questions concerning EPA's *Framework for Assessing Biogenic CO_2 Emissions from Stationary Sources* (November 2014), please contact Sara Ohrel, Climate Change Division, at *ohrel.sara@epa.gov* or (202) 343–9712.

Procedures for Providing Public Input: Public comment for consideration by EPA's federal advisory committees and panels has a different purpose from public comment provided to EPA program offices. Therefore, the process for submitting comments to a federal advisory committee is different from the process used to submit comments to an EPA program office. Federal advisory committees and panels, including scientific advisory committees, provide independent advice to EPA. Members of the public can submit relevant comments on the topic of this advisory activity, including the charge to the panel and the EPA review documents, and/or the group conducting the activity, for the SAB to consider during the advisory process. Input from the public to the SAB will have the most impact if it consists of comments that provide specific scientific or technical information or analysis for the SAB panel to consider or if it relates to the clarity or accuracy of the technical information.

Oral Statements: In general, individuals or groups requesting an oral presentation will be limited to five minutes per speaker for the face-to-face meeting and three minutes per speaker for the teleconference. Interested parties should contact Dr. Holly Stallworth, DFO, in writing (preferably via email), at the contact information noted above, by March 16, 2015 to be placed on the list of public speakers for the face-to-face meeting and by May 21, 2015 to be placed on the list of speakers for the teleconference.

Written Statements: Written statements should be received in the SAB Staff Office by March 16, 2015 to be considered for the face-to-face meeting and by May 21, 2015 to be considered for the teleconference. Written statements should be supplied to the DFO, preferably in electronic format via email. It is the SAB Staff Office general policy to post written comments on the Web page for the advisory meeting or teleconference. Submitters are requested to provide an unsigned version of each document because the SAB Staff Office does not publish documents with signatures on its Web sites. Members of the public should be aware that their personal contact information, if included in any written comments, may be posted to the SAB Web site. Copyrighted material will not be posted without explicit permission of the copyright holder.

Accessibility: The public can view the March 25 and 26, 2015 meeting via a non-interactive webcast that will be broadcast on the Internet. The connection information to view the webcast will be provided on the meeting Web page at the time of the meeting. The meeting Web page may be found by going to *http://epa.gov/sab* and clicking on the calendar then the meeting date. For information on access or services for individuals with disabilities, please contact Dr. Stallworth at the phone number or email address noted above, preferably at least ten days prior to the meeting, to give EPA as much time as possible to process your request.

Dated: February 10, 2015.

Thomas H. Brennan,

Deputy Director, EPA Science Advisory Board Staff Office.

[FR Doc. 2015–03452 Filed 2–18–15; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL 9921–30–Region 2]

Tentative Approval and Solicitation of Request for a Public Hearing for Public Water System Supervision Program Revision for Puerto Rico

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: Notice is hereby given that the Commonwealth of Puerto Rico is revising its approved Public Water System Supervision Program to adopt the Environmental Protection Agency's (EPA)'s National Primary Drinking Water Regulations for one major rule. The EPA has determined that this revision is no less stringent than the corresponding Federal regulations. Therefore, the EPA intends to approve this program revision. All interested parties may request a public hearing.

DATES: A request for a public hearing must be submitted to the Regional Administrator at the address shown below March 23, 2015. If no timely and appropriate request for a hearing is received and the Regional Administrator does not elect to hold a hearing on her own motion, this determination shall become final and effective March 23, 2015. More information on requesting a public hearing can be found in the **SUPPLEMENTARY INFORMATION** section of this document.

ADDRESSES: Requests for Public Hearing shall be addressed to: Regional Administrator, U.S. Environmental Protection Agency—Region 2, 290 Broadway, New York, New York 10007–1866.

All documents relating to this determination are available for inspection between the hours of 9:00 a.m. and 4:30 p.m., Monday through Friday, excluding legal holidays, at the following offices:

Puerto Rico Department of Health, PO Box 70184, San Juan, Puerto Rico 00936–8184

U.S. Environmental Protection Agency—Region 2, 24th Floor

Drinking Water Ground Water Protection Section, 290 Broadway, New York, New York 10007–1866

FOR FURTHER INFORMATION CONTACT: Michael J. Lowy, Drinking Water Ground Water Protection Section, U.S. Environmental Protection Agency—Region 2, (212) 637–3830.

SUPPLEMENTARY INFORMATION: Notice is hereby given that the United States Environmental Protection Agency (EPA) has determined to approve an application by the Commonwealth of Puerto Rico Department of Health to revise its Public Water Supply Supervision Primacy Program to incorporate a regulation no less stringent than the EPA's National Primary Drinking Water Regulations (NPDWR) for National Primary Drinking Water Regulation: Revisions to the Total Coliform Rule, Final Rule, promulgated by EPA February 13, 2013 (78 FR 10269).

The application demonstrates that Puerto Rico has adopted drinking water regulations which satisfy the NPDWRs for the above. The USEPA has determined that Puerto Rico's regulations are no less stringent than the corresponding Federal Regulations and that Puerto Rico continues to meet all requirements for primary enforcement responsibility as specified in 40 CFR 142.10.

Authority: (Section 1413 of the Safe Drinking Water Act, as amended, 40 U.S.C. 300g–2, and 40 CFR 142.10, 142.12(d) and 142.13).

This determination to approve Puerto Rico's primacy program revision application is made pursuant to 40 CFR 142.12(d)(3). It shall become final and effective unless (1) a timely and appropriate request for a public hearing is received or (2) the Regional Administrator elects to hold a public hearing on her own motion. Any interested person, other than Federal Agencies, may request a public hearing.

If a substantial request for a public hearing is made within the requested thirty day time frame, a public hearing will be held and a notice will be given in the **Federal Register** and a newspaper of general circulation. Frivolous or insubstantial requests for a hearing may be denied by the Regional Administrator.

Any request for a public hearing shall include the following information: (1) Name, address and telephone number of the individual, organization or other entity requesting a hearing; (2) a brief statement of the requesting person's interest in the Regional Administrator's determination and a brief statement on information that the requesting person intends to submit at such hearing; and (3) the signature of the individual making the requests or, if the request is made on behalf of an organization or other entity, the signature of a responsible official of the organization or other entity.

Dated: January 28, 2015.

Judith A. Enck,

Regional Administrator, Region 2.

[FR Doc. 2015–03477 Filed 2–18–15; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060–1171]

Information Collection Being Reviewed by the Federal Communications Commission

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3520), the Federal Communications Commission (FCC or the Commission) invites the general public and other Federal agencies to take this opportunity to comment on the following information collection. Comments are requested concerning: whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees. The FCC may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid Office of Management and Budget (OMB) control number.

DATES: Written PRA comments should be submitted on or before April 20, 2015. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: Direct all PRA comments to Cathy Williams, FCC, via email *PRA@fcc.gov* and to *Cathy.Williams@fcc.gov.*

FOR FURTHER INFORMATION CONTACT: For additional information about the information collection, contact Cathy Williams at (202) 418–2918.

SUPPLEMENTARY INFORMATION:

OMB Control Number: 3060–1171.

Title: Commercial Advertisement Loudness Mitigation (''CALM'') Act; 73.682(e) and 76.607(a).

Form Number: Not applicable.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit entities.

Number of Respondents and Responses: 2,937 respondents and 4,868 responses.

Frequency of Response: Recordkeeping requirement; Third party disclosure requirement; On occasion reporting requirement.

Estimated Time per Response: 0.25–80 hours.

Total Annual Burden: 6,036 hours.

Total Annual Cost to Respondents: No cost.

Obligation to Respond: Required to obtain or retain benefits. The statutory authority for this collection of information is contained in 47 U.S.C. 151, 152, 154(i) and (j), 303(r) and 621.

Nature and Extent of Confidentiality: There is no assurance of confidentiality provided to respondents with this collection of information.

Privacy Impact Assessment: No impact(s).

Needs and Uses: The Commission will use this information to determine compliance with the CALM Act. The CALM Act mandates that the Commission make the Advanced Television Systems Committee (''ATSC'') A/85 Recommended Practice mandatory for all commercial TV stations and cable/MVPDs.

Federal Communications Commission.

Marlene H. Dortch,

Secretary, Office of the Secretary, Office of the Managing Director.

[FR Doc. 2015–03397 Filed 2–18–15; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060–0190 and 3060–0340]

Information Collections Being Reviewed by the Federal Communications Commission Under Delegated Authority

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3520), the Federal Communications Commission (FCC or the Commission) invites the general public and other Federal agencies to take this opportunity to comment on the following information collection. Comments are requested concerning: Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees.

The FCC may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid Office of Management and Budget (OMB) control number.

DATES: Written PRA comments should be submitted on or before April 20, 2015. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: Direct all PRA comments to Cathy Williams, FCC, via email *PRA@fcc.gov* and to *Cathy.Williams@fcc.gov.*

FOR FURTHER INFORMATION CONTACT: For additional information about the information collection, contact Cathy Williams at (202) 418–2918.

SUPPLEMENTARY INFORMATION:

OMB Control Number: 3060–0190.

Title: Section 73.3544, Application To Obtain a Modified Station License.

Form Number: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit entities; Not-for-profit institutions.

Number of Respondents and Responses: 325 respondents and 325 responses.

Estimated Time per Response: 0.25–1 hour.

Frequency of Response: On occasion reporting requirement.

Obligation to Respond: Required to obtain or retain benefits. Statutory authority for this information collection is contained in 47 Section 154(i) of the Communications Act of 1934, as amended.

Total Annual Burden: 306 hours.

Total Annual Cost: $75,000.

Privacy Impact Assessment(s): No impact(s).

Nature and Extent of Confidentiality: There is no need for confidentiality and respondents are not being asked to submit confidential information to the Commission.

Needs and Uses: 47 CFR 73.3544(b) requires an informal application, see Sec. 73.3511(b), may be filed with the FCC in Washington, DC, Attention: Audio Division (radio) or Video Division (television), Media Bureau, to cover the following changes:

(1) A correction of the routing instructions and description of an AM station directional antenna system field monitoring point, when the point itself is not changed.

(2) A change in the type of AM station directional antenna monitor. See Sec. 73.69.

(3) A change in the location of the station main studio when prior authority to move the main studio location is not required.

(4) The location of a remote control point of an AM or FM station when prior authority to operate by remote control is not required.

47 CFR 73.3544(c) requires a change in the name of the licensee where no change in ownership or control is involved may be accomplished by written notification by the licensee to the Commission.

OMB Control Number: 3060–0340.

Title: Section 73.51, Determining Operating Power.

Form Number: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit entities.

Number of Respondents and Responses: 750 respondents; 834 responses.

Estimated Time per Response: 0.25 to 3.0 hours.

Frequency of Response: Recordkeeping requirement.

Obligation to Respond: Required to obtain or retain benefits. The statutory authority for this collection of information is contained in Section 154(i) of the Communications Act of 1934, as amended.

Total Annual Burden: 440 hours.

Total Annual Cost: None.

Privacy Impact Assessment(s): No impact(s).

Nature and Extent of Confidentiality: There is no need for confidentiality and respondents are not being asked to submit confidential information to the Commission.

Needs and Uses: When it is not possible to use the direct method of power determination due to technical reasons, the indirect method of determining antenna input power might be used on a temporary basis. 47 CFR Section 73.51(d) requires that a notation be made in the station log indicating the dates of commencement and termination of measurement using the indirect method of power determination. 47 CFR Section 73.51(e) requires that AM stations determining the antenna input power by the indirect method must determine the value F (efficiency factor) applicable to each mode of operation and must maintain a record thereof with a notation of its derivation. FCC staff use this information in field investigations to monitor licensees' compliance with the FCC's technical rules and to ensure that licensee is operating in accordance with its station authorization. Station personnel use the value F (efficiency factor) in the event that measurement by the indirect method of power is necessary.

Federal Communications Commission.

Marlene H. Dortch,

Secretary. Office of the Secretary, Office of the Managing Director.

[FR Doc. 2015–03398 Filed 2–18–15; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL MARITIME COMMISSION

Notice of Agreements Filed

The Commission hereby gives notice of the filing of the following agreements under the Shipping Act of 1984. Interested parties may submit comments on the agreements to the Secretary, Federal Maritime Commission,

Washington, DC 20573, within twelve days of the date this notice appears in the **Federal Register**. Copies of the agreements are available through the Commission's Web site (*www.fmc.gov*) or by contacting the Office of Agreements at (202)–523–5793 or *tradeanalysis@fmc.gov.*

Agreement No.: 011488–005.

Title: CSVV/Cool Carriers Space Charter Agreement.

Parties: Cool Carriers AB and CSAV Sud Americana De Vapores S.A.

Filing Party: David F. Smith, Esq.; Cozen O'Connor; 1627 I Street NW., Suite 1100; Washington, DC 20006.

Synopsis: The Amendment changes the name of Agreement party NYKCool AB to Cool Carriers AB and makes related conforming changes.

Agreement No.: 012287–001.

Title: Siem Car Carriers AS/Mitsui O.S.K Lines Ltd. Space Charter Agreement.

Parties: Siem Car Carriers AS and Mitsui O.S.K Lines, Ltd.

Filing Party: Ashley W. Craig, Esq. and Elizabeth K. Lowe, Esq.; Venable LLP; 575 Seventh Street NW., Washington, DC 20004.

Synopsis: The Amendment adds Germany and the U.S. Gulf Coast to the geographic scope of the Agreement.

Agreement No.: 012317.

Title: MOL/''K'' Line U.S. Atlantic and China Sailing Agreement.

Parties: Mitsui O.S.K. Lines, Ltd. and Kawasaki Kisen Kaisha, Ltd.

Filing Party: Eric. C. Jeffrey, Esq.; Nixon Peabody LLP; 401 9th Street NW., Suite 900; Washington, DC 20004.

Synopsis: The Agreement authorizes the Parties to coordinate their sailings and space requirements in the trade, and to discuss and agree upon the volumes, cargo characteristics, shipping requirements, and other transportation features of service for a specific shipper, when such shipper has given written authorization for such discussion and agreement.

By Order of the Federal Maritime Commission.

Dated: February 13, 2015.

Rachel E. Dickon,

Assistant Secretary.

[FR Doc. 2015–03506 Filed 2–18–15; 8:45 am]

BILLING CODE 6730–01–P

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisitions of Shares of a Bank or Bank Holding Company

The notificants listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire shares of a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. The notices also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than March 5, 2015.

A. Federal Reserve Bank of San Francisco (Gerald C. Tsai, Director, Applications and Enforcement) 101 Market Street, San Francisco, California 94105–1579:

1. *Bruce M. Williams and Joyce L. Williams, Anaheim, California; Brian Edward Williams, Yorba Linda, California; Ashley Maureen Williams, Orange, California; Brooke Ann Williams, Anaheim, California; Michael Robert Williams, Las Vegas, Nevada; Rebecca Kristy Williams, Fullerton, California; the Gladys M. Bryant Living Trust, Anaheim, California; and Bruce M. Williams as Trustee of the Gladys M. Bryant Living Trust, Anaheim, California;* to acquire and retain 10 percent or more of the shares of CalWest Bancorp and thereby indirectly South County Bank National Association, both of Rancho Santa Margarita, California.

Board of Governors of the Federal Reserve System, February 13, 2015.

Michael J. Lewandowski,

Assistant Secretary of the Board.

[FR Doc. 2015–03426 Filed 2–18–15; 8:45 am]

BILLING CODE 6210–01–P

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 *et seq.*) (BHC Act), Regulation Y (12 CFR part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The applications will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than March 16, 2015.

A. Federal Reserve Bank of Atlanta (Chapelle Davis, Assistant Vice President) 1000 Peachtree Street NE., Atlanta, Georgia 30309:

1. *First Mercantile Financial Corporation,* to become a bank holding company by acquiring 100 percent of the outstanding shares of Putnam 1st Mercantile Bank, both of Cookeville, Tennessee.

Board of Governors of the Federal Reserve System, February 13, 2015.

Michael J. Lewandowski,

Associate Secretary of the Board.

[FR Doc. 2015–03427 Filed 2–18–15; 8:45 am]

BILLING CODE 6210–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2014–D–1399]

Guidance for Entities Considering Whether To Register as Outsourcing Facilities Under Section 503B of the Federal Food, Drug, and Cosmetic Act; Draft Guidance for Industry; Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing the availability of a draft guidance entitled ''Guidance for Entities Considering Whether to Register as Outsourcing Facilities Under Section 503B of the Federal Food, Drug, and Cosmetic Act.'' This draft guidance is intended to inform entities that are considering registering as outsourcing facilities under section 503B of the Federal Food,

Drug, and Cosmetic Act (the FD&C Act), as added by the Drug Quality and Security Act (DQSA), of the regulatory implications of registration as an outsourcing facility.

DATES: Although you can comment on any guidance at any time (see 21 CFR 10.115(g)(5)), to ensure that the Agency considers your comment on this draft guidance before it begins work on the final version of the guidance, submit either electronic or written comments on the draft guidance by May 20, 2015.

ADDRESSES: Submit written requests for single copies of this guidance to the Division of Drug Information, Center for Drug Evaluation and Research, Food and Drug Administration, 10001 New Hampshire Ave., Hillandale Building, 4th Floor, Silver Spring, MD 20993. Send one self-addressed adhesive label to assist that office in processing your requests. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the guidance document.

Submit electronic comments on the guidance to *http://www.regulations.gov.* Submit written comments to the Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: Sara Rothman, Food and Drug Administration, 10903 New Hampshire Ave., Silver Spring, MD 20993, 301–796–3110.

SUPPLEMENTARY INFORMATION:

I. Background

FDA is announcing the availability of a draft guidance for industry entitled ''Guidance for Entities Considering Whether to Register as Outsourcing Facilities Under Section 503B of the Federal Food, Drug, and Cosmetic Act.'' On November 27, 2013, President Obama signed the DQSA (Pub. L. 113–54) into law. The DQSA added a new section 503B to the FD&C Act that created a category of entities called ''outsourcing facilities.'' Section 503B(d)(4) of the FD&C Act (21 U.S.C. 353b(d)(4)) defines an outsourcing facility, in part, as a facility that complies with all of the requirements of section 503B, including registering with FDA as an outsourcing facility and paying associated fees. If the conditions outlined in section 503B(a) of the FD&C Act are satisfied, a drug compounded by or under the direct supervision of a licensed pharmacist in an outsourcing facility is exempt from certain sections of the FD&C Act, including section 502(f)(1) (21 U.S.C. 352(f)(1)) (concerning the labeling of drugs with adequate directions for use) and section 505 (21 U.S.C. 355) (concerning the approval of human drug products under new drug applications (NDAs) or abbreviated new drug applications (ANDAs)). Drugs compounded in outsourcing facilities are not exempt from the requirements of section 501(a)(2)(B) of the FD&C Act (21 U.S.C. 351(a)(2)(B)) (concerning current good manufacturing practice for drugs).

FDA has received questions about whether entities engaged in various types of activities (*e.g.,* a facility that is compounding only non-sterile drugs or only repackaging biological products) should register as an outsourcing facility. Because entities that register as outsourcing facilities in fiscal year 2015 (beginning October 1, 2014) must pay a registration fee and FDA has determined that fees paid pursuant to sections 503B and 744K of the FD&C Act will not be refunded, FDA is issuing this guidance to answer some of these questions and to provide potential registrants additional information about the regulatory impact of registering as an outsourcing facility.

Elsewhere in this volume of the **Federal Register**, FDA is announcing the availability of separate FDA guidance documents on (1) mixing, diluting, or repackaging biological products outside the scope of an approved biologics license application, and (2) repackaging certain human drug products by pharmacies and outsourcing facilities. These guidance documents describe FDA's compliance policies with respect to biological products that are mixed, diluted, or repackaged outside the scope of an approved biologics license application and repackaged human drugs.

This draft guidance is being issued consistent with FDA's good guidance practices regulation (21 CFR 10.115). The draft guidance, when finalized, will represent the Agency's current thinking on registering as an outsourcing facility under section 503B of the FD&C Act. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. An alternative approach may be used if such approach satisfies the requirements of the applicable statutes and regulations.

II. Comments

Interested persons may submit either electronic comments regarding this document to *http://www.regulations.gov* or written comments to the Division of Dockets Management (see **ADDRESSES**). It is only necessary to send one set of comments. Identify comments with the docket number found in brackets in the heading of this document. Received comments may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday, and will be posted to the docket at *http://www.regulations.gov.*

III. Electronic Access

Persons with access to the Internet may obtain the document at either *http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm* or *http://www.regulations.gov.*

Dated: February 11, 2015.

Leslie Kux,

Associate Commissioner for Policy.

[FR Doc. 2015–03416 Filed 2–18–15; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2014–D–2138]

Adverse Event Reporting for Outsourcing Facilities Under Section 503B of the Federal Food, Drug, and Cosmetic Act; Draft Guidance for Industry; Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA or the Agency) is announcing the availability of a draft guidance for industry entitled ''Adverse Event Reporting for Outsourcing Facilities Under Section 503B of the Federal Food, Drug, and Cosmetic Act.'' Under the Federal Food, Drug, and Cosmetic Act (the FD&C Act), an outsourcing facility must submit adverse event reports to FDA. This guidance explains FDA's current thinking on adverse event reporting for outsourcing facilities.

DATES: Although you can comment on any guidance at any time (see 21 CFR 10.115(g)(5)), to ensure that the Agency considers your comment on this draft guidance before it begins work to finalize the guidance, submit either electronic or written comments on this draft guidance by May 20, 2015. Submit either electronic or written comments concerning the collection of information proposed in the draft guidance by May 20, 2015.

ADDRESSES: Submit written requests for single copies of the draft guidance to the Division of Drug Information, Center for Drug Evaluation and Research, Food and Drug Administration, 10001 New Hampshire Ave., Hillandale Building,

4th Floor, Silver Spring, MD 20993. Send one self-addressed adhesive label to assist that office in processing your requests. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the draft guidance document.

Submit electronic comments on the draft guidance to *http://www.regulations.gov.* Submit written comments to the Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: H. Joy Sharp, Office of Compliance, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Silver Spring, MD 20993–0002, 301–796–3100.

SUPPLEMENTARY INFORMATION:

I. Background

FDA is announcing the availability of a draft guidance for industry entitled ''Adverse Event Reporting for Outsourcing Facilities Under Section 503B of the Federal Food, Drug, and Cosmetic Act.'' On November 27, 2013, President Obama signed the Drug Quality and Security Act (DQSA) into law (Pub. L. 113–54). The DQSA added a new section 503B to the FD&C Act (21 U.S.C. 353b). Under section 503B(b), a compounder can register as an outsourcing facility with FDA. Section 503B(d)(4) of the FD&C Act defines an outsourcing facility, in part, as a facility that complies with all of the requirements of section 503B, including registering with FDA as an outsourcing facility and paying associated fees. If the conditions outlined in section 503B(a) of the FD&C Act are satisfied, a drug compounded by or under the direct supervision of a licensed pharmacist in an outsourcing facility is exempt from certain sections of the FD&C Act, including section 502(f)(1) (21 U.S.C. 352(f)(1)) (concerning the labeling of drugs with adequate directions for use) and section 505 (21 U.S.C. 355) (concerning the approval of human drug products under new drug applications (NDAs) or abbreviated new drug applications (ANDAs)). Drugs compounded in outsourcing facilities are not exempt from the requirements of section 501(a)(2)(B) of the FD&C Act (21 U.S.C. 351(a)(2)(B)) (concerning current good manufacturing practice for drugs).

Under section 503B(b)(5), an outsourcing facility must submit adverse event reports to FDA in accordance with the content and format requirements established through guidance or regulation under section 310.305 of title 21, Code of Federal Regulations (or any successor regulations). This draft guidance explains how FDA intends to implement § 310.305 with respect to outsourcing facilities.

This draft guidance is being issued consistent with FDA's good guidance practices regulation (21 CFR 10.115). The draft guidance, when finalized, will represent the Agency's current thinking on this topic. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. An alternative approach may be used if such approach satisfies the requirements of the applicable statutes and regulations.

II. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (the PRA) (44 U.S.C. 3501–3520), Federal Agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information that they conduct or sponsor. ''Collection of information'' is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes Agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. Section 3506(c)(2)(A) of the PRA (44 U.S.C. 3506(c)(2)(A)) requires Federal Agencies to provide a 60-day notice in the **Federal Register** for each proposed collection of information before submitting the collection to OMB for approval. To comply with this requirement, FDA is publishing notice of the proposed collection of information set forth in this document.

With respect to the collection of information associated with this document, FDA invites comments on the following topics: (1) Whether the proposed information collected is necessary for the proper performance of FDA's functions, including whether the information will have practical utility; (2) the accuracy of FDA's estimated burden of the proposed information collected, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility, and clarity of the information collected; and (4) ways to minimize the burden of information collected on the respondents, including through the use of automated collection techniques, when appropriate, and other forms of information technology.

Under the draft guidance, registered outsourcing facilities must submit to FDA adverse event reports within 15 calendar days of receiving the information and must submit a followup report within 15 calendar days of receipt of new information about the adverse event, or as requested by FDA. Outsourcing facilities must submit the adverse event report using the existing Form FDA 3500A (which is approved by OMB control number 0910–0291) or an alternate method in accordance with § 310.305(d). A copy of the current labeling of the compounded drug product must be included. Each form should be submitted with a cover letter that includes the following heading: ''Adverse event report submitted by human drug compounding outsourcing facility (503B).''

Under § 310.305, entities subject to the regulation must maintain for 10 years the records of all adverse events required to be reported under § 310.305, including raw data and any correspondence relating to the adverse event. The outsourcing facility should also maintain records of its efforts to obtain the data elements described in the draft guidance for each adverse event report.

The total estimated reporting and recordkeeping burdens for the draft guidance are as follows:

TABLE 1—ESTIMATED ANNUAL REPORTING BURDEN [1]

Type of reporting	Number of respondents	Number of responses per respondent	Total annual responses	Average burden per response (hours)	Total hours
Submission of adverse event reports including cover letter, copy of labeling, and other information as described in the draft guidance	50	2	100	1.1	110
Total					110

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.

TABLE 2—ESTIMATED ANNUAL RECORDKEEPING BURDEN [1]

Type of recordkeeping	Number of recordkeepers	Number of records per recordkeeper	Total annual records	Average burden per recordkeeping (hours)	Total hours
Records of adverse events, including records of efforts to obtain the data elements for each adverse event report	50	1	50	16	800

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.

III. Comments

Interested persons may submit either electronic comments regarding this document to *http://www.regulations.gov* or written comments to the Division of Dockets Management (see **ADDRESSES**). It is only necessary to send one set of comments. Identify comments with the docket number found in brackets in the heading of this document. Received comments can be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday, and will be posted to the docket at *http://www.regulations.gov.*

IV. Electronic Access

Persons with access to the Internet may obtain the document at either *http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm* or *http://www.regulations.gov.*

Dated: February 11, 2015.

Leslie Kux,

Associate Commissioner for Policy.

[FR Doc. 2015–03419 Filed 2–18–15; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2014–N–1459]

Memorandum of Understanding Addressing Certain Distributions of Compounded Human Drug Products Between the States and the Food and Drug Administration; New Proposed Draft; Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice of availability; withdrawal.

SUMMARY: The Food and Drug Administration (FDA or the Agency) is announcing the availability for public comment of a draft standard memorandum of understanding (MOU) entitled ''Memorandum of Understanding Addressing Certain Distributions of Compounded Human Drug Products Between the State of [insert State] and the U.S. Food and Drug Administration.'' The draft standard MOU describes the responsibilities of the State that chooses to sign the MOU in investigating and responding to complaints related to compounded human drug products distributed outside the State and in addressing the interstate distribution of inordinate amounts of compounded human drug products.

FDA is also announcing the withdrawal of an earlier draft standard MOU entitled ''Memorandum of Understanding on Interstate Distribution of Compounded Drug Products,'' which was issued in January 1999. The January 1999 draft standard MOU is superseded by the new draft standard MOU.

DATES: FDA is withdrawing its draft standard MOU that published on January 21, 1999 (64 FR 3301), as of February 19, 2015. Submit either electronic or written comments on the new draft standard MOU by June 19, 2015. Submit comments on information collection issues under the Paperwork Reduction Act of 1995 by June 19, 2015 (see the ''Paperwork Reduction Act of 1995'' section of this document).

ADDRESSES: Submit written requests for single copies of the MOU to Edisa Gozun, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 51, Suite 5100, Silver Spring, MD 20993–0002. Send one self-addressed label to assist that office in processing your request. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the new draft standard MOU.

Submit electronic comments on the new draft standard MOU or on the collection of information to *http://www.regulations.gov.* Submit written comments to the Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: Edisa Gozun, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 51, Suite 5100, Silver Spring, MD 20993–0002, 301–796–3110.

SUPPLEMENTARY INFORMATION:

I. Background

Section 503A of the Federal Food, Drug, and Cosmetic Act (the FD&C Act) (21 U.S.C. 353a) describes the conditions that must be satisfied for drug products compounded by a licensed pharmacist or licensed physician to be exempt from the following sections of the FD&C Act: (1) Section 501(a)(2)(B) (21 U.S.C. 351(a)(2)(B)) (concerning current good manufacturing practice (CGMP) requirements), (2) section 502(f)(1) (21 U.S.C. 352(f)(1)) (concerning the labeling of drugs with adequate directions for use), and (3) section 505 (21 U.S.C. 355) (concerning the approval of drugs under new drug applications or abbreviated new drug applications).

One of the conditions to qualify for the exemptions listed in section 503A of the FD&C Act is that (1) the drug product is compounded in a State that has entered into an MOU with FDA that addresses the distribution of inordinate amounts of compounded drug products interstate and provides for appropriate investigation by a State agency of complaints relating to compounded drug products distributed outside such State; or (2) if the drug product is compounded in a State that has not entered into such an MOU, the licensed pharmacist, pharmacy, or physician does not distribute, or cause to be distributed, compounded drug products out of the State in which they are compounded in quantities that exceed 5 percent of the total prescription orders dispensed or distributed by such pharmacy or physician (see section 503A(b)(3)(B)(i) and (b)(3)(B)(ii) of the FD&C Act).

Section 503A(b)(3)(B) of the FD&C Act directs FDA to develop, in consultation with the National Association of Boards of Pharmacy (NABP), a standard MOU for use by the States in complying with section 503A(b)(3)(B)(i).

II. Previous Efforts To Develop a Standard MOU

In the **Federal Register** of January 21, 1999 (64 FR 3301), FDA announced the availability for public comment of a draft standard MOU, developed in consultation with NABP (1999 draft

standard MOU). Over 6,000 commenters submitted comments on the 1999 draft standard MOU. Because of litigation over the constitutionality of the advertising, promotion, and solicitation provisions in section 503A,[1] the draft standard MOU was never completed. In 2013, section 503A of the FD&C Act was amended by the Drug Quality and Security Act (DQSA) (Pub. L. 113–54) to remove the advertising, promotion, and solicitation provisions that were held unconstitutional, and FDA is implementing section 503A, including the provisions on the MOU. By this notice, FDA is withdrawing the 1999 draft standard MOU, and the new draft standard MOU made available today supersedes that draft standard MOU.

III. New 503A Guidance

Immediately after the enactment of the DQSA, in December 2013, the Agency published a draft guidance on section 503A of the FD&C Act entitled ''Pharmacy Compounding of Human Drug Products Under Section 503A of the Federal Food, Drug, and Cosmetic Act'' (2013 draft 503A guidance) (see 78 FR 72901 (December 4, 2013) announcing the availability of the draft guidance). That draft guidance described FDA's proposed policy with regard to specific provisions of section 503A of the FD&C Act that require rulemaking or other action by FDA, such as the MOU provisions. Thirty-one commenters on the 2013 draft 503A guidance offered FDA their views on the MOU provisions of section 503A. FDA considered these comments in developing the new draft standard MOU. The final 503A guidance, published July 2, 2014 (see 79 FR 37742 announcing the availability of the final 503A guidance), states that FDA does not intend to enforce the 5 percent limit on distribution of compounded drug products out of the State in which they are compounded until after FDA has finalized an MOU and made it available to the States for their consideration and signature. After considering any comments on the new draft standard MOU submitted to this docket, FDA intends to finalize the standard MOU and make it available for signature by individual States. FDA will determine at the time of publication of the final MOU how long it will allow States to consider whether to sign the MOU before FDA begins to enforce the 5 percent limit in those States that have not signed an MOU.

IV. New Draft Standard MOU

FDA has now developed a new draft standard MOU on which it is soliciting public comment. FDA has consulted with NABP in developing this new draft standard MOU. FDA also considered the comments submitted in 1999 on the previous draft standard MOU, as well as comments on the MOU provisions it received in connection with the published 2013 draft 503A guidance. Key provisions of the new draft standard MOU are summarized and discussed in this section of the document and, where appropriate, compared to the provisions in the 1999 draft standard MOU.

A. Investigation of Complaints

The new draft standard MOU provides that States that enter into the MOU will agree to:

- Investigate complaints relating to human drug products compounded in the State and distributed outside the State, including complaints about adverse drug experiences or certain product quality issues to, among other things, determine whether there is a potential public health risk or safety concern, and confirm that any risk or safety concern is adequately contained;
- As appropriate, take action to ensure that the relevant compounding pharmacy, pharmacist, or physician determines the root cause of the problem and eliminates any public health risk identified in relation to the complaint;
- Notify FDA within 72 hours of any complaints relating to a compounded human drug product distributed outside the State involving a potential public health risk or immediate safety concern, such as a report of a serious adverse drug experience or serious product quality issue, the State's initial assessment of the validity of the complaint, and any actions the State has taken or plans to take to address such complaints;
- Provide FDA with certain information about the complaint, including the following:
  - ○ Name and contact information of the complainant;
  - ○ name and address of the pharmacist/pharmacy/physician that is the subject of the complaint;
  - ○ a description of the complaint, including a description of any compounded drug product that is the subject of the complaint;
  - ○ the State's initial assessment of the validity of the complaint relating to a compounded human drug product distributed outside the State; and
  - ○ a description and date of any actions the State has taken to address the complaint; and
- Maintain records of the complaints it receives, the investigation of each complaint, and any response to or action taken as a result of a complaint, beginning when the State receives notice of the complaint. The draft standard MOU says that the State agrees to maintain these records for at least 3 years, beginning on the date of final action or the date of a decision that the complaint requires no action.

The new draft standard MOU, as compared to the 1999 draft standard MOU, clarifies that the types of complaints of compounded human drug products that should be investigated include *any* adverse drug experience (not just *serious* adverse drug experiences, which were identified as an example of the types of complaints to be investigated in the 1999 draft standard MOU) and product quality issues that, if left uncorrected, could lead to potential public health risks or safety concerns. Even nonserious adverse drug experiences and product quality issues can be indicative of problems at a compounding facility that could result in product quality defects leading to serious adverse drug experiences if not corrected. For example, inflammation around the site of an injection can indicate product contamination from inadequate sterile practices at the compounding pharmacy. If the pharmacy has inadequate sterile practices, other more serious contamination could result in serious adverse events.

FDA is clarifying that the complaints that States agree to investigate under the MOU are only those complaints that are made about compounded human drug products distributed outside the State. In contrast to the 1999 draft standard MOU, the new draft standard MOU does not contain a provision that would require the States entering into the MOU with FDA to agree to investigate alleged violations of the FD&C Act. Upon further reflection, FDA has tentatively concluded that it would be more appropriate for FDA to determine whether a particular action is a violation of Federal law. Of course, if any State identifies a potential violation of Federal law, it is encouraged to report it to FDA.

Furthermore, the new draft standard MOU does not include specific directions to the States relating to how to conduct their investigation of

[1] The conditions of section 503A of the FD&C Act originally included restrictions on the advertising or promotion of the compounding of any particular drug, class of drug, or type of drug and the solicitation of prescriptions for compounded drugs. These provisions were challenged in court and held unconstitutional by the U.S. Supreme Court in 2002. See *Thompson* v. *Western States Med. Ctr.,* 535 U.S. 357 (2002).

complaints. Rather, as recommended by comments previously submitted on the 1999 draft standard MOU, the details of such investigations are left to the States' discretion.

States signing the new standard MOU would agree to notify FDA about certain complaints and provide FDA with certain information about the complaint so FDA could investigate the complaint itself, or take other appropriate action.[2]

B. Inordinate Amounts

The new draft standard MOU provides that States that enter into the MOU will agree to:

- Review compounding records during inspections of compounding pharmacies to identify whether the compounding pharmacy, or the compounding pharmacist or physician, is distributing inordinate amounts of compounded human drug products interstate;
- Notify FDA if the State identifies any pharmacy, pharmacist, or physician within its jurisdiction that has distributed inordinate amounts of compounded human drug products interstate;
- Take action regarding any pharmacy, pharmacist, or physician that distributes inordinate amounts of compounded human drug products interstate; and
- Provide FDA with certain information, including the following:
  - The name and address of the pharmacy/pharmacist/physician;
  - a description of the evidence indicating that the pharmacy/pharmacist/physician has distributed inordinate amounts of compounded human drug products interstate, including a description of any compounded drug product that was distributed in inordinate amounts; and
  - a description and date of any actions the State has taken to address the distribution of inordinate amounts of compounded human drug product interstate.

In the new draft standard MOU, a pharmacist, pharmacy, or physician is considered to have distributed an inordinate amount of compounded human drug products interstate if the number of units of compounded human drug products distributed interstate during any calendar month is equal to or greater than 30 percent of the number of units of compounded and non-compounded drug products distributed or dispensed both intrastate and interstate by such pharmacist, pharmacy, or physician during that calendar month. FDA does not intend to include in the consideration of inordinate amounts those prescriptions dispensed to a patient (or patient's agent), where the patient (or patient's agent) to whom the drug is dispensed carries the drug across State lines after it has been dispensed to the patient (or the patient's agent) at the facility in which the drug was compounded.[3] This concept would be called the 30 percent limit.

The 1999 draft standard MOU defined ''inordinate amounts'' as the number of compounded prescriptions dispensed or distributed interstate annually by a pharmacy or physician that is equal to or greater than 20 percent of the total number of prescriptions dispensed or distributed (including both intrastate and interstate) by such pharmacy or physician; or the number of compounded prescriptions dispensed or distributed interstate annually by a pharmacy or physician that is less than 20 percent of the total number of prescriptions dispensed or distributed (including both intrastate and interstate) by such pharmacy or physician, but prescriptions for one or more individual compounded drug products (including various strengths of the same active ingredient) dispensed or distributed interstate constitute more than 5 percent of the total number of prescriptions dispensed or distributed. The 1999 draft standard MOU also included an exclusion from calculations to determine inordinate amounts for ''local'' interstate distribution to patients within 50 miles of the compounding pharmacy, and for interstate distribution in response to a public health emergency or catastrophic event.

Many comments on the 1999 draft standard MOU opposed the percentage limits it contained, and some comments on the 2013 draft 503A guidance opposed any definition of inordinate amounts that would significantly restrict interstate distributions under section 503A of the FD&C Act. Other comments suggested not defining ''inordinate amounts,'' leaving the definition up to the States, or defining the term as ''the amount that would be considered conventional manufacturing.'' FDA is proposing the 30 percent limit as the definition of ''inordinate amounts'' for the following reasons.

Section 503A of the FD&C Act reflects Congress' recognition that human drug compounding may be appropriate when it is based on receiving a valid prescription or notation for an identified individual patient. However, drug products compounded under this section of the FD&C Act are not required to demonstrate that they are safe or effective, bear adequate directions for use, or conform to CGMP. Congress, therefore, imposed strict limits on the distribution of drug products compounded under this section to protect the public health and the integrity of the drug approval process.

In particular, Congress did not intend for compounders operating under these statutory provisions to grow into conventional manufacturing operations making unapproved drugs, operating a substantial proportion of their business interstate. Although other provisions of the FD&C Act apply to state-licensed pharmacies and physicians that may qualify for the exemptions under section 503A of the FD&C Act (*e.g.,* the adulteration provisions for making drugs under insanitary conditions), and although FDA may take action in appropriate cases against compounders that violate these provisions or that operate outside of the conditions in section 503A, Congress recognized that these compounders are primarily overseen by the States. If a substantial proportion of a compounder's drugs are distributed outside a State's borders, adequate regulation of those drugs poses significant challenges to State regulators. States face logistical, regulatory, and financial challenges inspecting compounders located outside of their jurisdiction. In addition, particularly if a compounder distributes drugs to multiple States, it can be very difficult to gather the scattered information about possible adverse events associated with those drugs, connect them to the compounder, and undertake coordinated action to address a potentially serious public health problem.

Therefore, as a baseline measure, section 503A(b)(3)(B) of the FD&C Act limits the distribution of compounded human drug products outside of the State in which they are compounded under section 503A(a) to 5 percent of the total prescription orders dispensed or distributed by a licensed pharmacist, pharmacy, or physician. It then directs FDA, in consultation with NABP, to develop a standard MOU that addresses the distribution of inordinate amounts of compounded human drug products interstate and provides for appropriate

[2] FDA is currently considering whether to propose regulations or issue guidance documents to further its implementation of section 503A(b)(3)(B) of the FD&C Act. Notice of any such action will be provided in the **Federal Register**.

[3] Drugs that a patient takes across state lines in this manner are distributed interstate. However, for reasons explained in this notice, FDA's draft standard MOU does not count them toward the limit on distributing inordinate amounts of compounded drug products interstate.

investigation by a State agency of complaints relating to compounded human drug products distributed outside such State. Implementation of this provision requires FDA to determine whether a limit higher than 5 percent would be appropriate, provided the States make certain agreements: A State agrees to appropriately investigate complaints relating to compounded human drug products distributed out of the State and agrees to address the distribution of amounts that would be inordinate.

FDA tentatively concludes that if a State agrees to meet the conditions set forth in this MOU, distribution interstate up to the 30 percent limit would not be inordinate. This conclusion is based on FDA's expectation that States signing the MOU would appropriately investigate complaints about compounded human drug products distributed out of State, and address compounders distributing an inordinate amount of compounded drug products out of the state in which they are compounded. FDA's current view is that its proposed limit would appropriately balance the benefits of access to compounded human drug products with the need to protect the public health and the drug approval system. We do not believe that an additional limit is necessary for the distribution of an individual compounded drug product such as that contained in the 1999 draft standard MOU.

In developing the new draft standard MOU, we considered that patients can now obtain compounded human drug products from outsourcing facilities,[4] which are not subject to volume restrictions on interstate distribution. This could mitigate the access concerns noted in some comments FDA received on the definition of ''inordinate amounts'' in the 1999 draft standard MOU, and in more recent comments expressing concerns about access if ''inordinate amounts'' is defined restrictively or the 5 percent limit is enforced.

It is appropriate to provide a bright line test for when compounding pharmacies located in States that sign the MOU cross the line to conventional manufacturing that should be subject to all of the requirements of the FD&C Act, including the new drug approval and CGMP requirements. Congress provided such a bright line test, the 5 percent limit, for compounders located in States that do not sign the MOU.

Some commenters in response to the 1999 draft MOU and the 2013 draft 503A guidance were concerned with limitations on interstate distribution of compounded human drug products to contiguous States. In the 1999 draft MOU, the calculation of ''inordinate amounts'' excluded compounded human drug products that were distributed interstate but within 50 miles of the pharmacy or physician's office. After considering the provision in the 1999 draft MOU and the comments, FDA believes that the 30 percent limit on inordinate amounts provided in this new draft standard MOU is high enough that special calculations to address interstate distribution between contiguous States or over short distances are not needed. Moreover, the new draft standard MOU includes consideration of inordinate amounts of prescriptions dispensed to a patient (or patient's agent), if the patient (or patient's agent) to whom the drug is dispensed carries the drug across State lines after it has been dispensed to the patient (or patient's agent) at the facility in which the drug was compounded. We also do not intend to count as part of the 5 percent limit on distribution out of the State prescriptions dispensed to a patient (or patient's agent), if the patient (or patient's agent) to whom the drug is dispensed carries the drug across State lines after it has been dispensed to the patient (or patient's agent) at the facility in which the drug was compounded. We believe this treatment of these transactions where there are direct relationships among the patient, the prescriber, and the pharmacist or physician compounding the drug is consistent with section 503A of the FD&C Act.

Finally, the new draft standard MOU does not exclude from the calculation of ''inordinate amounts'' interstate distributions in response to a public health emergency or catastrophic event. We believe the 30 percent limit affords adequate opportunity for interstate distributions and note that outsourcing facilities may be able to compound drugs in an emergency and drugs on FDA's drug shortage list, further mitigating access concerns.

C. Definitions

The Appendix to the new draft standard MOU defines key terms used in the MOU, including ''adverse drug experience,'' ''serious adverse drug experience,'' ''product quality issue,'' ''serious product quality issue,'' and ''distribution.'' The definitions of ''adverse drug experience,'' ''serious adverse drug experience,'' ''product quality issue,'' and ''serious product quality issue'' are taken from relevant sections of FDA's regulations (see 21 CFR 310.305 and 314.81). For purposes of the new draft standard MOU, a ''distribution'' occurs when a compounded human drug product leaves the facility in which the drug was compounded. Distribution includes delivery or shipment to a physician's office, hospital, or other health care setting for administration and dispensing to an agent of a patient or to a patient for his or her own use. However, the definition notes that, to qualify for the exemptions under section 503A of the FD&C Act, a compounder must obtain a prescription for an individually identified patient (section 503A(a)), and the draft standard MOU would not alter this condition. Interstate distributions of compounded drug products would count toward the 30 percent limit whether or not the compounded drug products satisfied the prescription condition, or other conditions, in section 503A of the FD&C Act.

Some comments on the 2013 draft 503A guidance state that provisions in the standard MOU relating to drug distribution should not apply to dispensed drugs. Although the comments do not share a single definition of dispensing, or offer a detailed definition, they generally take the position that a drug is dispensed when it is provided pursuant to a prescription or doctor's order, and that dispensing is not a form of distribution. We have not adopted this approach, and propose a definition of distribution that we believe is consistent with the text and purpose of section 503A of the FD&C Act. Under our draft standard MOU, a distribution occurs when a compounded drug leaves the facility where it was made, regardless of whether the drug is also deemed to be dispensed.

Section 503A(b)(3)(B) of the FD&C Act directs FDA to include provisions in the MOU regarding the distribution of compounded drugs. The section does not define distribution to exclude dispensing, which Congress has done elsewhere when that was its intention.[5]

[4] The DQSA adds new section 503B to the FD&C Act (21 U.S.C. 353b). Under section 503B(b) of the FD&C Act, a compounder may elect to become an outsourcing facility by registering with FDA. Products compounded in a registered outsourcing facility can qualify for exemptions from the FDA approval requirements in section 505 of the FD&C Act and the requirement to label products with adequate directions for use under section 502(f)(1) of the FD&C Act if the requirements in section 503B are met. Outsourcing facilities will be inspected by FDA and must comply with other provisions of the FD&C Act, such as CGMP requirements.

[5] In different contexts, where it would further a regulatory purpose, Congress and the Agency have specifically defined distribute to exclude

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Our proposed definition implements the purpose of section 503A(b)(3)(B) of the FD&C Act, which is to limit and regulate compounded drugs that are sent out of the state in which they are made.[6] Our definition is also consistent with the ordinary meaning of distribute; it is natural to say that an entity compounding under section 503A of the FD&C Act distributes the drugs it makes to patients and health care providers, just as the manufacturers of other regulated articles are said to distribute their products to their customers. The definition proposed by comments, on the other hand, would write an exclusion for dispensing into the statute where Congress did not. It would also mean that drug products compounded under section 503A of the FD&C Act are excluded from the MOU and the 5 percent limit, because, in order to qualify for the exemptions under section 503A, a compounder must obtain a valid prescription order for an individually identified patient. For the reasons stated previously in section IV.B of this document, we believe this would achieve the opposite of what Congress intended.

In support of their alternative approach, commenters note that in section 503A(b)(3)(B)(ii) of the FD&C Act, Congress directed FDA to calculate the quantity of ''prescription orders dispensed and distributed'' when the Agency applies the 5 percent limit to compounders in states that do not sign the MOU. This language, however, supports FDA's proposed approach, because it makes clear that Congress understood the word distribute in this section to refer to filling prescription orders; otherwise it would not have directed the Agency to count the number of prescription orders that pharmacists and prescribers ''distributed.'' Nor is there anything to suggest that Congress understood distributed and dispensed to be mutually exclusive categories rather than overlapping categories. Given the statutory text and purpose, we believe that Congress referred to drugs dispensed or distributed in section 503A(b)(3)(B) of the FD&C Act to make clear that the Agency must not limit its calculation of total prescription orders to compounded drugs that the pharmacy or prescriber makes, but also include any other prescription orders, such as conventionally manufactured drugs, for which the pharmacist or prescriber serves solely as the dispenser.

V. Other Issues

A. Development of a Standard MOU

A number of commenters on both the 1999 draft MOU and on the 2013 draft 503A guidance suggested that FDA specifically negotiate MOUs with individual States, rather than develop a standard MOU. Section 503A of the FD&C Act requires the Agency to develop a standard MOU for use by the States. Furthermore, it would be impractical to develop an individualized MOU with every State, and creating individualized MOUs would create a patchwork of regulation of interstate distribution from compounders seeking to qualify for the exemptions under section 503A of the FD&C Act. This would be confusing to the health care community, as well as regulators.

B. Exemptions From the Interstate Distribution Provisions

Some comments on the 2013 draft 503A guidance requested that we consider exempting certain drug products or types of compounding entities from the limits in the MOU and the 5 percent limit. For example, some comments recommended that we exempt nonsterile products or home infusion pharmacies.

Congress did not exempt any particular drug products or compounding entities from the 5 percent limit. Furthermore, FDA believes that the 5 percent limit and the MOU limit on inordinate amount provisions are important to distinguish pharmacy compounding from conventional manufacturing in the guise of compounding, and to protect consumers and the integrity of the drug approval process. American consumers rely on the FDA drug approval process to ensure that medications have been evaluated for safety and effectiveness before they are marketed in the United States. Drugs made by compounders, including those made at human drug compounding outsourcing facilities, are not FDA-approved. This means that they have not undergone premarket review of safety, effectiveness, or manufacturing quality. Therefore, when an FDA-approved drug is commercially available, FDA recommends that practitioners prescribe the FDA-approved drug rather than a compounded drug unless the prescribing practitioner has determined that a compounded product is necessary for the particular patient and would provide a significant difference for the patient as compared to the FDA-approved commercially available drug product.

In section 503A of the FD&C Act, Congress enacted several conditions to differentiate compounders from manufacturers and provided that only if they meet those conditions can they qualify for the exemptions from the drug approval requirements in section 505 of the FD&C Act. One of those conditions relates to limitations on the interstate distribution of compounded human drug products, and FDA intends to enforce those provisions to differentiate compounding that qualifies for the exemptions from conventional manufacturing in the guise of compounding that does not, and will apply the conditions to all types of drugs and all categories of compounding.

C. Information Sharing Between States and FDA

Several commenters on the 1999 draft MOU proposed that signatories to the MOU would agree to share information on a variety of subjects. The new draft standard MOU provides that States will agree to notify FDA of any complaint relating to a compounded human drug product distributed outside the State involving a potential public health risk or immediate safety concern, such as a report of a serious adverse drug experience or serious product quality issue, and provide information about those events and issues. The new draft standard MOU also provides that States will notify FDA if they identify a pharmacist, pharmacy, or physician within their jurisdiction that has distributed inordinate amounts of compounded human drug products interstate. In addition, FDA regularly posts on its compounding Web site information about enforcement and other actions related to compounders that violate the FD&C Act, and it is obligated to share certain information with States under section 105 of the DQSA.

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dispensing. See, for example, section 581(5) of the FD&C Act, which applies to Title II of the DQSA, and 21 CFR 208.3, which applies to 21 CFR part 208 of our regulations. Section 503A of the FD&C Act does not contain a similar definition, or specific direction to exclude dispensing from the meaning of distribution. We also note that these definitions were adopted for provisions that focus on conventionally manufactured drug products, which assign different obligations to dispensers than to wholesalers, packagers, or other intermediaries in light of the different role that dispensers play with respect to product labeling and the drug distribution chain. In contrast, section 503A of the FD&C Act focuses on compounded drugs, and the reasons for defining distribution to exclude dispensing in Title II of the DQSA or part 208 do not apply.

[6] See discussion of the purposes of section 503A of the FD&C Act in section IV.B, supra.

D. Enforcement of the 5 Percent Limit on Distribution of Compounded Drug Products Out of the State in Which They Are Compounded

In the 2013 draft 503A guidance, FDA stated that it does not intend to enforce the 5 percent limit on distribution of compounded drug products outside of the State in which they are compounded until 90 days after FDA has finalized a standard MOU and made it available to the States for their consideration and signature. Most commenters on the 2013 draft 503A guidance said this period was too short, but did not recommend a specific alternative. A few commenters recommended a different timeframe, one recommending 120 days and another recommending 365 days. The 1997 Senate Committee Report for the Food and Drug Administration Modernization Act suggests that a 180-day period for States to decide whether to sign might be appropriate.[7] The Agency proposes a 180-day period after the final standard MOU is made available for signature before FDA will enforce the 5 percent limit in States that have not signed the MOU, and invites public comment on whether this is the appropriate timeframe. FDA will announce at the time it publishes the final standard MOU and makes it available for signature when it intends to begin enforcing the 5 percent limit in States that do not sign.

VI. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (the PRA) (44 U.S.C. 3501–3520), Federal Agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. ''Collection of information'' is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes Agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. Section 3506(c)(2)(A) of the PRA (44 U.S.C. 3506(c)(2)(A)), requires Federal Agencies to provide a 60-day notice in the **Federal Register** for each proposed collection of information before submitting the collection to OMB for approval. To comply with this requirement, FDA is publishing notice of the proposed collection of information set forth in this document.

With respect to the following collection of information, FDA invites comments on these topics: (1) Whether the proposed collection of information is necessary for the proper performance of FDA's functions, including whether the information will have practical utility; (2) the accuracy of FDA's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility, and clarity of the information collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques, when appropriate, and other forms of information technology.

Section 503A of the FD&C Act describes, among other things, the circumstances under which certain human drug products compounded by a licensed pharmacist or licensed physician are exempt from certain sections of the FD&C Act. One of the conditions to qualify for the exemptions listed in section 503A of the FD&C Act is that: (1) The human drug product is compounded in a State that has entered into an MOU with FDA that addresses the distribution of inordinate amounts of compounded human drug products interstate and provides for appropriate investigation by a State agency of complaints relating to compounded human drug products distributed outside such a State; or (2) if the human drug product is compounded in a State that has not entered into such an MOU, the licensed pharmacist, pharmacy, or physician does not distribute, or cause to be distributed, compounded human drug products out of the State in which they are compounded, more than 5 percent of the total prescription orders dispensed or distributed by such pharmacy or physician (see section 503A(b)(3)(B)(i) and (b)(3)(B)(ii).

Section 503A(b)(3) directs FDA, in consultation with the NABP, to develop a standard MOU for use by states in complying with the provisions concerning the interstate distribution of inordinate amounts of compounded human drug products interstate and appropriate investigation by a State agency of complaints relating to compounded human drug products distributed outside such State.

The new draft standard MOU contains the information collections that must be approved by OMB under the PRA. These information collections are described in this section of the document. For purposes of this analysis, FDA assumes that 25 States will sign the standard MOU with FDA.

Under section III.a. of the new draft standard MOU, the State will notify FDA by email at *StateMOU@fda.hhs.gov* within 72 hours of receiving any complaint relating to a compounded human drug product distributed outside the State involving a potential public health risk or immediate safety concern, such as a report of a serious adverse drug experience or serious product quality issue. The notification will include the following information: (1) The name and contact information of the complainant, in the case of a complaint; (2) the name and address of the pharmacist, pharmacy, and/or physician that is the subject of the complaint; (3) a description of the complaint, including a description of any compounded drug product that is the subject of the complaint; (4) the State's initial assessment of the validity of the complaint relating to a compounded human drug product distributed outside the State; and (5) a description and date of any actions the State has taken to address the complaint. In addition, the States will maintain records of the complaints they receive, the investigation of each complaint, and any response to or action taken as a result of a complaint, beginning when the State receives notice of the complaint. The States will maintain these records for at least 3 years, beginning on the date of final action or the date of a decision that the complaint requires no action.

Based on our knowledge of State regulation of compounding practices and related complaints, we estimate that annually a total of approximately 25 States (''no. of respondents'' in table 1, row 1) will notify FDA within 72 hours of receiving any complaint relating to a compounded human drug product distributed outside the State involving a potential public health risk or immediate safety concern. We estimate that each State will notify FDA annually of approximately 3 complaints it receives (''no. of responses per respondent'' in table 1, row 1), for a total of 75 notifications of complaints sent to FDA (''total annual responses'' in table 1, row 1). We estimate that preparing and submitting this information to us as described in the MOU will take approximately 0.5 hours per response (''average burden per response'' in table 1, row 1), for a total of 37.5 hours (''total hours'' in table 1, row 1).

We also estimate that a total of approximately 25 States (''no. of recordkeepers'' in table 2) will prepare and maintain records for 3 years of the complaints they receive, investigations of complaints, and on any State action

[7] ''[U]ntil the State . . . enters into a memorandum of understanding (MOU) with the Secretary or 180 days after the development of the standard MOU, whichever comes first, the [section 503A] exemption shall not apply if inordinate quantities of compounded products are distributed outside of the State in which the compounding pharmacy or physician is located.'' (U.S. Senate Committee Report, see note 2.)

taken or replies to complaints. We estimate that each State will receive approximately 3 complaints annually and will prepare and maintain approximately 5 records per each complaint the State receives, for a total of 15 records per State (''no. of records per recordkeeper'' in table 2), and a total of 375 records annually across all States (''total annual records'' in table 2). We further estimate that preparing and maintaining these records will take approximately 1 hour per record (''average burden per recordkeeping (in hours)'' in table 2), for a total of 375 hours (''total hours'' in table 2).

Under section III.a. of the new draft standard MOU, investigations performed by the State under this MOU will ensure that (1) the root cause of the problem that is the subject of the complaint is determined, (2) any risk or safety concern associated with the compounded human drug product is adequately contained (*i.e.,* there is no ongoing risk to the public), and (3) sufficient corrective action has been taken to eliminate any future public health risk.

Under section III.b of the new draft standard MOU, the States will notify FDA by email at *StateMOU@fda.hhs.gov* within 7 days of determining that a pharmacist, pharmacy, or physician within their jurisdiction has distributed inordinate amounts of compounded human drug products interstate, as described in the MOU. The notification should include the following information: (1) The name and address of the pharmacist/pharmacy/physician; (2) a description of the evidence indicating that the pharmacist/pharmacy/physician has distributed inordinate amounts of compounded human drug products interstate, including a description of any compounded drug product that was distributed in inordinate amounts; and (3) a description and date of any actions the State has taken to address the distribution of inordinate amounts of compounded human drug products interstate.

We estimate that annually a total of approximately 25 States (''no. of respondents'' in table 1, row 2) will notify FDA of their determination that a pharmacist, pharmacy, or physician has distributed inordinate amounts of compounded human drug products interstate. We estimate that each State will notify FDA annually of approximately 2 determinations it makes (''no. of responses per respondent'' in table 1, row 2), for a total of 50 determinations (''total annual responses'' in table 1, row 2). We estimate that preparing and submitting this information to FDA as described in the MOU will take approximately 0.5 hours per response (''average burden per response'' in table 1, row 2), for a total of 25 hours (''total hours'' in table 1, row 2).

Under section V of the current draft standard MOU, a State may designate a new liaison to the MOU by notifying FDA's administrative liaison in writing. If a State's liaison becomes unavailable to fulfill its functions under the MOU, the State will name a new liaison within 2 weeks and notify FDA.

We estimate that annually a total of approximately 13 States (''no. of respondents'' in table 1, row 3) will notify FDA of a new liaison to the MOU. We estimate that each State will submit to FDA annually approximately 1 notification of a new liaison (''no. of responses per respondent'' in table 1, row 3), for a total of 13 notifications of a new liaison (''total annual responses'' in table 1, row 3). We estimate that preparing and submitting each notification as described in the MOU will take approximately 0.2 hours per response (''average burden per response'' in table 1, row 3), for a total of 2.6 hours (''total hours'' in table 1, row 3).

Under section VI of the new draft standard MOU, a State may terminate its participation in the MOU by submitting to FDA a 30-day notice of termination.

We estimate that annually a total of approximately 1 State (''no. of respondents'' in table 1, row 4) will notify FDA that it intends to terminate its participation in the MOU. We estimate that this State will submit to FDA annually approximately 1 notification of termination (''no. of responses per respondent'' in table 1, row 4), for a total of 1 notification (''total annual responses'' in table 1, row 4). We estimate that preparing and submitting the notification as described in the MOU will take approximately 0.2 hours per notification (''average burden per response'' in table 1, row 4), for a total of 0.2 hours (''total hours'' in table 1, row 4).

Under section VI of the new draft standard MOU, if a State does not adhere to the provisions of the MOU, FDA may post a 30-day notice of termination on its Web site. As a result of this action by FDA, the State will notify all pharmacists, pharmacies, and physicians within the State of the termination and advise them that compounded human drug products may be distributed (or caused to be distributed) out of the State only in quantities that do not exceed 5 percent of the total prescription orders dispensed or distributed by the pharmacist, pharmacy, or physician.

We estimate that annually a total of approximately 1 State (''no. of respondents'' in table 3) will submit 1 notification of termination as described in the MOU (''no. of disclosures per respondent'' in table 3) to the pharmacists, pharmacies, and physicians in its State for a total of 1 notification of termination (''total annual disclosures'' in table 3). We estimate that preparing and submitting each notification will take approximately 1 hour per notification (''average burden per disclosure (in hours)'' in table 3), for a total of 1 hour (''total hours'' in table 3).

FDA estimates the burden of this collection of information as follows:

TABLE 1—ESTIMATED ANNUAL REPORTING BURDEN [1]

Compounding MOU between FDA and States	Number of respondents	Number o esponses per respondent	Total annual responses	Average burden per response	Total hours
State notifies FDA of compounding complaints it receives	25	3	75	0.5	37.5
State notifies FDA of the distribution of inordinate amounts of compounded drug products	25	2	50	0.5	25
State notifies FDA of a new liaison to the MOU	13	1	13	0.2	2.6
State notifies FDA of its intent to terminate participation in the MOU	1	1	1	0.2	0.2
Total	64	7	139	N/A	65.3

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.

TABLE 2—ESTIMATED ANNUAL RECORDKEEPING BURDEN [1]

Compounding MOU between FDA and States	Number of recordkeepers	Number of records per recordkeeper	Total annual records	Average burden per recordkeeping (in Hours)	Total Hours
State recordkeeping for 3 years of compounding complaints	25	15	375	1	375
Total	25	15	375	1	375

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.

TABLE 3—ESTIMATED ANNUAL THIRD-PARTY DISCLOSURE BURDEN [1]

Compounding MOU between FDA and States	Number of respondents	Number of disclosures per respondent	Total annual disclosures	Average burden per disclosure (in Hours)	Total hours
State notification to pharmacists, pharmacies, and physicians that its participation in the MOU has been terminated by FDA	1	1	1	1	1
Total	1	1	1	1	1

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.

VII. Request for Comments

FDA invites comments from interested persons on the new draft standard MOU that would establish an agreement between the signatory States and FDA regarding the appropriate investigation by such States of complaints relating to compounded human drug products distributed outside the State, and the distribution of inordinate amounts of compounded human drug products interstate. The Agency is providing a 120-day comment period.

After considering any comments on the new draft standard MOU submitted to this docket, FDA intends to finalize the standard MOU and make it available for signature by individual States. FDA will determine at the time of publication of the final MOU how long it will allow States to consider whether to sign the MOU before FDA begins to enforce the 5 percent limit in those States that have not signed an MOU.

Interested persons may submit either electronic comments regarding this document to *http://www.regulations.gov* or written comments to the Division of Dockets Management (see **ADDRESSES**). It is only necessary to send one set comments. Identify comments with the docket number found in brackets in the heading of this document. Received comments may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday, and will be posted to the docket at *http://www.regulations.gov.*

VIII. Electronic Access

Persons with access to the Internet may obtain the draft standard MOU at *http://www.regulations.gov.*

Dated: February 12, 2015.

Leslie Kux,

Associate Commissioner for Policy.

[FR Doc. 2015–03420 Filed 2–18–15; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2014–D–1525]

Mixing, Diluting, or Repackaging Biological Products Outside the Scope of an Approved Biologics License Application; Draft Guidance for Industry; Availability

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA or the Agency) is announcing the availability of a draft guidance for industry entitled ''Mixing, Diluting, or Repackaging Biological Products Outside the Scope of an Approved Biologics License Application.'' This draft guidance describes the conditions under which FDA does not intend to take action against a state-licensed pharmacy, a Federal facility, or outsourcing facility that mixes, dilutes, or repackages certain biological products without obtaining an approved biologics license application (BLA).

DATES: Although you can comment on any guidance at any time (see 21 CFR 10.115(g)(5)), to ensure that the Agency considers your comment on this draft guidance before it begins work on the final version of the guidance, submit either electronic or written comments on the draft guidance by May 20, 2015.

ADDRESSES: Submit written requests for single copies of this guidance to the Division of Drug Information, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 51, Rm. 2201, Silver Spring, MD 20993–0002; or the Office of Communication, Outreach and Development, Center for Biologics Evaluation and Research (CBER), Food and Drug Administration, 10903 New Hampshire Avenue, Bldg. 71, Rm. 3128, Silver Spring, MD 20993–0002. Send one self-addressed adhesive label to assist that office in processing your requests. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the guidance document.

Submit electronic comments on the guidance to *http://www.regulations.gov.* Submit written comments to the Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: Leah Christl, Center for Drugs Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 22, Rm. 6426, Silver Spring, MD 20903, 301–796–0869; or Stephen Ripley, Center for Biologics Evaluation and Research, Food and Drug Administration, 10903

New Hampshire Ave., Bldg. 71, Rm. 7301, Silver Spring, MD 20993–0002, 240–402–7911.

SUPPLEMENTARY INFORMATION:

I. Background

FDA is announcing the availability of a draft guidance for industry entitled ''Mixing, Diluting, or Repackaging of Biological Products Outside the Scope of an Approved Biologics License Application.'' Certain licensed biological products may need to be mixed, diluted, or repackaged in a way not described in the approved labeling for the product to meet the needs of a specific patient. For example, for some biological products there is no licensed pediatric strength and/or dosage form. In addition, there may be certain circumstances when a person would remove a licensed biological product from its original container and place it into a different container(s) (repackage it), in a manner that is not within the scope of the approved labeling for the product. As described in the draft guidance, mixed, diluted, or repackaged biological products are not eligible for the statutory exemptions available to certain compounded drugs under sections 503A and 503B of the Federal Food, Drug, and Cosmetic Act (FD&C Act) (21 U.S.C. 353A and 353B). In addition, a biological product that is mixed, diluted, or repackaged outside the scope of an approved BLA is considered an unlicensed biological product under section 351 of the Public Health Service (PHS) Act (21 U.S.C. 262).

This draft guidance describes the conditions under which FDA does not intend to take action for violations of section 351 of the PHS Act and section 502(f)(1) (21 U.S.C. 352(f)(1) and where specified, section 501(a)(2)(B) (21 U.S.C. 351(a)(2)(B) of the FD&C Act, when a state-licensed pharmacy, a Federal facility, or an outsourcing facility dilutes, mixes, or repackages certain biological products without obtaining an approved BLA.

Elsewhere in this issue of the **Federal Register**, the Agency is making available for comment a draft guidance entitled ''Repackaging of Certain Human Drug Products by Pharmacies and Outsourcing Facilities.'' When these two guidances become final, they will address and clarify the Agency's policy regarding hospital pharmacies repackaging and safely transferring repackaged drug, including biological products, to other hospitals within the same health system during a drug shortage. Therefore, under section 506F(d) of the FD&C Act (21 U.S.C. 356f(d), when FDA issues these as final guidances, section 506F will no longer apply.

This draft guidance is being issued consistent with FDA's good guidance practices regulation (21 CFR 10.115). This guidance, when finalized, will represent FDA's current thinking on mixing, diluting, and repackaging of biological products not within the scope of the product's approved BLA as described in the approved labeling for the product. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. An alternative approach may be used if such approach satisfies the requirements of the applicable statutes and regulations.

II. Comments

Interested persons may submit either electronic comments regarding this document to *http://www.regulations.gov* or written comments to the Division of Dockets Management (see **ADDRESSES**). It is only necessary to send one set of comments. Identify comments with the docket number found in brackets in the heading of this document. Received comments may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday, and will be posted to the docket at *http://www.regulations.gov.*

III. Paperwork Reduction Act of 1995

This draft guidance contains information collection provisions that are subject to review by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). The title, description, and respondent description of the information collection are given under this section with an estimate of the annual reporting and recordkeeping burdens. Included in the estimate is the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

We invite comments on these topics: (1) Whether the proposed collection of information is necessary for the proper performance of FDA's functions, including whether the information will have practical utility; (2) the accuracy of FDA's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques, when appropriate, and other forms of information technology.

Title: Draft Guidance for Industry: Mixing, Diluting, or Repackaging of Biological Products Outside the Scope of an Approved Biologics License Application.

Description: The draft guidance describes FDA's policy with respect to the mixing, diluting, and repackaging of certain types of biological products that have been licensed under section 351 of the PHS Act when such activities are not within the scope of the product's approved BLA as described in the approved labeling for the product. The draft guidance describes the conditions under which FDA does not intend to take action for violations of section 351 of the PHS Act and section 502(f)(1) and where specified, section 501(a)(2)(B) of the FD&C Act, when a state-licensed pharmacy, a Federal facility, or an outsourcing facility mixes, dilutes, or repackages certain biological products without obtaining an approved BLA.

The draft guidance includes the following collection of information under the PRA.

One condition described in the draft guidance is that, if the biological product is mixed, diluted, or repackaged by an outsourcing facility, the label on the immediate container (primary packaging, *e.g.,* the syringe) of the mixed, diluted, or repackaged product includes the following information:

- The statement ''This product was mixed or diluted by [name of outsourcing facility],'' or ''This product was repackaged by [name of outsourcing facility]'' whichever statement is appropriate;
- the address and phone number of the outsourcing facility that mixed, diluted, or repackaged the biological product;
- the proper name of the original biological product that was mixed, diluted, or repackaged;
- the lot or batch number of the mixed, diluted, or repackaged biological product;
- the dosage form and strength;
- a statement of either the quantity or the volume of the mixed, diluted, or repackaged biological product, whichever is appropriate;
- the date the biological product was mixed, diluted, or repackaged;
- the beyond-use-date (BUD) of the mixed, diluted, or repackaged biological product;
- storage and handling instructions for the mixed, diluted, or repackaged biological product;
- the National Drug Code (NDC) number of the mixed, diluted, or

repackaged biological product, if available; [1]

• The statement ''Not for resale,'' and, if the biological product is distributed by an outsourcing facility other than pursuant to a prescription for an individual identified patient, the statement ''Office Use Only''; and

• If included on the label of the FDA-licensed product from which the biological product is being mixed, diluted, or repackaged, a list of the active and inactive ingredients; and if the ingredients are listed because they were listed on the original product, the label of the mixed, diluted, or repackaged product should include any additional ingredients that appear in the mixed, diluted, or repackaged product.

Another condition in the draft guidance is that, if the immediate product label is too small or the mixed, diluted, or repackaged product is otherwise unable to accommodate a label with sufficient space to bear the active and inactive ingredients, such information should be included on the label of the container from which the individual units are removed for administration (secondary packaging, *e.g.,* the bag, box, or other package in which the mixed, diluted, or repackaged biological products are distributed).

In addition, the draft guidance describes the conditions that the container label include directions for use, including, as appropriate, dosage and administration, and the following information to facilitate adverse event reporting: *http://www.fda.gov/medwatch* and 1–800–FDA–1088. Another condition in the draft guidance is that each mixed, diluted, or repackaged biological product is also accompanied by a copy of the prescribing information that accompanied the original licensed biological product that was mixed, diluted, or repackaged.

We estimate that annually a total of approximately five registered outsourcing facilities that mix, dilute, or repackage biological products (''Number of Respondents'' in table 1, row 1) will each design, test, and produce approximately five different labels (''Frequency per Disclosure'' in table 1, row 1), for a total of 25 labels that include the information set forth in section III.B of the draft guidance (including directions for use) (''Total Disclosures'' in table 1, row 1). We also estimate that designing, testing, and producing each label will take approximately 0.5 hours (''Hours per Disclosure'' in table 1, row 1). The provision to add *http://www.fda.gov/medwatch* and 1–800–FDA–1088 is not included in this burden estimate because it is not considered a collection of information under the PRA because the information is ''originally supplied by the Federal Government to the recipient for the purpose of disclosure to the public'' (5 CFR 1320.3(c)(2)).

Section III.C of the draft guidance discusses the preparation of prescription sets (*i.e.,* licensed allergenic extracts that are combined to provide subcutaneous immunotherapy to an individual patient) by a physician, state-licensed pharmacy, a Federal facility, or outsourcing facility. Under the draft guidance, if the prescription set is mixed or diluted by an outsourcing facility, the label on the immediate container of the prescription set (primary packaging) includes:

• The patient's name as identified on the prescription;

• the statement ''This prescription set was prepared by [name of outsourcing facility]'';

• the address and phone number of the outsourcing facility that prepared the prescription set;

• the identity of each allergenic extract in the prescription set and the quantity of each;

• the dilution of each dilution vial;

• the lot or batch number of the prescription set;

• the date the prescription set was prepared;

• the BUD of the prescription set;

• storage and handling instructions for the prescription set; and

• the statement ''Not for resale''.

In addition, under the draft guidance, the label of the container from which the individual units of the prescription set are removed for administration (secondary packaging) includes the following information to facilitate adverse event reporting: *http://www.fda.gov/medwatch* and 1–800–FDA–1088. Each prescription set prepared is also accompanied by instructions for use and the FDA approved package insert for each allergenic extract.

We estimate that annually a total of approximately five outsourcing facilities that prepare prescription sets (''Number of Respondents'' in table 2, row 1) will each include the information set forth in section III.C of the draft guidance (including directions for use) on the labels, packages, and/or containers of approximately 300 prescription sets (''Frequency per Disclosure'' in table 2, row 1) for a total of 1500 disclosures (''Total Disclosures'' in table 2, row 1). We also estimate that the initial process of designing, testing, and producing, and attaching each label, package, and/or container to each prescription set will take approximately 0.5 hours (''Hours per Disclosure'' in table 2, row 1). The provision to add the statement *http://www.fda.gov/medwatch* and 1–800–FDA–1088 is not included in this burden estimate because it is not considered a collection of information under the PRA because the information is ''originally supplied by the Federal Government to the recipient for the purpose of disclosure to the public'' (5 CFR 1320.3(c)(2)).

We also estimate that a total of approximately five outsourcing facilities (''Number of Respondents'' in table 2, row 2) will each design, test, and produce the instructions for use and a copy of prescribing information, as set forth in section III.C of the draft guidance, for approximately 300 prescription sets (''Frequency per Disclosure'' in table 2, row 2) for a total of 1500 disclosures (total disclosures'' in table 2, row 2), which we estimate will take approximately 1 hour for each prescription set (''Hours per Disclosure'' in table 2, row 2). The provision to include *http://www.fda.gov/medwatch* and 1–800–FDA–1088 is not included in this burden estimate because they are not considered a collection of information under the PRA because the information is ''originally supplied by the Federal Government to the recipient for the purpose of disclosure to the public'' (5 CFR 1320.3(c)(2)).

The total estimated third-party disclosure burden resulting from the draft guidance is as follows:

[1] The NDC number of the original licensed biological product should not be placed on the mixed, diluted, or repackaged biological product.

TABLE 1—ESTIMATED ANNUAL THIRD-PARTY DISCLOSURE BURDEN [1]

Biological product mixing, diluting, and repackaging	Number of respondents	Frequency per disclosure	Total disclosures	Hours per disclosure	Total hours
Designing, testing, and producing the label, container, packages, and/or outer containers for each mixed, diluted, or repackaged biological product	5	5	25	0.5	12.5
Prescribing information labeling accompanying each mixed, diluted, or repackaged drug product	5	5	25	1	25
Total					37.5

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.
*(30 minutes)

TABLE 2—ESTIMATED ANNUAL THIRD-PARTY DISCLOSURE BURDEN [1]

Preparation of prescription sets	Number of respondents	Frequency per disclosure	Total disclosures	Hours per disclosure	Total hours
Designing, testing, and producing each label on immediate containers, packages, and/or outer containers	5	300	1500	0.5	750
Including instructions for use labeling and the original package insert(s) for each prescription set	5	300	1500	1	1500
Total					2250

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.
*(30 minutes)

The draft guidance also references registration, product reporting, current good manufacturing practice (CGMP) requirements, and the payment of certain fees by human drug compounding outsourcing facilities. In the **Federal Register** of December 4, 2013 (78 FR 72899), FDA estimated the burden resulting from outsourcing facility registration. In the **Federal Register** of December 4, 2013 (78 FR 72897), FDA estimated the burden resulting from outsourcing facility interim product reporting. In the **Federal Register** of April 1, 2014 (79 FR 18297), FDA estimated the burden resulting from the payment of certain fees by outsourcing facilities. In the **Federal Register** of July 2, 2014 (79 FR 37743), FDA estimated the burden resulting from outsourcing facility compliance with CGMP requirements.

IV. Electronic Access

Persons with access to the Internet can obtain the document at either *http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm, http://www.fda.gov/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/default.htm* or *http://www.regulations.gov.*

Dated: February 11, 2015.

Leslie Kux,

Associate Commissioner for Policy.

[FR Doc. 2015–03418 Filed 2–18–15; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2014–D–1524]

Repackaging of Certain Human Drug Products by Pharmacies and Outsourcing Facilities; Draft Guidance for Industry; Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice of availability.

SUMMARY: The Food and Drug Administration (FDA or the Agency) is announcing the availability of a draft guidance for industry entitled ''Repackaging of Certain Human Drug Products by Pharmacies and Outsourcing Facilities.'' This guidance describes the conditions under which FDA does not intend to take action for violations of the Federal Food, Drug, and Cosmetic Act (the FD&C Act), when a state-licensed pharmacy, a Federal facility, or an outsourcing facility repackages human drug products.

When this guidance becomes final, the Agency may also consider withdrawing or revising other guidance documents that address human drug repackaging, including section 446.100 of the Compliance Program Guidance (CPG) Manual, entitled ''Regulatory Action Regarding Approved New Drugs and Antibiotic Drug Products Subjected to Additional Processing or other Manipulations,'' which was issued in January 1991, and section 460.100 of the CPG Manual, entitled ''Hospital Pharmacies—Status as Drug Manufacturer,'' which was issued in October 1980.

DATES: Although you can comment on any guidance at any time (see 21 CFR 10.115(g)(5)), to ensure that the Agency considers your comment on this draft guidance before it begins work on the final version of the guidance, submit either electronic or written comments on the draft guidance by May 20, 2015.

ADDRESSES: Submit written requests for single copies of this guidance to the Division of Drug Information, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 51, Rm. 2201, Silver Spring, MD 20993–0002. Send one self-addressed adhesive label to assist that office in processing your requests. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the guidance document.

Submit electronic comments on the guidance to *http://www.regulations.gov.* Submit written comments to the Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: Gail Bormel, Food and Drug Administration, 10001 New Hampshire Ave., Silver Spring, MD 20903, 301–796–3110.

SUPPLEMENTARY INFORMATION:

I. Announcement of Draft Guidance

FDA is announcing the availability of a draft guidance for industry entitled

''Repackaging of Certain Human Drug Products by Pharmacies and Outsourcing Facilities.'' FDA regards repackaging as the act of taking a finished drug product from the container in which it was distributed by the original manufacturer and placing it into a different container without further manipulation of the drug. If a drug is manipulated in any other way, including if the drug is reconstituted, diluted, mixed, or combined with another ingredient, that act is not considered repackaging.

Repackaged drugs are generally not exempt from any of the provisions of the FD&C Act related to the production of drugs. For example, repackaged drugs are generally subject to the premarket approval, misbranding, and adulteration provisions of the FD&C Act, including section 505 (concerning new drug applications), section 502(f)(1) (concerning labeling with adequate directions for use), and section 501(a)(2)(B) (concerning current good manufacturing practice (CGMP) (21 U.S.C. 355, 352(f)(1), and 351(a)(2)(B) of the FD&C Act).

Further, drugs that are repackaged are not subject to sections 503A and 503B of the FD&C Act (21 U.S.C. 353a and 353b). Therefore, drugs repackaged by state-licensed pharmacies, Federal facilities, or outsourcing facilities are not eligible for the exemptions provided under those sections.

This draft guidance describes the conditions under which FDA does not intend to take action for violations of sections 505, 502(f)(1), and, where specified in the guidance, section 501(a)(2)(B) of the FD&C Act, when a state-licensed pharmacy, Federal facility, or registered outsourcing facility repackages drug products. The guidance does not address repackaging of nonprescription drugs; drugs that are intended for use in animals; biological products subject to licensure under section 351 of the Public Health Services Act (42 U.S.C. 262); repackaging by entities that are not state-licensed pharmacies, Federal facilities, or registered outsourcing facilities; removing a drug product from the original container at the point of care for immediate administration to a single patient after receipt of a patient-specific prescription or order for that patient; or repackaging a solid oral dosage form drug product by a state-licensed pharmacy for purposes of dispensing the drug to a patient upon receipt of an individual patient-specific prescription.

Elsewhere in this issue of the **Federal Register**, the Agency is making available for comment a draft guidance entitled ''Mixing, Diluting, or Repackaging of Biological Products Outside the Scope of an Approved Biologics License Application.'' When these two guidances become final, they will address and clarify the Agency's policy regarding hospital pharmacies repackaging and safely transferring repackaged drugs to other hospitals within the same health system during a drug shortage. Therefore, under section 506F(d) of the FD&C Act, when FDA issues these as final guidances, section 506F will no longer apply.

This draft guidance is being issued consistent with FDA's good guidance practices regulation (21 CFR 10.115). This guidance, when finalized, will represent FDA's current thinking on repackaging human drug products by pharmacies, Federal facilities, and outsourcing facilities. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. An alternative approach may be used if such approach satisfies the requirements of the applicable statutes and regulations.

II. Amendment or Withdrawal of Repackaging Guidance Documents

When this guidance becomes final, the Agency may also consider withdrawing or revising other guidance documents that address human drug repackaging. These may include section 446.100 of the CPG Manual, entitled ''Regulatory Action Regarding Approved New Drugs and Antibiotic Drug Products Subjected to Additional Processing or other Manipulations,'' which was issued in January 1991, and section 460.100 of the CPG Manual, entitled ''Hospital Pharmacies—Status as Drug Manufacturer,'' which was issued in October 1980.

III. Comments

Interested persons may submit either electronic comments regarding this document to *http://www.regulations.gov* or written comments to the Division of Dockets Management (see **ADDRESSES**). It is only necessary to send one set of comments. Identify comments with the docket number found in brackets in the heading of this document. Received comments may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday, and will be posted to the docket at *http://www.regulations.gov.*

IV. Paperwork Reduction Act of 1995

This draft guidance contains information collection provisions that are subject to review by the Office of Management and Budget under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). The title, description, and respondent description of the information collection are given under this section with an estimate of the annual reporting and recordkeeping burdens. Included in the estimate is the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

We invite comments on these topics: (1) Whether the proposed collection of information is necessary for the proper performance of FDA's functions, including whether the information will have practical utility; (2) the accuracy of FDA's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques, when appropriate, and other forms of information technology.

Title: Repackaging of Certain Human Drug Products by Pharmacies and Outsourcing Facilities; Guidance for Industry.

Description: The draft guidance describes repackaging by state-licensed pharmacies, Federal facilities, and outsourcing facilities under section 503B of the FD&C Act, and it describes the conditions under which FDA does not intend to take action for violations of sections 505, 502(f)(1), and where specified, section 501(a)(2)(B) of the FD&C Act, when a state-licensed pharmacy, or Federal facility, or an outsourcing facility repackages drug products. The draft guidance includes the following collection of information under the PRA:

One condition in the draft guidance is that if a drug is repackaged by an outsourcing facility, the label on the immediate container (primary packaging, *e.g.,* the syringe) of the repackaged product includes the following information:

- The statement ''This drug product was repackaged by [name of outsourcing facility].''
- The address and phone number of the outsourcing facility that repackaged the drug product.
- The established name of the original, approved drug product that was repackaged.
- The lot or batch number of the repackaged drug product.
- The dosage form and strength of the repackaged drug product.

• A statement of either the quantity or volume of the repackaged drug product, whichever is appropriate.

• The date the drug product was repackaged.

• The beyond-use-date of the repackaged drug product.

• Storage and handling instructions for the repackaged drug product.

• The National Drug Code (NDC) number of the repackaged drug product, if available.[1]

• The statement ''Not for resale,'' and, if the drug is distributed by an outsourcing facility other than pursuant to a prescription for an individual identified patient, the statement ''Office Use Only.''

• If included on the label of the FDA-approved drug product from which the drug product is being repackaged, a list of the active and inactive ingredients, unless such information is included on the label for the container from which the individual units are removed, as described in this document.

In addition, a condition in the draft guidance is that the label on the container from which the individual units are removed for administration (secondary packaging, *e.g.,* the bag, box, or other package in which the repackaged products are distributed) includes the active and inactive ingredients, if the immediate product label is too small to include this information, and directions for use, including, as appropriate, dosage and administration, and the following information to facilitate adverse event reporting: *http://www.fda.gov/medwatch* and 1–800–FDA–1088.

Another condition in the draft guidance is that each repackaged drug product is accompanied by a copy of the prescribing information that accompanied the original drug product that was repackaged.

We estimate that annually a total of approximately 10 outsourcing facilities (''Number of Respondents'' in table 1, row 1) will each design, test, and produce approximately 10 different labels (''Frequency per Disclosure'' in table 1, row 1) for a total of 100 labels that include the information set forth in section III.A.11 of the draft guidance (including directions for use) (''Total Disclosures'' in table 1, row 1). We also estimate that designing, testing, and producing each label will take approximately 0.5 hours for each repackaged drug product (''Hours per Disclosure'' in table 1, row 1). The provision to add the statement *http://www.fda.gov/medwatch* and 1–800–FDA–1088 is not included in this burden estimate because it is not considered a collection of information under the PRA because the information is ''originally supplied by the Federal Government to the recipient for the purpose of disclosure to the public'' (5 CFR 1320.3(c)(2)).

We also estimate that annually a total of approximately 10 outsourcing facilities (''Number of Respondents'' in table 1, row 2) will each produce a copy of prescribing information as set forth in section III.A.11 of the draft guidance for approximately 10 repackaged drug products (''Frequency per Disclosure'' in table 1, row 1) for a total of 100 disclosures (''total disclosures'' in table 1, row 2). We also estimate that providing prescribing information labeling will take approximately 1 hour for each repackaged drug product (''Hours per Disclosure'' in table 1, row 2). The provision to add *http://www.fda.gov/medwatch* and 1–800–FDA–1088 is not included in this burden estimate because it is not considered a collection of information under the PRA because the information is ''originally supplied by the Federal Government to the recipient for the purpose of disclosure to the public'' (5 CFR 1320.3(c)(2)).

The total estimated third-party disclosure burden resulting from the draft guidance is as follows:

TABLE 1—ESTIMATED ANNUAL THIRD-PARTY DISCLOSURE BURDEN

Repackaging by outsourcing facilities	Number of respondents	Frequency per disclosure	Total disclosures	Hours per disclosure	Total hours
Designing, testing, and producing each label on immediate containers, packages and/or outer containers	10	10	100	.5	50
Prescribing information labeling produced for each repackaged drug product	10	10	100	1	100
Total					150

There are no capital costs or operating and maintenance costs associated with this collection of information.
*(30 minutes)

The draft guidance also references registration, product reporting, and CGMP requirements for outsourcing facilities. In the **Federal Register** of December 4, 2013 (78 FR 72899), FDA estimated the burden resulting from outsourcing facility registration. In the **Federal Register** of December 4, 2013 (78 FR 72897), FDA estimated the burden resulting from outsourcing facility interim product reporting. In the **Federal Register** of July 2, 2014 (79 FR 37743), FDA estimated the burden resulting from outsourcing facility compliance with CGMP requirements.

V. Electronic Access

Persons with access to the Internet can obtain the document at either *http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm* or *http://www.regulations.gov.*

Dated: February 11, 2015.

Leslie Kux,

Associate Commissioner for Policy.

[FR Doc. 2015–03417 Filed 2–18–15; 8:45 am]

BILLING CODE 4164–01–P

[1] The NDC number of the original approved drug product should not be placed on the repackaged drug product.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Submission for OMB Review; 30-Day Comment Request; Health Information National Trends Survey (HINTS) (NCI)

SUMMARY: Under the provisions of Section 3507(a)(1)(D) of the Paperwork Reduction Act of 1995, the National Institutes of Health (NIH), has submitted to the Office of Management and Budget (OMB) a request for review and approval of the information collection

listed below. This proposed information collection was previously published in the **Federal Register** on December 4, 2014 (Vol. 79, No. 233, pages 72003—4) and allowed 60 days for public comment. A total of five public comments were received. The purpose of this notice is to allow an additional 30 days for public comment. The National Cancer Institute (NCI), National Institutes of Health, may not conduct or sponsor, and the respondent is not required to respond to, an information collection that has been extended, revised, or implemented on or after October 1, 1995, unless it displays a currently valid OMB control number.

Direct Comments To OMB: Written comments and/or suggestions regarding the item(s) contained in this notice, especially regarding the estimated public burden and associated response time, should be directed to the: Office of Management and Budget, Office of Regulatory Affairs, *OIRA_submission@omb.eop.gov* or by fax to 202–395–6974, Attention: NIH Desk Officer.

DATES: *Comment Due Date:* Comments regarding this information collection are best assured of having their full effect if received within 30-days of the date of this publication.

FOR FURTHER INFORMATION CONTACT: To obtain a copy of the data collection plans and instruments or request more information on the proposed project contact: Bradford W. Hesse, Ph.D., Health Communication and Informatics Research Branch, 9609 Medical Center Drive, MSC 9761, Room 3E610, Rockville, MD 20850 or call non-toll free number 240–276–6721 or Email your request, including your address, to *hesseb@mail.nih.gov.* Formal requests for additional plans and instruments must be requested in writing.

Proposed Collection: Health Information National Trends Survey (HINTS) 0925–0538, Reinstatement with Change, National Cancer Institute (NCI), National Institutes of Health (NIH).

Need and Use of Information Collection: This partnership between NCI and FDA will include assessing the public's knowledge of medical devices, communications related to product recalls, nutritional supplement labeling, and topics to inform FDA's regulatory authority over tobacco, such as risk perceptions about new tobacco products, product pack color gradations, perceptions of product harm, and tobacco product claims and labels. This HINTS survey will couple knowledge-related questions with inquiries into the communication channels through which understanding is being obtained, and assessment of FDA-regulated material. This survey will extend the information collected and priorities from HINTS which have been to provide a comprehensive assessment of the American public's current access to, and use of, information about cancer across the cancer care continuum from cancer prevention, early detection, diagnosis, treatment, and survivorship.

OMB approval is requested for 1 year. There are no costs to respondents other than their time. The total estimated annualized burden hours are 2,159.

ESTIMATED ANNUALIZED BURDEN HOURS

Type of respondents	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total annual burden hour
Individuals	4,318	1	30/60	2,159

Dated: February 9, 2015.

Karla Bailey,

NCI Project Clearance Liaison, National Institutes of Health.

[FR Doc. 2015–03382 Filed 2–18–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Heart, Lung, and Blood Institute; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Heart, Lung, and Blood Institute Special Emphasis Panel; Short-term Educational Experiences in Hematology.

Date: March 11, 2015.

Time: 8:00 a.m. to 3:00 p.m.

Agenda: To review and evaluate grant applications.

Place: Hyatt Regency Bethesda; One Bethesda Metro Center; 7400 Wisconsin Avenue; Bethesda, MD 20814.

Contact Person: Melissa E Nagelin, Ph.D.; Scientific Review Officer; Office of Scientific Review/DERA; National Heart, Lung, and Blood Institute; 6701 Rockledge Drive; Room 7202; Bethesda, MD 20892; 301–435–0297; *nagelinmh2@nhlbi.nih.gov.*

Name of Committee: National Heart, Lung, and Blood Institute Special Emphasis Panel; International Strategic Timing of Antiretroviral Therapy.

Date: March 13, 2015.

Time: 11:00 a.m. to 1:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health; 6705 Rockledge Drive, Room 7188; Bethesda, MD 20817; (Telephone Conference Call).

Contact Person: Chang Sook Kim, Ph.D.; Scientific Review Officer; Office of Scientific Review/DERA; National Heart, Lung, and Blood Institute; 6701 Rockledge Drive; Room 7188; Bethesda, MD 20892–7924; 301–435–0287; *carolko@mail.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.233, National Center for Sleep Disorders Research; 93.837, Heart and Vascular Diseases Research; 93.838, Lung Diseases Research; 93.839, Blood Diseases and Resources Research, National Institutes of Health, HHS).

Dated: *February 12, 2015.*

Michelle Trout,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–03344 Filed 2–18–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Heart, Lung, and Blood Institute; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections

552b(c)(4) and 552b(c)(6), title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Heart, Lung, and Blood Institute Special Emphasis Panel; Pediatric Cardiac Genomics Consortium.

Date: March 11, 2015.

Time: 8:30 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: Hilton Garden Inn Washington DC/Bethesda, 7301 Waverly Street, Bethesda, MD 20814.

Contact Person: YingYing Li-Smerin, MD, Ph.D, Scientific Review Officer, Office of Scientific Review/DERA, National Heart, Lung, and Blood Institute, 6701 Rockledge Drive, Room 7184, Bethesda, MD 20892–7924, 301–435–0277, *lismerin@nhlbi.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.233, National Center for Sleep Disorders Research; 93.837, Heart and Vascular Diseases Research; 93.838, Lung Diseases Research; 93.839, Blood Diseases and Resources Research, National Institutes of Health, HHS)

Dated: February 12, 2015.

Michelle Trout,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–03345 Filed 2–18–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S. C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S. C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Sensorimotor Integration.

Date: March 10–11, 2015.

Time: 9:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD (Virtual Meeting).

Contact Person: Kirk Thompson, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5184, MSC 7844, Bethesda, MD 20892, 301–435–1242, *kgt@mail.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Adult Psychopathology and Disorders of Aging.

Date: March 17, 2015.

Time: 11:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Andrea B Kelly, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3182, MSC 7770, Bethesda, MD 20892, (301) 455–1761, *kellya2@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Pain.

Date: March 19–20, 2015.

Time: 8:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892 (Virtual Meeting).

Contact Person: John Bishop, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5182, MSC 7844, Bethesda, MD 20892, (301) 408–9664, *bishopj@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, RFA Panel: Molecular and Cellular Substrates of Complex Brain Disorders.

Date: March 23, 2015.

Time: 8:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: Crystal Gateway Marriott, 1700 Jefferson Davis Highway, Arlington, VA 22202.

Contact Person: Deborah L Lewis, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4183, MSC 7850, Bethesda, MD 20892, 301–408–9129, *lewisdeb@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, PAR–13–231: Phenotyping Embryonic Lethal Knockout Mice.

Date: March 24, 2015.

Time: 1:00 p.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Maqsood A Wani, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 2114, MSC 7814, Bethesda, MD 20892, 301–435–2270, *wanimaqs@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, PAR–13–231: Phenotyping Embryonic Lethal Knockout Mice.

Date: March 24, 2015.

Time: 1:00 p.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Arnold Revzin, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4146, MSC 7824, Bethesda, MD 20892, (301) 435–1153, *revzina@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Molecular Genetics.

Date: March 24, 2015.

Time: 2:30 p.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20817, (Telephone Conference Call).

Contact Person: Ronald Adkins, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 2206, MSC 7890, Bethesda, MD 20892, 301–435–4511, *ronald.adkins@nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, RFA–RM–14–012: Common Fund Glycoscience Data Integration and Analysis, Tools (R34).

Date: March 25, 2015.

Time: 1:00 p.m. to 4:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: Kee Hyang Pyon, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5148, MSC 7806, Bethesda, MD 20892, *pyonkh2@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Auditory Neuroscience.

Date: March 26–27, 2015.

Time: 8:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: John Bishop, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5182, MSC 7844, Bethesda, MD 20892, (301) 408–9664, *bishopj@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, RFA–RM–14–013: Development of Glycoscience Tools (U01).

Date: March 26, 2015.

Time: 8:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate cooperative agreement applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: James J Li, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5148, MSC 7849, Bethesda, MD 20892, 301–806–8065, *lijames@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Metabolism, Nutrition and Molecular Endocrinology.

Date: March 26, 2015.

Time: 8:00 a.m. to 7:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: Dianne Hardy, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6175, MSC 7892, Bethesda, MD 20892, 301–435–1154, *dianne.hardy@nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel, SBIR/STTR Informatics.

Date: March 26, 2015.

Time: 9:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: JW Marriott New Orleans, 614 Canal Street, New Orleans, LA 70130.

Contact Person: Melinda Jenkins, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3156, MSC 7770, Bethesda, MD 20892, 301–437–7872, *jenkinsml2@mail.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393–93.396, 93.837–93.844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: February 12, 2015.

Carolyn Baum,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–03343 Filed 2–18–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Cancer Institute; Notice of Meeting

Pursuant to section 10(a) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of a meeting of the National Cancer Institute Board of Scientific Advisors.

The meeting will be open to the public, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting. The meeting will also be videocast and can be accessed from the NIH Videocasting and Podcasting Web site (*http://videocast.nih.gov/*).

Name of Committee: National Cancer Institute Board of Scientific Advisors.

Date: March 11, 2015.

Time: 9:00 a.m. to 5:00 p.m.

Agenda: Director's Report: Ongoing and New Business; Reports of Program Review Group(s); Budget Presentations; Reports of Special Initiatives; RFA and RFP Concept Reviews; and Scientific Presentations.

Place: National Institutes of Health, 31 Center Drive, Building 31; C-Wing, 6th Floor, Room 10, Bethesda, MD 20892.

Contact Person: Paulette S. Gray, Ph.D., Director, Division of Extramural Activities, National Cancer Institute—Shady Grove, National Institutes of Health, 9609 Medical Center Drive, 7th Floor, Rm. 7w444 Bethesda, MD 20892, 240–276–6340, *grayp@mail.nih.gov.*

Any interested person may file written comments with the committee by forwarding the statement to the Contact Person listed on this notice. The statement should include the name, address, telephone number and when applicable, the business or professional affiliation of the interested person.

In the interest of security, NIH has instituted stringent procedures for entrance onto the NIH campus. All visitor vehicles, including taxicabs, hotel, and airport shuttles will be inspected before being allowed on campus. Visitors will be asked to show one form of identification (for example, a government-issued photo ID, driver's license, or passport) and to state the purpose of their visit.

Information is also available on the Institute's/Center's home page: *http://deainfo.nci.nih.gov/advisory/bsa/bsa.htm,* where an agenda and any additional information for the meeting will be posted when available.

(Catalogue of Federal Domestic Assistance Program Nos. 93.392, Cancer Construction; 93.393, Cancer Cause and Prevention Research; 93.394, Cancer Detection and Diagnosis Research; 93.395, Cancer Treatment Research; 93.396, Cancer Biology Research; 93.397, Cancer Centers Support; 93.398, Cancer Research Manpower; 93.399, Cancer Control, National Institutes of Health, HHS)

Dated: February 12, 2015.

Melanie J. Gray,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–03346 Filed 2–18–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

[Docket No. USCG–2015–0007]

Cooperative Research and Development Agreement—Robotic Aircraft for Maritime Public Safety

AGENCY: Coast Guard, DHS.

ACTION: Notice of intent; request for comments.

SUMMARY: The Coast Guard announces its intent to enter into a cooperative research and development agreement (CRADA) with several companies to evaluate small unmanned aircraft systems (SUAS) and their airborne sensors, to determine their potential for use in a maritime environment by a first responder and DHS operational components. The Coast Guard will conduct flight testing and evaluation of SUAS under a wide variety of simulated but realistic and relevant real-world maritime operational scenarios, such as law enforcement, search and rescue, and maritime environmental response. While the Coast Guard is currently considering partnering with Aerovel Corporation, Aerovironment Inc., Aurora Flight Sciences, Lockheed Martin Corporation, and Mission Technology Systems LLC, it solicits public comment on the possible participation of other parties in the proposed CRADA, and the nature of that participation. The Coast Guard also invites other potential non-Federal participants, who have the interest and capability to bring similar contributions to this type of research, to consider submitting proposals for consideration in similar CRADAs.

DATES: Comments must be submitted to the online docket via *http://www.regulations.gov,* or reach the Docket Management Facility, on or before March 23, 2015.

Synopses of proposals regarding future CRADAs must reach the Coast Guard (see **FOR FURTHER INFORMATION CONTACT**) on or before March 23, 2015.

ADDRESSES: Submit comments using one of the listed methods, and see **SUPPLEMENTARY INFORMATION** for more information on public comments.

- *Online—http://www.regulations.gov* following Web site instructions.
- *Fax*—202–493–2251.
- *Mail* or *hand deliver*—Docket Management Facility (M–30), U.S. Department of Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590–0001. Hours for

hand delivery are 9 a.m. to 5 p.m., Monday through Friday, except Federal holidays (telephone 202–366–9329).

FOR FURTHER INFORMATION CONTACT: If you have questions on this notice or wish to submit proposals for future CRADAs, contact Dr. Andrew Niccolai, Project Official, Aviation Branch, U.S. Coast Guard Research and Development Center, 1 Chelsea Street, New London, CT 06320, telephone 860–271–2670, email *Andrew.M.Niccolai@uscg.mil.* If you have questions on viewing or submitting material to the docket, call Cheryl Collins, Program Manager, Docket Operations, telephone 202–366–9826, toll free 1–800–647–5527.

SUPPLEMENTARY INFORMATION:

Public Participation and Request for Comments

We encourage you to submit comments and related material on this notice. All comments received will be posted, without change, to *http://www.regulations.gov* and will include any personal information you have provided.

Do not submit detailed proposals for future CRADAs to the Docket Management Facility. Instead, submit them directly to the Coast Guard (see **FOR FURTHER INFORMATION CONTACT**) .

Comments should be marked with docket number USCG–2015–0007 and should provide a reason for each suggestion or recommendation. You should provide personal contact information so that we can contact you if we have questions regarding your comments; but please note that all comments will be posted to the online docket without change and that any personal information you include can be searchable online (see the **Federal Register** Privacy Act notice regarding our public dockets, 73 FR 3316, Jan. 17, 2008).

Mailed or hand-delivered comments should be in an unbound 8½ x 11 inch format suitable for reproduction. The Docket Management Facility will acknowledge receipt of mailed comments if you enclose a stamped, self-addressed postcard or envelope with your submission.

Documents mentioned in this notice, and all public comments, are in our online docket at *http://www.regulations.gov* and can be viewed by following the Web site's instructions. You can also view the docket at the Docket Management Facility (see the mailing address under **ADDRESSES**) between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Discussion

CRADAs are authorized under 15 U.S.C. 3710(a).[1] A CRADA promotes the transfer of technology to the private sector for commercial use, as well as specified research or development efforts that are consistent with the mission of the Federal parties to the CRADA. The Federal party or parties agree with one or more non-Federal parties to share research resources, but the Federal party does not contribute funding.

CRADAs are not procurement contracts. Care is taken to ensure that CRADAs are not used to circumvent the contracting process. CRADAs have a specific purpose and should not be confused with other types of agreements such as procurement contracts, grants, and cooperative agreements.

Under the proposed CRADA, the Coast Guard's Research and Development Center (R&DC) will collaborate with one or more non-Federal participants. Together, the R&DC and the non-Federal participants will evaluate SUAS and their airborne sensors to determine their potential for use in a maritime environment by a first responder and DHS operational components.

We anticipate that the Coast Guard's contributions under the proposed CRADA will include the following:

(1) Develop the demonstration test plan to be executed under the CRADA;

(2) Provide the SUAS test range, test range support, facilities, and all approvals required for a 5 day demonstration under the CRADA;

(3) Conduct the privacy threshold analysis required for the demonstration;

(4) Conduct the privacy impact assessment required for the demonstration;

(5) Coordinate any required spectrum approval for the SUAS;

(6) Coordinate and receive any required interim flight clearance for the demonstration;

(7) Provide any required airspace coordination and de-confliction for the demonstration test plan;

(8) Collect and analyze demonstration test plan data; and

(9) Develop a demonstration final report documenting the methodologies, findings, conclusions, and recommendations of this CRADA work.

We anticipate that the non-Federal participants' contributions under the proposed CRADA will include the following:

(1) Provide SUAS all other equipment to conduct the demonstration described in the demonstration test plan;

(2) Provide all required operators and technicians to conduct the demonstration;

(3) Provide technical data for the SUAS to be utilized;

(4) Provide shipment and delivery of all SUAS equipment required for the demonstration; and

(5) Provide travel and associated personnel and other expenses as required.

The Coast Guard reserves the right to select for CRADA participants all, some, or no proposals submitted for this CRADA. The Coast Guard will provide no funding for reimbursement of proposal development costs. Proposals and any other material submitted in response to this notice will not be returned. Proposals submitted are expected to be unclassified and have no more than five single-sided pages (excluding cover page, DD 1494, JF–12, etc.). The Coast Guard will select proposals at its sole discretion on the basis of:

(1) How well they communicate an understanding of, and ability to meet, the proposed CRADA's goal; and

(2) How well they address the following criteria:

(a) Technical capability to support the non-Federal party contributions described; and

(b) Resources available for supporting the non-Federal party contributions described.

Currently, the Coast Guard is considering Aerovel Corporation, Aerovironment Inc., Aurora Flight Sciences, Lockheed Martin Corporation, and Mission Technology Systems LLC for participation in this CRADA, because each has demonstrated the ability to operate SUAS in a maritime environment. However, we do not wish to exclude other viable participants from this or future similar CRADAs.

This is a technology demonstration effort. The goal of this CRADA is to identify and investigate the potential of the SUAS and their airborne sensors to determine their potential use in a maritime environment by the first responder and the DHS operational components. Special consideration will be given to small business firms/consortia, and preference will be given to business units located in the U.S.

This notice is issued under the authority of 5 U.S.C. 552(a) and 15 U.S.C. 3710(a).

[1] The statute confers this authority on the head of each Federal agency. The Secretary of DHS's authority is delegated to the Coast Guard and other DHS organizational elements by DHS Delegation No. 0160.1, para. II.B.34.

Dated: January 26, 2015.

Dennis C. Evans,

Captain, USCG, Commanding Officer, U.S. Coast Guard Research and Development Center.

[FR Doc. 2015–03327 Filed 2–18–15; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

[Docket No. USCG–2015–0016]

Cooperative Research and Development Agreement: Western Rivers e-AtoN Technology Demonstration

AGENCY: Coast Guard, DHS.

ACTION: Notice of intent; request for comments.

SUMMARY: The Coast Guard announces its intent to enter into a cooperative research and development agreement (CRADA) to prepare for a demonstration, the ''Ohio River eNav Technology Demonstration'' of electronic navigation (eNav) technology to be conducted by the Coast Guard, U.S. Army Corps of Engineers, and the National Oceanic Atmospheric Administration. The eNav demonstration will involve the transmission of navigation safety and environmental information via automatic identification system (AIS) technology to the electronic charting system (ECS) displays on bridges of commercial vessels that are operating in the test area. The purpose of the demonstration is to identify the extent to which mariners would benefit from the distribution of e-AtoN information; and the policy changes, the infrastructure, and level of effort needed by the Coast Guard and its partner agencies to operate and maintain this technology.

The geographic area to be covered by the Ohio River eNav Technology Demonstration includes the Ohio River from Markland Lock (north of Louisville, KY) to the mouth of the Ohio River, and reaches of the Mississippi River within 45 statute miles of its confluence with the Ohio River. The Coast Guard needs end user participants, who are commercial operators that regularly operate in the Ohio River eNav Technology Demonstration test area, to receive the information via AIS. While the Coast Guard is currently considering partnering with Rose Point Navigation Systems (Rose Point), and CNS, Inc. (CNS), it solicits public comment on the possible participation of other parties in the proposed CRADA, and the nature of that participation.

DATES: Comments must be submitted to the online docket via *http://www.regulations.gov,* or reach the Docket Management Facility, on or before 30 days after date of publication in the **Federal Register**.

Synopses of proposals regarding future CRADAs must reach the Coast Guard (see **FOR FURTHER INFORMATION CONTACT**) on or before March 23, 2015.

ADDRESSES: Submit comments using one of the listed methods, and see **SUPPLEMENTARY INFORMATION** for more information on public comments.

- *Online—http://www.regulations.gov* following Web site instructions.
- *Fax*—202–493–2251.
- *Mail* or *hand deliver*—Docket Management Facility (M–30), U.S. Department of Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590–0001. Hours for hand delivery are 9 a.m. to 5 p.m., Monday through Friday, except Federal holidays (telephone 202–366–9329).

FOR FURTHER INFORMATION CONTACT: If you have questions on this notice or wish to submit proposals for future CRADAs, contact Arden C. Turner, Project Official, E&W Branch, U.S. Coast Guard Research and Development Center, 1 Chelsea Street, New London, CT 06320, telephone 860–271–2623, email *Arden.C.Turner@uscg.mil* . If you have questions on viewing or submitting material to the docket, call Cheryl Collins, Program Manager, Docket Operations, telephone 202–366–9826, toll free 1–800–647–5527.

SUPPLEMENTARY INFORMATION:

Public Participation and Request for Comments

We encourage you to submit comments and related material on this notice. All comments received will be posted, without change, to *http://www.regulations.gov* and will include any personal information you have provided.

Do not submit detailed proposals for future CRADAs to the Docket Management Facility. Instead, submit them directly to the Coast Guard (see **FOR FURTHER INFORMATION CONTACT**) .

Comments should be marked with docket number USCG–2015–0016 and should provide a reason for each suggestion or recommendation. You should provide personal contact information so that we can contact you if we have questions regarding your comments; but please note that all comments will be posted to the online docket without change and that any personal information you include can be searchable online (see the **Federal Register** Privacy Act notice regarding our public dockets, 73 FR 3316, Jan. 17, 2008).

Mailed or hand-delivered comments should be in an unbound 8½ x 11 inch format suitable for reproduction. The Docket Management Facility will acknowledge receipt of mailed comments if you enclose a stamped, self-addressed postcard or envelope with your submission.

Documents mentioned in this notice, and all public comments, are in our online docket at *http://www.regulations.gov* and can be viewed by following the Web site's instructions. You can also view the docket at the Docket Management Facility (see the mailing address under **ADDRESSES**) between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Discussion

CRADAs are authorized under 15 U.S.C. 3710(a).[1] A CRADA promotes the transfer of technology to the private sector for commercial use, as well as specified research or development efforts that are consistent with the mission of the Federal parties to the CRADA. The Federal party or parties agree with one or more non-Federal parties to share research resources, but the Federal party does not contribute funding.

CRADAs are not procurement contracts. Care is taken to ensure that CRADAs are not used to circumvent the contracting process. CRADAs have a specific purpose and should not be confused with other types of agreements such as procurement contracts, grants, and cooperative agreements.

Under the proposed CRADA, the Coast Guard's Research and Development Center (R&DC) will collaborate with one or more non-Federal participants to ensure that commercial vessel pilots who operate in the Ohio River Technology Demonstration Test Area are equipped with an ECS capability that accept AIS inputs to navigate; and to ensure that parties who have indicated their willingness to participate in the Technology Demonstration can receive and display the eNav information distributed by the Coast Guard during the eNav Technology Demonstration.

[1] The statute confers this authority on the head of each Federal agency. The Secretary of DHS's authority is delegated to the Coast Guard and other DHS organizational elements by DHS Delegation No. 0160.1, para. II.B.34.

We anticipate that the Coast Guard's contributions under the proposed CRADA will include the following:

(1) Provide the ECS manufacturers with summaries and formats of the information that will be distributed in the Ohio River eNav Technology Demonstration.

(2) Test the ECS equipment with the format upgrades in the RDC Test Laboratory prior to the Demonstration and provide feedback to manufacturers. Also, provide non-Federal participants with access to the RDC Test Laboratory data output stream to evaluate the data displays on their equipment.

(3) Deploy an eNav system that distributes navigation and safety information to marine users in the Technology Demonstration Test Area on the Ohio and Mississippi Rivers.

(4) Conduct the Ohio River eNav Technology Demonstration. During the Demonstration, record the information distributed through the AIS and the information received by participating mariners' AIS receivers. Collate and analyze the information collected by participating vessels to quantify system performance. Collect anecdotal information on mariners' responses to the technology and its benefits.

We anticipate that the non-Federal participants' contributions under the proposed CRADA will include the following:

(1) Configure their software to enable the receipt and display of eNav information on ECS devices located on vessel bridges of customers who are participating in the Ohio River eNav Technology Demonstration.

(2) Provide the Coast Guard with the latest version of its ECS software to support the RDC Test Laboratory evaluation.

(3) The RDC and its federal partners may finalize some AIS message types after the Ohio River Technology Demonstration has started. As their resources permit, the non-Federal participants will update their software and distribute them to their customers and the RDC after the Demonstration has started.

(4) At the conclusion of the Demonstration, the RDC and the non-Federal participants will jointly document the CRADA effort in a white paper format, to document the features developed by the ECS manufacturers, their installation on the test vessels, and the results of the Ohio River eNav Technology Demonstration.

The Coast Guard reserves the right to select for CRADA participants all, some, or no proposals submitted for this CRADA. The Coast Guard will provide no funding for reimbursement of proposal development costs. Proposals and any other material submitted in response to this notice will not be returned. Proposals submitted are expected to be unclassified and have no more than five single-sided pages (excluding cover page, DD 1494, JF–12, etc.). The Coast Guard will select proposals at its sole discretion on the basis of:

(1) Existence of commercial customers who routinely operate in the Ohio River eNav Technology Demonstration study area, who are equipped with an ECS capability that accept AIS inputs to navigate, and who are willing to participate in the Demonstration.

(2) How well respondents address the following criteria:

(a) Technical capability to support the non-Federal party contributions described; and

(b) Resources available for supporting the non-Federal party contributions described.

Currently, the Coast Guard is considering CNS and Rose Point for participation in this CRADA. This consideration is based on the fact that the Coast Guard has identified CNS and Rose Point as customers in the Demonstration area that use ECS with AIS input capability. However, the Coast Guard does not wish to exclude other viable participants from this CRADA.

This is a technology transfer/development effort. Presently, the Coast Guard has no plan to procure an ECS capability. Since the goal of this CRADA is to identify and investigate the advantages, disadvantages, required technology enhancements, performance, costs, and other issues associated with using ECS capabilities, non-Federal CRADA participants will not be excluded from any future Coast Guard procurements based solely on their participation in this CRADA. Special consideration will be given to small business firms/consortia, and preference will be given to business units located in the U.S.

This notice is issued under the authority of 5 U.S.C. 552(a) and 15 U.S.C. 3710(a).

Dated: January 26, 2015.

Dennis C. Evans,

Captain, USCG, Commanding Officer, U.S. Coast Guard Research and Development Center.

[FR Doc. 2015–03328 Filed 2–18–15; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

[USCG–2014–0941]

Port Access Route Study: In the Chukchi Sea, Bering Strait and Bering Sea

AGENCY: Coast Guard, DHS.

ACTION: Notice of study; request for comments.

SUMMARY: This study is a continuation of and an expansion of scope to the Port Access Route Study (PARS) the Coast Guard announced in 2010. Based on comments received from the 2010 notice the Coast Guard has developed a potential vessel routing system for the area. The Coast Guard requests comments on how consolidating vessel traffic into a defined vessel routing system may impact or benefit the region. The goal of the study is to help reduce the risk of marine casualties and increase the efficiency of vessel traffic in the region. The recommendations of the study may lead to future rulemaking action or appropriate international agreements.

DATES: Comments must be received on or before August 18, 2015.

ADDRESSES:

FOR FURTHER INFORMATION CONTACT: If you have questions on this notice of study, call or email LT Kody Stitz, Seventeenth Coast Guard District (dpw); telephone (907) 463–2270; email *Kody.J.Stitz@uscg.mil* or Mr. David Seris, Seventeenth Coast Guard District (dpw); telephone (907)463–2267; email *David.M.Seris@uscg.mil.* If you have questions on viewing or submitting material to the docket, call Cheryl F. Collins, Program Manager, Docket Operations, telephone 202–366–9826.

SUPPLEMENTARY INFORMATION:

Public Participation and Request for Comments

We encourage you to participate in this study by submitting comments and related materials. All comments received will be posted without change to *http://www.regulations.gov* and will include any personal information you have provided.

Comment submission: You may submit comments identified by docket number USCG–2014–0941 using any one of the following methods:

(1) Federal eRulemaking Portal: *http://www.regulations.gov.*

(2) *Fax:* 202–493–2251.

(3) *Mail:* Docket Management Facility (M–30), U.S. Department of

Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590–0001.

(4) *Hand delivery:* Same as mail address above, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202–366–9329.

To avoid duplication, please use only one of these four methods. See the ''Public Participation and Request for Comments'' portion of the **SUPPLEMENTARY INFORMATION** section below for instructions on submitting comments.

Privacy Act

Anyone can search the electronic form of comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review a Privacy Act notice regarding our public dockets in the January 17, 2008, issue of the **Federal Register** (73 FR 3316).

Public Meeting

The Coast Guard will hold public meeting(s) if there is sufficient demand to warrant holding a meeting. You must submit a request for one on or before Month Day, Year (30 days from publish date) using one of the four methods specified under **ADDRESSES**. Please explain why you believe a public meeting would be beneficial. If we determine that a public meeting would aid in the study, we will hold a meeting at a time and place announced by a later notice in the **Federal Register**.

Definitions

The following definitions (except ''Regulated Navigation Area'') are from the International Maritime Organization's (IMO's) publication ''*Ships' Routeing''* Tenth Edition 2010 and should help you review this notice:

Area to be avoided (ATBA) means a routing measure comprising an area within defined limits in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties and which should be avoided by all ships, or certain classes of ships.

Deep-water route means a route within defined limits, which has been accurately surveyed for clearance of sea bottom and submerged obstacles as indicated on the chart.

Inshore traffic zone means a routing measure comprising a designated area between the landward boundary of a traffic separation scheme and the adjacent coast, to be used in accordance with the provisions of Rule 10(d), as amended, of the International Regulations for Preventing Collisions at Sea, 1972 (COLREGS).

Precautionary area means a routing measure comprising an area within defined limits where ships must navigate with particular caution and within which the direction of traffic flow may be recommended.

Recommended route means a route of undefined width, for the convenience of ships in transit, which is often marked by centerline buoys.

Recommended track is a route which has been specially examined to ensure so far as possible that it is free of dangers and along which vessels are advised to navigate.

Regulated Navigation Area (RNA) means a water area within a defined boundary for which regulations for vessels navigating within the area have been established under 33 CFR part 165.

Roundabout means a routing measure comprising a separation point or circular separation zone and a circular traffic lane within defined limits. Traffic within the roundabout is separated by moving in a counterclockwise direction around the separation point or zone.

Separation zone or separation line means a zone or line separating the traffic lanes in which ships are proceeding in opposite or nearly opposite directions; or separating a traffic lane from the adjacent sea area; or separating traffic lanes designated for particular classes of ship proceeding in the same direction.

Traffic lane means an area within defined limits in which one-way traffic is established. Natural obstacles, including those forming separation zones, may constitute a boundary.

Traffic Separation Scheme (TSS) means a routing measure aimed at the separation of opposing streams of traffic by appropriate means and by the establishment of traffic lanes.

Two-way route means a route within defined limits inside which two-way traffic is established, aimed at providing safe passage of ships through waters where navigation is difficult or dangerous.

Vessel routing system means any system of one or more routes or routing measures aimed at reducing the risk of casualties; it includes traffic separation schemes, two-way routes, recommended tracks, areas to be avoided, no anchoring areas, inshore traffic zones, roundabouts, precautionary areas, and deep-water routes.

Background and Purpose

Requirement for Port Access Route Studies

Under the Ports and Waterways Safety Act (PWSA) (33 U.S.C. 1223(c)), the Commandant of the Coast Guard may designate necessary fairways and traffic separation schemes (TSSs) to provide safe access routes for vessels proceeding to and from U.S. ports.

Port Access Route Study to Date

The Coast Guard announced a port access route study in the **Federal Register** on November 8, 2010 (75 FR 68568). The purpose of the PARS was to solicit public comments on whether a vessel routing system such as a fairway or TSS was needed and if it could increase vessel safety in the area. The 2010 PARS was limited geographically in scope to a section of water extending approximately 100 nautical miles north of the Bering Strait into the Chukchi Sea to approximately 30 nautical miles south of St. Lawrence Island in the Bering Sea. At that time the Coast Guard did not propose a specific vessel routing system, but instead sought more general comments about whether a vessel routing system was needed or advisable in the study area. The Coast Guard received twenty five comments, and after reviewing them, determined that a vessel route needed to be proposed so more specific comments and concerns could be gathered and evaluated before determining if a routing system would be beneficial. The Coast Guard further determined that the study area should include a larger geographic area than was initially studied before finalizing the study and publishing the results.

Vessel Routing Comments to Date

The Coast Guard received twenty five public comments during the open comment period associated with the 2010 announcement. Nearly all of the comments that addressed vessel routing were supportive of the Coast Guard creating and implementing some form of vessel routing measure in the area. Since no specific routing measure was proposed in 2010, the comments received did note that precise concerns and impacts could only be identified after a specific route or measure was proposed.

Reopening of the Comment Period

This **Federal Register** notice announces the Coast Guard's intent to continue the PARS started in 2010, expand the study area and release the Coast Guard's proposed vessel routing system for comment. The Coast Guard's goal of the study remains the same in

that the study is focused on gathering factual and relevant information to aid the Coast Guard in reducing the risk of marine casualties and increasing the efficiency of vessel traffic in the region.

The study will assess whether the creation of a vessel routing system is advisable to increase the predictability of vessel movements, which may decrease the potential for collisions, oil spills, and other events that could threaten the marine environment.

Based on comments received to date there is a general sense that a designated traffic route could improve traffic predictability thereby reducing marine casualties and oil spills; however, a few comments received did note that a designated traffic route (depending on location) could adversely impact subsistence hunting, marine mammals and other wildlife more so than widely dispersed vessel traffic. Therefore, the Coast Guard puts forth a potential two-way route as a starting point for analyzing where to put a vessel traffic route should one be deemed needed and beneficial to the region.

The Coast Guard will analyze vessel traffic density, agency and stakeholder experience in vessel traffic management, navigation, ship handling, the effects of weather, impacts to subsistence hunting, impacts to marine mammals and other wildlife concerns into the decision making process of the study. We encourage you to participate in the study process by submitting comments in response to this notice.

The expanded study area is described as an area bounded by a line connecting the following geographic positions:

- 67°30′ N, 168°58′37″ W;
- 67°30′ N, 167°30′ W;
- 54°50′ N, 164°40′ W;
- 54°03′ N, 166°25′ W;
- 63°20′ N, 173°43′ W; thence following the Russian Federation/United States maritime boundary line to the first geographical position.

The proposed ship routing measures are described as follows:

(1) A four nautical mile wide, two-way route extending from Unimak Pass in the Aleutian Islands that proceeds Northward through the Bering Sea and Bering Strait before terminating in the Chukchi Sea.

(2) A four nautical mile wide, two-way route extending from a location North of the Western side of St. Lawrence Island and near the US/Russian Federation maritime border, then proceeding Northeast to a junction with the first two way route located to the West of King Island.

(3) A total of four precautionary areas, each circular and 8 nautical miles wide in diameter. Three of these precautionary areas will be located at the starting/ending points of the two-way routes, and the fourth will be located at the junction of the recommended two-way routes.

See the **ADDRESSES** section for where to obtain a copy of the chart showing the exact location of the proposed route.

Timeline, Study Area, and Process of this PARS: The Seventeenth Coast Guard District will conduct this PARS. The study will continue upon publication of this notice and may take 24 months to complete.

We will publish the results of the PARS in the **Federal Register**. It is possible that the study may validate the status quo (no routing measures) and conclude that no changes are necessary. It is also possible that the study may recommend one or more changes to enhance navigational safety and the efficiency of vessel traffic management. The recommendations may lead to future rulemakings or appropriate international agreements.

Schematic of proposed vessel routing system: A chart showing the Coast Guard's proposed two-way route can be downloaded from *http://www.regulations.gov,* type ''USCG–2014–0941'' into the search bar and click search, next to the displayed search results click ''Open Docket Folder'', which will display all comments and documents associated with this docket.

Dated: February 3, 2015.

D.B. Abel,

Rear Admiral, U.S. Coast Guard, Commander, Seventeenth Coast Guard District.

[FR Doc. 2015–03332 Filed 2–18–15; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

National Park Service

[NPS–ANRSS–17182; PPWONRADE2, PMP00EI05.YP0000]

North Cascades Ecosystem Grizzly Bear Restoration Plan/Environmental Impact Statement, Washington

AGENCY: Fish and Wildlife Service and National Park Service, Interior.

ACTION: Notice of intent.

SUMMARY: The National Park Service (NPS) and the Fish and Wildlife Service (FWS) are jointly preparing a North Cascades Ecosystem Grizzly Bear Restoration Plan and Environmental Impact Statement (Plan/EIS) to determine how to restore the grizzly bear to the North Cascades ecosystem (NCE), a portion of its historical range.

DATES: The FWS and NPS request that comments be submitted by March 23, 2015, or 15 days after the last public open house, whichever is later. Open houses will be announced in local media. For more information on submitting public comments, see *How To Provide Comments*, under Public Comment in the **SUPPLEMENTARY INFORMATION** section.

ADDRESSES: Information will be available for public review online at *http://parkplanning.nps.gov/NCEG*; in the Office of the Superintendent, 810 State Route 20, Sedro-Woolley, WA 98284 (360–854–7200, telephone); and in the Washington Fish and Wildlife Office, 510 Desmond Dr. SE., Suite 102, Lacey, WA 98503 (360–753–9440).

FOR FURTHER INFORMATION CONTACT: Denise Shultz, Public Information Officer, North Cascades National Park Service Complex, 810 State Route 20, Sedro-Woolley, WA 98284 (360–854–7302, telephone), or Brent Lawrence, Public Affairs Specialist, FWS Pacific Regional Office, 911 NE 11th Ave., Portland, OR 97232 (503–231–6211).

SUPPLEMENTARY INFORMATION: Pursuant to the National Environmental Policy Act of 1969, 42 U.S.C. 4332(2)(C) (NEPA), the National Park Service (NPS) and the Fish and Wildlife Service (FWS) are jointly preparing a North Cascades Ecosystem Grizzly Bear Restoration Plan and Environmental Impact Statement (Plan/EIS) to determine how to restore the grizzly bear (*Ursus arctos horribilis*) to the North Cascades ecosystem (NCE), a portion of its historical range.

Background

Situated in the core of the North Cascades Ecosystem (NCE), the North Cascades National Park Complex is surrounded by more than 2.6 million contiguous acres of federally designated wilderness, including protected lands and de facto wilderness in British Columbia, Canada. The United States portion of the NCE is contiguous with habitat north of the international border in British Columbia, Canada, but isolated from other grizzly bear populations in both the United States and Canada.

Research indicates that this wilderness landscape is capable of supporting a self-sustaining grizzly bear population. However, there has only been one observation of a solitary bear during the past 10 years. Given the low number of grizzly bears, very slow reproductive rate, and other recovery constraints, grizzly bears in the NCE are

the most at-risk grizzly bear population in the United States today.

The FWS recently reaffirmed (78 FR 70104, November 22, 2013) that the NCE grizzly bear warrants uplisting from threatened to endangered under the Endangered Species Act (ESA, 16 U.S.C. 1531 *et seq.*). However, a change in listing status remains precluded by lack of funding and the Service's need to make listing determinations for other species not yet protected under the ESA. The main threat to grizzly bears in this recovery zone is a small population size, with resulting demographic and genetic risks. Natural recovery in the NCE is challenged by the absence of verified reproduction, as well as isolation from any contiguous population in British Columbia, Canada, and the United States.

A nationwide Grizzly Bear Recovery Plan was finalized by the FWS in 1982, and updated in 1993. The NCE recovery plan chapter was finalized in 1997. Current recovery efforts in the United States are focused on limiting human-caused mortality, protecting habitat by emphasizing no net loss of core habitat, providing information and education efforts regarding grizzly bears and their habitat, and enhancing sanitation by enforcing proper garbage and food storage in bear habitat. Education programs continue to inform people about grizzly bear biology and techniques to avoid conflicts when living or recreating in bear habitat.

Restoration Plan and Environmental Impact Statement Draft Purpose, Need, and Objectives

The NCE recovery plan chapter identifies four priority actions: (1) Develop a strategy for implementation of the NCE chapter; (2) develop an intensive ongoing educational program to provide information about grizzly bears and grizzly bear recovery to the public; (3) initiate the NEPA process; and (4) conduct an intensive research and monitoring effort to determine grizzly bear population size and distribution, habitat use, and home ranges in the NCE. In accordance with the NCE recovery plan chapter, the NPS and the FWS are initiating a NEPA planning process as joint lead agencies for grizzly bear restoration in the U.S. portion of the NCE. The Washington Department of Fish and Wildlife and the U.S. Department of Agriculture–Forest Service will serve as cooperating agencies. The following are the draft purpose, need, and objectives for the NCE Grizzly Bear Restoration Plan/EIS:

Purpose

The purpose of this Plan/EIS is to determine how to restore the grizzly bear to the North Cascades ecosystem (NCE), a portion of its historical range.

Need

Since the NCE grizzly bears are at risk of local extinction, action is needed at this time to:

- Avoid the permanent loss of grizzly bears in the NCE;
- Contribute to the restoration of biodiversity of the ecosystem for the benefit and enjoyment of present and future generations of people;
- Enhance the probability of long-term survival and conservation of grizzly bears within the lower 48 States and thereby contribute to overall grizzly bear recovery; and
- Support the eventual removal of the grizzly bear from the Federal List of Endangered and Threatened Wildlife.

Objectives

The objectives of this Plan/EIS are to:

- Restore a grizzly bear population as part of the natural and cultural heritage of the North Cascades.
- Provide Pacific Northwest residents and visitors with the opportunity to again experience grizzly bears in their native habitat.
- Seek to support Tribal cultural and spiritual values, as well as environmental and natural resource objectives related to the grizzly bear.
- Expand outreach efforts to inform and involve the public and build understanding about grizzly bear recovery.

Environmental Impact Statement Alternatives and Their Impacts

As part of the planning and EIS process, the NPS and FWS will evaluate various approaches for the restoration of a grizzly bear population to the NCE. Preliminary alternatives to be considered in the Plan/EIS include the no action alternative (passive restoration) as well as active restoration alternatives, including moving grizzly bears from other U.S. and/or Canadian populations into the NCE as either threatened or experimental 10(j) populations under the ESA.

The Plan/EIS will evaluate the effects of a range of alternatives, including potential impacts to: Rare or unusual vegetation, wildlife and habitat, soundscapes, wilderness (including a minimum requirements analysis), visitor use and experience, socioeconomics, human safety, and other resources.

Public Comment

How To Provide Comments

During the scoping period, public open houses will be held on both the east and west sides of the North Cascades Ecosystem to provide an opportunity for the public to share their comments and learn more about grizzly bear restoration. Details regarding the exact times and locations of these meetings will be announced on the project Web site (*http://parkplanning.nps.gov/NCEG*) and through local and regional media. The meetings will also be announced through email notification to individuals and organizations on the initial distribution list. Those wishing to be added to the project information distribution list should send an email request to *NCE_grizzly@nps.gov.*

If you wish to comment on the purpose, need, objectives, potential alternatives, or on any other issues associated with development of the draft Plan/EIS, you may submit your comments by any one of several methods. You may comment online at *http://parkplanning.nps.gov/NCEG.* You may also mail or hand deliver comments to the Superintendent, North Cascades National Park Service Complex, 810 State Route 20, Sedro-Woolley, WA 98284. Written comments will also be accepted at the public open houses. Comments will not be accepted by fax, email, or by any method other than those specified above. Bulk comments in any format (hard copy or electronic) submitted on behalf of others will not be accepted.

Public Availability of Comments

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Dated: February 6, 2015.

Robyn Thorson,

Regional Director, Pacific Region, Fish and Wildlife Service.

Dated: February 5, 2015.

Christine S. Lehnertz,

Regional Director, Pacific West Region, National Park Service.

[FR Doc. 2015–03504 Filed 2–18–15; 8:45 am]

BILLING CODE 4312–52–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–HQ–IA–2015–N040; FXIA16710900000–156–FF09A30000]

Endangered Species; Receipt of Applications for Permit

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of receipt of applications for permit.

SUMMARY: We, the U.S. Fish and Wildlife Service, invite the public to comment on the following applications to conduct certain activities with endangered species. With some exceptions, the Endangered Species Act (ESA) prohibits activities with listed species unless Federal authorization is acquired that allows such activities.

DATES: We must receive comments or requests for documents on or before March 23, 2015.

ADDRESSES: Brenda Tapia, U.S. Fish and Wildlife Service, Division of Management Authority, Branch of Permits, MS: IA, 5275 Leesburg Pike, Falls Church, VA 22041; fax (703) 358–2281; or email *DMAFR@fws.gov.*

FOR FURTHER INFORMATION CONTACT: Brenda Tapia, (703) 358–2104 (telephone); (703) 358–2281 (fax); *DMAFR@fws.gov* (email).

SUPPLEMENTARY INFORMATION:

I. Public Comment Procedures

A. How do I request copies of applications or comment on submitted applications?

Send your request for copies of applications or comments and materials concerning any of the applications to the contact listed under **ADDRESSES**. Please include the **Federal Register** notice publication date, the PRT-number, and the name of the applicant in your request or submission. We will not consider requests or comments sent to an email or address not listed under **ADDRESSES**. If you provide an email address in your request for copies of applications, we will attempt to respond to your request electronically.

Please make your requests or comments as specific as possible. Please confine your comments to issues for which we seek comments in this notice, and explain the basis for your comments. Include sufficient information with your comments to allow us to authenticate any scientific or commercial data you include.

The comments and recommendations that will be most useful and likely to influence agency decisions are: (1) Those supported by quantitative information or studies; and (2) Those that include citations to, and analyses of, the applicable laws and regulations. We will not consider or include in our administrative record comments we receive after the close of the comment period (see **DATES**) or comments delivered to an address other than those listed above (see **ADDRESSES**).

B. May I review comments submitted by others?

Comments, including names and street addresses of respondents, will be available for public review at the street address listed under **ADDRESSES**. The public may review documents and other information applicants have sent in support of the application unless our allowing viewing would violate the Privacy Act or Freedom of Information Act. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

II. Background

To help us carry out our conservation responsibilities for affected species, and in consideration of section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), along with Executive Order 13576, ''Delivering an Efficient, Effective, and Accountable Government,'' and the President's Memorandum for the Heads of Executive Departments and Agencies of January 21, 2009—Transparency and Open Government (74 FR 4685; January 26, 2009), which call on all Federal agencies to promote openness and transparency in Government by disclosing information to the public, we invite public comment on these permit applications before final action is taken.

III. Permit Applications

A. Endangered Species

Applicant: GTWT, LLC, dba Bang 57 Ranch, Okeechobee, FL; PRT–48053A

The applicant requests a permit to authorize interstate and foreign commerce, export, and cull of excess barasingha (*Rucervus duvaucelii*) from the captive herd maintained at their facility for the purpose of enhancement of the survival of the species. This notification covers activities to be conducted by the applicant over a 5-year period.

Applicant: Blank Park Zoo, Des Moines, IA; PRT–45381B

The applicant requests a permit to export three males and one female captive-bred Mauritius Pink Pigeons (*Columba mayeri*) from Blank Park Zoo, Des Moines, Iowa to Durrell Wildlife Conservation Trust, Channel Islands for the purpose of enhancement of the survival of the species. This notification covers activities to be conducted by the applicant over a 5-year period.

Applicant: Turtle Conservancy, Ojai, CA; PRT–45549B

The applicant requests a permit to import ten wild individuals of the species angulated tortoise (*Astrochelys yniphora*) for the purpose of enhancement of the survival of the species. This notification covers activities to be conducted by the applicant over a 1-year period.

Applicant: Garden State Tortoise LLC, Freehold, NJ; PRT–233243

The applicant requests an amendment of his captive-bred wildlife registration under 50 CFR 17.21(g) for the species listed below to enhance the species' propagation or survival. This notification covers activities to be conducted by the applicant over a 5-year period.

Species

- Radiated tortoise (*Astrochelys radiata*)
- Aquatic box turtle (*Terrapene coahuila*)
- Galapagos giant tortoise (*Chelonoidis nigra*)
- Bolson tortoise (*Gopherus flavomarginatus*)
- Yellow-spotted river turtle (*Podocnemis unifilis*)
- Tartaruga (*Podocnemis expansa*)
- Spotted pond turtle (*Geoclemys hamiltonii*)
- River terrapin (*Batagur baska*)

Applicant: Joan Embery-Pillsbury, Lakeside, CA; PRT–45981B

The applicant requests a captive-bred wildlife registration under 50 CFR 17.21(g) for Andean condor (*Vultur gryphus*) and black & white ruffed lemur (*Varecia variegate*) to enhance the species propagation or survival. This notification covers activities to be conducted by the applicant over a 5-year period.

Multiple Applicants

The following applicants each request a permit to import the sport-hunted trophy of one male bontebok

(*Damaliscus pygargus pygargus*) culled from a captive herd maintained under the management program of the Republic of South Africa, for the purpose of enhancement of the survival of the species.

Applicant: Terry Arnold, Fellows, CA; PRT–57131B

Applicant: Leo Wright, Mead, WA; PRT–49585B

Applicant: Robert Bonar, Minneapolis, MN; PRT–55925B

Applicant: Bernard Richburg, Little Rock, AR; PRT–56820B

Applicant: Nicolas Pittman, Whiteville, TN; PRT–56826B

Brenda Tapia,

Program Analyst/Data Administrator, Branch of Permits, Division of Management Authority.

[FR Doc. 2015–03381 Filed 2–18–15; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF THE INTERIOR

U.S. Geological Survey

[GX.15.AE60.00C10.00.]

Notice of Intent To Grant an Exclusive License

AGENCY: U.S. Geological Survey, Department of the Interior.

ACTION: Notice of intent to grant an exclusive license.

SUMMARY: The Notice is hereby given that the U.S. Geological Survey intends to grant to Alpha Mach, Inc., 101–2205 Bombardier, Ste-Julie, Qc, Canada, J3E 2J9, an exclusive license to practice the following: A device for monitoring subsurface temperatures.

DATES: Comments must be received fifteen (15) days from the effective date of this notice.

FOR FURTHER INFORMATION CONTACT: Benjamin Henry, Technology Enterprise Specialist, Office of Policy & Analysis, U.S. Geological Survey, 12201 Sunrise Valley Dr, MS 153, Reston, VA 20192, 703–648–4344.

SUPPLEMENTARY INFORMATION: It is in the public interest to license this invention, as Alpha Mach, Inc., submitted a complete and sufficient application for a license. The prospective exclusive license will be royalty-bearing and will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7. The prospective exclusive license may be granted unless, within fifteen (15) days from the date of this published Notice, the U.S. Geological Survey Office of Policy & Analysis receives written evidence and argument which establishes that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR 404.7.

Katherine McCulloch,

Deputy Associate Director for Administration.

[FR Doc. 2015–03339 Filed 2–18–15; 8:45 am]

BILLING CODE 4311–AM–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLCA942000 L57000000.BX0000 14X L5017AR]

Filing of Plats of Survey: California

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice.

SUMMARY: The plats of survey of lands described below are scheduled to be officially filed in the Bureau of Land Management, California State Office, Sacramento, California.

DATES: March 23, 2015.

ADDRESSES: A copy of the plats may be obtained from the California State Office, Bureau of Land Management, 2800 Cottage Way, Sacramento, California 95825, upon required payment.

FOR FURTHER INFORMATION CONTACT: Chief, Branch of Geographic Services, Bureau of Land Management, California State Office, 2800 Cottage Way, W–1623, Sacramento, California 95825, (916) 978–4310. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

SUPPLEMENTARY INFORMATION: A person or party who wishes to protest a survey must file a notice that they wish to protest with the Chief, Branch of Geographic Services. A statement of reasons for a protest may be filed with the notice of protest and must be filed with the Chief, Branch of Geographic Services within thirty days after the protest is filed. If a protest against the survey is received prior to the date of official filing, the filing will be stayed pending consideration of the protest. A plat will not be officially filed until the day after all protests have been dismissed or otherwise resolved. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Mount Diablo Meridian, California

T. 45 N., R. 15 E., dependent resurvey and subdivision, accepted December 31, 2014.
T. 46 N., R. 15 E., dependent resurvey and subdivision, accepted December 31, 2014.
T. 17 N., R. 7 W., dependent resurvey and subdivision of sections, accepted January 16, 2015.
T. 17 N., R. 8 W., dependent resurvey and subdivision of section 34, accepted January 16, 2015.
T. 24 N., R. 9 E., dependent resurvey and subdivision of section 2, accepted January 27, 2015.

San Bernardino Meridian, California

T. 7 S., R. 15 E., supplemental plat of the SW 1/4 of the NW 1/4 of section 33, accepted January 8, 2015.
T. 17 S., R. 2 E., supplemental plat of portions of sections 9 and 10, accepted January 20, 2015.

Authority: 43 U.S.C., Chapter 3.

Dated: February 3, 2015.

Lance J. Bishop,

Chief Cadastral Surveyor, California.

[FR Doc. 2015–03468 Filed 2–18–15; 8:45 am]

BILLING CODE 4310–40–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLOR957000–L63100000–HD0000–15XL1116AF: HAG 15–0085]

Filing of Plats of Survey: Oregon/Washington

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice.

SUMMARY: The plats of survey of the following described lands are scheduled to be officially filed in the Bureau of Land Management, Oregon State Office, Portland, Oregon, 30 days from the date of this publication.

Willamette Meridian

Oregon

T. 23 S., R. 10 E., accepted January 23, 2015
T. 22 S., R. 10 E., accepted January 23, 2015
T. 25 S., R. 4 W., accepted February 5, 2015
T. 21 S., R. 9 W., accepted February 5, 2015
T. 28 S., R. 12 W., accepted February 5, 2015

T. 29 S., R. 11 W., accepted February 5, 2015
T. 38 S., R. 3 E., accepted February 5, 2015

Washington

T. 34 N., R. 44 E., accepted February 5, 2015

ADDRESSES: A copy of the plats may be obtained from the Public Room at the Bureau of Land Management, Oregon State Office, 1220 SW. 3rd Avenue, Portland, Oregon 97204, upon required payment.

FOR FURTHER INFORMATION CONTACT: Kyle Hensley, (503) 808–6132, Branch of Geographic Sciences, Bureau of Land Management, 1220 SW. 3rd Avenue, Portland, Oregon 97204. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

SUPPLEMENTARY INFORMATION: A person or party who wishes to protest against this survey must file a written notice with the Oregon State Director, Bureau of Land Management, stating that they wish to protest. A statement of reasons for a protest may be filed with the notice of protest and must be filed with the Oregon State Director within thirty days after the protest is filed. If a protest against the survey is received prior to the date of official filing, the filing will be stayed pending consideration of the protest. A plat will not be officially filed until the day after all protests have been dismissed or otherwise resolved. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Timothy J. Moore,

Acting Chief Cadastral Surveyor of Oregon/Washington.

[FR Doc. 2015–03423 Filed 2–18–15; 8:45 am]

BILLING CODE 4310–33–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–NER–SHEN–16985; PXPD203503C002]

Notice of Termination of the Environmental Impact Statement for a Chronic Wasting Disease Management Plan for Shenandoah National Park, Virginia

AGENCY: National Park Service, Interior.

ACTION: Terminate preparation of an environmental impact statement.

SUMMARY: The National Park Service (NPS) is terminating the preparation of an environmental impact statement (EIS) for a proposed Chronic Wasting Disease Management Plan at Shenandoah National Park. A Notice of Intent to Prepare the EIS was published in the **Federal Register** at 78 FR 13376 on February 27, 2013. Instead, the NPS has prepared an environmental assessment to amend its approved Chronic Wasting Disease Detection and Assessment Plan to include chronic wasting disease management actions.

ADDRESSES: The environmental assessment can be viewed at the NPS Planning, Environment and Public Comment (PEPC) Web site at: *http://parkplanning.nps.gov/cwdplanamendment.*

FOR FURTHER INFORMATION CONTACT: Jim Northup, Superintendent, Shenandoah National Park, 3655 U.S. Hwy 211 East, Luray, VA 22835.

SUPPLEMENTARY INFORMATION: In October 2013, the NPS approved a Chronic Wasting Disease Detection and Assessment Plan for the purpose of detecting the presence, and assessing the prevalence, of chronic wasting disease (CWD) within the boundaries of Shenandoah National Park (the park). The CWD Detection and Assessment Plan was evaluated in an environmental assessment (EA) that was released for public review in July 2012. Concurrent with the detection and assessment plan, the NPS initiated an EIS for long-term management of CWD within the park. The CWD management plan/EIS process focused on reducing deer density in specific areas as the most effective tool for managing CWD in the park. However, the results of scoping and preliminary analysis showed that the impacts of reducing deer density in specific areas for CWD management would not be substantially different than the impacts of the approved detection and assessment actions that were previously analyzed in the 2012 EA because the CWD Detection and Assessment Plan allows for the lethal removal of up to 300 deer for the purposes of detection and assessment, and specifies the same high deer density areas as proposed for managing CWD. The main differences are that density reductions may be done more frequently than lethal removals for detection or assessment, and there may be situations in which density reductions would be carried out concurrently with detection and assessment actions, which may increase the number of lethal removals but not to a level that changes the impacts or warrants analysis in an EIS. Therefore, the NPS determined that, rather than preparing a separate CWD management plan, the most efficient way to manage CWD would be to expand the range of management tools in the CWD Detection and Assessment Plan to include CWD response actions for the purpose of reducing the likelihood of establishment, and slowing the progression, of CWD within the park. The NPS further determined that an EA was the appropriate level of environmental review necessary to evaluate any differences in environmental impacts as a result of amending the approved CWD Detection and Assessment Plan to include CWD response actions.

Dated: February 12, 2015.

Michael A. Caldwell,

Regional Director, Northeast Region, National Park Service.

[FR Doc. 2015–03505 Filed 2–18–15; 8:45 am]

BILLING CODE 4310–WV–P

DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

[S1D1S SS08011000 SX066A000 67F 134S180110; S2D2S SS08011000 SX066A00 33F 13xs501520]

Notice of Proposed Information Collection; Request for Comments for 1029–0129

AGENCY: Office of Surface Mining Reclamation and Enforcement, Interior.

ACTION: Notice and request for comments.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995, the Office of Surface Mining Reclamation and Enforcement (OSMRE) is announcing its intention to request approval for the collection of information for OSMRE's call for nominations for its Excellence in Surface Coal Mining Reclamation Awards and Abandoned Mine Land Reclamation Awards.

DATES: Comments on the proposed information collection must be received by April 20, 2015, to be assured of consideration.

ADDRESSES: Comments may be mailed to John Trelease, Office of Surface Mining Reclamation and Enforcement, 1951 Constitution Ave. NW., Room 203–SIB, Washington, DC 20240. Comments may also be submitted electronically to *jtrelease@osmre.gov.*

FOR FURTHER INFORMATION CONTACT: To receive a copy of the information collection request contact John Trelease at (202) 208–2783 or by email at *jtrelease@osmre.gov.*

SUPPLEMENTARY INFORMATION: The Office of Management and Budget (OMB) regulations at 5 CFR part 1320, which implement provisions of the Paperwork Reduction Act of 1995 (Pub. L. 104–13), require that interested members of the public and affected agencies have an opportunity to comment on information collection and recordkeeping activities [see 5 CFR 1320.8(d)]. This notice identifies an information collection that OSMRE will be submitting to OMB for approval. The collection is for nominations to OSMRE's Excellence in Surface Coal Mining Reclamation Awards and Abandoned Mine Land Reclamation Awards. OSMRE will request a 3-year term of approval for the information collection activity.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Since this is a new information collection request, OSMRE is seeking new OMB control number. Responses are voluntary.

Comments are invited on: (1) The need for the collection of information for the performance of the functions of the agency; (2) the accuracy of the agency's burden estimates; (3) ways to enhance the quality, utility and clarity of the information collection; and (4) ways to minimize the information collection burden on respondents, such as use of automated means of collection of the information. A summary of the public comments will accompany OSMRE's submission of the information collection request to OMB.

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Title: Reclamation Awards—Call for Nominations.

OMB Control Number: 1029–0129.

Summary: This information collection clearance package is being submitted by the Office of Surface Mining Reclamation and Enforcement (OSMRE) for renewed approval to collect information for our annual call for nominations for our Excellence in Surface Coal Mining Reclamation Awards and Abandoned Mine Land Reclamation Awards. Since 1986, the Office of Surface Mining has presented awards to coal mine operators who completed exemplary active reclamation. A parallel award program for abandoned mine land reclamation began in 1992. The objective was to give public recognition to those responsible for the nation's most outstanding achievement in environmentally sound surface mining and land reclamation and to encourage the exchange and transfer of successful reclamation technology. This collection request seeks a three-year term of approval.

Bureau Form Number: None.

Frequency of Collection: Once.

Description of Respondents: Industry and state/tribal nominees for reclamation awards and state/tribal judges.

Total Annual Responses: 14 active mine respondents, 11 state and tribal abandoned mine land program respondents, and 26 state and tribal judges.

Total Annual Burden Hours: 1,646.

Total Annual Non-Wage Burden: $2,500.

Dated: February 11, 2015.

Harry J. Payne,

Chief, Division of Regulatory Support.

[FR Doc. 2015–03408 Filed 2–18–15; 8:45 am]

BILLING CODE 4310–05–P

DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

[S1D1S SS08011000 SX066A000 67F 134S180110; S2D2S SS08011000 SX066A00 33F 13xs501520]

Notice of Proposed Information Collection; Request for Comments for 1029–0059

AGENCY: Office of Surface Mining Reclamation and Enforcement, Interior.

ACTION: Notice and request for comments.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995, the Office of Surface Mining Reclamation and Enforcement (OSMRE) is announcing its intention to request renewed authority to collect information for our Grants for Program Development and Administration and Enforcement, State and Tribal Reclamation Grants, and associated forms. This information collection activity was previously approved by the Office of Management and Budget (OMB), and assigned clearance number 1029–0059.

DATES: Comments on the proposed information collection must be received by April 20, 2015, to be assured of consideration.

ADDRESSES: Comments may be mailed to John Trelease, Office of Surface Mining Reclamation and Enforcement, 1951 Constitution Ave. NW., Room 203–SIB, Washington, DC 20240. Comments may also be submitted electronically to *jtrelease@osmre.gov.*

FOR FURTHER INFORMATION CONTACT: To receive a copy of the information collection request, contact John Trelease at (202) 208–2783 or electronically at *jtrelease@osmre.gov.*

SUPPLEMENTARY INFORMATION: OMB regulations at 5 CFR part 1320, which implement provisions of the Paperwork Reduction Act of 1995 (Pub. L. 104–13), require that interested members of the public and affected agencies have an opportunity to comment on information collection and recordkeeping activities [see 5 CFR 1320.8(d)]. This notice identifies an information collection that OSMRE will be submitting to OMB for approval. This collection is contained in OSMRE grant forms—OSM–47 (Budget Information Report), OSM–49 (Budget Information and Financial Reporting) and OSM–51 (Performance and Program narrative); 30 CFR part 735 (Grants for Program Development and Administration and Enforcement); 30 CFR part 885 (Grants for Certified States and Indian Tribes); and 30 CFR part 886 (State and Tribal Reclamation Grants). Responses are required to obtain a benefit for this collection. OSMRE will request a 3-year term of approval for this information collection activity.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for the grants to states and tribes and associated forms is 1029–0059.

Comments are invited on: (1) The need for the collection of information for the performance of the functions of the agency; (2) the accuracy of the agency's burden estimates; (3) ways to enhance the quality, utility and clarity

of the information collection; and (4) ways to minimize the information collection burden on respondents, such as use of automated means of collection of the information. A summary of the public comments will accompany OSMRE's submission of the information collection request to OMB.

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

This notice provides the public with 60 days in which to comment on the following information collection activity:

Title: 30 CFR parts 735, 885 and 886—Grants to States and Tribes.

OMB Control Number: 1029–0059.

Summary: State and Tribal reclamation and regulatory authorities are requested to provide specific budget and program information as part of the grant application and reporting processes authorized by the Surface Mining Control and Reclamation Act.

Bureau Form Numbers: OSM–47, OSM–49 and OSM–51.

Frequency of Collection: Semi-annually and annually.

Description of Respondents: State and Tribal regulatory and reclamation authorities.

Total Annual Responses: 140.

Total Annual Burden Hours: 918 hours.

Total Annual Non-Wage Cost: $0.

Dated: January 30, 2015.

Harry J. Payne,

Chief, Division of Regulatory Support.

[FR Doc. 2015–03395 Filed 2–18–15; 8:45 am]

BILLING CODE 4310–05–P

DEPARTMENT OF JUSTICE

[OMB Number 1105–0008]

Agency Information Collection Activities; Proposed eCollection eComments Requested; Extension of a Currently Approved Collection; Claim for Damage, Injury, or Death

AGENCY: Civil Division, Department of Justice.

ACTION: 60-day notice.

SUMMARY: The Department of Justice (DOJ), Civil Division, will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995.

DATES: Comments are encouraged and will be accepted for 60 days until April 20, 2015.

FOR FURTHER INFORMATION CONTACT: Comments are encouraged and all comments should reference the 8 digit OMB number for the collection or the title of the collection. If you have questions concerning the collection, please contact the Director, Torts Branch, Civil Division, U.S. Department of Justice, Washington, DC 20530.

SUPPLEMENTARY INFORMATION: Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

—Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

—Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

—Enhance the quality, utility, and clarity of the information to be collected; and

—Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

Overview of this information collection:

1. *Type of Information Collection:* Reinstatement of the National Survey of Prosecutors, with changes, a previously approved collection for which approval has expired.

2. *The Title of the Form/Collection:* Claim for Damage, Injury, or Death.

3. *The agency form number, if any, and the applicable component of the Department sponsoring the collection:* The form number is CIV SF 95. The applicable component within the Department of Justice is the Civil Division.

4. *Affected public who will be asked or required to respond, as well as a brief abstract:* Primary: Individuals or households. Other: Businesses or other for-profit, Non-for-profit institutions, and State, Local, or Tribal Governments. Abstract: This form is used by those persons making a claim against the United States Government under the Federal Tort Claims Act.

5. *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* It is estimated that there will be 100,000 respondents who will each require 6 hours to respond.

6. *An estimate of the total public burden (in hours) associated with the collection:* The total estimated annual burden hours to complete the certification form is 600,000 hours.

If additional information is required contact: Jerri Murray, Department Clearance Officer, United States Department of Justice, Justice Management Division, Policy and Planning Staff, Two Constitution Square, 145 N Street NE., Room 3E.405B, Washington, DC 20530.

Dated: February 12, 2015.

Jerri Murray,

Department Clearance Officer for PRA, U.S. Department of Justice.

[FR Doc. 2015–03383 Filed 2–18–15; 8:45 am]

BILLING CODE 4410–12–P

DEPARTMENT OF JUSTICE

Notice of Lodging Proposed Consent Decree

In accordance with Departmental Policy, 28 CFR 50.7, notice is hereby given that a proposed Consent Decree in *United States* v. *Mlaskoch, et al.,* Civil Action No. 10–cv–2669–JRT–LIB, was lodged with the United States District Court for the District of Minnesota on February 11, 2015.

This proposed Consent Decree concerns a complaint filed by the United States on behalf of the United States Environmental Protection Agency against Bradd Louis James Mlaskoch, Danielle Johnson Mlaskoch f/k/a Danielle Johnson, and Mlaskoch Excavating, Inc., pursuant to sections 301(a), 309(b) and (d) of the Clean Water Act, 33 U.S.C. 1311 (a), 1319 (b) and (d), to obtain injunctive relief from, and impose civil penalties on, the Defendants in connection with alleged discharges of pollutants in or about Pine County, Minnesota, and for violating the Clean Water Act by discharging pollutants into waters of the United States without a permit and authorization by the United States Army Corps of Engineers. The proposed Consent Decree resolves these allegations by requiring the Defendants to restore the impacted areas and/or perform mitigation and to pay a civil penalty.

The Department of Justice will accept written comments relating to this proposed Consent Decree for thirty (30) days from the date of publication of this Notice. Please address comments to Friedrich A. P. Siekert, AUSA, United States Attorney's Office, United States Courthouse, 300 South Fourth Street, Suite 600, Minneapolis, MN 55415 and refer to *United States* v. *Mlaskoch, et al.,* USAO File No. 2009V00565, DJ# 90–5–1–1–18624.

The proposed Consent Decree may be examined at the Clerk's Office, United States District Court for the District of Minnesota, United States Courthouse, 300 South Fourth Street, Suite 202, Minneapolis, MN 55415. In addition, the proposed Consent Decree may be examined electronically at *http://www.justice.gov/enrd/Consent_Decrees.html.*

Cherie L. Rogers,

Assistant Section Chief, Environmental Defense Section, Environment and Natural Resources Division.

[FR Doc. 2015–03409 Filed 2–18–15; 8:45 am]

BILLING CODE 4410–15–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Bulk Manufacturer of Controlled Substances Application: Johnson Matthey, Inc.

ACTION: Notice of application.

DATES: Registered bulk manufacturers of the affected basic classes, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.33(a) on or before April 20, 2015.

ADDRESSES: Written comments should be sent to: Drug Enforcement Administration, Attention: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152. Request for hearings should be sent to: Drug Enforcement Administration, Attention: Hearing Clerk/LJ, 8701 Morrissette Drive, Springfield, Virginia 22152.

SUPPLEMENTARY INFORMATION: The Attorney General has delegated his authority under the Controlled Substances Act to the Administrator of the Drug Enforcement Administration (DEA), 28 CFR 0.100(b). Authority to exercise all necessary functions with respect to the promulgation and implementation of 21 CFR part 1301, incident to the registration of manufacturers, distributors, dispensers, importers, and exporters of controlled substances (other than final orders in connection with suspension, denial, or revocation of registration) has been redelegated to the Deputy Assistant Administrator of the DEA Office of Diversion Control (''Deputy Assistant Administrator'') pursuant to section 7 of 28 CFR part 0, appendix to subpart R.

In accordance with 21 CFR 1301.33(a), this is notice that on September 3, 2014, Johnson Matthey, Inc., Custom Pharmaceuticals Department, 2003 Nolte Drive, West Deptford, New Jersey 08066–1742, applied to be registered as a bulk manufacturer of the following basic classes of controlled substances:

Controlled substance	Schedule
Gamma Hydroxybutyric Acid (2010).	I
Marihuana (7360)	I
Tetrahydrocannabinols (7370)	I
Dihydromorphine (9145)	I
Difenoxin (9168)	I
Propiram (9649)	I
Amphetamine (1100)	II
Methamphetamine (1105)	II
Lisdexamfetamine (1205)	II
Methylphenidate (1724)	II
Nabilone (7379)	II
Cocaine (9041)	II
Codeine (9050)	II
Dihydrocodeine (9120)	II
Oxycodone (9143)	II
Hydromorphone (9150)	II
Diphenoxylate (9170)	II
Ecgonine (9180)	II
Hydrocodone (9193)	II
Meperidine (9230)	II
Methadone (9250)	II
Methadone intermediate (9254)	II
Morphine (9300)	II
Thebaine (9333)	II
Oxymorphone (9652)	II
Noroxymorphone (9668)	II
Alfentanil (9737)	II
Remifentanil (9739)	II
Sufentanil (9740)	II
Tapentadol (9780)	II
Fentanyl (9801)	II

The company plans to manufacture the listed controlled substances in bulk for sale to its customers.

Dated: February 11, 2015.

Joseph T. Rannazzisi,

Deputy Assistant Administrator.

[FR Doc. 2015–03492 Filed 2–18–15; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Bulk Manufacturer of Controlled Substances Application: Navinta LLC

ACTION: Notice of application.

DATES: Registered bulk manufacturers of the affected basic classes, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.33(a) on or before April 20, 2015.

ADDRESSES: Written comments should be sent to: Drug Enforcement Administration, Attention: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152. Request for hearings should be sent to: Drug Enforcement Administration, Attention: Hearing Clerk/LJ, 8701 Morrissette Drive, Springfield, Virginia 22152.

SUPPLEMENTARY INFORMATION: The Attorney General has delegated his authority under the Controlled Substances Act to the Administrator of the Drug Enforcement Administration (DEA), 28 CFR 0.100(b). Authority to exercise all necessary functions with respect to the promulgation and implementation of 21 CFR part 1301, incident to the registration of manufacturers, distributors, dispensers, importers, and exporters of controlled substances (other than final orders in connection with suspension, denial, or revocation of registration) has been redelegated to the Deputy Assistant Administrator of the DEA Office of Diversion Control (''Deputy Assistant Administrator'') pursuant to section 7 of 28 CFR part 0, appendix to subpart R.

In accordance with 21 CFR 1301.33(a), this is notice that on September 5, 2014, Navinta LLC, 1499 Lower Ferry Road, Ewing, New Jersey 08618–1414, applied to be registered as a bulk manufacturer of the following basic classes of controlled substances:

Controlled substance	Schedule
Pentobarbital (2270)	II
Remifentanil (9739)	II

The company plans to initially to manufacture API quantities of the listed controlled substances for validation purposes and FDA approval, then to produce commercial size batches for distribution to dosage form manufacturers upon FDA approval.

Dated: February 11, 2015.

Joseph T. Rannazzisi,

Deputy Assistant Administrator.

[FR Doc. 2015–03489 Filed 2–18–15; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Bulk Manufacturer of Controlled Substances Application: Johnson Matthey, Inc.

ACTION: Notice of application.

DATES: Registered bulk manufacturers of the affected basic classes, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.33(a) on or before April 20, 2015.

ADDRESSES: Written comments should be sent to: Drug Enforcement Administration, Attention: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152. Request for hearings should be sent to: Drug Enforcement Administration, Attention: Hearing Clerk/LJ, 8701 Morrissette Drive, Springfield, Virginia 22152.

SUPPLEMENTARY INFORMATION: The Attorney General has delegated his authority under the Controlled Substances Act to the Administrator of the Drug Enforcement Administration (DEA), 28 CFR 0.100(b). Authority to exercise all necessary functions with respect to the promulgation and implementation of 21 CFR part 1301, incident to the registration of manufacturers, distributors, dispensers, importers, and exporters of controlled substances (other than final orders in connection with suspension, denial, or revocation of registration) has been redelegated to the Deputy Assistant Administrator of the DEA Office of Diversion Control (''Deputy Assistant Administrator'') pursuant to section 7 of 28 CFR part 0, appendix to subpart R.

In accordance with 21 CFR 1301.33(a), this is notice that on September 3, 2014, Johnson Matthey, Inc., Pharmaceuticals Materials, 900 River Road, Conshohocken, Pennsylvania 19428, applied to be registered as a bulk manufacturer of the following basic classes of controlled substances:

Controlled substance	Schedule
Gamma Hydroxybutyric Acid (2010).	I
Amphetamine (1100)	II
Methylphenidate (1724)	II
Codeine (9050)	II
Oxycodone (9143)	II
Diphenoxylate (9170)	II
Hydrocodone (9193)	II
Meperidine (9230)	II
Methadone (9250)	II
Methadone intermediate (9254)	II
Morphine (9300)	II
Thebaine (9333)	II

The company plans to manufacture the listed controlled substances in bulk for distribution and sale to its customers.

The Thebaine (9333) will be used to manufacture other controlled substances for sale in bulk to its customers.

Dated: February 11, 2015.

Joseph T. Rannazzisi,

Deputy Assistant Administrator.

[FR Doc. 2015–03491 Filed 2–18–15; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Importer of Controlled Substances Application: Mylan Technologies, Inc.

ACTION: Notice of application.

DATES: Registered bulk manufacturers of the affected basic classes, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.34(a) on or before March 23, 2015. Such persons may also file a written request for a hearing on the application pursuant to 21 CFR 1301.43 on or before March 23, 2015.

ADDRESSES: Written comments should be sent to: Drug Enforcement Administration, Attention: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152. Request for hearings should be sent to: Drug Enforcement Administration, Attention: Hearing Clerk/LJ, 8701 Morrissette Drive, Springfield, Virginia 22152.

SUPPLEMENTARY INFORMATION: The Attorney General has delegated his authority under the Controlled Substances Act to the Administrator of the Drug Enforcement Administration (DEA), 28 CFR 0.100(b). Authority to exercise all necessary functions with respect to the promulgation and implementation of 21 CFR part 1301, incident to the registration of manufacturers, distributors, dispensers, importers, and exporters of controlled substances (other than final orders in connection with suspension, denial, or revocation of registration) has been redelegated to the Deputy Assistant Administrator of the DEA Office of Diversion Control (''Deputy Assistant Administrator'') pursuant to section 7 of 28 CFR part 0, appendix to subpart R.

In accordance with 21 CFR 1301.34(a), this is notice that on November 13, 2014, Mylan Technologies, Inc., 110 Lake Street, Saint Albans, Vermont 05478, applied to be registered as an importer of the following basic classes of controlled substances:

Controlled substance	Schedule
Methylphenidate (1724)	II
Fentanyl (9801)	II

The company plans to import the listed controlled substances in finished dosage form (FDF) from foreign sources for analytical testing and clinical trials in which the foreign FDF will be compared to the company's own domestically-manufactured FDF. This analysis is required to allow the company to export domestically-manufactured FDF to foreign markets.

Dated: February 11, 2015.

Joseph T. Rannazzisi,

Deputy Assistant Administrator.

[FR Doc. 2015–03493 Filed 2–18–15; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Importer of Controlled Substances Registration: United States Pharmacopeial Convention

ACTION: Notice of registration.

SUMMARY: United States Pharmacopeial Convention applied to be registered as an importer of certain basic classes of controlled substances. The DEA grants United States Pharmacopeial Convention registration as an importer of those controlled substances.

SUPPLEMENTARY INFORMATION: By notice dated August 11, 2014, and published in the **Federal Register** on August 20, 2014, 79 FR 49341, United States Pharmacopeial Convention, 12601 Twinbrook Parkway, Rockville, Maryland 20852, applied to be registered as an importer of certain basic classes of controlled substances. No

comments or objections were submitted to this notice.

The Drug Enforcement Administration (DEA) has considered the factors in 21 U.S.C. 823, 952(a) and 958(a) and determined that the registration of United States Pharmacopeial Convention to import the basic classes of controlled substances is consistent with the public interest and with United States obligations under international treaties, conventions, or protocols in effect on May 1, 1971. The DEA investigated the company's maintenance of effective controls against diversion by inspecting and testing the company's physical security systems, verifying the company's compliance with state and local laws, and reviewing the company's background and history.

Therefore, pursuant to 21 U.S.C. 952(a) and 958(a), and in accordance with 21 CFR 1301.34, the above-named company is granted registration as an importer of the basic classes of controlled substances listed:

Controlled substance	Schedule
Cathinone (1235)	I
Methaqualone (2565)	I
Lysergic acid diethylamide (7315)	I
Marihuana (7360)	I
Tetrahydrocannabinols (7370)	I
4-Methyl-2,5-dimethoxyamphetamine (7395).	I
3,4-Methylenedioxyamphetamine (7400).	I
Codeine-N-oxide (9053)	I
Difenoxin (9168)	I
Heroin (9200)	I
Morphine-N-oxide (9307)	I
Norlevorphanol (9634)	I
Amphetamine (1100)	II
Methamphetamine (1105)	II
Phenmetrazine (1631)	II
Methylphenidate (1724)	II
Amobarbital (2125)	II
Pentobarbital (2270)	II
Secobarbital (2315)	II
Glutethimide (2550)	II
Phencyclidine (7471)	II
4-Anilino-N-phenethyl-4-piperidine (8333).	II
Phenylacetone (8501)	II
Alphaprodine (9010)	II
Anileridine (9020)	II
Cocaine (9041)	II
Codeine (9050)	II
Dihydrocodeine (9120)	II
Oxycodone (9143)	II
Hydromorphone (9150)	II
Diphenoxylate (9170)	II
Hydrocodone (9193)	II
Levomethorphan (9210)	II
Levorphanol (9220)	II
Meperidine (9230)	II
Methadone (9250)	II
Dextropropoxyphene, bulk (non-dosage forms) (9273).	II
Morphine (9300)	II
Thebaine (9333)	II
Oxymorphone (9652)	II
Noroxymorphone (9668)	II
Alfentanil (9737)	II
Sufentanil (9740)	II

The company plans to import reference standards for sale to researchers and analytical labs.

The company plans to import the listed controlled substances in bulk powder form from foreign sources for the manufacture of analytical reference standards for sale to their customers.

Dated: February 11, 2015.

Joseph T. Rannazzisi,

Deputy Assistant Administrator.

[FR Doc. 2015–03481 Filed 2–18–15; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Importer of Controlled Substances Registration: Research Triangle Institute

ACTION: Notice of registration.

SUMMARY: Research Triangle Institute applied to be registered as an importer of certain basic classes of controlled substances. The DEA grants Research Triangle Institute registration as an importer of the controlled substance.

SUPPLEMENTARY INFORMATION: By notice dated July 2, 2014, and published in the **Federal Register** on July 11, 2014, 79 FR 40160, Research Triangle Institute, Kenneth S. Rehder, Ph.D., Hermann Building East Institute Drive, P.O. Box 12194, Research Triangle Park, North Carolina 27709, applied to be registered as an importer of certain basic classes of controlled substances. No comments or objections were submitted for this notice.

Comments and requests for hearings on applications to import narcotic raw material are not appropriate. 72 FR 3417 (January 25, 2007).

The Drug Enforcement Administration (DEA) has considered the factors in 21 U.S.C. 823, 952(a) and 958(a) and determined that the registration of Research Triangle Institute to import the basic classes of controlled substances is consistent with the public interest and with United States obligations under international treaties, conventions, or protocols in effect on May 1, 1971. The DEA investigated the company's maintenance of effective controls against diversion by inspecting and testing the company's physical security systems, verifying the company's compliance with state and local laws, and reviewing the company's background and history.

Therefore, pursuant to 21 U.S.C. 952(a) and 958(a), and in accordance with 21 CFR 1301.34, the above-named company is granted registration as an importer of the basic classes of controlled substances:

Controlled substance	Schedule
AM-2201 (7201)	I
AM-694 (7694)	I
JWH-018 (7118)	I
JWH-073 (7173)	I
JWH-200 (7200)	I
JWH-250 (6250)	I
JWH-019 (7019)	I
JWH-081(7081)	I
SR-19 and RCS-4 (7104)	I
JWH-122 (7122)	I
JWH-203 (7203)	I
JWH-398 (7398)	I
1-(1-Phenylcyclohexyl)pyrrolidine (7458)	I
1-[1-(2-Thienyl)cyclohexyl]piperidine (7470)	I
1-[1-(2-Thienyl)cyclohexyl]pyrrolidine (7473)	I
1-Methyl-4-phenyl-4-propionoxypiperidine (9661)	I
1-(2-Phenylethyl)-4-phenyl-4-acetoxypiperidine (9663)	I

Controlled substance	Schedule
2-(4-chloro-2,5-dimethoxyphenyl)-N-(2-methoxybenzl) ethanamine (25C-NBOMe) (7537)	I
2-(4-iodo-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl) ethanamine (25I-NBOMe) (7538)	I
2,5-Dimethoxy-4-ethylamphetamine (7399)	I
2,5-Dimethoxyamphetamine (7396)	I
2C-D (7508)	I
2C-E (7509)	I
2C-H (7517)	I
2C-N (7521)	I
2C-P (7524)	I
2C-T-2 (7385)	I
2C-T-7 (7348)	I
2C-I (7518)	I
2C-C (7519)	I
2C-T-4 (7532)	I
3,4,5-Trimethoxyamphetamine (7390)	I
3,4-Methylenedioxyamphetamine (7400)	I
Controlled Substance Schedule 3,4-Methylenedioxymethamphetamine (7405)	I
3,4-Methylenedioxy-N-ethylamphetamine (7404)	I
3-Fluoro-N-methylcathinone (3-FMC) (1233)	I
3-Methylfentanyl (9813)	I
3-Methylthiofentanyl (9833)	I
4-Bromo-2,5-dimethoxyamphetamine (7391)	I
4-Bromo-2,5-dimethoxyphenethylamine (7392)	I
4-Fluoro-N-methylcathinone (4-FMC) (1238)	I
4-Methyl-2,5-dimethoxyamphetamine (7395)	I
4-Methyl-alphapyrrolidinopropiophenone (4-MePPP) (7498)	I
4-Methylaminorex (cis isomer) (1590)	I
4-Methyl-N-ethylcathinone (4-MEC) (1249)	I
4-Methoxyamphetamine (7411)	I
CP-47,497 C8 Homologue (7298)	I
5-Fluoro-PB-22;5F-PB-22 (7225)	I
5-Methoxy-3,4-methylenedioxyamphetamine (7401)	I
5-Methoxy-N-N-dimethyltryptamine (7431)	I
5-Methoxy-N,N-diisopropyltryptamine (7439)	I
AB-FUBINACA (7012)	I
Acetorphine (9319)	I
Acetyl-alpha-methylfentanyl (9815)	I
Acetyldihydrocodeine (9051)	I
Acetylmethadol (9601)	I
ADB-PINACA (7035)	I
Allylprodine (9602)	I
Alphacetylmethadol except levo-alphacetylmethadol (9603)	I
Alpha-ethyltryptamine (7249)	I
Alphameprodine (9604)	I
Alphamethadol (9605)	I
Alpha-methylfentanyl (9814)	I
Alpha-methylthiofentanyl (9832)	I
Alpha-methyltryptamine (7432)	I
alpha-pyrrolidinopentiophenone (α-PVP) (7545)	I
alpha-pyrrolidinobutiophenone (α-PBP) (7546)	I
Aminorex (1585)	I
APINACA and AKB48 (7048)	I
Benzethidine (9606)	I
Benzylmorphine (9052)	I
Betacetylmethadol (9607)	I
Beta-hydroxy-3-methylfentanyl (9831)	I
Beta-hydroxyfentanyl (9830)	I
Betameprodine (9608)	I
Betamethadol (9609)	I
Betaprodine (9611)	I
Bufotenine (7433)	I
Controlled Substance Schedule Butylone (7541)	I
CP-47,497 (5-(1,1-Dimethylheptyl)-2-[(1R,3S)-3-hydroxycyclohexyl-phenol) (7297)	I
Cathinone (1235)	I
Clonitazene (9612)	I
Codeine methylbromide (9070)	I
Codeine-N-Oxide (9053)	I
Cyprenorphine (9054)	I
Desomorphine (9055)	I
Dextromoramide (9613)	I
Diampromide (9615)	I
Diethylthiambutene (9616)	I
Diethyltryptamine (7434)	I
Difenoxin (9168)	I

Controlled substance	Schedule
Dihydromorphine (9145)	I
Dimenoxadol (9617)	I
Dimepheptanol (9618)	I
Dimethylthiambutene (9619)	I
Dimethyltryptamine (7435)	I
Dioxaphetyl butyrate (9621)	I
Dipipanone (9622)	I
Drotebanol (9335)	I
Ethylmethylthiambutene (9623)	I
Etonitazene (9624)	I
Etorphine (except HCl) (9056)	I
Etoxeridine (9625)	I
Fenethylline (1503)	I
Furethidine (9626)	I
Heroin (9200)	I
Hydromorphinol (9301)	I
Hydroxypethidine (9627)	I
Gamma Hydroxybutyric Acid (2010)	I
Ibogaine (7260)	I
Ketobemidone (9628)	I
Levomoramide (9629)	I
Levophenacylmorphan (9631)	I
Lysergic acid diethylamide (7315)	I
MDPV (3,4-Methylenedioxypyrovalerone) (7535)	I
Marihuana (7360)	I
Mecloqualone (2572)	I
Mephedrone (1248)	I
Mescaline (7381)	I
Methaqualone (2565)	I
Methcathinone (1237)	I
Methyldesorphine (9302)	I
Controlled Substance Schedule Methyldihydromorphine (9304)	I
Methylone (3,4-Methylenedioxy-N-methylcathinone) (7540)	I
Morpheridine (9632)	I
Morphine methylbromide (9305)	I
Morphine methylsulfonate (9306)	I
Morphine-N-oxide (9307)	I
Myrophine (9308)	I
N,N-Dimethylamphetamine (1480)	I
N-Benzylpiperazine (7493)	I
N-Ethyl-3-piperidyl benzilate (7482)	I
N-Ethylamphetamine (1475)	I
N-Ethyl-1-phenylcyclohexylamine (7455)	I
N-Hydroxy-3,4-methylenedioxyamphetamine (7402)	I
Naphyrone (1258)	I
Nicocodeine (9309)	I
Nicomorphine (9312)	I
N-Methyl-3-piperidyl benzilate (7484)	I
Noracymethadol (9633)	I
Norlevorphanol (9634)	I
Normethadone (9635)	I
Normorphine (9313)	I
Norpipanone (9636)	I
Para-Fluorofentanyl (9812)	I
Parahexyl (7374)	I
Pentedrone (α-methylaminovalerophenone) (1246)	I
Pentylone (7542)	I
Peyote (7415)	I
Phenadoxone (9637)	I
Phenampromide (9638)	I
Phenomorphan (9647)	I
Phenoperidine (9641)	I
Pholcodine (9314)	I
Piritramide (9642)	I
Proheptazine (9643)	I
Properidine (9644)	I
Propiram (9649)	I
Psilocybin (7437)	I
Psilocyn (7438)	I
PB-22 (Quinolin-8-yl 1-pentyl-1H-indole-3-carboxylate) (7222)	I
Racemoramide (9645)	I
SR-18 and RCS-8 (7008)	I
Tetrahydrocannabinols (7370)	I
Thebacon (9315)	I

Controlled substance	Schedule
Controlled Substance Schedule Thiofentanyl (9835)	I
Tilidine (9750)	I
Trimeperidine (9646)	I
UR-144 (1-Pentyl-1H-indol-3-yl)(2,2,3,3-tetramethylcyclopropyl)methanone (7144)	I
1-Phenylcyclohexylamine (7460)	II
1-Piperidinocyclohexanecarbonitrile (8603)	II
4-Anilino-N-phenethyl-4-piperidine (8333)	II
Alfentanil (9737)	II
Alphaprodine (9010)	II
Amobarbital (2125)	II
Amphetamine (1100)	II
Anileridine (9020)	II
Bezitramide (9800)	II
Carfentanil (9743)	II
Coca Leaves (9040)	II
Cocaine (9041)	II
Codeine (9050)	II
Dextropropoxyphene, bulk (non-dosage forms) (9273)	II
Dihydrocodeine (9120)	II
Dihydroetorphine (9334)	II
Diphenoxylate (9170)	II
Ecgonine (9180)	II
Ethylmorphine (9190)	II
Etorphine HCl (9059)	II
Fentanyl (9801)	II
Glutethimide (2550)	II
Hydrocodone (9193)	II
Hydromorphone (9150)	II
Isomethadone (9226)	II
Levo-alphacetylmethadol (9648)	II
Levomethorphan (9210)	II
Levorphanol (9220)	II
Lisdexamfetamine (1205)	II
Meperidine (9230)	II
Meperidine intermediate-A (9232)	II
Meperidine intermediate-B (9233)	II
Meperidine intermediate-C (9234)	II
Metazocine (9240)	II
Methadone (9250)	II
Methadone intermediate (9254)	II
Methamphetamine (1105)	II
Methylphenidate (1724)	II
Metopon (9260)	II
Moramide-intermediate (9802)	II
Controlled Substance Schedule Morphine (9300)	II
Nabilone (7379)	II
Noroxymorphone (9668)	II
Opium, raw (9600)	II
Opium extracts (9610)	II
Opium fluid extract (9620)	II
Opium tincture (9630)	II
Poppy Straw (9650)	II
Opium, powdered (9639)	II
Oripavine (9330)	II
Poppy Straw Concentrate (9670)	II
Opium, granulated (9640)	II
Oxycodone (9143)	II
Oxymorphone (9652)	II
Pentobarbital (2270)	II
Phenazocine (9715)	II
Phencyclidine (7471)	II
Phenmetrazine (1631)	II
Phenylacetone (8501)	II
Piminodine (9730)	II
Racemethorphan (9732)	II
Racemorphan (9733)	II
Remifentanil (9739)	II
Secobarbital (2315)	II
Sufentanil (9740)	II
Tapentadol (9780)	II
Thebaine (9333)	II

The company plans to import small quantities of the listed controlled substances for the National Institute on Drug Abuse for research activities.

In reference to drug codes 7360 and 7370, the company plans to import a synthetic cannabidiol and a synthetic tetrahydrocannabinol. No other activity for these drug codes are authorized for this registration.

The import of the above-listed basic classes of controlled substances would be granted only for analytical testing and clinical testing. This authorization does not extend to the import of a finished FDA approved or non-approved dosage forms for commercial sale.

Dated: February 11, 2015.

Joseph T. Rannazzisi,

Deputy Assistant Administrator.

[FR Doc. 2015-03487 Filed 2–18–15; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

[Docket No. OSHA–2006–0040]

SGS North America, Inc.: Grant of Expansion of Recognition

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Notice.

SUMMARY: In this notice, OSHA announces its final decision to expand the scope of recognition for SGS North America, Inc., as a Nationally Recognized Testing Laboratory (NRTL).

DATES: The expansion of the scope of recognition becomes effective on February 19, 2015.

FOR FURTHER INFORMATION CONTACT: Information regarding this notice is available from the following sources:

Press inquiries: Contact Mr. Frank Meilinger, Director, OSHA Office of Communications, U.S. Department of Labor, 200 Constitution Avenue NW., Room N–3647, Washington, DC 20210; telephone: (202) 693–1999; email: *meilinger.francis2@dol.gov.*

General and technical information: Contact Mr. Kevin Robinson, Acting Director, Office of Technical Programs and Coordination Activities, Directorate of Technical Support and Emergency Management, Occupational Safety and Health Administration, U.S. Department of Labor, 200 Constitution Avenue NW., Room N–3655, Washington, DC 20210; telephone: (202) 693–2110; email: *robinson.kevin@dol.gov.* OSHA's Web page includes information about the NRTL Program (see *http://www.osha.gov/dts/otpca/nrtl/index.html*).

SUPPLEMENTARY INFORMATION:

I. Notice of Final Decision

OSHA hereby gives notice of the expansion of the scope of recognition of SGS North America, Inc. (SGS), as an NRTL. SGS's expansion covers the addition of nine test standards to its scope of recognition.

OSHA recognition of an NRTL signifies that the organization meets the requirements specified by 29 CFR 1910.7. Recognition is an acknowledgment that the organization can perform independent safety testing and certification of the specific products covered within its scope of recognition and is not a delegation or grant of government authority. As a result of recognition, employers may use products properly approved by the NRTL to meet OSHA standards that require testing and certification of the products.

The Agency processes applications by an NRTL for initial recognition, or for expansion or renewal of this recognition, following requirements in Appendix A to 29 CFR 1910.7. This appendix requires that the Agency publish two notices in the **Federal Register** in processing an application. In the first notice, OSHA announces the application and provides its preliminary finding and, in the second notice, the Agency provides its final decision on the application. These notices set forth the NRTL's scope of recognition or modifications of that scope. OSHA maintains an informational Web page for each NRTL that details its scope of recognition. These pages are available from the Agency's Web site at *http://www.osha.gov/dts/otpca/nrtl/index.html.*

SGS submitted three applications, dated March 13, 2014 (OSHA–2006–0040–0018, Exhibit 14–4—SGS Request for Expansion), May 15, 2014 (OSHA–2006–0040–0019, Exhibit 14–5—SGS Request for Expansion) and May 28, 2014 (OSHA–2006–0040–0016, Exhibit 14–6—SGS Request for Expansion), to expand its recognition to include nine additional test standards. OSHA staff performed a detailed analysis of the application packets and reviewed other pertinent information. OSHA did not perform any on-site reviews in relation to this application.

OSHA published the preliminary notice announcing SGS's expansion application in the **Federal Register** on October 27, 2014 (79 FR 63946). The Agency requested comments by November 12, 2014, but it received no comments in response to this notice. OSHA now is proceeding with this final notice to grant expansion of SGS's scope of recognition.

To obtain or review copies of all public documents pertaining to SGS's application, go to *www.regulations.gov* or contact the Docket Office, Occupational Safety and Health Administration, U.S. Department of Labor, 200 Constitution Avenue NW., Room N–2625, Washington, DC 20210. Docket No. [OSHA–2006–0040] contains all materials in the record concerning SGS's recognition.

II. Final Decision and Order

OSHA staff examined SGS's expansion application, its capability to meet the requirements of the test standards, and other pertinent information. Based on its review of this evidence, OSHA finds that SGS meets the requirements of 29 CFR 1910.7 for expansion of its recognition, subject to the limitation and conditions listed below. OSHA, therefore, is proceeding with this final notice to grant SGS's scope of recognition expansion. OSHA limits the expansion of SGS's recognition to testing and certification of products for demonstration of conformance to the test standards listed in Table 1 below.

LIST OF APPROPRIATE TEST STANDARDS FOR INCLUSION IN SGS'S NRTL SCOPE OF RECOGNITION

Test standard	Test standard title
UL 676	Underwater Luminaires and Submersible Junction Boxes.
UL 1088	Temporary Lighting Strings.
UL 1786	Direct Plug-In Nightlights.
ANSI/AAMI ES60601–1: 2005/(R)2012.	Medical electrical equipment—Part 1: General requirements for basic safety and essential performance (with amendments).
FM 3600	Electrical Equipment for Use in Hazardous (Classified) Locations—General Requirements.

LIST OF APPROPRIATE TEST STANDARDS FOR INCLUSION IN SGS'S NRTL SCOPE OF RECOGNITION—Continued

Test standard	Test standard title
FM 3610	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations.
FM 3611	Nonincendive Electrical Equipment for Use in Class I and II, Division 2, and Class III, Divisions 1 and 2, Hazardous (Classified) Locations.
NFPA 496	Purged and Pressurized Enclosures for Electrical Equipment.
UL 783	Electric Flashlights and Lanterns for Use in Hazardous (Classified) Locations.

OSHA's recognition of any NRTL for a particular test standard is limited to equipment or materials for which OSHA standards require third-party testing and certification before using them in the workplace. Consequently, if a test standard also covers any products for which OSHA does not require such testing and certification, an NRTL's scope of recognition does not include these products.

The American National Standards Institute (ANSI) may approve the test standards listed above as American National Standards. However, for convenience, we may use the designation of the standards-developing organization for the standard as opposed to the ANSI designation. Under the NRTL Program's policy (see OSHA Instruction CPL 1–0.3, Appendix C, paragraph XIV), any NRTL recognized for a particular test standard may use either the proprietary version of the test standard or the ANSI version of that standard. Contact ANSI to determine whether a test standard is currently ANSI-approved.

A. Conditions

In addition to those conditions already required by 29 CFR 1910.7, SGS must abide by the following conditions of the recognition:

1. SGS must inform OSHA as soon as possible, in writing, of any change of ownership, facilities, or key personnel, and of any major change in its operations as an NRTL, and provide details of the change(s);

2. SGS must meet all the terms of its recognition and comply with all OSHA policies pertaining to this recognition; and

3. SGS must continue to meet the requirements for recognition, including all previously published conditions on SGS's scope of recognition, in all areas for which it has recognition.

Pursuant to the authority in 29 CFR 1910.7, OSHA hereby expands the scope of recognition of SGS, subject to the limitation and conditions specified above.

III. Authority and Signature

David Michaels, Ph.D., MPH, Assistant Secretary of Labor for Occupational Safety and Health, 200 Constitution Avenue NW., Washington, DC 20210, authorized the preparation of this notice. Accordingly, the Agency is issuing this notice pursuant to 29 U.S.C. 657(g)(2), Secretary of Labor's Order No. 1–2012 (77 FR 3912, Jan. 25, 2012), and 29 CFR 1910.7.

Signed at Washington, DC, on February 13, 2015.

David Michaels,

Assistant Secretary of Labor for Occupational Safety and Health.

[FR Doc. 2015–03476 Filed 2–18–15; 8:45 am]

BILLING CODE 4510–26–P

DEPARTMENT OF LABOR

Office of Workers' Compensation Programs

Division of Longshore and Harbor Workers' Compensation; Proposed Renewal of Existing Collection; Comment Request

ACTION: Notice.

SUMMARY: The Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden, conducts a preclearance consultation program to provide the general public and Federal agencies with an opportunity to comment on proposed and/or continuing collections of information in accordance with the paperwork Reduction Act of 1995 (PRA95) [44 U.S.C. 3506 (c)(2)(A)]. This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. Currently, the Office of Workers' Compensation Programs (OWCP) is soliciting comments concerning the proposed collection: Request for Earnings Information (LS–426). A copy of the proposed information collection request can be obtained by contacting the office listed below in the address section of this Notice.

DATES: Written comments must be submitted to the office listed in the addresses section below on or before April 20, 2015.

ADDRESSES: Ms. Yoon Ferguson, U.S. Department of Labor, 200 Constitution Ave., NW., Room S–3201, Washington, DC 20210, telephone (202) 354–9647, fax (202) 693–1447, Email *Ferguson.Yoon@dol.gov.* Please use only one method of transmission for comments (mail, fax, or Email).

SUPPLEMENTARY INFORMATION:

I. Background

The Office of Workers' Compensation Programs (OWCP) administers the Longshore and Harbor Workers' Compensation Act (LHWCA). The Act provides benefits to workers' injured in maritime employment on the navigable waters of the United States or in an adjoining area customarily used by an employer in loading, unloading, repairing, or building a vessel. In addition, several acts extend the Longshore Act's coverage to certain other employees.

The Secretary of Labor is authorized, under the Act, to make rules and regulations to administer the Act and its extensions. Pursuant to the LHWCA, injured employees shall receive compensation in an amount equal to 66–2/3 per centum of their average weekly wage. Form LS–426, Request for Earnings Information, is used by district offices to collect wage information from injured workers to assure payment of compensation benefits to injured workers at the proper rate. This information is needed for determination of compensation benefits in accordance with section 10 of the LHWCA. This information collection is currently approved for use through August 31, 2015.

II. Review Focus

The Department of Labor is particularly interested in comments which:

* Evaluate whether the proposed collection of information is necessary

for the proper performance of the functions of the agency, including whether the information will have practical utility;

* Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

* Enhance the quality, utility and clarity of the information to be collected; and

* Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submissions of responses.

III. Current Actions

The Department of Labor seeks the extension of approval of this information collection in order to carry out its responsibility to assure payment of compensation benefits to injured workers at the proper rate.

Agency: Office of Workers' Compensation Programs.

Type of Review: Extension.

Title: Request for Earnings Information.

OMB Number: 1240–0025.

Agency Number: LS–426.

Affected Public: Individuals or households.

Total Respondents: 100.

Total Annual Responses: 100.

Estimated Total Burden Hours: 25.

Estimated Time per Response: 15 minutes.

Frequency: On occasion.

Total Burden Cost (capital/startup): $0.

Total Burden Cost (operating/maintenance): $45.

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval of the information collection request; they will also become a matter of public record.

Dated: February 13, 2015.

Yoon Ferguson,

Agency Clearance Officer, Office of Workers' Compensation Programs, U.S. Department of Labor.

[FR Doc. 2015–03422 Filed 2–18–15; 8:45 am]

BILLING CODE 4510–CF–P

OFFICE OF PERSONNEL MANAGEMENT

Submission for Review: Assignment, Federal Employees' Group Life Insurance (FEGLI) Program, RI 76–10, 3206–XXXX

AGENCY: U.S. Office of Personnel Management.

ACTION: 30-Day notice and request for comments.

SUMMARY: The Retirement Services, Office of Personnel Management (OPM) offers the general public and other Federal agencies the opportunity to comment on an existing collection in use without an OMB control number, Assignment, Federal Employees' Group Life Insurance (FEGLI) Program, RI 76–10. As required by the Paperwork Reduction Act of 1995, (Pub. L. 104–13, 44 U.S.C. chapter 35) as amended by the Clinger-Cohen Act (Pub. L. 104–106), OPM is soliciting comments for this collection. The information collection was previously published in the **Federal Register** on August 5, 2014 at Volume 79 FR 45499 allowing for a 60-day public comment period. No comments were received for this information collection. The purpose of this notice is to allow an additional 30 days for public comments.

DATES: Comments are encouraged and will be accepted until March 23, 2015. This process is conducted in accordance with 5 CFR 1320.1.

ADDRESSES: Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503, Attention: Desk Officer for the Office of Personnel Management or sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–6974.

FOR FURTHER INFORMATION CONTACT: A copy of this ICR, with applicable supporting documentation, may be obtained by contacting the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503, Attention: Desk Officer for the Office of Personnel Management or sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–6974.

SUPPLEMENTARY INFORMATION: The Office of Management and Budget is particularly interested in comments that:

1. Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

2. Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

3. Enhance the quality, utility, and clarity of the information to be collected; and

4. Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submissions of responses.

The Federal Employees' Group Life Insurance (FEGLI) Program allows an insured individual to transfer ownership, or ''assign'' the FEGLI coverage, to a third party. An insured may assign for several reasons; for example, for financial planning purposes, or to comply with a court order, or to sell the coverage to a third-party. Unlike a designation of beneficiary, once an assignment is executed, it is irrevocable.

Analysis

Agency: Retirement Operations, Retirement Services, Office of Personnel Management.

Title: Assignment, Federal Employees' Group Life Insurance (FEGLI) Program.

OMB Number: 3206–XXXX.

Frequency: Annually.

Affected Public: Federal employees, retirees, and assignees.

Number of Respondents: 400.

Estimated Time Per Respondent: 15 minutes.

Total Burden Hours: 100 hours.

U.S. Office of Personnel Management.

Katherine Archuleta,

Director.

[FR Doc. 2015–03393 Filed 2–18–15; 8:45 am]

BILLING CODE 6325–38–P

OFFICE OF PERSONNEL MANAGEMENT

Hispanic Council on Federal Employment

AGENCY: U.S. Office of Personnel Management.

ACTION: Renewal of advisory committee.

SUMMARY: The U.S. Office of Personnel Management announces the renewal of the Hispanic Council on Federal Employment (Council). The Commission shall advise the Director of

the U.S. Office of Personnel Management (OPM) on the implementation of leading employment practices in an effort to remove any unnecessary barriers to the recruitment, hiring, retention and advancement of Hispanics in the Federal workplace. The Council is an advisory committee composed of Federal employees and Hispanic organizations.

FOR FURTHER INFORMATION CONTACT: Veronica E. Villalobos, Director for the Office of Diversity and Inclusion, Office of Personnel Management, 1900 E St. NW., Suite 5H35, Washington, DC 20415. Phone (202) 606–0020 FAX (202) 606–2183 or email at *veronica.villalobos@opm.gov.*

SUPPLEMENTARY INFORMATION: The charter for the Hispanic Council on Federal Employment publishes as follows:

1. Committee's Official Designation (Title). The Hispanic Council on Federal Employment.

2. Authority. This charter establishes the Hispanic Council on Federal Employment in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. App. The Commission is in the public interest and supports the U.S. Office of Personnel Management (OPM) in performing its duties and responsibilities under 5 CFR part 950.

3. Objectives and Scope of Activities. The purpose of the Commission is to advise the Director of OPM on the implementation of leading employment practices in an effort to remove any unnecessary barriers to the recruitment, hiring, retention and advancement of Hispanics in the Federal workplace.

4. Description of Duties. The Council shall provide recommendations to the Director of OPM on the implementation of initiatives involving the recruitment, hiring, and advancement of Hispanics in the Federal workforce. Its activities shall include, to the extent permitted by the law:

a. Reviewing leading practices in strategic human resources management planning;

b. Providing advice on ways to increase outreach to Hispanic communities, with a focus on Veterans, students, and people with disabilities;

c. Recommending any further actions, as appropriate, to address the underrepresentation of Hispanics in the Federal workforce where it occurs;

d. Recommending any further actions, as appropriate, to promote successful retention and advancement efforts including training of department and agency personnel;

e. Implementing recommendations for innovative ways to improve the dissemination of information about Federal employment to the Hispanic communities; and

f. Recommending any further actions, as appropriate, to address the underrepresentation of Hispanics in the Federal workforce where it occurs.

5. Agency Official to Whom the Commission Reports. The Commission will report recommendations to the OPM Director.

6. Support. OPM is responsible for providing administrative services and support to the Commission.

7. Estimated Annual Operating Costs and Staff Years. The estimated annual operating expenses of the Council are $12,000.00 (.25 FTE). These expenses include funds to cover actual staff time (including benefits) devoted to preparation for meetings and technical discussions at meetings, expenses for preparing and printing discussion materials and administrative costs for filing the charter, preparing **Federal Register** notices, preparing minutes of the meetings, etc.

8. Designated Federal Officer (DFO). The Director of the Office of Diversity and Inclusion, at OPM shall be appointed as the DFO of the Council. The DFO will approve or call all Council and subcommittee meetings, prepare and approve all meeting agendas, attend all Council and subcommittee meetings, adjourn any meeting when they determine adjournment to be in the public interest, and chair meetings when directed to do so by the official to whom the Council reports.

9. Estimated Number of Frequency of Meetings. The frequency of meetings will be determined by the Co-Chair of the Council with the approval of the DFO, and the committee is expected to convene once every two months.

10. Duration. It is expected that the Commission will conclude its work in approximately one year.

11. Termination. December 31, 2015.

12. Membership and Designation. The Council will include a total of approximately 22 Federal workers and non-government individuals, including Regular Government Employees and Representative Members. The Council members will represent various perspectives from Hispanic that have experience in working on Federal employee, Hispanic student, Veterans, persons with disabilities and/or employment issues affecting Hispanic communities, while other Council members will provide technical expertise regarding strategic human resources management planning and the merit systems principles. The Director of OPM may also designate other members of the Council. Such additional members may include, but are not limited to: (1) The Chief Human Capital Officers of other Executive agencies; and (2) Members who are designated on an ex officio basis and who may be invited to contribute to projects, as particular skills and expertise are needed.

13. Subcommittees. The Co-Chairs of the Council, with the Agency's approval, are responsible for directing the work of the Council, including the creation of subcommittees necessary to carry out the Council's mandate. All subcommittees will report to the Council and will not provide advice directly to the Agency.

14. Recordkeeping. The records of the Council, as well as any formally and informally established subcommittees, shall be maintained in accordance with General Records Schedule 26, Item 2 or other appropriate agency records disposition schedule. These records shall be available for public inspection and copying, subject to applicable exemptions of the Freedom of Information Act, 5 U.S.C. 552.

U.S. Office of Personnel Management.

Katherine L. Archuleta,

Director.

[FR Doc. 2015–03396 Filed 2–18–15; 8:45 am]

BILLING CODE 6820–B2–P

OFFICE OF PERSONNEL MANAGEMENT

Excepted Service

AGENCY: U.S. Office of Personnel Management (OPM).

ACTION: Notice.

SUMMARY: This notice identifies Schedule A, B, and C appointing authorities applicable to a single agency that were established or revoked from November 1, 2014, to November 30, 2014.

FOR FURTHER INFORMATION CONTACT: Senior Executive Resources Services, Senior Executive Services and Performance Management, Employee Services, (202) 606–2246.

SUPPLEMENTARY INFORMATION: In accordance with 5 CFR 213.103, Schedule A, B, and C appointing authorities available for use by all agencies are codified in the Code of Federal Regulations (CFR). Schedule A, B, and C appointing authorities applicable to a single agency are not codified in the CFR, but the Office of Personnel Management (OPM) publishes a notice of agency-specific authorities established or revoked each

month in the **Federal Register** at *www.gpo.gov/fdsys/*. OPM also publishes an annual notice of the consolidated listing of all Schedule A, B, and C appointing authorities, current as of June 30, in the **Federal Register**.

Schedule A

05. Department of the Treasury (Sch. A, 213.3105)

(a) Office of the Secretary—

(1) Not to exceed 20 positions at the equivalent of GS–13 through GS–15 or Senior Level (SL) to supplement permanent staff in the study of complex problems relating to international financial, economic, trade, and energy policies and programs of the Government, when filled by individuals with special qualifications for the particular study being undertaken. Employment under this authority may not exceed 4 years.

05. Department of the Treasury (Sch. A, 213.3105)

(h) Office of Financial Stability—

(1) Positions needed to perform investment, risk, financial, compliance, and asset management requiring unique qualifications currently not established by OPM. Positions will be in the Office of Financial Stability at the General Schedule (GS) grade levels 12–15 or Senior Level (SL), for initial employment not to exceed 4 years. No new appointments may be made under this authority after December 31, 2012.

Schedule B

No Schedule B authorities to report during November 2014.

Schedule C

The following Schedule C appointing authorities were approved during November 2014.

Agency name	Organization name	Position title	Authorization No.	Effective date
Department of Agriculture	Office of the Deputy Secretary	Confidential Assistant	DA150021	11/18/2014
Department of Commerce	Office of the Under Secretary	Senior Advisor for Trade and Strategic Initiatives.	DC150012	11/6/2014
	Office of the Assistant Secretary and Director General for United States and Foreign Commercial Service.	Senior Director	DC150016	11/10/2014
	Office of the Deputy Secretary	Deputy Chief Data Officer	DC150020	11/10/2014
	Office of the Chief Financial Officer and Assistant Secretary for Administration.	Senior Director for Management and Performance and Chief of Staff for Administration.	DC150019	11/13/2014
Commission on Civil Rights	Office of Commissioners	Special Assistant	CC150001	11/13/2014
Department of Defense	Office of the Assistant Secretary of Defense (Global Strategic Affairs).	Special Assistant for Strategy, Plans and Forces.	DD150013	11/13/2014
	Office of Assistant Secretary of Defense (Public Affairs).	Speechwriter	DD150018	11/13/2014
	Washington Headquarters Services	Defense Fellow	DD150019	11/17/2014
	Office of the Secretary of Defense	Advance Officer (3)	DD150020	11/21/2014
			DD150021	11/21/2014
			DD150028	11/21/2014
Department of the Army	Office of Assistant Secretary Army (Manpower and Reserve Affairs).	Special Assistant(Manpower and Reserve Affairs).	DW150003	11/25/2014
Department of Education	Office of Innovation and Improvement.	Special Assistant	DB150016	11/14/2014
	Office for Civil Rights	Confidential Assistant	DB150017	11/14/2014
	Office of the Secretary	Special Assistant	DB150019	11/24/2014
	Office of Legislation and Congressional Affairs.	Special Assistant	DB150022	11/24/2014
Department of Energy	Office of Public Affairs	Digital Communications Specialist	DE150010	11/4/2014
Environmental Protection Agency	Office of the Administrator	Special Assistant	EP150006	11/10/2014
	Office of Advance Staff	Deputy for Advance	EP150007	11/13/2014
Department of Health and Human Services.	Office of the Secretary	Confidential Assistant	DH150023	11/4/2014
	Office of the Assistant Secretary for Preparedness and Response.	Special Assistant for Preparedness and Response.	DH150027	11/10/2014
	Office of Intergovernmental and External Affairs.	Outreach Coordinator	DH150029	11/10/2014
		Director, Center for Faith-Based and Neighborhood Partnerships.	DH150026	11/13/2014
		Regional Director, San Francisco, California, Region IX.	DH150035	11/14/2014
	Office of Communications	Senior Advisor	DH150039	11/26/2014
	Office of the Assistant Secretary for Public Affairs.	Communications Director for Human Services.	DH150040	11/26/2014
Department of Homeland Security	Ombudsman, Citizenship and Immigration Services.	Public Affairs Specialist	DM150013	11/3/2014
	Office of the Assistant Secretary for Intergovernmental Affairs.	Intergovernmental Affairs Coordinator.	DM150024	11/7/2014
	Office of the Executive Secretariat	Writer-Editor	DM150025	11/7/2014
	Office of the Assistant Secretary for Policy.	Senior Director	DM150026	11/7/2014
	United States Customs and Border Protection.	Special Advisor	DM150029	11/17/2014
		Advisor	DM150030	11/17/2014
	Office of the Under Secretary for Science and Technology.	Advisor	DM150032	11/18/2014

Agency name	Organization name	Position title	Authorization No.	Effective date
	United States Immigration and Customs Enforcement.	Special Assistant	DM150034	11/18/2014
Department of the Interior	Secretary's Immediate Office	Special Assistant	DI150010	11/14/2014
		White House Liaison	DI150011	11/14/2014
	Office of Assistant Secretary—Land and Minerals Management.	Senior Advisor	DI150009	11/20/2014
	Bureau of Reclamation	Advisor	DI150007	11/25/2014
Department of Justice	Executive Office for United States Attorneys.	Counsel	DJ150016	11/3/2014
	Office of the Attorney General	Special Assistant	DJ150020	11/24/2014
Department of Labor	Employment and Training Administration.	Director of Center for Workforce Industry Partnerships.	DL150010	11/7/2014
	Office of the Secretary	Scheduler	DL150012	11/14/2014
	Women's Bureau	Senior Advisor	DL150014	11/20/2014
Office of Management and Budget	Legislative Affairs	Confidential Assistant	BO150004	11/17/2014
Office of Science and Technology Policy.	Office of Science and Technology Policy.	Special Assistant	TS150003	11/25/2014
Small Business Administration	Office of Communications and Public Liaison.	Deputy Assistant Administrator for Communications and Public Liaison.	SB150008	11/6/2014
Department of State	Office of the Under Secretary for Management.	Special Assistant	DS150007	11/10/2014
	Office of the Under Secretary for Civilian Security, Democracy, and Human Rights.	Senior Advisor	DS150008	11/10/2014
Department of Transportation	Office of the Secretary	Special Assistant	DT150007	11/5/2014
	Office of Assistant Secretary for Governmental Affairs.	Director of Governmental Affairs	DT150010	11/13/2014
		Associate Director for State and Local Governmental Affairs.	DT150013	11/25/2014
Department of the Treasury	Office of the Assistant Secretary (Public Affairs).	Senior Advisor	DY150008	11/14/2014
		Special Assistant	DY150009	11/14/2014

The following Schedule C appointing authorities were revoked during November 2014.

Agency name	Organization name	Position title	Authorization number	Vacate date
Department of Commerce	Office of Public Affairs	Director of Digital Strategy	DC120070	11/1/2014
	Office of the Chief Financial Officer and Assistant Secretary for Administration.	Senior Director for Performance and Business Process Improvement.	DC120136	11/15/2014
Department of Energy	Office of Public Affairs	Assistant Press Secretary	DE130119	11/1/2014
	Office of the Deputy Secretary	Special Advisor	DE130113	11/1/2014
Federal Energy Regulatory Commission.	Office of the Secretary of Commissioners.	Confidential Assistant	DR140006	11/9/2014
Department of Health and Human Services.	Health Resources and Services Administration and Office of the Administrator.	Special Assistant	DH130111	11/1/2014
	Office of the Assistant Secretary for Children and Families.	Special Assistant to the Principal Deputy Assistant Secretary for Children and Families.	DH110108	11/1/2014
	Office of the Assistant Secretary for Preparedness and Response.	Special Assistant to the Assistant Secretary for Preparedness and Response.	DH140122	11/1/2014
	Office of the Assistant Secretary for Planning and Evaluation.	Deputy Director	DH090232	11/15/2014
	Office of Intergovernmental and External Affairs.	Special Assistant	DH140017	11/15/2014
Department of Homeland Security.	United States Immigration and Customs Enforcement.	Special Assistant	DM110235	11/1/2014
	Office of the Chief of Staff	Special Assistant	DM130137	11/1/2014
		White House Liaison	DM130171	11/1/2014
	Office of the Secretary	Special Assistant	DM140151	11/1/2014
Department of Housing and Urban Development.	Office of the Secretary	Special Assistant	DU130041	11/1/2014
	Office of the Chief Human Capital Officer.	Advance Coordinator	DU130047	11/1/2014

Agency name	Organization name	Position title	Authorization number	Vacate date
	Office of Congressional and Intergovernmental Relations.	Congressional Relations Officer	DU130048	11/15/2014
Department of the Interior	Secretary's Immediate Office	White House Liaison	DI130054	11/1/2014
Department of Justice	Office of Legislative Affairs	Legislative Assistant	DJ100152	11/7/2014
	Executive Office for United States Attorneys.	Counsel	DJ130035	11/15/2014
	Antitrust Division	Senior Counsel	DJ130066	11/22/2014
Department of Labor	Office of the Assistant Secretary for Policy.	Senior Policy Advisor	DL130023	11/1/2014
	Office of the Solicitor	Senior Counselor to the Solicitor.	DL130015	11/1/2014

Authority: 5 U.S.C. 3301 and 3302; E.O. 10577, 3 CFR, 1954–1958 Comp., p. 218.

U.S. Office of Personnel Management.

Katherine Archuleta,

Director.

[FR Doc. 2015–03390 Filed 2–18–15; 8:45 am]

BILLING CODE 6325–39–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 31456]

Investment Company Act of 1940

February 12, 2015.

In the Matter of Wilshire Mutual Funds, Inc., Wilshire Variable Insurance Trust, Wilshire Associates Incorporated, SEI Investments Distribution Co., 1299 Ocean Avenue, Suite 700, Santa Monica, CA 90401, (812–14350)

Order Under Section 12(D)(1)(J) of the Investment Company Act of 1940 Granting an Exemption from Sections 12(D)(1)(A) and (B) of the Act, under Sections 6(C) and 17(B) of the Act Granting an Exemption from Sections 17(A)(1) and (2) of the Act, and under Section 6(C) of the Act for an Exemption from Rule 12d1–2(A) under the Act

Wilshire Mutual Funds, Inc., Wilshire Variable Insurance Trust, Wilshire Associates Incorporated, and SEI Investments Distribution Co. filed an application on August 19, 2014, and an amendment to the application on November 10, 2014, requesting an order under section 12(d)(1)(J) of the Investment Company Act of 1940 (the ''Act'') granting an exemption from sections 12(d)(1)(A) and (B) of the Act, under sections 6(c) and 17(b) of the Act granting an exemption from sections 17(a)(1) and (2) of the Act, and under section 6(c) of the Act for an exemption from rule 12d1–2(a) under the Act. The order would (a) permit certain registered open-end management investment companies that operate as ''funds of funds'' to acquire shares of certain registered open-end management investment companies and unit investment trusts that are within and outside the same group of investment companies as the acquiring investment companies, and (b) permit funds of funds relying on rule 12d1–2 under the Act to invest in certain financial instruments.

On December 16, 2014, a notice of the filing of the application was issued (Investment Company Act Release No. 31381). The notice gave interested persons an opportunity to request a hearing and stated that an order granting the application would be issued unless a hearing was ordered. No request for a hearing has been filed, and the Commission has not ordered a hearing.

The matter has been considered and it is found, on the basis of the information set forth in the application, as amended, that granting the requested exemption is appropriate in and consistent with the public interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of the Act.

It is also found that the terms of the proposed transactions are reasonable and fair and do not involve overreaching, and the proposed transactions are consistent with the policies of each registered investment company concerned and with the general purposes of the Act.

Accordingly,

It is ordered, that the relief requested under section 12(d)(1)(J) of the Act from sections 12(d)(1)(A) and (B) of the Act, under sections 6(c) and 17(b) of the Act from sections 17(a)(1) and (2) of the Act, and under section 6(c) of the Act for an exemption from rule 12d1–2(a) under the Act by Wilshire Mutual Funds, Inc., et al. (File No. 812–14350) is granted, effective immediately, subject to the conditions contained in the application, as amended.

For the Commission, by the Division of Investment Management, under delegated authority.

Brent J. Fields,

Secretary.

[FR Doc. 2015–03404 Filed 2–18–15; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–74267; File No. SR–BOX–2015–009]

Self-Regulatory Organizations; BOX Options Exchange, LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Regarding the Acceptance of the Transfer, by Citadel Securities, LLC (''Citadel Securities'') to Its Affiliate, Citadel Securities Principal Investments, LLC, of Citadel Securities' Ownership Interest in BOX Options Exchange, LLC and BOX Holdings Group, LLC, an Affiliate of the Exchange

February 12, 2015.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act''),[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on January 29, 2015, BOX Options Exchange, LLC (the ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to accept the transfer, by Citadel Securities LLC (''Citadel Securities'') to its affiliate, Citadel Securities Principal Investments LLC, a Delaware limited liability

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

company (''CSPI''), of Citadel Securities' ownership interest in the Exchange and BOX Holdings Group LLC, an affiliate of the Exchange (''BOX Holdings''). The text of the proposed rule change is available from the principal office of the Exchange, at the Commission's Public Reference Room and also on the Exchange's Internet Web site at *http://boxexchange.com.*

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange is a limited liability company, organized under the laws of the State of Delaware on August 26, 2010. The Exchange's charter is a Limited Liability Company Agreement, dated as of May 10, 2012 (the ''Exchange LLC Agreement''). Citadel Securities is a Member of the Exchange.

BOX Holdings is a limited liability company, organized under the laws of the State of Delaware on August 26, 2010. BOX Holdings is the sole owner of BOX Market LLC, a facility of the Exchange. The BOX Holdings charter is a Limited Liability Company Agreement, dated as of May 10, 2012 (the ''Holdings LLC Agreement''). Citadel Securities is a Member of the Exchange.

Citadel Securities is a limited liability company organized under the laws of the State of Delaware. Citadel Securities is a wholly-owned subsidiary of CLP Holdings Three LLC, a limited liability company organized under the laws of the State of Delaware (''Citadel Parent'' and, collectively with Citadel Securities and CSPI, ''Citadel''). CSPI, like Citadel Securities, is also a wholly-owned subsidiary of Citadel Parent.

Citadel Securities currently holds 6,445 Economic Units and 12,855 Voting Units of the Exchange, representing 6.455% of the outstanding Economic Units and 12.855% of the outstanding Voting Units of the Exchange, respectively (the ''Exchange Units''). Citadel Securities also currently holds 500 Class A Units of BOX Holdings, representing 4.203% of the outstanding Units of BOX Holdings (the ''Holdings Units'' and, together with the Exchange Units, the ''Citadel Units'').

Citadel has informed the Exchange that, for its own internal business purposes, it desires to restructure its holdings of assets including all of the Citadel Units. Accordingly, it is proposed that Citadel Securities transfer all of the Citadel Units to CSPI (the ''Transfer''). After the Transfer, Citadel Parent will remain the sole owner of CSPI, the Citadel entity holding the Citadel Units, and CSPI will then hold all of the Citadel Units.

As provided in Section 7.1(c) of the Exchange LLC Agreement, ''a Person shall be admitted to the Exchange as an additional or substitute Member of the Exchange, if such Person is not already a Member, only upon (i) such Person's execution of a counterpart of this Agreement to evidence its written acceptance of the terms and provisions of this Agreement, and acceptance by the affirmative vote of Members holding a majority of the Voting Percentage Interest, which vote may be given or withheld in the sole discretion of each such voting Member, (ii) if such Person is a transferee, its agreement in writing to its assumption of the obligations hereunder of its assignor, and acceptance thereof by the affirmative vote of Members holding a majority of the Voting Percentage Interest, which vote may be given or withheld in the sole discretion of each such voting Member and (iii) if such Person is a transferee, a determination by the Board that the Transfer was permitted by this Agreement.'' In addition, as provided in Section 18.1 of the Exchange LLC Agreement, the Exchange LLC Agreement ''may only be changed, amended or supplemented by an agreement in writing that is approved by the affirmative vote of Members holding at least a majority of the Voting Percentage Interest [3] without the consent of any Member or other Person.''

Upon the effectiveness of the Transfer, CSPI proposes to become a Member of the Exchange. Accordingly, in connection with the Transfer, CSPI will execute an Instrument of Accession to the Exchange LLC Agreement substantially in the form set forth in Exhibit 5 hereto (the ''Exchange Instrument of Accession''). By executing and delivering the Exchange Instrument of Accession and obtaining the acceptance and approval of Members and the determination of the Board described above, CSPI will fulfill the requirements described in Sections 7.1(c) and 18.1 of the Exchange LLC Agreement in connection with the Transfer. The Exchange proposes to replace references to Citadel Securities in the Exchange LLC Agreement with references to CSPI in connection with the Transfer.

As provided in Section 7.1(b) of the Holdings LLC Agreement, ''a Person shall be admitted to BOX Holdings as an additional or substitute Member of BOX Holdings, if such Person is not already a Member, only upon (i) such Person's execution of a counterpart of this Agreement to evidence its written acceptance of the terms and provisions of this Agreement, and acceptance thereof by resolution of the Board, which acceptance may be given or withheld in the sole discretion of the Board, (ii) if such Person is a transferee, its agreement in writing to its assumption of the obligations hereunder of its assignor, and acceptance thereof by resolution of the Board, which acceptance may be given or withheld in the sole discretion of the Board, (iii) if such Person is a transferee, a determination by the Board that the Transfer was permitted by this Agreement, and (iv) approval of the Board.'' In addition, as provided in Section 18.1 of the Exchange LLC Agreement, the Exchange LLC Agreement ''may only be changed, amended or supplemented by an agreement in writing that is approved by Directors holding a majority of the Total Votes [4] without the consent of any Member or other Person.''

Upon the effectiveness of the Transfer, CSPI proposes to become a Member of BOX Holdings. Accordingly, in connection with the Transfer, CSPI will execute an Instrument of Accession to the Holdings LLC Agreement substantially in the form set forth in

[3] ''Voting Percentage Interest'' as defined in Section 1.1 of the Exchange LLC Agreement means, with respect to each Member, ''the ratio of the number of Voting Units held by the Member, directly or indirectly, of record or beneficially, to the total of all of the issued and outstanding Voting Units held by Members, expressed as a percentage.''

[4] ''Total Votes'' means a total of 100 votes available to be voted on any action to be taken by the Board. As provided in Section 4.3(a) of the Holdings LLC Agreement, each Director ''shall be entitled to vote that percentage of the Total Votes equal to the quotient obtained by dividing (i) the quotient of (A) the number of Units held by the Member that designated such Director (if applicable, rounded down to the nearest whole Unit) divided by (B) the aggregate number of Units held by all Members that designated Directors by (ii) the number of Directors designated by such Member.''

Exhibit 5 hereto (the ''Holdings Instrument of Accession''). By executing and delivering the Holdings Instrument of Accession and obtaining the acceptance, determination and approval of the Board described above, CSPI will fulfill the requirements described in Sections 7.1(b) and 18.1 of the Holdings LLC Agreement in connection with the Transfer. BOX Holdings proposes to replace references to Citadel Securities in the Holdings LLC Agreement with references to CSPI in connection with the Transfer.

For the reasons stated above, the Exchange is submitting to the Commission the proposed Instruments of Accession to the Exchange LLC Agreement and the Holdings LLC Agreement as a rule change.

2. Statutory Basis

The Exchange believes that the proposal is consistent with the requirements of Section 6(b) of the Act,[5] in general, and furthers the objectives of Section 6(b)(1),[6] in particular, in that it enables the Exchange to be so organized so as to have the capacity to be able to carry out the purposes of the Act and to comply, and to enforce compliance by its exchange members and persons associated with its exchange members, with the provisions of the Act, the rules and regulations thereunder, and the rules of the Exchange. The Exchange also believes that this filing furthers the objectives of Section 6(b)(5) of the Act[7] in that it is designed to facilitate transactions in securities, to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and in general, to protect investors and the public interest.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.

[5] 15 U.S.C. 78f(b).

[6] 15 U.S.C. 78f(b)(5).

[7] 15 U.S.C. 78f(b)(5).

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange has neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The Exchange has filed the proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act[8] and Rule 19b–4(f)(6) thereunder.[9] Because the proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, the proposed rule change has become effective pursuant to Section 19(b)(3)(A) of the Act and Rule 19b–4(f)(6) thereunder.[10]

A proposed rule change filed under Rule 19b–4(f)(6) normally does not become operative for 30 days after the date of filing. However, Rule 19b–4(f)(6)(iii) permits the Commission to designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has asked the Commission to waive the 30-day operative delay because the Transfer is intended to be completed in less than 30 days. The Exchange notes that the Commission has previously waived the operative delay for similar filings.[11] Based on the foregoing, the Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest.[12] The Commission hereby grants the Exchange's request and designates the proposal operative upon filing.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

[8] 15 U.S.C. 78s(b)(3)(A)(iii).

[9] 17 CFR 240.19b–4(f)(6).

[10] In addition, Rule 19b–4(f)(6)(iii) requires the Exchange to give the Commission written notice of the Exchange's intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Commission has waived the 5-day prefiling requirement in this case.

[11] *See* Securities Exchange Act Release Nos. 58445 (August 29, 2008), 73 FR 52434 (September 9, 2008) (SR–BSE–2008–43); 58445A (September 10, 2008), 73 FR 53469 (September 16, 2008) (SR–BSE–2008–43; Correction); 57260 (February 1, 2008), 73 FR 7617 (February 8, 2008) (SR–BSE–2008–06); 57713 (April 25, 2008), 73 FR 24327 (May 2, 2008) (SR–BSE–2008–28); and 62400 (June 29, 2010), 75 FR 39299 (July 8, 2010) (SR–BX–2010–042).

[12] For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov*. Please include File Number SR–SR–BOX–2015–009 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–BOX–2015–009. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments

received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–BOX–2015–009 and should be submitted on or before March 12, 2015.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[13]

Brent J. Fields,

Secretary.

[FR Doc. 2015–03402 Filed 2–18–15; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–74263; File No. SR–BYX–2015–08]

Self-Regulatory Organizations; BATS Y-Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Related to Fees for Use of BATS Y-Exchange, Inc.

February 12, 2015.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the ''Act''),[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on February 2, 2015, BATS Y-Exchange, Inc. (the ''Exchange'' or ''BYX'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Exchange has designated the proposed rule change as one establishing or changing a member due, fee, or other charge imposed by the Exchange under Section 19(b)(3)(A)(ii) of the Act[3] and Rule 19b–4(f)(2) thereunder,[4] which renders the proposed rule change effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of the Substance of the Proposed Rule Change

The Exchange filed a proposal to amend the fee schedule applicable to Members[5] and non-members of the Exchange pursuant to BYX Rules 15.1(a) and (c). Changes to the fee schedule pursuant to this proposal are effective upon filing.

The text of the proposed rule change is available at the Exchange's Web site at *www.batstrading.com*, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend its fee schedule to remove the reference to ROLF from fee code BO. Fee code BO currently provides that the Exchange will charge $0.0030 per share for any order routed using ROLF or Destination Specific routing strategy unless otherwise specified. Under the ROLF routing strategy, an order will check the Exchange for available shares and then will be sent to LavaFlow ECN (''LavaFlow''). This change is being proposed in response to LavaFlow's announcement that it will cease market operations and its last day of trading will be Friday, January 30, 2015. As such, beginning on February 2, 2015, the Exchange will no longer route orders to LavaFlow. As proposed, the Exchange would continue to charge $0.0030 per share for orders routed using a Destination Specific routing strategy.

The Exchange proposes to implement the amendments to its fee schedule effective February 2, 2015.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder that are applicable to a national securities exchange, and, in particular, with the requirements of Section 6 of the Act.[6] Specifically, the Exchange believes that the proposed rule change is consistent with Sections 6(b)(4) of the Act and 6(b)(5) of the Act,[7] in that it provides for the equitable allocation of reasonable dues, fees and other charges among members and other persons using any facility or system which the Exchange operates or controls. The Exchange notes that it operates in a highly competitive market in which market participants can readily direct order flow to competing venues if they deem fee levels at a particular venue to be excessive.

The Exchange believes that its proposal to eliminate ROLF from fee code BO represents an equitable allocation of reasonable dues, fees, and other charges among Members and other persons using its facilities. The proposed change is in response to LavaFlow's announcement that it will cease market operations and its last day of trading will be Friday, January 30, 2015. The Exchange notes that the proposed change is not designed to amend any fee or rebate, nor alter the manner in which the Exchange assesses fees and rebates. As of February 2, 2015, the Exchange will no longer route orders to LavaFlow and, therefore, proposes to remove ROLF from the fee schedule, which will make the fee schedule clearer and less confusing for investors as well as help to eliminate potential investor confusion, thereby removing impediments to and perfecting the mechanism of a free and open market and a national market system, and, in general, protecting investors and the public interest.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. The Exchange also believes that its proposal to remove ROLF from fee code BO would not affect intermarket nor intramarket competition because the change is not designed to amend any fee or rebate or to alter the manner in which the Exchange assesses fees or calculates rebates. It is simply proposed in response to LavaFlow's announcement that it will cease market operations following the close of business on Friday, January 30, 2015. As stated above, the Exchange notes that it operates in a highly competitive market in which market participants can readily direct order flow to competing

[13] 17 CFR 200.30–3(a)(12).

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] 15 U.S.C. 78s(b)(3)(A)(ii).

[4] 17 CFR 240.19b–4(f)(2).

[5] The term ''Member'' is defined as ''any registered broker or dealer that has been admitted to membership in the Exchange.'' *See* Exchange Rule 1.5(n).

[6] 15 U.S.C. 78f.

[7] 15 U.S.C. 78f(b)(4) and (5).

venues if they deem fee structures to be unreasonable or excessive.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange has not solicited, and does not intend to solicit, comments on this proposed rule change. The Exchange has not received any written comments from members or other interested parties.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A) of the Act [8] and paragraph (f)(2) of Rule 19b–4 thereunder.[9] At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–BYX–2015–08 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–BYX–2015–08. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–BYX–2015–08 and should be submitted on or before March 12, 2015.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[10]

Brent J. Fields,

Secretary.

[FR Doc. 2015–03401 Filed 2–18–15; 8:45 am]

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[8] 15 U.S.C. 78s(b)(3)(A).

[9] 17 CFR 240.19b–4(f)(2).

[10] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–74268; File No. SR–OCC–2014–24]

Self-Regulatory Organizations; The Options Clearing Corporation; Order Approving Proposed Rule Change Concerning Extended and Overnight Trading Sessions

February 12, 2015.

On December 12, 2014, The Options Clearing Corporation (''OCC'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change SR–OCC–2014–24 pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'') [1] and Rule 19b–4 thereunder.[2] The proposed rule change was published for comment in the **Federal Register** on December 30, 2014.[3] The Commission did not receive any comments on the proposed rule change. This order approves the proposed rule change.

I. Description

This rule change was filed in connection with OCC's proposed change to its operations concerning the clearance of confirmed trades executed in overnight trading sessions offered by exchanges for which OCC provides clearance and settlement services. OCC currently clears overnight trading activity for CBOE Futures Exchange, LLC (''CFE'').[4] The total number of trades submitted to OCC from overnight trading sessions is nominal, typically less than 3,000 contracts per session. However, OCC has recently observed an industry trend whereby exchanges are offering overnight trading sessions beyond traditional hours. Exchanges offering overnight trading sessions have indicated to OCC that such sessions benefit market participants by providing additional price transparency and hedging opportunities for products traded in such sessions, which, in turn, promotes market stability.[5] In light of this trend, OCC proposed to implement a framework for clearing trades executed in such sessions that includes: (1) Qualification criteria used to approve clearing members for overnight trading sessions, (2) systemic controls to identify trades executed during overnight trading sessions by clearing members not approved for such sessions, (3) enhancements to OCC's overnight monitoring of trades submitted by exchanges during overnight trading sessions, (4) enhancements to OCC's credit controls with respect to monitoring clearing members' credit risk during overnight trading sessions, including procedures for contacting an exchange offering overnight trading sessions in order to invoke use of the exchange's kill switch, and (5) taking appropriate disciplinary action against clearing members who attempt to clear during the overnight trading sessions without first obtaining requisite approvals. These changes (described in greater detail below) are designed to reduce and mitigate the

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4. OCC also filed this change as an advance notice under Section 806(e)(1) of the Payment, Clearing, and Settlement Supervision Act of 2010. 12 U.S.C. 5465(e)(1). Securities Exchange Act Release No. 74073 (January 15, 2015), 80 FR 3287 (January 22, 2014) (SR–OCC–2014–812). The Commission did not receive any comments on the advance notice.

[3] Securities Exchange Act Release No. 73907 (December 22, 2014), 79 FR 78543 (December 30, 2014) (SR–OCC–2014–24).

[4] ELX Futures LP (''ELX'') previously submitted overnight trading activity to OCC, but currently does not submit trades from overnight trading sessions to OCC. OCC will re-evaluate ELX's risk controls in the event ELX re-institutes its overnight trading sessions.

[5] *See* CFE–2014–010 at *http://cfe.cboe.com/publish/CFErulefilings/SR-CFE-2014-010.pdf.*

risks associated with clearing trades executed in overnight trading sessions. In addition, the only products that will be eligible for clearing in the overnight trading sessions are index options and index futures products.

OCC's framework for determining whether to provide clearing services for overnight trading sessions offered by an exchange is designed to work in conjunction with the risk controls of the exchange that offers overnight trading sessions. OCC will confirm an exchange's risk controls as well as its staffing levels as they relate to overnight trading sessions to determine if OCC may reasonably rely on such risk controls to the reduce risk presented to OCC by the exchange's overnight trading sessions. Such exchange risk controls will consist of: (1) Price reasonability checks; (2) controls to prevent orders from being executed beyond a certain percentage (determined by the exchange) from the initial execution price; (3) activity based protections which focus on risk beyond price, such as a high number of trades occurring in a set period of time; and (4) kill switch capabilities, which may be initiated by the exchange and can cancel all open quotes or all orders of a particular participant. OCC believes that confirming the existence of applicable pre-trade risk controls as well as overnight staffing at the relevant exchanges is essential to mitigating risks presented to OCC from overnight trading sessions.[6] OCC believes that providing clearing services to exchanges offering such sessions is consistent with OCC's mission to provide market participants with clearing and risk management solutions that respond to changes in the marketplace.

Qualification Criteria

In order to mitigate risks associated with clearing for overnight trading sessions, clearing members that participate in such trading sessions will be required to provide contact information to OCC for operational and risk personnel available to be contacted by OCC during such sessions. In addition, OCC will require that clearing members participating in an overnight trading session post additional margin in a designated account in order to mitigate the risk that OCC cannot draft a clearing member's bank account during an overnight trading session.[7] OCC also will adopt a procedure whereby, on a quarterly basis, it confirms its record of clearing members eligible for overnight trading sessions with a similar record maintained by exchanges offering such overnight trading sessions.

With respect to providing operational and risk contacts, under OCC Rule 201, each clearing member is required to maintain facilities for conducting business with OCC and to have a representative authorized in the name of the clearing member to take all action necessary for conducting business with OCC be available at the facility during such hours as may be specified from time-to-time by OCC. Similarly, OCC Rules 214(c) and (d) require clearing members to ensure that they have the appropriate number of qualified personnel and to maintain the ability to process anticipated volumes and values of transactions. OCC will use this existing authority to require clearing members trading during overnight trading sessions to maintain operational and risk staff that may be contacted by OCC during such sessions.

OCC will impose upon clearing members qualified to participate in overnight trading sessions additional margin requirement in an amount of the lesser of $10 million or 10% of the clearing member's net capital (''Additional Margin''), which will be equal to the first monitoring risk threshold (described below) and which will be collected the morning before each overnight trading sessions. Clearing members must identify the proprietary account that would be charged the Additional Margin amount. The Additional Margin requirement is intended to provide OCC with additional margin assets should a clearing member's credit risk increase during overnight trading sessions.[8] OCC will adopt a process whereby each morning OCC Financial Risk Management staff will assess the Additional Margin requirement prior to participating in any future overnight trading sessions against clearing members eligible to participate in overnight trading sessions. Clearing members that do not have sufficient excess margin on deposit with OCC to meet the Additional Margin amount will be required to deposit additional funds with OCC to satisfy the Additional Margin requirement.[9] This process will be adopted under existing rule authority.

Moreover, OCC also will confirm that an exchange offering overnight trading sessions has adopted a procedure whereby such exchange would contact OCC when a trader requests trading privileges during overnight trading sessions. The purpose of this contact is to verify that the trader's clearing firm (*i.e.,* the OCC clearing member) is approved for overnight trading sessions. If the applicable OCC clearing member is not approved for overnight trading sessions, then the clearing member must receive OCC's approval for overnight trading sessions, or the exchange will not provide the trader trading privileges during overnight trading sessions. Moreover, OCC will confirm that an exchange offering overnight trading sessions has implemented a procedure to periodically (*i.e.,* quarterly) validate its record of approved clearing firms against OCC's record of clearing members approved for overnight trading sessions.[10] Any discrepancies between the two records will be promptly resolved by either the clearing member obtaining approval from OCC for overnight trading sessions, or by the exchange revoking the clearing firm's trading privileges for overnight trading sessions.

Systemic Controls

OCC will implement system changes so that trades submitted to OCC during overnight trading sessions that have been executed by clearing members not approved for such trading sessions will be reviewed by OCC staff after acceptance but before being processed (each such trade being a ''Reviewed Trade''). OCC will contact the submitting exchange regarding each Reviewed Trade in order to determine if the trade is a valid trade. If the exchange determines that the Reviewed Trade was in error such that, as provided in Article VI, Section 7(c) of OCC's By-laws, new

[6] Comparable controls are applied to futures and future option trades executed in overnight trading sessions currently cleared by OCC, although such controls have been implemented by clearing futures commission merchants (''clearing FCMs'') pursuant to Commodity Futures Trading Commission (''CFTC'') Regulation 1.73. This requires clearing FCMs to monitor for adherence to such controls during regular and overnight trading sessions. Some of the risk control measures are similar to those proposed by OCC for use in clearing securities trades in overnight trading sessions. For instance, OCC confirmed that CFE maintains kill switch capabilities.

[7] Clearing members will be required to designate a firm account to ensure that OCC has a general lien on the assets in the account and can use them to satisfy any obligation of the clearing member to OCC.

[8] Clearing members approved for overnight trading sessions who do not meet the Additional Margin requirement for a given overnight trading session will be treated like a clearing member not approved overnight trading sessions, as described below.

[9] Under OCC Rule 601, OCC has the discretion to fix the margin requirement for any account at an amount that it deems necessary or appropriate under the circumstances to protect the interests of clearing members, OCC and the public.

[10] As discussed in more detail below, clearing members that attempt to participate in overnight trading sessions without the necessary approval will be subject to a minor rule violation fine.

or revised trade information is required to properly clear the transaction, OCC expects the exchange would instruct OCC to disregard or ''bust'' the trade. If the exchange determines that the Reviewed Trade was not in error, then OCC will clear the Reviewed Trade and take appropriate disciplinary action against the non-approved clearing member, as described below. OCC believes that clearing the Reviewed Trade is appropriate in order to avoid potentially harming the clearing member approved for overnight trading sessions that is on the opposite side of the transaction.

Overnight Monitoring

OCC will implement additional overnight monitoring in order to better monitor clearing members' credit risk during overnight trading sessions. Such monitoring of credit risk is similar to existing OCC practices concerning futures cleared during overnight trading hours and includes automated processes within OCC's clearing ENCORE to measure, by clearing member: (i) The aggregate mark-to-market amounts of a clearing member's positions, including positions created during overnight trading, based on current prices using OCC's Portfolio Revaluation System; (ii) the aggregate incremental margin produced by all positions resulting from transactions executed during overnight trading; and (iii) with respect to options cleared during overnight trading hours, the aggregate net trade premium positions resulting from trades executed during overnight trading (each of these measures being a ''Credit Risk Number''). Hourly credit reports would be generated by ENCORE containing the Credit Risk Numbers expressed in terms of both dollars and, except for the mark-to-market position values, as a percentage of net capital for each clearing member trading during overnight trading sessions. The Credit Risk Numbers are the same information used by OCC staff to evaluate clearing member exposure during regular trading hours and, in addition to OCC's knowledge of its clearing members' businesses, are effective measures of the risk presented to OCC by each clearing member. OCC's Operations staff will review such reports as they are generated and, in the event that any of the Credit Risk Numbers for positions established by a clearing member during an overnight trading session exceed established thresholds, staff will alert OCC's Market Risk staff [11] of the exceedance in accordance with established procedures, as described below.

Market Risk staff will follow a standardized process concerning such exceedances, including escalation to OCC's management, if required by such process. Given the nominal volume of trades executed in overnight trading sessions that are presently submitted for clearance, OCC does not contemplate changes in its current staffing levels that support overnight clearing activities at this time, however, OCC will periodically assess and adjust such staffing levels, as appropriate. As part of the overnight clearing activities, OCC has, however, designated an on-call Market Risk duty officer who would be responsible for reviewing issues that arise when clearing for overnight trading session and determining what measures to be taken as well as additional escalation, if necessary.

With respect to OCC's escalation thresholds, if any Credit Risk Number of a clearing member approved for overnight trading sessions is $10 million or more, or any Credit Risk Number equals 10% or more of the clearing member's net capital, OCC's Operations staff will be required to provide email notification to Market Risk and Member Services staff. If any Credit Risk Number of a clearing member not approved for overnight trading sessions is $10 million or more, or any Credit Risk Number equals 10% or more of the clearing member's net capital, OCC's Operations will also notify Market Risk and Member Services staff as well as its senior management. Such departments will take action to prevent additional trading by the non-approved clearing member, including contacting the exchange to invoke use of the exchange's kill switch.

If any Credit Risk Number of a clearing member approved for overnight trading sessions is $50 million or more, or equals 25% or more of the clearing member's net capital, Operations staff will be required to contact, by telephone: (i) Market Risk and Member Services, (ii) the applicable exchange for secondary review, and (iii) the clearing member's designated contacts. The on-call Market Risk duty officer also will consider if additional action is necessary, which may include contacting a designated executive officer in order to issue an intra-day margin call, increase the clearing member's margin requirement in order to prevent the withdrawal of a specified amount of excess margin collateral, if any, the clearing member has on deposit with OCC or contacting the exchange in order to invoke the use of its kill switch.

If any Credit Risk Number is $75 million or more, or equals 50% or more of the clearing member's net capital, Operations staff will be required to contact, by telephone, Market Risk staff, the on-call Market Risk duty officer and a designated executive officer. Such officer will be responsible for reviewing the situation and determining whether to implement credit controls, which are described in greater detail below and include: Issuing an intra-day margin call, increasing a clearing member's margin requirement in order to prevent the withdrawal of a specified amount of excess margin collateral, if any, the clearing member has on deposit with OCC, whether further escalation is warranted in order for OCC to take protective measures pursuant to OCC Rule 305, or contact the exchange in order to invoke use of its kill switch. OCC stated that it chose the above described escalation thresholds based on its analysis of historical overnight trading activity across the futures industry. OCC believes that these thresholds strike an appropriate balance between effective risk monitoring and operational efficiency.

Credit Controls

In order to address credit risk associated with trading during overnight trading sessions, and as described above, OCC will collect Additional Margin from clearing members as well as monitor and analyze the impact that positions established during such sessions have on a clearing member's overall exposure. Should the need arise based on threshold breaches described above, and pursuant to OCC Rule 609, OCC may require the deposit of additional margin (''intra-day margin'') by any clearing member that increases its incremental risk as a result of trading activity during overnight trading sessions. Accordingly, a clearing member's positions established during such sessions will be incorporated into OCC's intra-day margin process. Further, if a clearing member's exposure significantly increases during a time when settlement banks are not open to process an intra-day margin call, OCC will use its current authority under OCC Rule 601 to increase a clearing member's margin requirement, which will restrict the clearing member's ability to withdraw excess margin collateral. The implementation of these measures is discussed more fully below.

In the event that a clearing member's exposure during overnight trading sessions causes a clearing member to exceed OCC's intra-day margin call threshold for overnight trading sessions, OCC will require the clearing member to

[11] OCC's Member Services staff will also receive alerts in order to contact clearing members as may be necessary.

deposit intra-day margin equal to the increased incremental risk presented by the clearing member. Specifically, if a clearing member has a total risk charge [12] exceeding 25% (a reduction of the usual figure of 50%), as computed overnight by OCC's STANS system, and a loss of greater than $50,000 from an overnight trading session(s), as computed by Portfolio Revaluation, OCC will initiate an intra-day margin call. OCC will know at approximately 8:30 a.m. (Central Time) if an intra-day margin call on a clearing member will be initiated based on breaches of these thresholds. This ''start of business'' margin call is in addition to daily margin OCC collects from clearing members pursuant to OCC Rule 605, any intra-day margin call that OCC may initiate as a result of regular trading sessions or special margin call that OCC may initiate.

In addition to, or instead of, requiring additional intra-day margin, OCC Rule 601 [13] and OCC's Clearing Member Margin Call Policy will work together to authorize Market Risk staff to increase a clearing member's margin requirement which may be in an amount equal to an intra-day margin call.[14] (Any increased margin requirement will remain in effect until the next business day.) This action will immediately prevent clearing members from withdrawing any excess margin collateral (in the amount of the increased margin requirement) the clearing member has deposited with OCC. With respect to clearing trades executed in overnight trading sessions, and in the event OCC requires additional margin from a clearing member, Market Risk staff may use increased margin requirements as a means of collateralizing the increase in incremental risk a clearing member incurred during such sessions without having to wait for banks to open to process an intra-day margin call.[15] Such action may be taken by OCC instead of, or in addition to, issuing an intra-day margin call depending on the amount of excess margin a clearing member has on deposit with OCC and the amount of the incremental risk presented by such clearing member. OCC believes that the expansion of its intra-day margin call process as described in the preceding paragraph, including OCC's ability to manually increase clearing members' margin requirements, will mitigate the risk that OCC is under-collateralized as a result of overnight trading hours.

Moreover, a designated executive officer may call an exchange offering overnight trading sessions to invoke the use of its kill switch. The kill switch prevents a clearing member (or the market participant clearing through a clearing member) from executing trades on the exchange during a given overnight trading session or, if needed, stop all trading during a given overnight trading session. Finally, pursuant to OCC Rule 305, the Executive Chairman or the President of OCC, in certain situations, has the authority to impose limitations and restrictions on the transactions, positions and activities of a clearing member. This authority will be used, as needed, in the event a clearing member accumulates significant credit risk during overnight trading sessions, or a clearing member's activities during such trading sessions otherwise warrant OCC taking protective action.

Rule Enforcement Actions

In order to deter clearing members from attempting to participate in overnight trading sessions without authorization as well as appropriately enforce the above described processes, OCC will ensure that any attempt by a clearing member to participate in overnight trading sessions without first obtaining the necessary approval will result in the initiation of a rule enforcement action against such clearing member. As described above, clearing members not approved for overnight trading sessions that trade during such overnight sessions will have their trades reviewed by OCC staff. Clearing members that attempt to participate in overnight trading sessions but not obtain the necessary approval to do so will be subject to a minor rule violation fine.[16] In addition, if a clearing member's operational or risk contacts for overnight trading sessions were unavailable had OCC attempted to contact such individuals, the clearing member will be subject to a minor rule violation fine. OCC has existing processes in place to monitor for clearing member violations of OCC's rules and such processes will also apply to clearing member activity during overnight trading sessions.

II. Discussion and Commission Findings

Section 19(b)(2)(C) of the Act [17] directs the Commission to approve a proposed rule change of a self-regulatory organization if it finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to such organization.

The Commission finds that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Act,[18] which requires, among other things, that the rules of a clearing agency are designed to assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible. Although clearing transactions executed in overnight trading sessions may present additional risk to OCC and the markets in general, OCC's proposal is designed to monitor and mitigate these risks and thus assure the safeguarding of securities and funds which are in OCC's custody or control or for which it is responsible.

By limiting the product set eligible for overnight trading sessions to index options and index futures products and by instituting qualification criteria for determining whether to provide clearing services for overnight trading sessions offered by a particular exchange, OCC should be able to better assure the safeguarding of securities and funds which are in its custody or control. In addition, in order to address the risks associated with extended trading hours, including those associated with OCC and clearing members' inability to transfer funds to satisfy margin during overnight hours, OCC's proposed framework, which includes a number of mechanisms designed to further control the risks and safeguard securities and funds, should also facilitate the safeguarding of securities and funds. These mechanisms include (i) clearing member qualification criteria; (ii) systemic controls to identify trades executed by clearing members not approved for overnight trading; (iii) enhancements to OCC's overnight monitoring of trades submitted by exchanges during overnight trading sessions; (iv) enhancements to OCC's credit controls with respect to monitoring clearing members' credit risk during overnight trading sessions; and (v) disciplinary actions for unapproved clearing members who

[12] Total risk charge is a number derived from STANS outputs and is the sum of expected shortfall, stress test charges and any add-on charges computed by STANS. STANS is OCC's proprietary margin methodology.

[13] In addition, OCC Rule 601 provides OCC with the authority to fix the margin requirement for any account or any class of cleared contracts at such amount as it deems necessary or appropriate under the circumstances to protect the respective interests of clearing members, OCC and the public.

[14] Clearing members frequently deposit margin at OCC in excess of requirements.

[15] Clearing members will be able to substitute the locked-up collateral during normal time frames (*i.e.,* 6:00 a.m. to 5:00 p.m. (Central Time) for equity securities).

[16] *See* OCC Rule 1201(b).

[17] 15 U.S.C. 78s(b)(2)(C).

[18] 15 U.S.C. 78q–1(b)(3)(F).

attempt to clear during overnight trading sessions.

In particular, OCC's overnight monitoring and escalation mechanism, which includes the ability for OCC to require additional intra-day margin, increase a clearing member's margin requirement, invoke an exchange's kill switch, or use any combination thereof, should provide OCC with the necessary mechanisms to ensure securities and funds which are in its custody or control. The obligation for OCC and clearing members to maintain and enforce adequate staffing by employing the use of a designated an on-call Market Risk duty officer should also help assure that clearing activities and margin levels are being adequately monitoring during the overnight trading hours, which in turn should facilitate the safeguarding of securities and funds which are in the custody or control of OCC or for which it is responsible.

III. Conclusion

On the basis of the foregoing, the Commission finds that the proposal is consistent with the requirements of the Act and in particular with the requirements of Section 17A of the Act [19] and the rules and regulations thereunder.

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,[20] that the proposed rule change (SR–OCC–2014–24) be, and it hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[21]

Brent J. Fields,

Secretary.

[FR Doc. 2015–03403 Filed 2–18–15; 8:45 am]

BILLING CODE 8011–01–P

[19] In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[20] 15 U.S.C. 78s(b)(2).

[21] 17 CFR 200.30–3(a)(12).

DEPARTMENT OF STATE

[Public Notice 9043]

Culturally Significant Object Imported for Exhibition Determinations: ''International Pop'' Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000 (and, as appropriate, Delegation of Authority No. 257 of April 15, 2003), I hereby determine that the object to be included in the exhibition ''International Pop,'' imported from abroad for temporary exhibition within the United States, is of cultural significance. The object is imported pursuant to a loan agreement with the foreign owner or custodian. I also determine that the exhibition or display of the exhibit object at the Walker Art Center, Minneapolis, MN, from on or about April 11, 2015, until on or about September 6, 2015, at the Dallas Museum of Art, Dallas, TX, from on or about October 11, 2015, until on or about January 17, 2016, at the Philadelphia Museum of Art, Philadelphia, PA, from on or about February 18, 2016, until on or about May 15, 2016, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including the object list, contact Julie Simpson, Attorney-Adviser, Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6467). The mailing address is U.S. Department of State, SA–5, L/PD, Fifth Floor (Suite 5H03), Washington, DC 20522–0505.

Dated: February 11, 2015.

Kelly Keiderling,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2015–03498 Filed 2–18–15; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice 9042]

Culturally Significant Objects Imported for Exhibition Determinations: ''Ships, Clocks & Stars: The Quest for Longitude''

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, and Delegation of Authority No. 236–3 of August 28, 2000 (and, as appropriate, Delegation of Authority No. 257 of April 15, 2003), I hereby determine that the objects to be included in the exhibition ''Ships, Clocks & Stars: The Quest for Longitude,'' imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at the Folger Shakespeare Library, Washington, DC, from on or about March 16, 2015, until on or about August 23, 2015, the Mystic Seaport Museum, Mystic, Connecticut, from on or about September 14, 2015, until on or about March 28, 2016, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact Paul W. Manning, Attorney-Adviser, Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6469). The mailing address is U.S. Department of State, SA–5, L/PD, Fifth Floor (Suite 5H03), Washington, DC 20522–0505.

Dated: February 11, 2015.

Kelly Keiderling,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2015–03497 Filed 2–18–15; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice 9041]

Culturally Significant Objects Imported for Exhibition Determinations: ''Sultans of Deccan India, 1500–1700: Opulence and Fantasy''

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, and Delegation of Authority No. 236–3 of August 28, 2000 (and, as appropriate, Delegation of Authority No. 257 of April 15, 2003), I hereby determine that the objects to be included in the exhibition ''Sultans of Deccan India, 1500–1700: Opulence and Fantasy,'' imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to a loan agreement with the foreign owner or

custodian. I also determine that the exhibition or display of the exhibit objects at the Metropolitan Museum of Art, New York, New York, from on or about April 20, 2015, until on or about July 26, 2015, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact Paul W. Manning, Attorney-Adviser, Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6469). The mailing address is U.S. Department of State, SA–5, L/PD, Fifth Floor (Suite 5H03), Washington, DC 20522–0505.

Dated: February 11, 2015.

Kelly Keiderling,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2015–03496 Filed 2–18–15; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Public Notice for Waiver of Aeronautical Land-Use Assurance

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of intent of waiver with respect to land; Indianapolis International Airport, Indianapolis, Indiana.

SUMMARY: The FAA is considering a proposal to change 22.212 acres of airport land from the federal obligation dedicating it to aeronautical use and to authorize this land to be used for revenue producing, non-aeronautical purposes at Indianapolis International Airport, Indianapolis, Indiana. The aforementioned land is not needed for current or future aeronautical use.

The land is north of the Indianapolis Maintenance Center, west of the Indianapolis Maintenance Center's central energy plant, and industrial waste water treatment facility located just south of U.S. Route 40 and west of Brushwood Road. The land is not currently developed. A solar power generating facility is proposed for development on the land.

DATES: Comments must be received on or before March 23, 2015.

ADDRESSES: Documents are available for review by appointment at the FAA Chicago Airports District Office, Melanie Myers, Program Manager, 2300 East Devon Avenue, Des Plaines, IL 60018 Telephone: (847) 294–7525/Fax: (847) 294–7046 and Eric Anderson, Indianapolis Airport Authority, 7800 Col. H. Weir Cook Memorial Drive, Indianapolis, IN 46241; (317) 487–5135.

Written comments on the Sponsor's request must be delivered or mailed to: Melanie Myers, Program Manager, Federal Aviation Administration, Chicago Airports District Office, 2300 East Devon Avenue, Des Plaines, IL 60018, Telephone Number: (847) 294–7525/FAX Number: (847) 294–7046.

FOR FURTHER INFORMATION CONTACT: Melanie Myers, Program Manager, Federal Aviation Administration, Chicago Airports District Office, 2300 East Devon Avenue, Des Plaines, IL 60018, Telephone Number: (847) 294–7525/FAX Number: (847) 294–7046.

SUPPLEMENTARY INFORMATION: In accordance with section 47107(h) of Title 49, United States Code, this notice is required to be published in the **Federal Register** 30 days before modifying the land-use assurance that requires the property to be used for an aeronautical purpose.

The vacant property consists of portions of 4 original airport acquired parcels. These parcels were acquired with local funds. The land is located outside the airport operations area. There are no impacts to the airport by allowing the Indianapolis Airport Authority to lease the property for solar energy generation.

The Indianapolis Airport Authority will control use of the parcel through terms and conditions of the ground lease. The lease will be subordinate to the sponsor's existing grant assurances. This will ensure that all activities on the parcel will be compatible with FAA requirements and airport operations. The disposition of proceeds from the lease of the airport property will be in accordance with FAA's Policy and Procedures Concerning the Use of Airport Revenue, published in the **Federal Register** on February 16, 1999 (64 FR 7696).

A fair market value (FMV) appraisal for the parcel was completed in September 2014 in accordance with FAA Order 5100.37A. The appraisal concluded that the FMV for an annual commercial ground lease of the property is $5,342.98 per acre.

This notice announces that the FAA is considering the release of the subject airport property at the Indianapolis International Airport, Indianapolis, Indiana from its obligations to be maintained for aeronautical purposes. Approval does not constitute a commitment by the FAA to financially assist in the change in use of the subject airport property nor a determination of eligibility for grant-in-aid funding from the FAA.

Legal Description

A part of the Southeast Quarter and the Southwest Quarter of Section 21, Township 15 North, Range 2 East, Wayne Township, Marion County, Indiana, more particularly described as follows:

Commencing at brass disk (IAA monument 22–O) found at the Northeast corner of the Southeast Quarter of said Section 21; thence South 88 degrees 25 minutes 07 seconds West (all bearings are based on the Indiana State Plane Coordinate System), East Zone (NAD 83)) along the North line of said Southeast Quarter 2288.09 feet; thence South 01 degrees 34 minutes 53 seconds East perpendicular to the last described line 132.00 feet to a chain link fence and the POINT OF BEGINNING (the following four courses are along said chain link fence); (1) Thence South 45 degrees 01 minutes 35 seconds East 1095.49 feet; (2) thence South 44 degrees 54 minutes 51 seconds West 286.62 feet; (3) thence South 44 degrees 32 minutes 57 seconds East 19.33 feet; (4) thence south 44 degrees 55 minutes 22 seconds West 616.14 feet; thence North 50 degrees 12 minutes 17 seconds West 498.46 feet; thence North 39 degrees 47 minutes 43 seconds East 146.78 feet; thence North 50 degrees 12 minutes 17 seconds West 608.47 feet; thence North 44 degrees 58 minutes 25 seconds East 856.65 feet to the POINT OF BEGINNING, containing 22.212 acres, more or less.

Issued in Des Plaines, Illinois, on February 10, 2015.

Deb Bartell,

Acting Manager, Chicago Airports District Office, FAA, Great Lakes Region.

[FR Doc. 2015–03485 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

[Docket No. FHWA–2015–0004]

Agency Information Collection Activities: Request for Comments for Periodic Information Collection

AGENCY: Federal Highway Administration (FHWA), U.S. Department of Transportation.

ACTION: Notice of Request for Approval of a New Information Collection and Request for Comments.

SUMMARY: The FHWA invites the public to comment on our intention to request the Office of Management and Budget (OMB) to approve a new (periodic) information collection. This collection is summarized below under Supplementary Information. We are required to publish this notice in the **Federal Register** by the Paperwork Reduction Act of 1995.

DATES: Please submit comments by April 20, 2015.

ADDRESSES: You may submit comments identified by DOT Docket ID Number 2015–0004 by any of the following methods:

Web site: For access to the docket to read background documents or comments received, go to the Federal eRulemaking Portal: *http://www.regulations.gov.* Follow the online instructions for submitting comments.

Fax: 1–202–493–2251.

Mail: Docket Management Facility; U.S. Department of Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.

Hand Delivery or Courier: U.S. Department of Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Adella Santos, 202–366–5021, NHTS Program Manager, Federal Highway Administration, Office of Policy,1200 New Jersey Avenue, SE., Room E83–426, Washington, DC 20590, Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Title: 2015 National Household Travel Survey (NHTS).

Type of Request: New request for periodic information collection requirement.

Background: Title 23, United States Code, Section 502 authorizes the USDOT to carry out advanced research and transportation research to measure the performance of the surface transportation systems in the US, including the efficiency, energy use, air quality, congestion, and safety of the highway and intermodal transportation systems. The USDOT is charged with the overall responsibility to obtain current information on national patterns of travel, which establishes a data base to better understand travel behavior, evaluate the use of transportation facilities, and gauge the impact of the USDOT's policies and programs.

The NHTS is the USDOT's authoritative nationally representative data source for daily passenger travel. This inventory of travel behavior reflects travel mode (*e.g.,* private vehicles, public transportation, walk and bike) and trip purpose (*e.g.,* travel to work, school, recreation, personal/family trips) by U.S. household residents. Survey results are used by federal and state agencies to monitor the performance and adequacy of current facilities and infrastructure, and to plan for future needs.

The collection and analysis of national transportation data has been of critical importance for nearly half a century. Previous surveys were conducted in 1969, 1977, 1983, 1990, 1995, 2001, and 2009. The current survey will be the eighth in this series, and allow researchers, planners, and officials at the state and federal levels to monitor travel trends.

Data from the NHTS are widely used to support research needs within the USDOT, and State and local agencies, in addition to responding to queries from Congress, the research community and the media on important issues. Current and recent topics of interest include:

- Travel to work patterns by transportation mode for infrastructure improvements and congestion reduction,
- Access to public transit, paratransit, and rail services by various demographic groups,
- Measures of travel by mode to establish exposure rates for risk analyses,
- Support for Federal, State, and local planning activities and policy evaluation,
- Active transportation by walk and bike to establish the relationship to public health issues,
- Vehicle usage for energy consumption analysis,
- Traffic behavior of specific demographic group such as Millennials and the aging population.

Within the USDOT, the Federal Highway Administration (FHWA) holds responsibility for technical and funding coordination. The National Highway Traffic Safety Administration (NHTSA), Federal Transit Administration (FTA), and the Bureau of Transportation Statistics (BTS) are also primary data users, and have historically participated in project planning and financial support.

Proposed Data Acquisition Methodology

NHTS data are collected from a stratified random sample of households that represent a broad range of geographic and demographic characteristics. Letters and a brief household survey are sent to selected households requesting some basic demographic and contact information and inviting them to participate in the survey. The recruitment surveys are returned in business reply envelopes to the survey contractor.

Participating households are subsequently sent a package containing travel logs for each member of the household age 5 and older. The household is assigned to record their travel on a specific day, and asked to note every trip taken during a 24 hour period. Based upon their preferences, the travel information is then reported either through the use of a survey Web site, or through a telephone interview.

Reminders are sent periodically to households who do not respond within the expected timeframe. Monetary incentives are included in each recruitment package, and are provided in increasing amounts for all households that complete the survey.

The survey will collect data during an entire 12 month period so that all 365 days of the year including weekends and holidays are accounted for. A total of 26,000 households will comprise the national sample for the 2015 survey. As described below, changes in the establishment of the sampling frame, the promotion of participation, and in data retrieval techniques are planned, as compared to previous surveys, to improve statistical precision, enhance response rates, and increase survey efficiency.

Issues Related to Sampling. In previous years, the household sample was identified using random digit dialing techniques. Today, only 59 percent [1] have a landline telephone in the home (down from 75% during the 2009 NHTS) while over 80 percent of U.S. households have access to the Internet.[2] This survey will leverage this shift in technology, in particular the move away from home telephone usage, to structure a research design that uses web, mail, and telephone data collection modes.

The revised methodological approach starts with a national address-based sample (ABS), a change from the telephone-based random digit dialing (RDD) sample design used in recent NHTS efforts, while also incorporating core data elements that have been part of the NHTS since 1969.

[1] Blumberg, S.J., and Luke, J.V. (2014). *Wireless substitution: Early release of estimates from the National Health Interview Survey, July–December 2013.* National Center for Health Statistics. Available from *http://www.cdc.gov/nchs/nhis.htm.*

[2] Source: U.S. Census Bureau, Current Population Survey, Select Years, Internet Release date: January 2014.

The survey sample will be drawn from the ABS frame maintained by Marketing Systems Group (MSG). It originates from the U.S. Postal Service (USPS) Computerized Delivery Sequence file (CDS), and is updated on a monthly basis. MSG also provides the ability to match some auxiliary variables (*e.g.,* race/ethnicity, education, household income) to a set of sampled addresses. MSG geocodes their entire ABS frame, so block-, block group-, and tract-level characteristics from the Decennial Census and the American Community Survey (ACS) may be appended to addresses and used for sampling and/or data collection purposes.

Sample Size. A sample size of 26,000 households will be included in the national sample. Assuming response rates of 30 percent for the recruitment stage, 65 percent for the retrieval stage, and a residency rate of 89 percent for sampled addresses, a total of 149,813 sampled addresses will be required to attain the targeted 26,000 responding households.

Stratification. This survey produces state-level estimates as well as national estimates. Assuming equal costs and population variances across states, the most efficient design for national estimates is one in which the sample is allocated to the states in proportion to the size of the civilian, noninstitutionalized population in each state, and the most efficient design for state-level estimates is one in which equal sample sizes are allocated to all states. Various allocation options for the national sample are being considered in order to arrive at a final allocation for the NHTS national sample.

With the ABS approach, identifying targeted areas (*e.g.,* states) that correspond to those for which estimates can be developed from the NHTS data are straightforward. Addresses are definitively linked to states, so state-level estimation is routine. Geocoding and GIS processing can be used to link addresses to counties in a highly reliable fashion. There can be some ambiguity for addresses that are P.O. boxes or are listed as rural route addresses. These can be handled in a routine manner with a set of well-defined rules as such addresses will represent only a small proportion of a state's population. Thus, no important issues arise in the definition of areas with an ABS sample design that relies on mail for data collection, as is the case with the proposed approach.

Assignments for recording travel data by sampled households will be equally distributed across all days to ensure a balanced day of week distribution. The sample (of recruitment letters to households) will be released periodically through a process that will control the balance of travel days by month.

Data Collection Methods

An updated approach to enhancing survey response has been developed. This includes providing progressive monetary incentives, and using a mail-out/mail-back recruitment survey. This recruitment survey is designed to be relevant, aesthetically pleasing, and elicit participation by including topics of importance to the respondent. Upon returning the completed recruitment survey, each household member will be provided with personalized travel logs by mail, and offered the option of completing the retrieval survey by web using a unique personal identification number (PIN) or telephone interview.

Information Proposed for Collection

Recruitment. The survey will begin with mailing the sampled households a short recruitment survey designed to collect key household information (*e.g.* enumeration of household members), additional contact information (*e.g.* email address and telephone number). This recruitment survey includes some engaging travel-related opinion or experience questions considered to be highly relevant to the survey and interesting to respondents. The initial survey will be accompanied by a letter from the USDOT, and a Business Reply Envelope.

In the first mail contact, each sampled address will receive a $2 cash incentive. The second mail contact will include the travel log package sent to each recruited household and a $5 cash incentive and a promise of an additional $20 for successfully submitting their travel logs. The incentives paid will be tracked at each of the three levels offered.

To support the mail recruitment approach, the survey contractor will provide a toll-free number on survey materials and will assist the recruited participant to provide the required information by telephone if requested to do so by the participant. A survey Web site will be established for potential respondents who want to check on the authenticity of the survey or find out more information. This Web site will also serve as the portal to the survey.

All returned recruitment surveys will be processed using commercial off-the-shelf software (COTS) technology. All data collected in the recruitment survey will be used to populate the household record in the survey database. As part of the non-response protocol, non-responding households may also be provided the opportunity to recruit by web. If respondents call the help desk or use the web to complete, their responses are collected in the same survey database.

The mail back recruitment approach described here has been tested and found to be successful in several surveys funded by the Federal Government (*e.g.,* the National Crime Victimization Survey); these surveys have proven this method can be implemented with large sample sizes covering vast geographic regions. This approach has been developed in response to declining recruitment rates in recent studies.

Retrieval. The NHTS data will be collected from respondents either from self-reporting via the web, or from professionally trained interviewers using a computer-assisted telephone interviewing (CATI) system. Either approach will be based upon a single database that allows for sophisticated branching and skip patterns to enhance data retrieval by asking only those questions that are necessary and appropriate for the individual participant. Look-up tables are included to assist with information such as vehicle makes and models. The Google map UI is used to assist in identifying specific place names and locations. The location data for the participant's home, workplace, or school are stored and automatically inserted in the dataset for trips after the first report. Household rostering is a list of all vehicles and persons in the household that allows a trip to be reported from one household member and can include another household member who travel together to be inserted into the record for the second person. This automatic insert of information reduces the burden of the second respondent to be queried about a trip already reported by the initial respondent.

Data range, consistency and edit checks are automatically programmed to reduce reporting error, survey length, and maintain the flow of information processing. Data cross checks also help reduce the burden by ensuring that the reporting is consistent within each trip.

Data retrieval is based upon materials provided to participants as shown below.

Travel Log Materials

Travel Log Packet. The travel log packet will include a letter, an exemplar log, and personalized travel logs for each age eligible person in the household, and will be sent using first class postage in a 6''x9'' envelope. The envelopes will be branded to match the

letterhead used for the invitation letter. The second respondent incentive will be included with the travel logs. This $5 cash incentive is expected to serve as a ''good faith'' incentive to encourage completion of the retrieval survey.

Travel Log Letter. A household letter will be included in the travel log packet. The letter will further familiarize the participants with the travel recording stage, identify the households' travel date and provide details about when and how to complete the retrieval survey. The letter will also remind participants about the final $20 household incentive. Like the invitation letter, the travel log letter will be branded.

Travel Logs. A personalized travel log will be provided for each household member (ages 5 and older). The logs are intended to be a memory jogger to guide accurate data collection and aid in the reporting of each place visited on the travel day.

Exemplar Log. Participants will be provided with an exemplar log with the instructions for recording the details about the places visited on the travel day.

All web and computer assisted telephone interview (CATI) instruments will be reviewed for Section 508 compliance using the rules specified in sections 1194.22—'Web-based intranet and internet information and applications' and 1194.23—'Telecommunications products.' All materials will be available in both English and Spanish language forms. Spanish translations will be developed using industry standards and will apply reverse-translation protocols.

Estimated Burden Hours For Information Collection

Frequency: This collection will be conducted every 5–7 years.

Respondents. A stratified random sample of 26,000 households across the 50 states and the District of Columbia will be included in the survey. Household will include an average of 2.5 members for a total of 65,000 individual respondents to the main survey.

Estimated Average Burden per Response. It will take approximately 5 minutes per household member to complete the recruitment data form, and 20 minutes to complete the retrieval survey. This results in a total of 25 minutes per household member.

Total Annual Burden Hours. It is estimated that a total of 65,000 persons will be included in the survey. This would result in approximately 27,083 hours of support for this data collection effort.

Public Comments Invited

You are asked to comment on any aspect of this information collection, including: (1) Whether the proposed collection of information is necessary for the USDOT's performance, including whether the information will have practical utility; (2) the data acquisition methods; (3) the accuracy of the USDOT's estimate of the burden of the proposed information collection; (4) the types of data being acquired; (5) ways to enhance the quality, usefulness, and clarity of the collected information; and (6) ways that the burden could be minimized without reducing the quality of the collected information. The agency will summarize and/or include your comments in the request for OMB's clearance of this information collection.

Authority: The Paperwork Reduction Act of 1995; 44 U.S.C. Chapter 35, as amended; and 49 CFR 1.48.

Dated: February 13, 2015.

Michael Howell,

Information Collection Officer, Federal Highway Administration.

[FR Doc. 2015–03462 Filed 2–18–15; 8:45 am]

BILLING CODE P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No FMCSA–2014–0177]

Crash Weighting Research Findings

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice; Extension of comment period.

SUMMARY: FMCSA extends the comment period for its January 23, 2015, notice. This notice shares information on the ''Crash Weighting Analysis'' which informs decision-making about the feasibility of using a motor carrier's role in crashes as an indicator of future crash risk. The January notice advised the public of the availability of the study report for review and comment, and requested feedback on what steps the Agency should take regarding crash and Police Accident Report (PAR) data quality. The Agency extends the deadline for comment from February 23 to March 25, 2015.

DATES: Comments must be received on or before [March 25, 2015].

ADDRESSES: You may submit comments identified by docket number FMCSA–2014–0177 using any one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.*
- *Fax:* 202–493–2251.
- *Mail:* Docket Management Facility (M–30), U.S. Department of Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590–0001.
- *Hand delivery or courier:* Same as mail address above, between 9 a.m. and 5 p.m., e.t., Monday through Friday, except Federal holidays. The telephone number is 202–366–9329.

To avoid duplication, please use only one of these four methods. See the ''Public Participation and Request for Comments'' heading under the **SUPPLEMENTARY INFORMATION** section below for instructions on submitting comments.

FOR FURTHER INFORMATION CONTACT: Ms. Dee Williams, Federal Motor Carrier Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590, Telephone 202–366–1812 or by email: *dee.williams@dot.gov.* FMCSA *office hours are from 9 a.m. to 5 p.m., e.t., Monday through Friday, except Federal holidays.* If you have questions on viewing or submitting material to the docket, contact Docket Operations at telephone 202–366–9826.

SUPPLEMENTARY INFORMATION:

I. Public Participation and Request for Comments

FMCSA encourages you to participate by submitting comments and related materials.

Submitting Comments

If you submit a comment, please include the docket number for this notice (FMCSA–2014- 0177), indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online or by fax, mail, or hand delivery, but please use only one of these means. FMCSA recommends that you include your name and a mailing address, an email address, or a phone number in the body of your document so the Agency can contact you if it has questions regarding your submission.

To submit your comment online, go to *http://www.regulations.gov* and click on the ''Submit a Comment'' box, which will then become highlighted in blue. In the ''Document Type'' drop down menu, select ''Rules,'' insert ''FMCSA–2014–0177'' in the ''Keyword'' box, and click ''Search.'' When the new screen appears, click on ''Submit a Comment'' in the ''Actions'' column. If you submit your comments by mail or hand delivery, submit them in an unbound

format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the facility, please enclose a stamped, self-addressed postcard or envelope.

FMCSA will consider all comments and material received during the comment period and may change this analysis based on your comments.

Viewing Comments and Documents

To view comments, as well as documents mentioned in this preamble as being available in the docket, go to *http://www.regulations.gov* and click on the ''Read Comments'' box in the upper right hand side of the screen. Then, in the ''Keyword'' box, insert ''FMCSA–2014–0177'' and click ''Search.'' Next, click ''Open Docket Folder'' in the ''Actions'' column. Finally, in the ''Title'' column, click on the document you would like to review. If you do not have access to the Internet, you may view the docket online by visiting the Docket Management Facility in Room W12–140 on the ground floor of the DOT West Building, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., e.t., Monday through Friday, except Federal holidays.

Privacy Act

In accordance with U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to *http://www.regulations.gov* as described in the system of records notice (DOT/ALL–14 FDMS), can be reviewed at *http://www.dot.gov/privacy.*

Background

FMCSA is extending the comment period to March 25, 2015 because interested parties have requested more time. This study assesses (1) whether PARs provide sufficient, consistent, and reliable information to support crash weighting determinations; (2) whether a crash weighting determination process would offer an even stronger predictor of crash risk than overall crash involvement and how crash weighting would be implemented in the Agency's Safety Measurement System (SMS); and (3) how FMCSA might manage a process for making crash weighting determinations, including the acceptance of public input. This notice extends the public comment period in response to stakeholder requests.

Issued on: February 12, 2015.

Larry W. Minor,

Associate Administrator for Policy.

[FR Doc. 2015–03471 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[FMCSA Docket No. FMCSA–2014–0310]

Qualification of Drivers; Exemption Applications; Diabetes Mellitus

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice of final disposition.

SUMMARY: FMCSA confirms its decision to exempt 66 individuals from its rule prohibiting persons with insulin-treated diabetes mellitus (ITDM) from operating commercial motor vehicles (CMVs) in interstate commerce. The exemptions enable these individuals to operate CMVs in interstate commerce.

DATES: The exemptions were effective on January 15, 2015. The exemptions expire on January 15, 2017.

FOR FURTHER INFORMATION CONTACT: Charles A. Horan, III, Director, Carrier, Driver and Vehicle Safety Standards, (202) 366–4001, *fmcsamedical@dot.gov,* FMCSA, Room W64–224, Department of Transportation, 1200 New Jersey Avenue SE., Washington, DC 20590–0001. Office hours are from 8:30 a.m. to 5 p.m., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

I. Electronic Access

You may see all the comments online through the Federal Document Management System (FDMS) at: *http://www.regulations.gov.*

Docket: For access to the docket to read background documents or comments, go to *http://www.regulations.gov* and/or Room W12–140 on the ground level of the West Building, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Privacy Act: In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to *www.regulations.gov,* as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at *www.dot.gov/privacy.*

II. Background

On December 15, 2014, FMCSA published a notice of receipt of Federal diabetes exemption applications from 66 individuals and requested comments from the public (79 FR 74159). The public comment period closed on January 14, 2015, and no comments were received.

FMCSA has evaluated the eligibility of the 66 applicants and determined that granting the exemptions to these individuals would achieve a level of safety equivalent to or greater than the level that would be achieved by complying with the current regulation 49 CFR 391.41(b)(3).

Diabetes Mellitus and Driving Experience of the Applicants

The Agency established the current requirement for diabetes in 1970 because several risk studies indicated that drivers with diabetes had a higher rate of crash involvement than the general population. The diabetes rule provides that a person is physically qualified to drive a commercial motor vehicle if that person has no established medical history or clinical diagnosis of diabetes mellitus currently requiring insulin for control (49 CFR 391.41(b)(3)).

FMCSA established its diabetes exemption program, based on the Agency's July 2000 study entitled ''A Report to Congress on the Feasibility of a Program to Qualify Individuals with Insulin-Treated Diabetes Mellitus to Operate in Interstate Commerce as Directed by the Transportation Act for the 21st Century.'' The report concluded that a safe and practicable protocol to allow some drivers with ITDM to operate CMVs is feasible. The September 3, 2003 (68 FR 52441), **Federal Register** notice in conjunction with the November 8, 2005 (70 FR 67777), **Federal Register** notice provides the current protocol for allowing such drivers to operate CMVs in interstate commerce.

These 66 applicants have had ITDM over a range of one to 41 years. These applicants report no severe hypoglycemic reactions resulting in loss of consciousness or seizure, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning symptoms, in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the past 5 years. In each case, an endocrinologist verified that the driver has demonstrated a willingness to properly monitor and manage his/her diabetes mellitus, received education related to

diabetes management, and is on a stable insulin regimen. These drivers report no other disqualifying conditions, including diabetes-related complications. Each meets the vision requirement at 49 CFR 391.41(b)(10).

The qualifications and medical condition of each applicant were stated and discussed in detail in the December 15, 2014, **Federal Register** notice and they will not be repeated in this notice.

III. Discussion of Comments

FMCSA received no comments in this proceeding.

IV. Basis for Exemption Determination

Under 49 U.S.C. 31136(e) and 31315, FMCSA may grant an exemption from the diabetes requirement in 49 CFR 391.41(b)(3) if the exemption is likely to achieve an equivalent or greater level of safety than would be achieved without the exemption. The exemption allows the applicants to operate CMVs in interstate commerce.

To evaluate the effect of these exemptions on safety, FMCSA considered medical reports about the applicants' ITDM and vision, and reviewed the treating endocrinologists' medical opinion related to the ability of the driver to safely operate a CMV while using insulin.

Consequently, FMCSA finds that in each case exempting these applicants from the diabetes requirement in 49 CFR 391.41(b)(3) is likely to achieve a level of safety equal to that existing without the exemption.

V. Conditions and Requirements

The terms and conditions of the exemption will be provided to the applicants in the exemption document and they include the following: (1) That each individual submit a quarterly monitoring checklist completed by the treating endocrinologist as well as an annual checklist with a comprehensive medical evaluation; (2) that each individual reports within 2 business days of occurrence, all episodes of severe hypoglycemia, significant complications, or inability to manage diabetes; also, any involvement in an accident or any other adverse event in a CMV or personal vehicle, whether or not it is related to an episode of hypoglycemia; (3) that each individual provide a copy of the ophthalmologist's or optometrist's report to the medical examiner at the time of the annual medical examination; and (4) that each individual provide a copy of the annual medical certification to the employer for retention in the driver's qualification file, or keep a copy in his/her driver's qualification file if he/she is self-employed. The driver must also have a copy of the certification when driving, for presentation to a duly authorized Federal, State, or local enforcement official.

VI. Conclusion

Based upon its evaluation of the 66 exemption applications, FMCSA exempts the following drivers from the diabetes requirement in 49 CFR 391.41(b)(10), subject to the requirements cited above (49 CFR 391.64(b)):

Eric D. Ambler (WI)
Clay B. Anderson (IL)
Gregory C. Bartley (PA)
Aaron M. Batts (NC)
Nathan R. Batzel (MN)
Michael R. Bell (MD)
Andrew P. Coffey (CT)
Robert N. Coury (NV)
Jerry A. Cox, Sr. (LA)
Lloyd F. Cuckow (CO)
Kenneth B. Dennard (GA)
Eric Q. Dickerson (IN)
James P. Dreifuerst (WI)
Billy D. Dryer (MO)
James H. Elliott (OH)
Domenic R. Folino (PA)
Jimmie W. Grist (ID)
Scott M. Guyette (WI)
Carl D. Hall (KY)
Howard M. Hammel (NJ)
Derrick D. Harris (IL)
Terry M. Jacobson (WI)
Kevin R. Johnson (MI)
Martin S. Kiss (IL)
Robert S. Krueger (WA)
David J. Long (PA)
Michael R. Ludowese (MN)
David P. Magee (MO)
Gary F. Marson (WI)
Steven R. Mc Clain (IL)
Arthur D. McFadden, Sr. (IA)
Elbert J. Means (SC)
James A. Meridith (MI)
Richard A. Moore (PA)
Keith B. Muehler (ND)
John K. Murray (NY)
Harold N. Myers (IA)
Clayton L. Neuhauser (ND)
Eugene E. Patterson, III (TX)
John D. Pede, Jr. (PA)
Jack E. Pollock (GA)
John F. Prophet (FL)
David M. Pullen (VA)
Dominic F. Quartullo (WI)
David Quintrall (WY)
Michael E. Reed (IA)
Carlos B. Rodriguez (NY)
Marvin A. Ryan (IN)
David J. Sierra (NJ)
Larry D. Small (NJ)
Roger E. Smith (IA)
Terrell W. Smith (PA)
Anthony L. Spratto (WI)
Timothy R. Stephens (KS)
Howard C. Stines (TN)
Christopher E. Swanson (CA)
Scott R. Swisher (KS)
Diana C. Tabala (NY)
Brewster E. Thurston (VT)
Phillip J. Ulmer (LA)
Charles A. Walker (IL)
Roger L. Watt (PA)
John D. Weaver (WY)
Avery White (GA)
Leroy D. Yost (IA)
Wayne W. Zander (SD)

In accordance with 49 U.S.C. 31136(e) and 31315 each exemption is valid for two years unless revoked earlier by FMCSA. The exemption will be revoked if the following occurs: (1) The person fails to comply with the terms and conditions of the exemption; (2) the exemption has resulted in a lower level of safety than was maintained before it was granted; or (3) continuation of the exemption would not be consistent with the goals and objectives of 49 U.S.C. 31136(e) and 31315. If the exemption is still effective at the end of the 2-year period, the person may apply to FMCSA for a renewal under procedures in effect at that time.

Dated: February 10, 2015.

Larry W. Minor,

Associate Administrator for Policy.

[FR Doc. 2015–03459 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2014–0298]

Qualification of Drivers; Exemption Applications; Vision

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice of final disposition.

SUMMARY: FMCSA announces its decision to exempt 34 individuals from the vision requirement in the Federal Motor Carrier Safety Regulations (FMCSRs). They are unable to meet the vision requirement in one eye for various reasons. The exemptions will enable these individuals to operate commercial motor vehicles (CMVs) in interstate commerce without meeting the prescribed vision requirement in one eye. The Agency has concluded that granting these exemptions will provide a level of safety that is equivalent to or greater than the level of safety maintained without the exemptions for these CMV drivers.

DATES: The exemptions were granted December 24, 2014. The exemptions expire on December 24, 2016.

FOR FURTHER INFORMATION CONTACT: Charles A. Horan, III, Director, Carrier, Driver and Vehicle Safety Standards, (202) 366–4001, *fmcsamedical@dot.gov,* FMCSA, Department of Transportation, 1200 New Jersey Avenue SE., Room W64–224, Washington, DC 20590–0001. Office hours are from 8:30 a.m. to 5 p.m., Monday through Friday, except Federal holidays. If you have questions on viewing or submitting material to the docket, contact Docket Services, telephone (202) 366–9826.

SUPPLEMENTARY INFORMATION:

I. Electronic Access

You may see all the comments online through the Federal Document Management System (FDMS) at *http://www.regulations.gov.*

Docket: For access to the docket to read background documents or comments, go to *http://www.regulations.gov* and/or Room W12–140 on the ground level of the West Building, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Privacy Act: In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to *www.regulations.gov,* as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at *www.dot.gov/privacy.*

II. Background

On November 24, 2014, FMCSA published a notice of receipt of exemption applications from certain individuals, and requested comments from the public (79 FR 69985). That notice listed 34 applicants' case histories. The 34 individuals applied for exemptions from the vision requirement in 49 CFR 391.41(b)(10), for drivers who operate CMVs in interstate commerce.

Under 49 U.S.C. 31136(e) and 31315, FMCSA may grant an exemption for a 2-year period if it finds ''such exemption would likely achieve a level of safety that is equivalent to or greater than the level that would be achieved absent such exemption.'' The statute also allows the Agency to renew exemptions at the end of the 2-year period. Accordingly, FMCSA has evaluated the 34 applications on their merits and made a determination to grant exemptions to each of them.

III. Vision and Driving Experience of the Applicants

The vision requirement in the FMCSRs provides:

A person is physically qualified to drive a commercial motor vehicle if that person has distant visual acuity of at least 20/40 (Snellen) in each eye without corrective lenses or visual acuity separately corrected to 20/40 (Snellen) or better with corrective lenses, distant binocular acuity of a least 20/40 (Snellen) in both eyes with or without corrective lenses, field of vision of at least 70° in the horizontal meridian in each eye, and the ability to recognize the colors of traffic signals and devices showing red, green, and amber (49 CFR 391.41(b)(10)).

FMCSA recognizes that some drivers do not meet the vision requirement but have adapted their driving to accommodate their vision limitation and demonstrated their ability to drive safely. The 34 exemption applicants listed in this notice are in this category. They are unable to meet the vision requirement in one eye for various reasons, including a prosthetic eye, amblyopia, complete loss of vision, optic atrophy, retinal damage, strabismic amblyopia, a corneal scar, rubiosis iridis, a macular scar, cataract, ischemic optic neuropathy, refractive amblyopia, a scar, and vision loss. In most cases, their eye conditions were not recently developed. Twenty-four of the applicants were either born with their vision impairments or have had them since childhood.

The ten individuals that sustained their vision conditions as adults have had them for a range of four to 34 years.

Although each applicant has one eye which does not meet the vision requirement in 49 CFR 391.41(b)(10), each has at least 20/40 corrected vision in the other eye, and in a doctor's opinion, has sufficient vision to perform all the tasks necessary to operate a CMV. Doctors' opinions are supported by the applicants' possession of valid commercial driver's licenses (CDLs) or non-CDLs to operate CMVs. Before issuing CDLs, States subject drivers to knowledge and skills tests designed to evaluate their qualifications to operate a CMV.

All of these applicants satisfied the testing requirements for their State of residence. By meeting State licensing requirements, the applicants demonstrated their ability to operate a CMV, with their limited vision, to the satisfaction of the State.

While possessing a valid CDL or non-CDL, these 34 drivers have been authorized to drive a CMV in intrastate commerce, even though their vision disqualified them from driving in interstate commerce. They have driven CMVs with their limited vision in careers ranging from three to 40 years. In the past three years, two of the drivers were involved in crashes and three were convicted of moving violations in a CMV.

The qualifications, experience, and medical condition of each applicant were stated and discussed in detail in the November 24, 2014, notice (79 FR 69985).

IV. Basis for Exemption Determination

Under 49 U.S.C. 31136(e) and 31315, FMCSA may grant an exemption from the vision requirement in 49 CFR 391.41(b)(10) if the exemption is likely to achieve an equivalent or greater level of safety than would be achieved without the exemption. Without the exemption, applicants will continue to be restricted to intrastate driving. With the exemption, applicants can drive in interstate commerce. Thus, our analysis focuses on whether an equal or greater level of safety is likely to be achieved by permitting each of these drivers to drive in interstate commerce as opposed to restricting him or her to driving in intrastate commerce.

To evaluate the effect of these exemptions on safety, FMCSA considered the medical reports about the applicants' vision as well as their driving records and experience with the vision deficiency.

To qualify for an exemption from the vision requirement, FMCSA requires a person to present verifiable evidence that he/she has driven a commercial vehicle safely with the vision deficiency for the past 3 years. Recent driving performance is especially important in evaluating future safety, according to several research studies designed to correlate past and future driving performance. Results of these studies support the principle that the best predictor of future performance by a driver is his/her past record of crashes and traffic violations. Copies of the studies may be found at Docket Number FMCSA–1998–3637.

FMCSA believes it can properly apply the principle to monocular drivers, because data from the Federal Highway Administration's (FHWA) former waiver study program clearly demonstrate the driving performance of experienced monocular drivers in the program is better than that of all CMV drivers collectively (See 61 FR 13338, 13345, March 26, 1996). The fact that experienced monocular drivers demonstrated safe driving records in the waiver program supports a conclusion that other monocular drivers, meeting the same qualifying conditions as those required by the waiver program, are also likely to have adapted to their vision

deficiency and will continue to operate safely.

The first major research correlating past and future performance was done in England by Greenwood and Yule in 1920. Subsequent studies, building on that model, concluded that crash rates for the same individual exposed to certain risks for two different time periods vary only slightly (See Bates and Neyman, University of California Publications in Statistics, April 1952). Other studies demonstrated theories of predicting crash proneness from crash history coupled with other factors. These factors—such as age, sex, geographic location, mileage driven and conviction history—are used every day by insurance companies and motor vehicle bureaus to predict the probability of an individual experiencing future crashes (See Weber, Donald C., ''Accident Rate Potential: An Application of Multiple Regression Analysis of a Poisson Process,'' Journal of American Statistical Association, June 1971). A 1964 California Driver Record Study prepared by the California Department of Motor Vehicles concluded that the best overall crash predictor for both concurrent and nonconcurrent events is the number of single convictions. This study used 3 consecutive years of data, comparing the experiences of drivers in the first 2 years with their experiences in the final year.

Applying principles from these studies to the past 3-year record of the 34 applicants, two of the drivers were involved in crashes, and three were convicted of moving violations in a CMV. All the applicants achieved a record of safety while driving with their vision impairment, demonstrating the likelihood that they have adapted their driving skills to accommodate their condition. As the applicants' ample driving histories with their vision deficiencies are good predictors of future performance, FMCSA concludes their ability to drive safely can be projected into the future.

We believe that the applicants' intrastate driving experience and history provide an adequate basis for predicting their ability to drive safely in interstate commerce. Intrastate driving, like interstate operations, involves substantial driving on highways on the interstate system and on other roads built to interstate standards. Moreover, driving in congested urban areas exposes the driver to more pedestrian and vehicular traffic than exists on interstate highways. Faster reaction to traffic and traffic signals is generally required because distances between them are more compact. These conditions tax visual capacity and driver response just as intensely as interstate driving conditions. The veteran drivers in this proceeding have operated CMVs safely under those conditions for at least 3 years, most for much longer. Their experience and driving records lead us to believe that each applicant is capable of operating in interstate commerce as safely as he/she has been performing in intrastate commerce. Consequently, FMCSA finds that exempting these applicants from the vision requirement in 49 CFR 391.41(b)(10) is likely to achieve a level of safety equal to that existing without the exemption. For this reason, the Agency is granting the exemptions for the 2-year period allowed by 49 U.S.C. 31136(e) and 31315 to the 34 applicants listed in the notice of November 24, 2014 (79 FR 69985).

We recognize that the vision of an applicant may change and affect his/her ability to operate a CMV as safely as in the past. As a condition of the exemption, therefore, FMCSA will impose requirements on the 34 individuals consistent with the grandfathering provisions applied to drivers who participated in the Agency's vision waiver program.

Those requirements are found at 49 CFR 391.64(b) and include the following: (1) That each individual be physically examined every year (a) by an ophthalmologist or optometrist who attests that the vision in the better eye continues to meet the requirement in 49 CFR 391.41(b)(10) and (b) by a medical examiner who attests that the individual is otherwise physically qualified under 49 CFR 391.41; (2) that each individual provide a copy of the ophthalmologist's or optometrist's report to the medical examiner at the time of the annual medical examination; and (3) that each individual provide a copy of the annual medical certification to the employer for retention in the driver's qualification file, or keep a copy in his/her driver's qualification file if he/she is self-employed. The driver must have a copy of the certification when driving, for presentation to a duly authorized Federal, State, or local enforcement official.

V. Discussion of Comments

FMCSA received no comments in this proceeding.

VI. Conclusion

Based upon its evaluation of the 34 exemption applications, FMCSA exempts the following drivers from the vision requirement in 49 CFR 391.41(b)(10), subject to the requirements cited above (49 CFR 391.64(b)):

Peter H. Bailey (MI)
Dewey E. Ballard, Jr. (SC)
Steven M. Claney (IA)
Thurman T. Clayton, Jr. (LA)
Tig G. Cornell (ID)
Kevin R. Cowger (WY)
Jon R. Davidson (CO)
David R. Demura (TX)
Edwin T. Donaldson (PA)
William W. R. Dunn (PA)
Larry E. Emanuel, Jr. (FL)
Barbara A. Evans (NH)
Russell J. Fisher (MT)
Timothy J. Fisher (FL)
Bradley J. Gaspard (LA)
Perry D. Hamilton (TN)
Jerome A. Henderson (VA)
William A. Hill III (OH)
James C. Jankowski (WI)
Glen L. Joens (IA)
Phillip V. King (KY)
Keith C. Lendt (MN)
Daniel E. Manchester (GA)
Richard B. McMaster (AR)
Joseph McTear, Jr. (TX)
Martin Montañez (IL)
Lee A. Mosier (IA)
Timothy L. O'Neill (NY)
John W. Randels (CO)
Carl W. Russell (OK)
Valnei L. Santos (FL)
Thomas L. Stanaway (MI)
Daniel R. Thompson (PA)
Luther W. Wieder, Jr. (ME)

In accordance with 49 U.S.C. 31136(e) and 31315, each exemption will be valid for 2 years unless revoked earlier by FMCSA. The exemption will be revoked if: (1) The person fails to comply with the terms and conditions of the exemption; (2) the exemption has resulted in a lower level of safety than was maintained before it was granted; or (3) continuation of the exemption would not be consistent with the goals and objectives of 49 U.S.C. 31136 and 31315.

If the exemption is still effective at the end of the 2-year period, the person may apply to FMCSA for a renewal under procedures in effect at that time.

Dated: February 10, 2015.

Larry W. Minor,

Associate Administrator for Policy.

[FR Doc. 2015–03461 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA- 2014–0313]

Qualification of Drivers; Exemption Applications; Diabetes Mellitus

AGENCY: Federal Motor Carrier Safety Administration (FMCSA).

ACTION: Notice of applications for exemptions; request for comments.

SUMMARY: FMCSA announces receipt of applications from 78 individuals for exemption from the prohibition against persons with insulin-treated diabetes mellitus (ITDM) operating commercial motor vehicles (CMVs) in interstate commerce. If granted, the exemptions would enable these individuals with ITDM to operate CMVs in interstate commerce.

DATES: Comments must be received on or before March 23, 2015.

ADDRESSES: You may submit comments bearing the Federal Docket Management System (FDMS) Docket No. FMCSA–2014–0313 using any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov.* Follow the on-line instructions for submitting comments.
- *Mail:* Docket Management Facility; U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.
- *Hand Delivery:* West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays.
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FOR FURTHER INFORMATION CONTACT: Charles A. Horan, III, Director, Carrier, Driver and Vehicle Safety Standards, (202) 366–4001, *fmcsamedical@dot.gov,* FMCSA, Department of Transportation, 1200 New Jersey Avenue SE., Room W64–224, Washington, DC 20590–0001. Office hours are from 8:30 a.m. to 5 p.m., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

I. Background

Under 49 U.S.C. 31136(e) and 31315, FMCSA may grant an exemption from the Federal Motor Carrier Safety Regulations for a 2-year period if it finds ''such exemption would likely achieve a level of safety that is equivalent to or greater than the level that would be achieved absent such exemption.'' The statute also allows the Agency to renew exemptions at the end of the 2-year period. The 78 individuals listed in this notice have recently requested such an exemption from the diabetes prohibition in 49 CFR 391.41(b) (3), which applies to drivers of CMVs in interstate commerce. Accordingly, the Agency will evaluate the qualifications of each applicant to determine whether granting the exemption will achieve the required level of safety mandated by statute.

II. Qualifications of Applicants

Timothy E. Adkins

Mr. Adkins, 45, has had ITDM since 2007. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Adkins understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Adkins meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Kentucky.

John Angelesco, III

Mr. Angelesco, 22, has had ITDM since 2004. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Angelesco understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Angelesco meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Massachusetts.

Matthew D. Anthony

Mr. Anthony, 29, has had ITDM since 2005. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Anthony understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Anthony meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Minnesota.

Daniel S. Arke

Mr. Arke, 48, has had ITDM since 2011. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Arke understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Arke meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Hawaii.

Raul Arlequin, Jr.

Mr. Arlequin, 55, has had ITDM since 1999. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Arlequin understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Arlequin meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he has stable nonproliferative diabetic retinopathy. He holds a Class A CDL from New Jersey.

Dale A. Bahr

Mr. Bahr, 54, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Bahr understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Bahr meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Wisconsin.

Darren E. Barrett

Mr. Barrett, 45, has had ITDM since 2007. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Barrett understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Barrett meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Texas.

Chad W. Beeman

Mr. Beeman, 31, has had ITDM since 2013. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Beeman understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Beeman meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from New York.

William W. Bell III

Mr. Bell, 63, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Bell understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Bell meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Vermont.

Jeffrey S. Bohle

Mr. Bohle, 54, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Bohle understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Bohle meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Iowa.

Bradley T. Boyd

Mr. Boyd, 51, has had ITDM since 1991. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Boyd understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Boyd meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Iowa.

Bradley M. Brauer

Mr. Brauer, 48, has had ITDM since 2000. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Brauer understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Brauer meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class B CDL from Nebraska.

Gary W. Brendel

Mr. Brendel, 61, has had ITDM since 2009. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Brendel understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV

safely. Mr. Brendel meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from New York.

Thomas Browning

Mr. Browning, 63, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Browning understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Browning meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Pennsylvania.

Kell D. Busby, Jr.

Mr. Busby, 44, has had ITDM since 2011. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Busby understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Busby meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a chauffeur's license from Michigan.

Norman W. Camp

Mr. Camp, 63, has had ITDM since 2013. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Camp understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Camp meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Tennessee.

Rafael B. Castillo

Mr. Castillo, 66, has had ITDM since 2006. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Castillo understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Castillo meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he has stable nonproliferative diabetic retinopathy. He holds a Class C CDL from New Jersey.

Camille M. Converse-Smith

Ms. Converse-Smith, 54, has had ITDM since 2014. Her endocrinologist examined her in 2014 and certified that she has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. Her endocrinologist certifies that Ms. Converse-Smith understands diabetes management and monitoring, has stable control of her diabetes using insulin, and is able to drive a CMV safely. Ms. Converse-Smith meets the requirements of the vision standard at 49 CFR 391.41(b)(10). Her ophthalmologist examined her in 2014 and certified that she does not have diabetic retinopathy. She holds an operator's license from Wisconsin.

Zachary D. Craig

Mr. Craig, 33, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Craig understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Craig meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from North Dakota.

Terry R. Darnall

Mr. Darnall, 59, has had ITDM since 2003. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Darnall understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Darnall meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Illinois.

Raymond W. Dropps

Mr. Dropps, 50, has had ITDM since 2011. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Dropps understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Dropps meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Minnesota.

Curtis W. Fox

Mr. Fox, 55, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or

resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Fox understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Fox meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Indiana.

William H. Geiselhart, Jr.

Mr. Geiselhart, 56, has had ITDM since 2006. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Geiselhart understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Geiselhart meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he has stable nonproliferative diabetic retinopathy. He holds a Class A CDL from Pennsylvania.

Darrel G. Goetz

Mr. Goetz, 57, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Goetz understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Goetz meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Missouri.

Chris S. Hammack

Mr. Hammack, 46, has had ITDM since 1976. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Hammack understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Hammack meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Colorado.

James P. Hancock, Jr.

Mr. Hancock, 56, has had ITDM since 1996. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Hancock understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Hancock meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he has stable nonproliferative diabetic retinopathy. He holds a Class A CDL from Pennsylvania.

Donald S. Hanson

Mr. Hanson, 50, has had ITDM since 2011. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Hanson understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Hanson meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Minnesota.

Michael Hasley

Mr. Hasley, 52, has had ITDM since 2002. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Hasley understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Hasley meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Arkansas.

Gene A. Heibult

Mr. Heibult, 63, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Heibult understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Heibult meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from South Dakota.

Ronald R. Herrington

Mr. Herrington, 59, has had ITDM since 1984. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Herrington understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Herrington meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His

ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from West Virginia.

Jay H. Hess

Mr. Hess, 48, has had ITDM since 2013. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Hess understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Hess meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Pennsylvania.

Kevin L. Holmes

Mr. Holmes, 55, has had ITDM since 1984. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Holmes understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Holmes meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he has stable nonproliferative diabetic retinopathy. He holds a Class C CDL from Illinois.

Claude E. Hoskins

Mr. Hoskins, 55, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Hoskins understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Hoskins meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Washington.

Brian L. Hughes

Mr. Hughes, 43, has had ITDM since 2009. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Hughes understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Hughes meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class B CDL from Pennsylvania.

Ulysses Jones, II

Mr. Jones, 52, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Jones understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Jones meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Indiana.

Sean M. Jordan

Mr. Jordan, 40, has had ITDM since 1986. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Jordan understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Jordan meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Pennsylvania.

Steven N. Kemp

Mr. Kemp, 34, has had ITDM since 2009. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Kemp understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Kemp meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Texas.

Tracy A. Knake

Mr. Knake, 55, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Knake understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Knake meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Iowa.

Cory D. Knowles

Mr. Knowles, 43, has had ITDM since 2008. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Knowles understands

diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Knowles meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Tennessee.

Eric J. Kuster

Mr. Kuster, 28, has had ITDM since 2013. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Kuster understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Kuster meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Iowa.

Daniel J. Lacroix

Mr. Lacroix, 40, has had ITDM since 2010. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Lacroix understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Lacroix meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Massachusetts.

Robert E. Lane

Mr. Lane, 44, has had ITDM since 2011. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Lane understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Lane meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Indiana.

James D. Langer

Mr. Langer, 57, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Langer understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Langer meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Wisconsin.

Jason C. Lewis

Mr. Lewis, 27, has had ITDM since 2007. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Lewis understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Lewis meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Maryland.

Corey A. Maas

Mr. Maas, 27, has had ITDM since 1997. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Maas understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Maas meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Kansas.

James P. MacDonald

Mr. MacDonald, 54, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. MacDonald understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. MacDonald meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Massachusetts.

Michael T. Markowitz

Mr. Markowitz, 64, has had ITDM since 2013. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Markowitz understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Markowitz meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Illinois.

Timothy D. Maxson

Mr. Maxson, 55, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or

resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Maxson understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Maxson meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from New York.

Roger McDonald

Mr. McDonald, 60, has had ITDM since 2013. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. McDonald understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. McDonald meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Utah.

Guy D. McGuire

Mr. McGuire, 57, has had ITDM since 2004. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. McGuire understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. McGuire meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2015 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Maryland.

Roy A. Montalvan

Mr. Montalvan, 56, has had ITDM since 1981. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Montalvan understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Montalvan meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Pennsylvania.

William M. Nafus

Mr. Nafus, 56, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Nafus understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Nafus meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he has stable nonproliferative diabetic retinopathy. He holds a Class A CDL from Pennsylvania.

Harold L. Overholtzer

Mr. Overholtzer, 58, has had ITDM since 2009. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Overholtzer understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Overholtzer meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class B CDL from Pennsylvania.

Pandy T. Perry

Ms. Perry, 45, has had ITDM since 2014. Her endocrinologist examined her in 2014 and certified that she has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. Her endocrinologist certifies that Ms. Perry understands diabetes management and monitoring has stable control of her diabetes using insulin, and is able to drive a CMV safely. Ms. Perry meets the requirements of the vision standard at 49 CFR 391.41(b)(10). Her ophthalmologist examined her in 2014 and certified that she does not have diabetic retinopathy. She holds an operator's license from Virginia.

Justin M. Powell

Mr. Powell, 28, has had ITDM since 1993. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Powell understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Powell meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from North Carolina.

Jackie Riley

Mr. Riley, 60, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Riley understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Riley meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does

not have diabetic retinopathy. He holds a Class A CDL from North Carolina.

Rudy A. Rodriguez

Mr. Rodriguez, 55, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Rodriguez understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Rodriguez meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Oregon.

R.N. Schoonmaker

Mr. Schoonmaker, 59, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Schoonmaker understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Schoonmaker meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from New York.

Philip M. Schopp

Mr. Schopp, 52, has had ITDM since 2011. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Schopp understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Schopp meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he has stable nonproliferative diabetic retinopathy. He holds a Class A CDL from Missouri.

Andrew T. Segetti

Mr. Segetti, 33, has had ITDM since 2013. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Segetti understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Segetti meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class B CDL from Connecticut.

Roger L. Shones

Mr. Shones, 58, has had ITDM since 2004. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Shones understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Shones meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he has stable nonproliferative diabetic retinopathy. He holds a Class A CDL from Minnesota.

William L. Sirabella

Mr. Sirabella, 55, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Sirabella understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Sirabella meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Rhode Island.

Ronald D. Strobo

Mr. Strobo, 45, has had ITDM since 1989. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Strobo understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Strobo meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Florida.

Rodney H. Swartz

Mr. Swartz, 63, has had ITDM since 2004. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Swartz understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Swartz meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from New York.

John S. Tingley

Mr. Tingley, 47, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in

the last 5 years. His endocrinologist certifies that Mr. Tingley understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Tingley meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class B CDL from Vermont.

David A. Tipps

Mr. Tipps, 56, has had ITDM since 2003. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Tipps understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Tipps meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Illinois.

Keith J. Tschetter

Mr. Tschetter, 53, has had ITDM since 2013. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Tschetter understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Tschetter meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class B CDL from North Dakota.

Sean E. Twohig

Mr. Twohig, 51, has had ITDM since 1970. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Twohig understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Twohig meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from New York.

Robert A. Wais

Mr. Wais, 56, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Wais understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Wais meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from New York.

Ashley D. Waite

Mr. Waite, 62, has had ITDM since 2000. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Waite understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Waite meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Vermont.

Jimmie W. Ward

Mr. Ward, 65, has had ITDM since 2006. His endocrinologist examined him in 2015 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Ward understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Ward meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2015 and certified that he has stable nonproliferative diabetic retinopathy. He holds a Class A CDL from North Carolina.

Michael R. Waskow

Mr. Waskow, 55, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Waskow understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Waskow meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Wisconsin.

Brent J. Weber

Mr. Weber, 40, has had ITDM since 1999. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Weber understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Weber meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds an operator's license from Colorado.

James B. Westphal

Mr. Westphal, 57, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no

severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Westphal understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Westphal meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Wisconsin.

Nathan L. Wilkerson

Mr. Wilkerson, 48, has had ITDM since 2006. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Wilkerson understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Wilkerson meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he has stable nonproliferative diabetic retinopathy. He holds a Class A CDL from Utah.

John A. Winquist

Mr. Winquist, 61, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Winquist understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Winquist meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from South Dakota.

Robert J. Wyand

Mr. Wyand, 51, has had ITDM since 2014. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Wyand understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Wyand meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His optometrist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from New York.

Michael E. Zincone

Mr. Zincone, 56, has had ITDM since 2012. His endocrinologist examined him in 2014 and certified that he has had no severe hypoglycemic reactions resulting in loss of consciousness, requiring the assistance of another person, or resulting in impaired cognitive function that occurred without warning in the past 12 months and no recurrent (2 or more) severe hypoglycemic episodes in the last 5 years. His endocrinologist certifies that Mr. Zincone understands diabetes management and monitoring, has stable control of his diabetes using insulin, and is able to drive a CMV safely. Mr. Zincone meets the requirements of the vision standard at 49 CFR 391.41(b)(10). His ophthalmologist examined him in 2014 and certified that he does not have diabetic retinopathy. He holds a Class A CDL from Rhode Island.

III. Request for Comments

In accordance with 49 U.S.C. 31136(e) and 31315, FMCSA requests public comment from all interested persons on the exemption petitions described in this notice. We will consider all comments received before the close of business on the closing date indicated in the date section of the notice.

FMCSA notes that section 4129 of the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users requires the Secretary to revise its diabetes exemption program established on September 3, 2003 (68 FR 52441).[1] The revision must provide for individual assessment of drivers with diabetes mellitus, and be consistent with the criteria described in section 4018 of the Transportation Equity Act for the 21st Century (49 U.S.C. 31305).

Section 4129 requires: (1) Elimination of the requirement for 3 years of experience operating CMVs while being treated with insulin; and (2) establishment of a specified minimum period of insulin use to demonstrate stable control of diabetes before being allowed to operate a CMV.

In response to section 4129, FMCSA made immediate revisions to the diabetes exemption program established by the September 3, 2003 notice. FMCSA discontinued use of the 3-year driving experience and fulfilled the requirements of section 4129 while continuing to ensure that operation of CMVs by drivers with ITDM will achieve the requisite level of safety required of all exemptions granted under 49 U.S.C. 31136(e).

Section 4129(d) also directed FMCSA to ensure that drivers of CMVs with ITDM are not held to a higher standard than other drivers, with the exception of limited operating, monitoring and medical requirements that are deemed medically necessary.

The FMCSA concluded that all of the operating, monitoring and medical requirements set out in the September 3, 2003 notice, except as modified, were in compliance with section 4129(d). Therefore, all of the requirements set out in the September 3, 2003 notice, except as modified by the notice in the **Federal Register** on November 8, 2005 (70 FR 67777), remain in effect.

IV. Submitting Comments

You may submit your comments and material online or by fax, mail, or hand delivery, but please use only one of these means. FMCSA recommends that you include your name and a mailing address, an email address, or a phone number in the body of your document so that FMCSA can contact you if there are questions regarding your submission.

To submit your comment online, go to *http://www.regulations.gov* and in the search box insert the docket number FMCSA–2014–0313 and click the search button. When the new screen appears, click on the blue ''Comment Now!'' button on the right hand side of the page. On the new page, enter information required including the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation. If you submit your comments by mail or hand delivery, submit them in an unbound format, no

[1] Section 4129(a) refers to the 2003 notice as a ''final rule.'' However, the 2003 notice did not issue a ''final rule'' but did establish the procedures and standards for issuing exemptions for drivers with ITDM.

larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the facility, please enclose a stamped, self-addressed postcard or envelope.

We will consider all comments and material received during the comment period and may change this proposed rule based on your comments. FMCSA may issue a final rule at any time after the close of the comment period.

V. Viewing Comments and Documents

To view comments, as well as any documents mentioned in this preamble, To submit your comment online, go to *http://www.regulations.gov* and in the search box insert the docket number FMCSA–2014–0313 and click ''Search.'' Next, click ''Open Docket Folder'' and you will find all documents and comments related to the proposed rulemaking.

Issued on: February 10, 2015.

Larry W. Minor,

Associate Administrator for Policy.

[FR Doc. 2015–03428 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. DOT–MARAD 2015 0021]

Request for Comments of a Previously Approved Information Collection

ACTION: Notice and request for comments.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), this notice announces that the Information Collection Request (ICR) abstracted below is being forwarded to the Office of Management and Budget (OMB) for review and comments. A **Federal Register** Notice with a 60-day comment period soliciting comments on the following information collection was published on November 26, 2014 (**Federal Register** 70611, Vol. 79, No. 228).

DATES: Comments must be submitted on or before March 23, 2015.

FOR FURTHER INFORMATION CONTACT: Michael Yarrington, (202) 366–1915, Office of Marine Insurance, Maritime Administration, U.S. Department of Transportation, 1200 New Jersey Avenue SE., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

Title: Seamen's Claims, Administrative Action and Litigation.

OMB Control Number: 2133–0522.

Type of Request: Renewal of a Previously Approved Information Collection.

Abstract: The collection consists of information obtained from claimants for death, injury, or illness suffered while serving as officers or members of a crew on board a vessel owned or operated by the United States through the Maritime Administration. The Maritime Administration reviews the information and makes a determination regarding the issues of agency and vessel liability and the reasonableness of the recovery demand.

Affected Public: Officers or members of a crew who suffered death, injury, or illness while employed on vessels owned or operated by the United States through the Maritime Administration. Also included are surviving dependents, beneficiaries, and legal representatives of officers or crew members.

Estimated Number of Respondents: 15.

Estimated Number of Responses: 15.

Annual Estimated Total Annual Burden Hours: 188.

ADDRESSES: Send comments regarding the burden estimate, including suggestions for reducing the burden, to the Office of Management and Budget, Attention: Desk Officer for the Office of the Secretary of Transportation, 725 17th Street NW., Washington, DC 20503. Comments are invited on: Whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; the accuracy of the Department's estimate of the burden of the proposed information collection; ways to enhance the quality, utility and clarity of the information to be collected; and ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

Authority: The Paperwork Reduction Act of 1995; 44 U.S.C. Chapter 35, as amended; and 49 CFR 1.93.

Dated: February 10, 2015.

Christine Gurland,

Acting Secretary, Maritime Administration.

[FR Doc. 2015–03369 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–81–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[U.S. DOT Docket Number NHTSA–2014–0115]

Reports, Forms, and Recordkeeping Requirements

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

ACTION: Request for public comment on extension of a currently approved collection of information.

SUMMARY: Before a Federal agency can collect certain information from the public, it must receive approval from the Office of Management and Budget (OMB). Under procedures established by the Paperwork Reduction Act of 1995, before seeking OMB approval, Federal agencies must solicit public comment on proposed collections of information, including extensions and reinstatement of previously approved collections. This document describes an existing collection of information for motor vehicle tire and rim labeling requirements for which NHTSA intends to seek renewed OMB approval. The **Federal Register** notice with a 60-day comment period was published on November 25, 2014 (79 FR 70274).

DATES: Comments must be received on or before March 23, 2015.

ADDRESSES: Send comments within 30 days to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503. Attention: NHTSA Desk Officer.

FOR FURTHER INFORMATION CONTACT: Dr. Abigail Morgan, NHTSA, 1200 New Jersey Avenue SE., Room W43–467, NVS–122, Washington, DC 20590. Telephone: (202) 366–1810.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995, before an agency submits a proposed collection of information to OMB for approval, it must first publish a document in the **Federal Register** providing a 60-day comment period and otherwise consult with members of the public and affected agencies concerning each proposed collection of information. The OMB has promulgated regulations describing what must be included in such a document. Under OMB's regulation (at 5 CFR 1320.8(d)), an agency must ask for public comment on the following topics:

(1) Is the proposed collection of information necessary for the proper performance of the functions of the

agency? Does the information collection have practical utility?

(2) Is the agency's estimate of the burden of the proposed collection of information accurate? Is the methodology valid (including the assumptions used)?

(3) How can the agency enhance the quality, utility, and clarity of the information that we plan to collect?

(4) How can the agency minimize the burden of collecting this information on those who are to respond? Are there appropriate automated, electronic, mechanical, or other technological collection techniques (or other forms of information technology) that would be suitable for this collection (*e.g.,* permitting electronic submission of responses)?

In compliance with these requirements, NHTSA published a notice in the **Federal Register** providing a 60-day comment period, and we received no public comments on the renewal of this information collection (79 FR 70274). Today's notice provides a 30-day comment period in which public comments on the renewal of this information collection may be submitted to OMB.

Title: Tires and Rims Labeling.

OMB Control Number: 2127–0503.

Type of Request: Extension of a currently approved collection of information.

Form Number: This collection of information uses no standard form.

Abstract: Each tire manufacturer and rim manufacturer must label their tires and rims with applicable safety information. In addition, each vehicle manufacturer must affix a label to each vehicle indicating the designated tire size for the vehicle. These labeling requirements ensure that tires are mounted on the appropriate rims, and that the rims and tires are mounted on the vehicle for which they are intended.

Affected Public: Business or other for profit.

Estimated Annual Burden: 274,491 hours.

Estimated Number of Respondents: 1,800.

Comments are invited on: Whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; the accuracy of the Department's estimate of the burden of the proposed information collection; ways to enhance the quality, utility and clarity of the information to be collected; and ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology. A comment to OMB is most effective if OMB receives it within 30 days of publication of this notice.

Raymond R. Posten,

Associate Administrator for Rulemaking.

[FR Doc. 2015–03412 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. DOT–NHTSA–2015–0012]

Notice and Request for Comments

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Notice and request for comments.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), this notice announces that the Information Collection Request (ICR) abstracted below is being forwarded to the Office of Management and Budget (OMB) for review and comments. A **Federal Register** Notice with a 60-day comment period soliciting comments on the following information collection was published on December 5, 2014, 79 FR 72243–72244.

DATES: Comments must be submitted on or before March 23, 2015.

FOR FURTHER INFORMATION CONTACT: Walter Culbreath, Office of Chief Information Officer, National Highway Traffic Safety Administration, 1200 New Jersey Ave., SE, W48–311, Washington, DC, 20590. Walter Culbreath's phone number is 202–366–1566.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995, before an agency submits a proposed collection of information to OMB for approval, it must first publish a document in the **Federal Register** providing a 60-day comment period and otherwise consult with members of the public and affected agencies concerning each proposed collection of information. The OMB has promulgated regulations describing what must be included in such a document. Under OMB's regulation (at 5CFR 1320.8(d), an agency must ask for public comment on the following:

(i) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(ii) The accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(iii) How to enhance the quality, utility, and clarity of the information to be collected;

(iv) how to minimize the burden of the collection of information on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.* permitting electronic submission of responses.

In compliance with these requirements, NHTSA asks for public comments on the following proposed collection of information for which the agency is seeking approval from:

OMB Control Number: 2127–0682.

Title: Generic Clearance for the Collection of Qualitative Feedback on Agency Service Delivery.

Type of Request: Extension of a currently approved collection.

Abstract: The proposed information collection activity provides a means to garner qualitative customer and stakeholder feedback in an efficient, timely manner, in accordance with the Administration's commitment to improving service delivery.

This feedback will provide insights into customer or stakeholder perceptions, experiences and expectations, provide an early warning of issues with service, or focus attention on areas where communication, training or changes in operations might improve delivery of products or services. These collections will allow for ongoing, collaborative and actionable communications between the Agency and its customers and stakeholders. It will also allow feedback to contribute directly to the improvement of program management.

The solicitation of feedback will target areas such as: Timeliness, appropriateness, accuracy of information, courtesy, efficiency of service delivery, and resolution of issues with service delivery. Responses will be assessed to plan and inform efforts to improve or maintain the quality of service offered to the public. If this information is not collected, vital feedback from customers and stakeholders on the Agency's services will be unavailable.

The Agency will only submit a collection for approval under this generic clearance if it meets the following conditions:

- The collections are voluntary;
- The collections are low-burden for respondents (based on considerations of

total burden hours, total number of respondents, or burden-hours per respondent) and are low-cost for both the respondents and the Federal Government;

- The collections are non-controversial and do not raise issues of concern to other Federal agencies;
- Any collection is targeted to the solicitation of opinions from respondents who have experience with the program or may have experience with the program in the near future;
- Personally identifiable information (PII) is collected only to the extent necessary and is not retained;
- Information gathered is intended to be used only internally for general service improvement and program management purposes and is not intended for release outside of the agency (if released, the agency must indicate the qualitative nature of the information);
- Information gathered will not be used for the purpose of substantially informing influential policy decisions; and
- Information gathered will yield qualitative information; the collections will not be designed or expected to yield statistically reliable results or used as though the results are generalizable to the population of study.

Feedback collected under this generic clearance provides useful information, but it does not yield data that can be generalized to the overall population. This type of generic clearance for qualitative information will not be used for quantitative information collections that are designed to yield reliably actionable results, such as monitoring trends over time or documenting program performance. Such data uses require more rigorous designs that address: the target population to which generalizations will be made, the sampling frame, the sample design (including stratification and clustering), the precision requirements or power calculations that justify the proposed sample size, the expected response rate, methods for assessing potential non-response bias, the protocols for data collection, and any testing procedures that were or will be undertaken prior to fielding the study. Depending on the degree of influence the results are likely to have, such collections may still be eligible for submission for other generic mechanisms that are designed to yield quantitative results.

As a general matter, information collections will not result in any new system of records containing privacy information and will not ask questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

Affected Public: Individuals and Households, Businesses and Organizations, State, Local or Tribal Government.

Frequency: Once per request.

Estimated Total Annual Burden Hours: 20,204.

Number of Respondents: 113,582.

ADDRESSES: Send comments regarding the burden estimate, including suggestions for reducing the burden, to the Office of Management and Budget, Attention: Desk Officer for the Office of the Secretary of Transportation, 725 17th Street NW., Washington, DC 20503.

Comments are invited on: Whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; the accuracy of the Department's estimate of the burden of the proposed information collection; ways to enhance the quality, utility and clarity of the information to be collected; and ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

Authority: The Paperwork Reduction Act of 1995; 44 U.S.C. Chapter 35, as amended; and 49 CFR 1:48.

Paul Mounkhaty,

ISSM/Chief Architect.

[FR Doc. 2015–03335 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

Reports, Forms and Record Keeping Requirements; Agency Information Collection Activity Under OMB Review

AGENCY: National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), this notice announces that the Information Collection Request (ICR) abstracted below has been forwarded to the Office of Management and Budget (OMB) for review and comment. The ICR describes the nature of the information collections and their expected burden. The **Federal Register** Notice with a 60-day comment period was published on November 25, 2014 [79 FR 70272]. The 60-day comment period ended on January 25, 2015. The agency received no comment.

DATES: Comments must be submitted on or before March 23, 2015.

ADDRESSES: Send comments, within 30 days, to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503, Attention NHTSA Desk Officer.

FOR FURTHER INFORMATION CONTACT: Mr. Hisham Mohamed, NHTSA, 1200 New Jersey Ave. SE., West Building, Room W43–437, NVS–131, Washington, DC 20590. Mr. Mohamed's telephone number is (202) 366–0307.

SUPPLEMENTARY INFORMATION:

National Highway Traffic Safety Administration

Title: 49 CFR 575—Consumer Information Regulations (sections 103 and 105).

OMB Control Number: 2127–0049.

Form Number: None.

Affected Public: Vehicle manufacturers.

Requested Expiration Date of Approval: Three years from approval date.

Abstract: NHTSA must ensure that motor vehicle manufacturers comply with 49 CFR part 575, Consumer Information Regulation part 575.103 Truck-camper loading and part 575.105 Utility Vehicles. Part 575.103 requires that manufacturers of light trucks that are capable of accommodating slide-in campers provide information on the cargo weight rating and the longitudinal limits within which the center of gravity for the cargo weight rating should be located. Part 575.105 requires that manufacturers of utility vehicles affix a sticker in a prominent location alerting drivers that the particular handling and maneuvering characteristics of utility vehicles require special driving practices when these vehicles are operated.

Estimated Annual Burden: 300 hours.

Number of Respondents: 15.

Based on prior years' manufacturer submissions, the agency estimates that 15 responses will be submitted annually. Currently 19 light truck manufacturers comply with 49 CFR part 575. These manufacturers file one response annually and submit an additional response when they introduce a new model. Changes are rarely filed with the agency, but we estimate that three manufacturers will alter their information because of model changes. The light truck manufacturers gather only pre-existing data for the purposes of this regulation. Based on previous years' manufacturer

information, the agency estimates that light truck manufacturers use a total of 20 hours. Specifically, manufacturers use 9 hours to gather and arrange the data in its proper format, 4 hours to distribute the information to its dealerships and attach labels to light trucks that are capable of accommodating slide-in campers, and 7 hours to print the labels and utility vehicle information in the owner's manual or in a separate document included with the owner's manual. The estimated annual burden hour is 300 hours. This number reflects the total responses (15) times the total hours (20). Prior years' manufacturer information indicates that it takes an average of $37.00 per hour for professional and clerical staff to gather data, distribute and print material. Therefore, the agency estimates that the cost associated with the burden hours is $11,100 ($37.00 per hour × 300 burden hours).

Estimated Annual Cost: $2,432,924.

The annual cost is based on light truck production. In model year 2013, light truck manufacturers produced about 8,298,102 units. By assuming that all light truck manufacturers (both large and small volume manufacturers) incur the same cost, the total annual cost to comply with statutory requirements, § 575.103 and § 575.105 is equal to $2,904,336 (or $0.35 each unit).

Comments Are Invited On:

- Whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility.
- Whether the Department's estimate for the burden of the proposed information collection is accurate.
- Ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

A comment to OMB is most effective if OMB receives it within 30 days of publication.

Raymond R. Posten,

Associate Administrator for Rulemaking.

[FR Doc. 2015–03411 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[U.S. DOT Docket Number NHTSA–2014–0116]

Reports, Forms, and Recordkeeping Requirements

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

ACTION: Request for public comment on extension of a currently approved collection of information.

SUMMARY: Before a Federal agency can collect certain information from the public, it must receive approval from the Office of Management and Budget (OMB). Under procedures established by the Paperwork Reduction Act of 1995, before seeking OMB approval, Federal agencies must solicit public comment on proposed collections of information, including extensions and reinstatement of previously approved collections. This document describes an existing collection of information for 49 CFR part 574, Tire Identification and Recordkeeping, for which NHTSA intends to seek renewed OMB approval. The **Federal Register** notice with a 60-day comment period was published on November 25, 2014 (79 FR 70271).

DATES: Comments must be received on or before March 23, 2015.

ADDRESSES: Send comments within 30 days to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503. Attention: NHTSA Desk Officer.

FOR FURTHER INFORMATION CONTACT: Dr. Abigail Morgan, NHTSA, 1200 New Jersey Avenue SE., Room W43–467, NVS–122, Washington, DC 20590. Telephone: (202) 366–1810.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995, before an agency submits a proposed collection of information to OMB for approval, it must first publish a document in the **Federal Register** providing a 60-day comment period and otherwise consult with members of the public and affected agencies concerning each proposed collection of information. The OMB has promulgated regulations describing what must be included in such a document. Under OMB's regulation (at 5 CFR 1320.8(d)), an agency must ask for public comment on the following topics:

(1) Is the proposed collection of information necessary for the proper performance of the functions of the agency? Does the information collection have practical utility?

(2) Is the agency's estimate of the burden of the proposed collection of information accurate? Is the methodology valid (including the assumptions used)?

(3) How can the agency enhance the quality, utility, and clarity of the information that we plan to collect?

(4) How can the agency minimize the burden of collecting this information on those who are to respond? Are there appropriate automated, electronic, mechanical, or other technological collection techniques (or other forms of information technology) that would be suitable for this collection (*e.g.* permitting electronic submission of responses)?

In compliance with these requirements, NHTSA published a notice in the **Federal Register** providing a 60-day comment period, and we received no public comments on the renewal of this information collection (79 FR 70271). Today's notice provides a 30-day comment period in which public comments on the renewal of this information collection may be submitted to OMB.

Title: Tire Identification and Recordkeeping.

OMB Control Number: 2127–0050.

Form Number: This collection of information uses no standard form.

Type of Request: Extension of a currently approved collection of information.

Summary of the Collection of Information: 49 U.S.C. 30117(b) requires each tire manufacturer to collect and maintain records of the first purchasers of new tires. To carry out this mandate, 49 CFR part 574, Tire Identification and Recordkeeping, requires tire dealers and distributors to record the names and addresses of retail purchasers of new tires and the identification numbers(s) of the tires sold. A specific form is provided to tire dealers and distributors by tire manufacturers for recording this information. The completed forms are returned to the tire manufacturers where they are retained for not less than five years. Part 574 requires independent tire dealers and distributors to provide a registration form to consumers with the tire identification number(s) already recorded and information identifying the dealer/distributor. The consumer can then record his/her name and address and return the form to the tire manufacturer via U.S. mail, or alternatively, the consumer can provide this information electronically on the tire manufacturer's Web site if the tire manufacturer provides this capability. Additionally, motor vehicle

manufacturers are required to record the names and addresses of the first purchasers (for purposes other than resale), together with the identification numbers of the tires on the new vehicle, and retain this information for not less than five years.

Description of the Need for the Information and the Use of the Information: The information is used by a tire manufacturer after it or the agency determines that some of its tires either fail to comply with an applicable safety standard or contain a safety related defect. With the information, the tire manufacturer can notify the first purchaser of the tire and provide them with any necessary information or instructions to remedy the non-compliance situation or safety defect.

Without this information, efforts to identify the first purchaser of tires that have been determined to be defective or nonconforming pursuant to sections 30118 and 30119 of title 49 U.S.C. would be impeded. Further, the ability of the purchasers to take appropriate action in the interest of motor vehicle safety may be compromised.

Description of the Likely Respondents (Including Estimated Number and Proposed Frequency of Response to the Collection of Information): We estimate that the collection of information affects 10 million respondents annually. This group consists of approximately 20 tire manufacturers, 59,000 new tire dealers and distributors, and 10 million consumers who choose to register their tire purchases with tire manufacturers. A response is required by motor vehicle manufacturers upon each sale of a new vehicle and by non-independent tire dealers with the each sale of a new tire. A consumer may elect to respond when purchasing a new tire from an independent tire dealer.

Estimate of the Total Annual Reporting and Recordkeeping Burden Resulting from the Collection of Information: The estimated burden is as follows:

New tire dealers and distributors: 59,000.

Consumers: 10,000,000.

Total tire registrations (manual): 54,000,000.

Total tire registration hours (manual): 225,000.

Recordkeeping hours (manual): 25,000.

Total annual tire registration and recordkeeping hours: 250,000.

Comments are invited on: Whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; the accuracy of the Department's estimate of the burden of the proposed information collection; ways to enhance the quality, utility and clarity of the information to be collected; and ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology. A comment to OMB is most effective if OMB receives it within 30 days of publication of this notice.

Raymond R. Posten,

Associate Administrator for Rulemaking.

[FR Doc. 2015–03413 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

[Docket No: PHMSA–2015–0009]

Pipeline Safety: Information Collection Activities, Renewal of Annual Report for Hazardous Liquid Pipeline Systems

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, the Pipeline and Hazardous Materials Safety Administration (PHMSA) invites comments on its intent to request from the Office of Management and Budget (OMB) a three year renewal of form PHMSA F 7000–1.1—Annual Report for Hazardous Liquid Pipeline Systems which is currently collected under OMB Control number 2137–0614.

DATES: Interested parties are invited to submit comments on or before April 20, 2015.

ADDRESSES: Comments may be submitted in the following ways:

E-Gov Web site: http://www.regulations.gov. This site allows the public to enter comments on any **Federal Register** notice issued by any agency.

Fax: 1–202–493–2251.

Mail: Docket Management Facility; U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., West Building, Room W12–140, Washington, DC 20590–0001.

Hand Delivery: Room W12–140 on the ground level of DOT, West Building, 1200 New Jersey Avenue SE., Washington, DC, between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays.

Instructions: Identify the docket number, PHMSA–2012–0024, at the beginning of your comments. Note that all comments received will be posted without change to *http://www.regulations.gov,* including any personal information provided. You should know that anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). Therefore, you may want to review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000, (65 FR 19477) or visit *http://www.regulations.gov* before submitting any such comments.

Docket: For access to the docket or to read background documents or comments, go to *http://www.regulations.gov* at any time or to Room W12–140 on the ground level of DOT, West Building, 1200 New Jersey Avenue SE., Washington, DC, between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays. If you wish to receive confirmation of receipt of your written comments, please include a self-addressed, stamped postcard with the following statement: ''Comments on PHMSA–2012–0024.'' The Docket Clerk will date stamp the postcard prior to returning it to you via the U.S. mail. Please note that due to delays in the delivery of U.S. mail to Federal offices in Washington, DC, we recommend that persons consider an alternative method (internet, fax, or professional delivery service) of submitting comments to the docket and ensuring their timely receipt at DOT.

FOR FURTHER INFORMATION CONTACT: Angela Dow by telephone at 202–366–1246, by fax at 202–366–4566, or by mail at DOT, PHMSA, 1200 New Jersey Avenue SE., PHP–30, Washington, DC 20590–0001.

SUPPLEMENTARY INFORMATION: The following information is provided for each information collection: (1) Abstract for the affected annual report form; (2) title of the information collection; (3) OMB control number; (4) affected annual report form; (5) description of affected public; (6) estimate of total annual reporting and recordkeeping burden; and (7) frequency of collection. PHMSA will request a three-year term of approval for each information collection activity and, when approved by OMB, publish notice of the approval in the **Federal Register**.

PHMSA requests comments on the following information collection:

Title: Reporting Requirements for Hazardous Liquid Pipeline Operators: Hazardous Liquid Annual Report.

OMB Control Number: 2137–0614.

Current Expiration Date: 12/31/2015.

Type of Request: Renewal without change.

Abstract: Each operator must annually complete and submit Form PHMSA F 7000–1.1 for each type of hazardous liquid pipeline facility operated at the end of the previous year as required by 49 CFR 195.49. This Annual Report for Hazardous Liquid Pipeline Systems is required to be filed by June 15 of each year for the preceding calendar year. On the Annual Report form, PHMSA collects data concerning the number of miles of pipeline each operator has and other characteristics of each pipeline system. PHMSA also collects information on the number of anomalies identified and repaired using various types of pipe inspection and assessment methods.

Affected Public: Hazardous liquid pipeline operators.

Annual Reporting and Recordkeeping Burden:

Total Annual Responses: 447.

Total Annual Burden Hours: 8,457.

Frequency of collection: Annually.

Comments are invited on:

(a) The need for the proposed collection of information for the proper performance of the functions of the agency, including whether the information will have practical utility;

(b) The accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(c) Ways to enhance the quality, utility, and clarity of the information to be collected; and

(d) Ways to minimize the burden of the collection of information on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques.

Issued in Washington, DC, on February 12, 2015.

Alan K. Mayberry,

Deputy Associate Administrator for Policy and Programs.

[FR Doc. 2015–03360 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–60–P

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

Delayed Applications

AGENCY: Office of Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.

ACTION: List of application delayed more than 180 days.

SUMMARY: In accordance with the requirements of 49 U.S.C. 5117(c), PHMSA is publishing the following list of special permit applications that have been in process for 180 days or more. The reason(s) for delay and the expected completion date for action on each application is provided in association with each identified application.

FOR FURTHER INFORMATION CONTACT: Ryan Paquet, Director, Office of Hazardous Materials Special Permits and Approvals, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building, PHH–30, 1200 New Jersey Avenue Southeast, Washington, DC 20590–0001, (202) 366–4535.

Key to "Reason for Delay"

1. Awaiting additional information from applicant.
2. Extensive public comment under review.
3. Application is technically complex and is of significant impact or precedent-setting and requires extensive analysis.
4. Staff review delayed by other priority issues or volume of special permit applications.

Meaning of Application Number Suffixes

N—New application

M—Modification request

R—Renewal Request

P—Party To Exemption Request

Issued in Washington, DC, on February 3, 2015.

Donald Burger,

Chief, General Approvals and Permits.

Applicaton No.	Applicant	Reason for delay	Estimated date of completion
	Modification to Special Permits		
15642–M	Praxair Distribution, Inc., Danbury, CT	4	02–28–2015
11903–M	Comptank Corporation, Bothwell, ON	4	03–31–2015
8451–M	Special Devices, Inc., Mesa, AR	4	03–31–2015
15552–M	Poly-Coat Systems, Inc., Liverpool, TX	4	03–15–2015
12116–M	Proserv UK Ltd, East Tullos Aberdeen	4	02–28–2015
	New Special Permit Applications		
15767–N	Union Pacific Railroad Company, Omaha, NE	1	02–28–2015
16001–N	VELTEK, Malvern, PA	4	03–31–2015
16061–N	Battery Solutions, LLC, Howell, MI	4	02–28–2015
16154–N	Patriot Fireworks, LLC, Ann Arbor, MI	4	03–31–2015
16189–N	Coffeyville Resources Nitrogen Fertilizers, LLC, Kansas City, KS	4	02–28–2015
16190–N	Digital Wave Corporation, Centennial, CO	4	02–28–2015
16217–N	Fuji Electric Co., Ltd., Shinagawa-ku, To	4	04–30–2015
16198–N	Fleischmann's Vinegar Company, Inc., Cerritos, CA	4	02–28–2015
16181–N	Arc Process, Inc., Pflugerville, TX	4	03–31–2015
16212–N	Entegris, Inc., Billerica, MA	4	04–30–2015
16220–N	Americase, Waxahache, TX	4	02–28–2015
16193–N	CH&I Technologies, Inc., Santa Paula, CA	4	03–31–2015
16199–N	Rosharon Testing and Subsea Center, A Division of Schlumberger Technology Corporation, Rosharon, TX.	4	02–28–2015
15991–N	Dockweiler, Neustadt-Glewe, Germany	4	03–31–2015
	Renewal Special Permits Applications		
11602–R	East Tennessee Iron & Metal, Inc., Rogersville, TN	4	03–31–2015

Applicaton No.	Applicant	Reason for delay	Estimated date of completion
11860–R	GATX Corporation, Chicago, IL	4	02–28–2015

[FR Doc. 2015–02986 Filed 2–18–15; 8:45 am]

BILLING CODE 4910–60–M

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[Docket No. EP 290 (Sub-No. 4)]

Railroad Cost Recovery Procedures—Productivity Adjustment

AGENCY: Surface Transportation Board, DOT.

ACTION: Proposed railroad cost recovery procedures productivity adjustment.

SUMMARY: In a decision served on February 13, 2015, we proposed to adopt 1.007 (0.7% per year) as the measure of average change in railroad productivity for the 2009–2013 (5-year) averaging period. This value represents a decrease of 0.3% from the average for the 2008–2012 period. The Board's February 13, 2015 decision in this proceeding stated that comments may be filed addressing any perceived data and computational errors in our calculation. It also stated that, if there were no further action taken by the Board, the proposed productivity adjustment would become effective on March 1, 2015.

DATES: The productivity adjustment is effective March 1, 2015. Comments are due by February 25, 2015.

ADDRESSES: Send comments (an original and 10 copies) referring to Docket No. EP 290 (Sub-No. 4) to: Surface Transportation Board, 395 E Street SW., Washington, DC 20423–0001.

FOR FURTHER INFORMATION CONTACT: Michael Smith, (202) 245–0322. Federal Information Relay Service (FIRS) for the hearing impaired, (800) 877–8339.

SUPPLEMENTARY INFORMATION: Additional information is contained in the Board's decision, which is available on our Web site at *http://www.stb.dot.gov.* Copies of the decision may be purchased by contacting the Board's Office of Public Assistance, Governmental Affairs, and Compliance at (202) 245–0236. Assistance for the hearing impaired is available through FIRS at (800) 877–8339.

This action will not significantly affect either the quality of the human environment or the conservation of energy resources.

Decided: February 12, 2015.

By the Board, Acting Chairman Miller and Vice Chairman Begeman.

Brendetta S. Jones,

Clearance Clerk.

[FR Doc. 2015–03501 Filed 2–18–15; 8:45 am]

BILLING CODE 4915–01–P

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[Docket No. EP 558 (Sub-No. 18)]

Railroad Cost of Capital—2014

AGENCY: Surface Transportation Board, DOT.

ACTION: Notice of decision instituting a proceeding to determine the railroad industry's 2014 cost of capital.

SUMMARY: The Board is instituting a proceeding to determine the railroad industry's cost of capital for 2014. The decision solicits comments on the following issues: (1) The railroads' 2014 current cost of debt capital; (2) the railroads' 2014 current cost of preferred equity capital (if any); (3) the railroads' 2014 cost of common equity capital; and (4) the 2014 capital structure mix of the railroad industry on a market value basis. Comments should focus on the various cost of capital components listed above using the same methodology followed in *Railroad Cost of Capital—2013*, EP 558 (Sub-No. 17) (STB served July 31, 2014).

DATES: Notices of intent to participate are due by March 30, 2015. Statements of the railroads are due by April 20, 2015. Statements of other interested persons are due by May 11, 2015. Rebuttal statements by the railroads are due by June 1, 2015.

ADDRESSES: Comments may be submitted either via the Board's e-filing system or in the traditional paper format. Any person using e-filing should comply with the instructions at the E–FILING link on the Board's Web site, at *http://www.stb.dot.gov.* Any person submitting a filing in the traditional paper format should send an original and 10 copies to: Surface Transportation Board, Attn: Docket No. EP 558 (Sub-No. 18), 395 E Street SW., Washington, DC 20423–0001.

FOR FURTHER INFORMATION CONTACT: Pedro Ramirez at (202) 245–0333. Assistance for the hearing impaired is available through the Federal Information Relay Service (FIRS) at (800) 877–8339.

SUPPLEMENTARY INFORMATION: The Board's decision is posted on the Board's Web site, *http://www.stb.dot.gov.* Copies of the decision may be purchased by contacting the Board's Office of Public Assistance, Governmental Affairs, and Compliance at (202) 245–0238. Assistance for the hearing impaired is available through FIRS at (800) 877–8339.

This action will not significantly affect either the quality of the human environment or the conservation of energy resources.

Authority: 49 U.S.C. 10704(a).

Decided: February 11, 2015.

By the Board, Acting Chairman Miller and Vice Chairman Begeman.

Jeffrey Herzig,

Clearance Clerk.

[FR Doc. 2015–03430 Filed 2–18–15; 8:45 am]

BILLING CODE 4915–01–P

DEPARTMENT OF THE TREASURY

Departmental Offices; Submission for OMB Review, Comment Request

ACTION: Notice and request for comments.

SUMMARY: The Department of the Treasury, on behalf of itself and the United States Bureau of Engraving and Printing (BEP) and as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to comment on a new proposed information collection, as required by the Paperwork Reduction Act of 1995, Public Law 104–13 (44 U.S.C. 3506(c)(2)(A)). The BEP has requested and received approval for a generic clearance to conduct conference studies and focus groups. This generic clearance has allowed the BEP to collect information from attendees of conferences and gatherings for persons who are blind and visually impaired about which tactile features most effectively provide meaningful access to denominate United States paper currency. BEP is now considering a series of scientific studies that will help gauge the acuity with which blind and visually impaired persons can denominate United States paper currency using various tactile features

currently being evaluated. BEP has previously conducted an approved acuity study under OMB control number 1520–0010. Given the results of the first study and the information collected pursuant to the generic clearance, BEP now requests a second stand-alone clearance for a series of more focused scientific studies.

DATES: Written comments should be received on or before April 20, 2015 to be assured of consideration.

ADDRESSES: Comments regarding these information collections should be addressed to the BEP Contact listed below and to the Treasury Department PRA Clearance Officer, Department of the Treasury, Room 11000, 1750 Pennsylvania Avenue NW., Washington, DC 20220.

FOR FURTHER INFORMATION CONTACT: Copies of the submission(s) may be obtained by contacting Sidney Rocke, Deputy Chief Counsel, United States Department of the Treasury, Bureau of Engraving and Printing, 14th and C Streets SW., Washington, DC 20228, by telephone at 202–874–2306, or by email at *sidney.rocke@bep.gov.*

SUPPLEMENTARY INFORMATION:

Title: Study for Meaningful Access Determination.

OMB Control Number: NEW.

Abstract: A court order was issued in *American Council of the Blind* v. *Paulson,* 591 F. Supp. 2d 1 (D.D.C. 2008) (''*ACB* v. *Paulson''*) requiring the Department of the Treasury and BEP to ''provide meaningful access to United States currency for blind and other visually impaired persons, which steps shall be completed, in connection with each denomination of currency, not later than the date when a redesign of that denomination is next approved by the Secretary of the Treasury . . . .''

In compliance with the court's order, BEP intends to meet with blind and visually impaired persons and request their feedback about tactile features that BEP is considering for possible incorporation into the next U.S. paper currency redesign.

The BEP intends to contract with a specialist in the field of tactile acuity to conduct scientific tests. The specialist contracted with by the BEP will conduct acuity testing with select groups of blind and visually impaired volunteers. The acuity tests will help either confirm or provide other perspectives on the results of BEP's information collections at national conferences and conventions. The acuity tests will also help provide a scientific basis on which BEP determines the tactile feature to be incorporated into the next United States paper currency design.

Type of Review: New Collection.

Affected Public: Individuals, Organizations.

Respondent's Obligation: Voluntary.

The study or studies will likely involve up to 500 subjects. Each individual data collection session will be approximately 90 minutes long.

Estimated Average Time per Respondent: 90 minutes per response.

Estimated Total Annual Burden Hours: Approximately 750 burden hours.

Request for Comments: Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval. All comments will become a matter of public record. The public is invited to submit written comments concerning: (a) Whether the collection of information is necessary for the proper performance of the functions of the Bureau, including whether the information will have practical uses; (b) the accuracy of the above estimate of the burden of the proposed information collection; (c) ways to enhance the quality, usefulness, and clarity of the information to be collected; and (d) ways to minimize the reporting burdens on respondents, including the use of automated collection techniques or other forms of information technology.

Direct Comments to: Sidney Rocke, Deputy Chief Counsel, United States Department of the Treasury, Bureau of Engraving and Printing, 14th and C Streets SW., Washington, DC 20228.

Robert Dahl,

Treasury Department PRA Clearance Officer.

[FR Doc. 2015–03415 Filed 2–18–15; 8:45 am]

BILLING CODE 4810–25–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Open Meeting of the Taxpayer Advocacy Panel Joint Committee

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of meeting.

SUMMARY: An open meeting of the Taxpayer Advocacy Panel Joint Committee will be conducted. The Taxpayer Advocacy Panel is soliciting public comments, ideas, and suggestions on improving customer service at the Internal Revenue Service.

DATES: The meeting will be held Wednesday, March 25, 2015.

FOR FURTHER INFORMATION CONTACT: Lisa Billups at 1–888–912–1227 or (214) 413–6523.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to Section 10(a)(2) of the Federal Advisory Committee Act, 5 U.S.C. App. (1988) that an open meeting of the Taxpayer Advocacy Panel Joint Committee will be held Wednesday, March 25, 2015, at 1:00 p.m. Eastern Time via teleconference. The public is invited to make oral comments or submit written statements for consideration. For more information please contact Lisa Billups at 1–888–912–1227 or 214–413–6523, or write TAP Office 1114 Commerce Street, Dallas, TX 75242–1021, or post comments to the Web site: *http://www.improveirs.org.*

The agenda will include various committee issues for submission to the IRS and other TAP related topics. Public input is welcomed.

Dated: February 12, 2015.

Otis Simpson,

Acting Director, Taxpayer Advocacy Panel.

[FR Doc. 2015–03512 Filed 2–18–15; 8:45 am]

BILLING CODE 4830–01–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Open Meeting of the Taxpayer Advocacy Panel Special Projects Committee

AGENCY: Internal Revenue Service (IRS) Treasury.

ACTION: Notice of meeting.

SUMMARY: An open meeting of the Taxpayer Advocacy Panel Special Projects Committee will be conducted. The Taxpayer Advocacy Panel is soliciting public comments, ideas, and suggestions on improving customer service at the Internal Revenue Service.

DATES: The meeting will be held Thursday, March 5, 2015.

FOR FURTHER INFORMATION CONTACT: Kim Vinci at 1–888–912–1227 or 916–974–5086.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to Section 10(a)(2) of the Federal Advisory Committee Act, 5 U.S.C. App. (1988) that a meeting of the Taxpayer Advocacy Panel Special Projects Committee will be held Thursday, March 5, 2015, at 2 p.m. Eastern Time via teleconference. The public is invited to make oral comments or submit written statements for consideration. Due to limited conference lines, notification of intent to participate must be made with Kim Vinci. For more information please contact: Kim Vinci at 1–888–912–1227 or 916–974–5086, TAP

Office, 4330 Watt Ave, Sacramento, CA 95821, or contact us at the Web site: *http://www.improveirs.org.*

The agenda will include a discussion on various special topics with IRS processes.

February 12, 2015.

Otis Simpson,

Acting Director, Taxpayer Advocacy Panel.

[FR Doc. 2015–03474 Filed 2–17–15; 11:15 am]

BILLING CODE 4830–01–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Open Meeting of the Taxpayer Advocacy Panel Tax Forms and Publications Project Committee

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of meeting.

SUMMARY: An open meeting of the Taxpayer Advocacy Panel Tax Forms and Publications Project Committee will be conducted. The Taxpayer Advocacy Panel is soliciting public comments, ideas and suggestions on improving customer service at the Internal Revenue Service.

DATES: The meeting will be held March 3, 2015.

FOR FURTHER INFORMATION CONTACT: Donna Powers at 1–888–912–1227 or (954) 423–7977.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to section 10(a)(2) of the Federal Advisory Committee Act, 5 U.S.C. App. (1988) that an open meeting of the Taxpayer Advocacy Panel Tax Forms and Publications Project Committee will be held Tuesday, March 3, 2015 at 1 p.m. Eastern Time via teleconference. The public is invited to make oral comments or submit written statements for consideration. Due to limited conference lines, notification of intent to participate must be made with Donna Powers. For more information please contact: Donna Powers at 1–888–912–1227 or (954) 423–7977 or write: TAP Office, 1000 S. Pine Island Road, Plantation, FL 33324 or contact us at the Web site: *http://www.improveirs.org.* The committee will be discussing various issues related to Tax Forms and Publications and public input is welcomed.

Dated: February 12, 2015.

Otis Simpson,

Acting Director, Taxpayer Advocacy Panel.

[FR Doc. 2015–03472 Filed 2–17–15; 11:15 am]

BILLING CODE 4830–01–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Open Meeting of the Taxpayer Advocacy Panel Taxpayer Communications Project Committee

AGENCY: Internal Revenue Service (IRS) Treasury.

ACTION: Notice of meeting.

SUMMARY: An open meeting of the Taxpayer Advocacy Panel Taxpayer Communications Project Committee will be conducted. The Taxpayer Advocacy Panel is soliciting public comments, ideas, and suggestions on improving customer service at the Internal Revenue Service.

DATES: The meeting will be held Thursday, March 5, 2015.

FOR FURTHER INFORMATION CONTACT: Janice Spinks at 1–888–912–1227 or (206) 946–3006.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to Section 10(a)(2) of the Federal Advisory Committee Act, 5 U.S.C. App. (1988) that an open meeting of the Taxpayer Advocacy Panel Taxpayer Communications Project Committee will be held Thursday, March 5, 2015, at 3 p.m. Eastern Time via teleconference. The public is invited to make oral comments or submit written statements for consideration. Due to limited conference lines, notification of intent to participate must be made with Janice Spinks. For more information please contact: Janice Spinks at 1–888–912–1227 or 206 946–3006, or write TAP Office, 915 2nd Avenue, MS W–406, Seattle, WA 98174, or post comments to the Web site: *http://www.improveirs.org.*

The committee will be discussing various issues related to Taxpayer Communications and public input is welcome.

February 12, 2015.

Otis Simpson,

Acting Director, Taxpayer Advocacy Panel.

[FR Doc. 2015–03475 Filed 2–17–15; 11:15 am]

BILLING CODE 4830–01–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Open Meeting of the Taxpayer Advocacy Panel Notices and Correspondence Project Committee

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of meeting.

SUMMARY: An open meeting of the Taxpayer Advocacy Panel Notices and Correspondence Project Committee will be conducted. The Taxpayer Advocacy Panel is soliciting public comments, ideas, and suggestions on improving customer service at the Internal Revenue Service.

DATES: The meeting will be held Thursday, March 12, 2015.

FOR FURTHER INFORMATION CONTACT: Theresa Singleton at 1–888–912–1227 or 202–317–3329.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to Section 10(a)(2) of the Federal Advisory Committee Act, 5 U.S.C. App. (1988) that a meeting of the Taxpayer Advocacy Panel Notices and Correspondence Project Committee will be held Thursday, March 12, 2015, at 12:00 p.m. Eastern Time via teleconference. The public is invited to make oral comments or submit written statements for consideration. Due to limited conference lines, notification of intent to participate must be made with Theresa Singleton. For more information please contact: Theresa Singleton at 1–888–912–1227 or 202–317–3329, TAP Office, 1111 Constitution Avenue NW., Room 1509–National Office, Washington, DC 20224, or contact us at the Web site: *http://www.improveirs.org.*

The agenda will include a discussion on various letters, and other issues related to written communications from the IRS.

Dated: February 12, 2015.

Otis Simpson,

Acting Director, Taxpayer Advocacy Panel.

[FR Doc. 2015–03511 Filed 2–18–15; 8:45 am]

BILLING CODE 4830–01–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Open Meeting of the Taxpayer Advocacy Panel Taxpayer Assistance Center Improvements Project Committee

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of meeting.

SUMMARY: An open meeting of the Taxpayer Advocacy Panel Taxpayer Assistance Center Improvements Project Committee will be conducted. The Taxpayer Advocacy Panel is soliciting public comments, ideas, and suggestions on improving customer service at the Internal Revenue Service.

DATES: The meeting will be held Wednesday, March 11, 2015.

FOR FURTHER INFORMATION CONTACT: Otis Simpson at 1–888–912–1227 or 202–317–3332.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to Section 10(a)(2) of the Federal Advisory Committee Act, 5 U.S.C. App. (1988) that a meeting of the Taxpayer Advocacy Panel Taxpayer Assistance Center Improvements Project Committee will be held Wednesday, March 11, 2015, at 3:00 p.m. Eastern Time. The public is invited to make oral comments or submit written statements for consideration. Due to limited conference lines, notification of intent to participate must be made with Otis Simpson. For more information please contact: Otis Simpson at 1–888–912–1227 or 202–317–3332, TAP Office, 1111 Constitution Avenue NW., Room 1509, National Office, Washington, DC 20224, or contact us at the Web site: *http://www.improveirs.org.*

The committee will be discussing various issues related to the Taxpayer Assistance Centers and public input is welcomed.

Dated: February 12, 2015.

Otis Simpson,

Acting Director, Taxpayer Advocacy Panel.

[FR Doc. 2015–03507 Filed 2–18–15; 8:45 am]

BILLING CODE 4830–01–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Open Meeting of the Taxpayer Advocacy Panel Toll-Free Phone Line Project Committee

AGENCY: Internal Revenue Service (IRS) Treasury.

ACTION: Notice of meeting.

SUMMARY: An open meeting of the Taxpayer Advocacy Panel Toll-Free Phone Line Project Committee will be conducted. The Taxpayer Advocacy Panel is soliciting public comments, ideas, and suggestions on improving customer service at the Internal Revenue Service.

DATES: The meeting will be held Wednesday, March 18, 2015.

FOR FURTHER INFORMATION CONTACT: Linda Rivera at 1–888–912–1227 or (202) 317–3337.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to Section 10(a)(2) of the Federal Advisory Committee Act, 5 U.S.C. App. (1988) that an open meeting of the Taxpayer Advocacy Panel Toll-Free Phone Line Project Committee will be held Wednesday, March 18, 2015 at 2:30 p.m. Eastern Time via teleconference. The public is invited to make oral comments or submit written statements for consideration. Due to limited conference lines, notification of intent to participate must be made with Linda Rivera. For more information please contact: Ms. Rivera at 1–888–912–1227 or (202) 317–3337, or write TAP Office, 1111 Constitution Avenue NW., Room 1509, National Office, Washington, DC 20224, or contact us at the Web site: *http://www.improveirs.org.*

The committee will be discussing Toll-free issues and public input is welcomed.

Dated: February 12, 2015.

Otis Simpson,

Acting Director, Taxpayer Advocacy Panel.

[FR Doc. 2015–03510 Filed 2–18–15; 8:45 am]

BILLING CODE 4830–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0113]

Proposed Information Collection (Application for Fee or Roster Personnel Designation) Activity: Comment Request

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: The Veterans Benefits Administration (VBA), Department of Veterans Affairs (VA), is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed revision of a currently approved collection, and allow 60 days for public comment in response to the notice. This notice solicits comments on information needed to determine applicants' qualifications as a fee appraiser or compliance inspector.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before April 20, 2015.

ADDRESSES: Submit written comments on the collection of information through Federal Docket Management System (FDMS) at *www.Regulations.gov* or to Nancy J. Kessinger, Veterans Benefits Administration (20M33), Department of Veterans Affairs, 810 Vermont Avenue NW., Washington, DC 20420 or email to *nancy.kessinger@va.gov.* Please refer to ''OMB Control No. 2900–0113'' in any correspondence. During the comment period, comments may be viewed online through FDMS.

FOR FURTHER INFORMATION CONTACT: Nancy J. Kessinger at (202) 632–8924 or FAX (202) 632–8925.

SUPPLEMENTARY INFORMATION: Under the PRA of 1995 (Public Law 104–13; 44 U.S.C. 3501–3521), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. This request for comment is being made pursuant to Section 3506(c)(2)(A) of the PRA.

With respect to the following collection of information, VBA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of VBA's functions, including whether the information will have practical utility; (2) the accuracy of VBA's estimate of the burden of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or the use of other forms of information technology.

Title: Application for Fee or Roster Personnel Designation, VA Form 26–6681.

OMB Control Number: 2900–0113.

Type of Review: Revision of a currently approved collection.

Abstract: Applicants complete VA form 26–6681 to apply for a position as a designate fee appraiser or compliance inspector. VA will use the data collected to determine the applicant's experience in the real estate valuation field.

Affected Public: Individuals or households.

Estimated Annual Burden: 1,000 hours.

Estimated Average Burden per Respondent: 30 minutes.

Frequency of Response: One-time.

Estimated Number of Respondents: 2,000.

Dated: February 12, 2015.

By direction of the Secretary.

Crystal Rennie,

Department Clearance Officer, Department of Veterans Affairs.

[FR Doc. 2015–03367 Filed 2–18–15; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0823]

Proposed Information Collection (Expanded Access to Non-VA Care Through the Veterans Choice Program) Activity: Comment Request

AGENCY: Veterans Health Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: The Veterans Health Administration (VHA), Department of Veterans Affairs (VA), is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each extension collection, and allow 60 days for public comment in response to the notice. This notice solicits comments on the information needed for Veterans, Veteran Representatives and health care providers to request reimbursement from the federal government for emergency services at a private institution.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before April 20, 2015.

ADDRESSES: Submit written comments on the collection of information through Federal Docket Management System (FDMS) at *www.Regulations.gov;* or Audrey Revere, Office of Regulatory and Administrative Affairs, Veterans Health Administration (10B4), Department of Veterans Affairs, 810 Vermont Avenue NW., Washington, DC 20420 or email: *Audrey.revere@va.gov.* Please refer to ''OMB Control No. 2900–0823'' in any correspondence. During the comment period, comments may be viewed online through the FDMS.

FOR FURTHER INFORMATION CONTACT: Audrey Revere at (202) 461–5694.

SUPPLEMENTARY INFORMATION: Under the PRA of 1995 (Pub. L. 104–13; 44 U.S.C. 3501–3521), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. This request for comment is being made pursuant to Section 3506(c)(2)(A) of the PRA.

With respect to the following collection of information, VHA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of VHA's functions, including whether the information will have practical utility; (2) the accuracy of VHA's estimate of the burden of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or the use of other forms of information technology.

Titles: Election to Receive Authorized Non-VA Care and Selection of Provider for the Veterans Choice Program.

OMB Control Number: 2900–0823.

Type of Review: Extension.

Abstract: Section 17.1515 requires eligible veterans to notify VA whether the veteran elects to receive authorized non-VA care through the Veterans Choice Program, be placed on an electronic waiting list, or be scheduled for an appointment with a VA health care provider. Section 17.1515(b)(1) also allows eligible veterans to specify a particular non-VA entity or health care provider, if that entity or provider meets certain requirements.

Affected Public: Individuals or Households,

Estimated Annual Burden: 185,721 burden hours.

Estimated Average Burden per Respondent: 2 minutes.

Frequency of Response: 12.64 times per year.

Estimated Number of Respondents: 440,794 respondents.

Titles: Health-Care Plan Information for the Veterans Choice Program.

OMB Control Number: 2900–0823.

Type of Review: Extension.

Abstract: Section 17.1510(d) requires eligible veterans to submit to VA information about their health-care plan to participate in the Veterans Choice Program.

Affected Public: Individuals or Households.

Estimated Annual Burden: 88,159 burden hours.

Estimated Average Burden per Respondent: 10 minutes.

Frequency of Response: 1.2 times per year.

Estimated Number of Respondents: 440,794 respondents.

Titles: Submission of Medical Record Information under the Veterans Choice Program.

OMB Control Number: 2900–0823.

Type of Review: Extension.

Abstract: Participating eligible entities and providers are required to submit a copy of any medical record related to hospital care or medical services furnished under this Program to an eligible veteran.

Affected Public: Individuals or Households.

Estimated Annual Burden: 464,428 burden hours.

Estimated Average Burden per Respondent: 5 minutes.

Frequency of Response: 29.80 times per year.

Estimated Number of Respondents: 187,000 respondents.

Titles: Submission of Information on Credentials and Licenses by Eligible Entities or Providers.

OMB Control Number: 2900–0823.

Type of Review: Extension.

Abstract: Section 17.1530 requires eligible entities and providers to submit verification that the entity or provider maintains at least the same or similar credentials and licenses as those required of VA's health care providers, as determined by the Secretary.

Affected Public: Individuals or Households.

Estimated Annual Burden: 15,583 burden hours.

Estimated Average Burden per Respondent: 5 minutes.

Frequency of Response: Once annually.

Estimated Number of Respondents: 187,000 respondents.

Dated: February 12, 2015.

By direction of the Secretary.

Crystal Rennie,

Department Clearance Officer, Department of Veterans Affairs.

[FR Doc. 2015–03354 Filed 2–18–15; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0681]

Proposed Information Collection (IL Assessment) Activity: Comment Request

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: The Veterans Benefits Administration (VBA), Department of Veterans Affairs (VA), is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed revision of a currently approved

collection, and allow 60 days for public comment in response to the notice. This notice solicits comments on information needed to evaluate a disabled veterans' independent living needs.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before April 20, 2015.

ADDRESSES: Submit written comments on the collection of information through Federal Docket Management System (FDMS) at *www.Regulations.gov* or to Nancy J. Kessinger, Veterans Benefits Administration (20M33), Department of Veterans Affairs, 810 Vermont Avenue NW., Washington, DC 20420 or email to *nancy.kessinger@va.gov.* Please refer to ''OMB Control No. 2900–0681'' in any correspondence. During the comment period, comments may be viewed online through the FDMS.

FOR FURTHER INFORMATION CONTACT: Nancy J. Kessinger at (202) 632–8924 or FAX (202) 632–8925.

SUPPLEMENTARY INFORMATION: Under the PRA of 1995 (Pub. L. 104–13; 44 U.S.C. 3501–21), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. This request for comment is being made pursuant to section 3506(c)(2)(A) of the PRA.

With respect to the following collection of information, VBA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of VBA's functions, including whether the information will have practical utility; (2) the accuracy of VBA's estimate of the burden of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or the use of other forms of information technology.

Title: Preliminary Independent Living (IL) Assessment, VA Form 28–0791.

OMB Control Number: 2900–0681.

Type of Review: Revision of a currently approved collection.

Abstract: VA case managers use VA Form 28–0791 while evaluating the independent living needs of veterans with severe disabilities. The data is used to determine the scope of the veteran's independent living under the Vocational Rehabilitation and Employment program.

Affected Public: Individuals or households.

Estimated Annual Burden: 2,500 hours.

Estimated Average Burden per Respondent: 1 hour.

Frequency of Response: One-time.

Estimated Number of Respondents: 2,500.

Dated: February 13, 2015.

By direction of the Secretary.

Crystal Rennie,

VA Clearance Officer, Department of Veterans Affairs.

[FR Doc. 2015–03446 Filed 2–18–15; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0205]

Proposed Information Collection (Applications and Appraisals for Employment for Title 38 Positions and Trainees); Activity: Comment Request

AGENCY: Veterans Health Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: The Veterans Health Administration (VHA), Department of Veterans Affairs (VA), is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each revision collection, and allow 60 days for public comment in response to the notice. This notice solicits comments on the information needed for Veterans, Veteran Representatives and health care providers to request reimbursement from the federal government for emergency services at a private institution.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before April 20, 2015.

ADDRESSES: Submit written comments on the collection of information through Federal Docket Management System (FDMS) at *www.Regulations.gov;* or Audrey Revere, Office of Regulatory and Administrative Affairs, Veterans Health Administration (10B4), Department of Veterans Affairs, 810 Vermont Avenue NW., Washington, DC 20420 or email: *Audrey.revere@va.gov.* Please refer to ''OMB Control No. 2900–0205'' in any correspondence. During the comment period, comments may be viewed online through the FDMS.

FOR FURTHER INFORMATION CONTACT: Audrey Revere at (202) 461–5694.

SUPPLEMENTARY INFORMATION: Under the PRA of 1995 (Pub. L. 104–13; 44 U.S.C. 3501–3521), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. This request for comment is being made pursuant to Section 3506(c)(2)(A) of the PRA.

With respect to the following collection of information, VHA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of VHA's functions, including whether the information will have practical utility; (2) the accuracy of VHA's estimate of the burden of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or the use of other forms of information technology.

Titles: Applications and Appraisals for Employment for Title 38 Positions and Trainees.

OMB Control Number: 2900–0205.

Type of Review: Revision.

Abstract: VA Forms 10–2850 and 2850a through care applications designed specifically to elicit appropriate information about each candidate's qualifications for employment with Department of Veterans Affairs (VA) as well as educational and experience. To assure that a full evaluation of each candidate's credentials can be made prior to employment, the forms require disclosure of details about all licenses ever held, Drug Enforcement Administration certification, board certification, clinical privileges, revoked certification or registration, liability insurance history, and involvement in malpractice proceedings.

The collection of this information is authorized by Title 38, United States Code (U.S.C.) 7403, (Veterans' Benefits), which provides that appointments of Title 38 employees will be made only after qualifications have been satisfactorily verified in accordance with regulations prescribed by the Secretary. Occupations listed in 38 U.S.C. 7401(1) and 7401(3) (Appointments in Veterans Health Administration), are appointed at a grade and step rate or an assignment based on careful evaluation of their education and experience.

Affected Public: Individuals or Households.

Estimated Annual Burden: 153,833 burden hours.

Estimated Average Burden per Respondent: 3 minutes.

Frequency of Response: Annually.

Estimated Number of Respondents: 412,787

Dated: February 13, 2015.

By direction of the Secretary.

Crystal Rennie,

Department Clearance Officer, Department of Veterans Affairs.

[FR Doc. 2015–03455 Filed 2–18–15; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0085]

Agency Information Collection (Appeal to Board of Veterans' Appeals) Activity Under OMB Review

AGENCY: Office of Acquisition, Logistics and Construction, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3521), this notice announces that the Board of Veterans' Appeals (BVA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden and includes the actual data collection instrument.

DATES: Comments must be submitted on or before March 23, 2015.

ADDRESSES: Submit written comments on the collection of information through *www.Regulations.gov,* or to Office of Information and Regulatory Affairs, Office of Management and Budget, Attn: VA Desk Officer; 725 17th St. NW., Washington, DC 20503 or sent through electronic mail to *oira_submission@omb.eop.gov.* Please refer to ''OMB Control No. 2900–0085'' in any correspondence. During the comment period, comments may be viewed online through the FDMS.

FOR FURTHER INFORMATION CONTACT: Crystal Rennie, Enterprise Records Service (005R1B), Department of Veterans Affairs, 810 Vermont Avenue NW., Washington, DC 20420, (202) 632–7492 or email *crystal.rennie@va.gov.* Please refer to ''OMB Control No. 2900–0085'' in any correspondence.

SUPPLEMENTARY INFORMATION:

Titles:

a. Appeal to Board of Veterans' Appeals, VA Form 9.

b. Withdrawal of Services by a Representative.

c. Request for Changes in Hearing Date.

d Motions for Reconsideration.

OMB Control Number: 2900–0085.

Type of Review: Revision of a currently approved collection.

Abstract:

a. Appeal to Board of Veterans' Appeals, VA Form 9, may be used by appellants to complete their appeal to the Board of Veterans' Appeals (BVA) from a denial of VA benefits. The information is used by BVA to identify the issues in dispute and prepare a decision responsive to the appellant's contentions and the legal and factual issues raised.

b. Withdrawal of Services by a Representative: When the appellant's representative withdraws from a case, both the appellant and the BVA must be informed so that the appellant's rights may be adequately protected and so that the BVA may meet its statutory obligations to provide notice to the current representative.

c. Request for Changes in Hearing Date: VA provides hearings to appellants and their representatives, as required by basic Constitutional due-process and by Title 38 U.S.C. 7107(b). From time to time, hearing dates and/or times are changed, hearing requests withdrawn and new hearings requested after failure to appear at a scheduled hearing. The information is used to comply with the appellants' or their representatives' requests.

d. Motions for Reconsideration: Decisions by BVA are final unless the Chairman orders reconsideration of the decision either on the Chairman's initiative, or upon motion of a claimant. The Board Chairman, or his designee, uses the information provided in deciding whether reconsideration of a Board decision should be granted.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published at 79 FR 71506 on December 2, 2014.

Affected Public: Individuals or households, Business or other for profit, and Not for profit institutions.

Estimated Total Annual Burden:

a. Appeal to Board of Veterans' Appeals, VA Form 9—52,287 hours.

b. Withdrawal of Services by a Representative—183 hours.

c. Request for Changes in Hearing Date—1,343 hours.

d. Motions for Reconsideration—642 hours.

Estimated Average Burden per Respondent:

a. Appeal to Board of Veterans' Appeals, VA Form 9—1 hour.

b. Withdrawal of Services by a Representative—20 minutes.

c. Request for Changes in Hearing Date—15 minutes (hearing date change), 15 minutes (request to withdraw a hearing),—1 hour (requests change a motion).

d. Motions for Reconsideration—1 hour.

Frequency of Response: On occasion.

Estimated Total Number of Respondents:

a. Appeal to Board of Veterans' Appeals, VA Form 9—54,340.

b. Withdrawal of Services by a Representative—550.

c. Request for Changes in Hearing Date—3,070.

d. Motions for Reconsideration—642.

Dated: February 13, 2015.

By direction of the Secretary.

Crystal Rennie,

Department Clearance Officer, Department of Veterans Affairs.

[FR Doc. 2015–03425 Filed 2–18–15; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

Advisory Committee: National Academic Affiliations Council Notice of Meeting

The Department of Veterans Affairs (VA) gives notice under Public Law 92–463 (Federal Advisory Committee Act) that a meeting of the National Academic Affiliations Council will be held March 31, 2015–April 1, 2015 in the Office of Academic Affiliations (OAA) Conference Room, 1800 G Street NW., Suite 870, Washington, DC. The March 31st sessions will begin at 9 a.m. and end at 4:30 p.m. On April 1st, sessions will begin at 9 a.m. and adjourn at 1 p.m.

The purpose of the Council is to advise the Secretary on matters affecting partnerships between VA and its academic affiliates.

On March 31, the Council will discuss strategies for continued Graduate Medical Education (GME) expansion pertaining to the 2014 Veterans Access, Choice, and Accountability (VACAA) Act; potential for health professions education expansion in rural areas; and potential new VA academic partnerships. On April 1, the Council will discuss nursing education, hear remarks from the Deputy Secretary of

Veterans Affairs, and continue the discussion concerning opportunities and challenges impacting academic affiliation relationships. The Council will receive public comments from 12:30 p.m. to 12:45 p.m. on April 1, 2015.

Interested persons may attend and present oral statements to the Council. A sign-in sheet for those who want to give comments will be available at the meeting. Individuals who speak are invited to submit a 1–2 page summary of their comments at the time of the meeting for inclusion in the official meeting record. Oral presentations will be limited to five minutes or less, depending on the number of participants. Interested parties may also provide written comments for review by the Council prior to the meeting or at any time, by email to, *William.Marks@va.gov,* or by mail to William J. Marks M.D., MS–HCM, Chief of Health Professions Education, Office of Academic Affiliations (10A2D), 810 Vermont Avenue NW., Washington, DC 20420. Because the meeting is being held in a government building, a photo I.D. must be presented at the Guard's Desk as a part of the clearance process. Therefore, you should allow an additional 15 minutes before the meeting begins. Any member of the public wishing to attend or seeking additional information should contact Dr. Marks via email or by phone at (415) 750–2100.

Dated: February 12, 2015.

Jelessa Burney,

Federal Advisory Committee Management Officer.

[FR Doc. 2015–03324 Filed 2–18–15; 8:45 am]

BILLING CODE 8320–01–P

FEDERAL REGISTER

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Part II

Environmental Protection Agency

40 CFR Part 136

Clean Water Act Methods Update Rule for the Analysis of Effluent; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 136

[EPA–HQ–OW–2014–0797; FRL–9920–55–OW]

RIN 2040–AF48

Clean Water Act Methods Update Rule for the Analysis of Effluent

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA proposes changes to pollutant analysis methods that are used by industries and municipalities to analyze the chemical, physical, and biological components of wastewater and other environmental samples that are required by regulations under the Clean Water Act. EPA designed the proposed changes to increase flexibility for the regulated community, improve data quality, and update CWA methods to keep current with technology advances and analytical methods science. EPA updates and revises the CWA analytical methods from time to time, the most recent updates being completed in 2012. The new set of proposed changes described in this notice include revisions to current EPA methods and new and/or revised methods published by voluntary consensus standard bodies, such as ASTM International and the Standard Methods Committee. EPA also proposes to approve certain methods reviewed under the alternate test procedures program and clarify the procedures for EPA approval of nationwide and limited use alternate test procedures. Further, EPA proposes amendments to the procedure for determination of the method detection limit to address laboratory contamination and to better account for intra-laboratory variability.

DATES: Comments on this proposed rule must be received on or before April 20, 2015.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OW–2014–0797, by one of the following methods:

- *www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *Email: OW-Docket@epa.gov,* Attention Docket ID number EPA–HQ–OW–2014–0797.
- *Mail:* Water Docket, Environmental Protection Agency, Mail code: 4203M, 1200 Pennsylvania Ave. NW., Washington, DC 20460. Attention Docket ID number EPA–HQ–OW–2014–0797. Please include a total of 3 copies.
- *Hand Delivery:* Water Docket, EPA Docket Center, EPA West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC, Attention Docket ID number EPA–HQ–OW–2014–0797. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information by calling 202–566–2426.

Instructions: Direct your comments to Docket ID number EPA–HQ–OW–2014–0797. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or email. The *www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through *www.regulations.gov* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information in the docket is not publicly available, *e.g.,* CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at the Water Docket in EPA Docket Center, EPA/DC, EPA West William J. Clinton Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is 202–566–1744 and the telephone number for the Water Docket is 202–566–2426.

FOR FURTHER INFORMATION CONTACT: Adrian Hanley, Engineering and Analysis Division (4303T), Office of Water, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; telephone: 202–564–1564; email: *hanley.adrian@epa.gov.*

SUPPLEMENTARY INFORMATION:

Table of Contents

I. General Information
II. Overview
III. Statutory Authority
IV. Purpose and Summary of Proposed Rule
V. Statutory and Executive Order Reviews

I. General Information

A. Does this Action apply to me?

Entities potentially affected by the requirements of this proposed action include:

Category	Examples of potentially affected entities
State, Territorial, and Indian Tribal Governments.	States, territories, and tribes authorized to administer the National Pollutant Discharge Elimination System (NPDES) permitting program; states, territories, and tribes providing certification under CWA section 401; state, territorial, and tribal owned facilities that must conduct monitoring to comply with NPDES permits.
Industry	Facilities that must conduct monitoring to comply with NPDES permits.
Municipalities	Publicly Owned Treatment Works (POTWs) or other municipality owned facilities that must conduct monitoring to comply with NPDES permits.

This table is not exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. This table lists types of entities that EPA is now aware of that could potentially be affected by this action. Other types of entities not listed in the table could also be affected. To determine whether your facility is affected by this action, you should carefully examine the applicability language at 40 CFR 122.1 (NPDES purpose and scope), 40 CFR 136.1 (NPDES permits and CWA) and 40 CFR 403.1 (pretreatment standards purpose and applicability). If you have questions regarding the applicability of this action to a particular entity, consult the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. What should I consider as I prepare my comments for EPA?

1. Submitting CBI. Do not submit CBI to EPA through *www.regulations.gov* or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk that you mail to EPA, mark the outside of the disk as CBI and then identify electronically within the disk the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures for handling and protection of CBI set forth in 40 CFR part 2.

2. Tips for Preparing Your Comments. When submitting comments, remember to:

- Identify the rulemaking by Docket ID number and other identifying information (subject heading, **Federal Register** date and page number).
- Explain why you agree or disagree, suggest alternatives, and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

II. Overview

This preamble describes the reasons for the proposed rule; the legal authority for the proposed rule; a summary of the proposed changes and clarifications; and explanation of the abbreviations and acronyms used in this document. In addition, this preamble solicits comment and data from the public.

Abbreviations and Acronyms Used in the Preamble and Proposed Rule Text

AA: Atomic Absorption
ADMI: American Dye Manufacturers Institute
ASTM: ASTM International
ATP: Alternate Test Procedure
CAS: Chemical Abstract Services
CFR: Code of Federal Regulations
CWA: Clean Water Act
EPA: Environmental Protection Agency
FLAA: Flame Atomic Absorption Spectroscopy
GC: Gas Chromatograph
ICP/AES: Inductively Coupled Plasma—Atomic Emission Spectroscopy
ICP/MS: Inductively Coupled Plasma—Mass Spectrometry
LCS: Laboratory Control Sample
MS: Mass Spectrometry
MS/MSD: Matrix Spike/Matrix Spike Duplicate
NPDES: National Pollutant Discharge Elimination System
POTW: Publicly Owned Treatment Works
QA: Quality Assurance
QC: Quality Control
SM: Standard Methods
STGFAA: Stabilized Temperature Graphite Furnace Atomic Absorption Spectroscopy
USGS: United States Geological Survey
VCSB: Voluntary Consensus Standards Body

III. Statutory Authority

EPA proposes this regulation under the authorities of sections 301(a), 304(h), and 501(a) of the CWA, 33 U.S.C. 1311(a), 1314(h), and 1361(a). Section 301(a) of the CWA prohibits the discharge of any pollutant into navigable waters unless the discharge complies with, among other provisions, a NPDES permit issued under section 402 of the CWA. Section 304(h) of the CWA requires the Administrator of the EPA to ''. . . promulgate guidelines establishing test procedures for the analysis of pollutants that shall include the factors which must be provided in any certification pursuant to [section 401 of the CWA] or permit application pursuant to [section 402 of the CWA].'' Section 501(a) of the CWA authorizes the Administrator to ''. . . prescribe such regulations as are necessary to carry out this function under [the CWA].'' EPA generally has codified its test procedure regulations (including analysis and sampling requirements) for CWA programs at 40 CFR part 136, though some requirements are codified in other parts (*e.g.,* 40 CFR Chapter I, Subchapters N and O).

IV. Purpose and Summary of Proposed Rule

The CWA requires EPA to promulgate test procedures (analytical methods) for analyses required in NPDES permit applications and for reports required under NPDES permits. EPA codifies these approved test procedures at 40 CFR part 136. EPA regions, as well as authorized states, territories and tribes issue NPDES permits. These permits must include conditions designed to ensure compliance with the technology-based and water quality-based requirements of the CWA, including in many cases, restrictions on the quantity of specific pollutants that can be discharged as well as pollutant measurement and reporting requirements. Often, entities have a choice in deciding which approved test procedure they will use for a specific pollutant because EPA has approved the use of more than one.[1]

The procedures for the analysis of pollutants required by CWA section 304(h) are a central element of the NPDES permit program. Examples of where these EPA analytical methods must be used include, among others, the following: (1) Applications for NPDES permits, (2) sampling or other reports required under NPDES permits, (3) other requests for quantitative or qualitative effluent data under the NPDES regulations, (4) State CWA 401 certifications and (5) sampling and analysis required under EPA's General Pre-Treatment Regulations for Existing and New Sources of Pollution 40 CFR 136.1 and 40 CFR 403.12(b)(5)(v).

Periodically, EPA proposes to update the approved methods in 40 CFR part 136. In general, the changes in this proposed action fall into the following categories: new and revised EPA methods and new and revised methods adopted by VCSBs; methods EPA has reviewed under EPA's national alternate test procedures (ATP) program and preliminarily concluded are appropriate for nationwide use; certain corrections to 40 CFR part 136; and amendments to the procedure for determination of the MDL primarily to address laboratory contamination and to better account for intra-laboratory variability. Collectively, EPA's current understanding indicates that adoption of these proposed revisions would improve data quality, update methods to keep current with technology advances, provide additional

[1] NPDES permit regulations also specify that the approved method needs to be sufficiently sensitive. See 40 CFR 122.21.e.3.

clarity for ATPs, and provide the regulated community with greater flexibility.

The following paragraphs provide details on the proposed revisions.

A. Changes to 40 CFR 136.3 and Appendix A to Include New Versions of Previously Approved EPA Methods

EPA proposes revisions to the approved EPA Methods 608, 624, and 625 which it adopted in 1984, and proposes to make a minor correction to the parameter list in EPA Method 611. These four EPA methods are listed in Table IC at 40 CFR part 136. Methods 608 and 625 also are listed in Tables ID and IG, and Methods 624 and 625 are listed in Table IF. EPA also proposes minor corrections to microbiological methods 1600, 1603, 1680, and 1682. These four EPA methods are listed in Table IA at 40 CFR part 136, and Methods 1600 and 1603 are listed in Table IH.

1. Methods 608, 624, and 625

The proposed revisions take advantage of improvements in analytical technology and allow greater flexibility in order to accommodate future improvements to the methods and generally obviate any need for additional revisions. EPA revised these methods in collaboration with other EPA offices, states, and environmental laboratory organizations. The revisions conform to the following principles:

Updated Technology: EPA changed the GC columns from packed columns to capillary (open tubular) columns. Capillary columns provide greater resolution and decreased adsorption (loss) of the analytes and, therefore, result in a significant improvement in the accuracy (recovery) and precision of the results.

Method Flexibility: The revised methods allow greater method flexibility so that the methods more closely align with 40 CFR 136.6. This flexibility would make it easier for laboratories to make in-house improvements and technology updates in the future that will not compromise the original quality control acceptance criteria of the methods. Consistent with 40 CFR 136.6, EPA built into the methods procedures that will allow a laboratory to make limited changes to a method without applying for an ATP; however, the laboratory must document that the revisions produce results consistent with the QC acceptance criteria in the method in order to take advantage of the built-in flexibility. For example, the revised methods allow access to a greater list of compounds than the list of compounds determined by the original versions of these methods, provided that the laboratory can demonstrate acceptable accuracy and precision with these analytes in the specified matrices. The expanded list of compounds is an amalgamation of lists from Methods 1624, 1625, 1699 and other EPA methods that demonstrate the technology can be used to quantify these additional analytes. The revisions also allow more flexibility to adopt different extraction procedures, such as solid phase extraction. The revised methods include requirements for a laboratory to develop its own in-house QC acceptance criteria for tests of the laboratory control sample and tests of matrix spike and matrix spike duplicate samples, provided the LCS and MS/MSD meet minimum criteria specified in the method. The revisions also clarify that hydrogen can be used as a carrier gas for the methods. Some of the flexibility EPA proposes to add to the methods is currently specified in 40 CFR 136.6(b)(4)(xvi). Because EPA proposes to incorporate that flexibility directly into the method, EPA proposes to delete the corresponding text from 40 CFR 136.6.

Method Harmonization: EPA updated these methods to make them more consistent with the most recent updates of similar methods from the Office of Ground Water and Drinking Water and the Office of Resource Conservation and Recovery. EPA revised the required QC frequencies and standards (internal standards and surrogates) to more closely match the methods from other EPA analytical method programs. Laboratories that run methods from multiple EPA programs will benefit from these revisions.

2. Method 611

EPA proposes a minor correction to a parameter name in the parameter list of of EPA Method 611 (''Haloethers''). As currently listed, the compound with the CAS Registry Number 108–60–1 is bis(2-chloroisopropyl)ether. EPA proposes to correct the analyte name to 2,2′-oxybis(1-chloropropane), which matches the CAS Number 108–60–1. The original analyte name bis(2-chloroisopropyl)ether has a CAS number of 39638–32–9. EPA is unaware that this chemical has ever been in industrial production, and is therefore unlikely to be a compound of monitoring concern. Furthermore, it is not possible to procure an analytical standard reference material for the compound with CAS number 39638–32–9. The compound in the parameter list should be 2,2′-oxybis(1-chloropropane), CAS number 108–60–1.

3. Methods 1600, 1603, 1680, and 1682

EPA proposes the following changes for EPA microbiological methods 1600, 1603, 1680, and 1682. These changes correct typographical or other errors that EPA identified in the methods after publication. EPA proposes to revise all of these methods with new EPA document numbers and dates.

a. EPA Method 1600 for Enterococci using membrane filtration: In Table 3 Verification controls, EPA changed the negative control for brain heart infusion broth incubated at 45 °C from *E. coli* to *Enterobacter aerogenes. E. coli* is thermotolerant and *E. aerogenes* is not, so *E. coli* is not an appropriate negative control when heated.

b. EPA Method 1603 for *E. coli* using membrane filtration: In Section 11.5, EPA changed the number of colonies on a countable plate from 20–60 to 20–80 colonies. Sixty colonies was a typographical error. In addition the following sentence was inadvertently omitted and EPA included it: Sample volumes of 1–100 mL are normally tested at half-log intervals (*e.g.,* 100, 30, 10, and 3 mL).

c. EPA Method 1680 for fecal coliforms using multiple tube fermentation: in Section 3.1 Definitions, the sentence ''The predominant fecal coliform is *E. coli.''* should read ''The predominant fecal coliform can be *E. coli.''*

d. EPA Method 1682 for *Salmonella* by MSRV medium: (1) In Section 9.3, Table 2, the lab-prepared spike acceptance criteria should read ''Detect—254%'' and ''Detect—287%'' and (2) in Section 14.5, Table 9, the spiked *Salmonella* for Example 2, Liquid should read ''3.7×10^{8} CFU/mL.''

B. Methods Incorporated by Reference

Currently, hundreds of methods and ATPs are incorporated by reference within 40 CFR part 136. In most cases, 40 CFR part 136 contains multiple approved methods for a single pollutant and regulated entities often have a choice in the selected method. The proposed rule contains revisions to methods that will be incorporated by reference from two VCSBs: Standard Methods and ASTM. EPA proposed VCSB methods in compliance with the National Technology Transfer Act (see Section V.I below). The proposed VCSB methods are available on their respective VCSB Web sites to everyone at a cost determined by the VCSB, generally from $40 to $80. Both organizations also offer memberships or subscriptions that allow unlimited access to their methods. The cost of obtaining these methods is not a

significant financial burden for a discharger or environmental laboratory, making the methods reasonably available. The proposal also includes USGS methods and vendor ATPs that are incorporated by reference. The ATPs and USGS methods are available free of charge on the Web site for that organization. Therefore, EPA concludes that the proposed methods and ATPs incorporated by reference are reasonably available. The individual standards are discussed in greater detail below.

C. Changes to 40 CFR 136.3 to Include New Versions of Approved Standard Methods

EPA proposes to approve new versions of currently approved Standard Methods. The new versions of currently approved Standard Methods clarify or improve the instructions in the method, improve the QC instructions, or make editorial corrections. Consistent with the previous method update rule (77 FR 29767–29768), EPA proposes to generally approve and include in 40 CFR part 136 only the most recent version of a method published by the Standard Methods Committee by listing only one version of the method with the year of publication designated by the last four digits in the method number (*e.g.,* SM 3111 B–2011). The date indicates the latest revision date of the method. This allows use of a specific method in any edition that includes a method with the same method number and year of publication.

Most of the revisions that EPA proposes to Standard Methods previously approved in 40 CFR part 136 do not contain any substantive changes. The following describes the proposed non-substantive changes related to Standard Methods in 40 CFR part 136. Each entry contains the proposed Standard Methods number and date, the parameter, and a brief description of the analytical technique. The methods listed below are organized according to the table at 40 CFR part 136 in which they appear.

The following changes would apply to Table IA at 40 CFR part 136:

1. SM 9221 (B,C,E,F)–2006, Coliform (fecal), Coliform (fecal) in presence of chlorine, Coliform (total), Coliform (total) in presence of chlorine, *E. coli,* most probable number (MPN), 5 tube 3 dilution.
2. SM 9223–2004, *E. coli,* multiple tube/multiple well.
3. SM 9230 (B,C)–2007, Fecal Streptococci, Enterococci, most probable number (MPN), 5 tube 3 dilution or membrane filtration.

The following changes would apply to Table IB at 40 CFR part 136:

1. SM 2120 B–2011, color, platinum cobalt method.
2. SM 2130 B–2011, turbidity, nephelometric method.
3. SM 2310 B–2011, acidity, titration using electrometric endpoint or phenolphthalein endpoint.
4. SM 2320 B–2011, alkalinity, electrometric or colorimetric titration to pH 4.5.
5. SM 2340 B–2011 and SM 2340 C–2011, hardness, by the calculation method or EDTA titration.
6. SM 2510 B–2011, conductivity, Wheatstone bridge method.
7. SM 2540 B–2011, SM 2540 C–2011, SM 2540 D–2011, SM 2540 E–2011, and SM 2540 F–2011, total, filterable, non-filterable, volatile, and settleable residue (solids, listed in the same order as the method numbers), all by gravimetric methodologies.
8. SM 2550 B–2010, temperature, thermometric.
9. SM 3111 B–2011, SM 3111 C–2011, SM 3111 D–2011, and SM 3111 E–2011, metals, direct aspiration AA methods with different gas mixtures. Each method has a different list of metals; no changes are proposed to these lists.
10. SM 3112 B–2011, metals, applicable to mercury, cold-vapor atomic absorption spectrometric method.
11. SM 3114 B–2011 and SM 3114 C–2011, total arsenic and total selenium, hydride generation/atomic absorption spectrometric methods. Both analyze total arsenic and total selenium.
12. SM 3120 B–2011, metals, ICP method; no changes are proposed for the approved list of metals.
13. SM 3125 B–2011, metals, ICP/MS method; no changes are proposed for the approved list of metals.
14. SM 3500-Al B–2011, aluminum, colorimetric method.
15. SM 3500-As B–2011, arsenic, colorimetric method (SDDC).
16. SM 3500-Ca B–2011, calcium, titrimetric method (EDTA).
17. SM 3500-Cr B–2011 and SM 3500-Cr C–2011, chromium, the ''B'' method uses a colorimetric method (diphenylcarbazide) and is approved for total or dissolved chromium, the ''C'' method uses ion chromatography and is only approved for dissolved chromium.
18. SM 3500-Cu B–2011 and SM 3500-Cu C–2011, copper, both method sections use colorimetric methods, the ''B'' method uses a neocuproine reagent and the ''C'' method uses a bathocuproine reagent.
19. SM 3500-Fe B–2011, iron, colorimetric method (phenanthroline).
20. SM 3500-K B–2011 and SM 3500–K C–2011, potassium, the ''B'' method is a flame photometric method and the ''C'' method is an electrode method.
21. SM 3500-Mn B–2011, manganese, colorimetric method (persulfate).
22. SM 3500-Na B–2011, sodium, flame photometric method.
23. SM 3500-Pb B–2011, lead, colorimetric method (dithizone).
24. SM 3500-V B–2011, vanadium, colorimetric method (gallic acid).
25. SM 3500-Zn B–2011, zinc, colorimetric method (zincon).
26. SM 4110 (B–D)–2011, anions, ion chromatography; no changes are proposed for the approved analyte list.
27. SM 4140 B–2011, inorganic anions, capillary ion electrophoresis with indirect UV detection: No changes are proposed for the approved analyte list.
28. SM 4500-B B–2011, boron, spectrophotometer or filter photometer (curcumin).
29. SM 4500-Cl^- (B–E)–2011, chloride, titrimetric: (silver nitrate), (mercuric nitrate), automated (ferricyanide), potentiometric titration
30. SM 4500-Cl (B–G)–2011, chlorine (residual), amperometric direct, amperometric direct (low level), iodometric direct, back titration ether end–point, titrimetric: N,N-diethyl-p-phenylenediamine with ferrous ammonium sulfate (DPD-FAS), spectrophotometric (DPD).
31. SM 4500-CN^- (B–G)–2011, cyanide, manual distillation with $MgCl_2$ followed by: Titrimetric, spectrophotometric, manual, ion selective electrode, cyanide amenable to chlorination (CATC); manual distillation with $MgCl_2$, followed by: Titrimetric or spectrophotometric.
32. SM 4500-F^- (B–E)–2011, fluoride, manual distillation, followed by any of the following: Electrode, manual, colorimetric, fluoride dye reagent (SPADNS is the common name for the fluoride dye reagent which is a mixture of chemicals), automated complexone.
33. SM 4500-H^+ B–2011, hydrogen ion (pH), electrometric measurement.
34. SM 4500-NH_3 (B–H)–2011, ammonia (as nitrogen), manual distillation or gas diffusion (pH > 11), followed by any of the following: Titration, electrode, manual phenate, salicylate, or other substituted phenols in Berthelot reaction based methods; automated phenate, salicylate, or other substituted phenols in Berthelot reaction based methods.
35. SM 4500-NO_2^- B–2011, nitrite (as nitrogen), spectrophotometric: Manual.
36. SM 4500-NO_3^- D–2011, nitrate (as nitrogen), ion selective electrode.
37. SM 4500-NO_3^- (E,F, H)–2011, nitrate-nitrite (as nitrogen), colorimetric: Cadmium reduction-manual and automated, and colorimetric: Automated hydrazine.

38. SM 4500-NO_3^- (E,F)–2011, nitrite (as nitrogen), colorimetric: Cadmium reduction-manual and automated.

39. SM 4500-N_{org} (B–D)–2011, total Kjeldahl nitrogen (as nitrogen, organic), semi-automated block digester colorimetric (distillation not required).

40. SM 4500-O (B–G), oxygen (dissolved), Winkler (azide modification), electrode.

41. SM 4500-P (B (5), E–H)–2011, phosphorus and ortho-phosphate, persulfate digestion, digestion, followed by any of the following: Manual or automated ascorbic acid reduction. The ''B Part 5'' method is the persulfate digestion procedure and is required prior to measurement of total phosphorus using SM 4500 P (E–H). The ''E'' through ''G'' methods are approved for both total phosphorus and ortho-phosphate. The ''H'' method is only approved for total phosphorous.

42. SM 4500-S^{2-} (B–D, F,G)–2011, sulfide, sample pretreatment, titrimetric (iodine) analysis, colorimetric (methylene blue), ion selective electrode.

43. SM 4500-SiO_2 (C,E,F)–2011, silica, 0.45-micron filtration followed by any of the following: Colorimetric, manual or automated (Molybdosilicate).

44. SM 4500-SO_3^{2-} B–2011, sulfite, titrimetric (iodine-iodate).

45. SM 4500-SO_4^{2-} (C–G)–2011, sulfate, automated colorimetric, gravimetric, and turbidimetric.

46. SM 5210 B–2011, biochemical oxygen demand (BOD5), dissolved oxygen depletion.

47. SM 5220 (B–D)–2011, chemical oxygen demand (COD), titrimetric; spectrophotometric, manual or automatic.

48. SM 5310 (B-D)–2011, total organic carbon (TOC), combustion, heated persulfate or UV persulfate oxidation.

49. SM 5520 (B,F)–2011, oil and grease, hexane extractable material (HEM): n-hexane extraction and gravimetry, silica gel treated HEM (SGT–HEM): Silica gel treatment and gravimetry.

50. SM 5530 (B,D)–2010, phenols, manual distillation, followed by colorimetric (4AAP) manual.

51. SM 5540 C–2011, surfactants, colorimetric (methylene blue).

The following changes would apply to Table IC at 40 CFR part 136:

1. SM 6200 (B,C)–2011, volatile organic compounds, purge and trap capillary-column gas chromatographic/mass spectrometric (GC/MS), purge and trap capillary-column gas chromatographic (GC).

2. SM 6440 B–2005, polynuclear aromatic hydrocarbons (PAHs), high performance liquid chromatography (HPLC).

The following changes would apply to Table ID at 40 CFR part 136:

1. SM 6630 (B, C)–2007, organochlorine pesticides, gas chromatography (GC).

2. SM 6640 B–2006, acidic herbicide compounds, gas chromatography (GC).

EPA also proposes revisions to certain Standard Methods approved in Part 136 for which Standard Methods adopted updates that contain substantive changes. The following summarizes these changes for each method, organized by the table at 40 CFR part 136 in which they appear.

The following changes would apply to Table IA and/or Table IH at 40 CFR part 136:

1. EPA proposes that the membrane filtration method SM 9222 B–1997 be replaced with SM 9222 B–2006. This method analyzes Coliform (total) in the presence of chlorine. The newer method includes a number of technology updates that do not significantly change the procedure. In addition, the method:

a. Modified the procedure to allow for the use of a humidified incubator if loose-lidded plates are used during incubation.

b. Added a note that five typical and five atypical colonies per membrane need to be identified during coliform verification.

c. Moved the definition of ''Coliform'' that was Section 4 of SM 9222, and renumbered the rest of the document, such that the ''Procedure'' is now Section 4, instead of Section 5. This is not a substantive change except that in Table IA, Parameter 4 ''Coliform (total), in presence of chlorine, number per 100 mL'' the citation for ''MF with enrichment'' would be changed from ''9222 (B+B.5c)–1997'' to ''9222 (B+B.4c)–2006.''

2. EPA proposes that the membrane filtration method SM 9222 D–1997 be replaced with SM 9222 D–2006. This method analyzes Coliform (fecal) and Coliform (fecal) in the presence of chlorine. The new method allows use of a dry recirculating incubator as specified in the culture dishes section. In addition, EPA proposes to add the following footnote to Tables IA and IH regarding SM9222D–2006 for fecal coliform verification frequency: ''The verification frequency is at least five typical and five atypical colonies per sampling site on the day of sample collection & analysis.'' SM 9222 D–2006 specifies that the fecal coliform colonies should be verified ''at a frequency established by the laboratory,'' which can be as low as zero. Colonies need be verified to prevent misidentification of results as false positive or false negative.

3. EPA proposes that the membrane filtration method SM 9222 G–1997 be replaced with SM 9222 G–2006 in Table IH. These methods analyze for *E. coli* and Fecal Coliforms. The newer method includes a number of technology updates that do not significantly change the procedure. In addition, the method now has a modified composition of EC broth to include different quantities of KH_2PO_4 and 4-methylumbelliferyl-β-D-glucuronide.

The following changes would apply to Table IB at 40 CFR part 136:

EPA proposes SM 2120 F–2011 be added to Table IB for Color. EPA previously approved it as SM 2120 E–1993. It is also similar to the currently approved National Council for Air and Stream Improvement, Inc. method that uses American Dye Manufacturers Institute weighted–ordinate spectrophotometric parameters.

1. EPA proposes that SM 3113 B–2004, a metals atomic absorption furnace method, be replaced with the revised version SM 3113 B–2010. The only substantive change would be a reduction in the required replicate analyses of each calibration standard from three to two. Similar EPA methods do not require replicates of each calibration standard.

Finally, Standard Methods requested that EPA propose SM 6810 for the analysis of pharmaceutical and personal care products in water. EPA does not propose to add this method because no supporting data were received by the deadline to demonstrate that the method had undergone full inter-laboratory validation.

D. Changes to 40 CFR 136.3 to Include New Versions of Approved ASTM Methods

EPA proposes to approve new versions of currently approved ASTM methods, for the same reasons outlined in the first paragraph of Section IV.B above. Many of the changes EPA proposes to ASTM Methods approved in 40 CFR part 136 do not contain any substantive changes. The following describes the proposed changes related to ASTM Methods in 40 CFR part 136. Each entry contains (in the following order): proposed ASTM method number and date, the parameter, a brief description of the analytical technique, and a brief description of any substantive changes in this revision from the last approved version of the method. The methods listed below are organized according to the table at 40 CFR part 136 in which they appear.

The following changes would apply to Table IB at 40 CFR part 136:

1. ASTM D 511–09 (A, B), calcium and magnesium, titrimetric (EDTA), AA direct aspiration; the modified method includes less specific calibration requirements for the part A titrimetric method than the previous version. However, the revised requirements are still more comprehensive than other approved methods. Therefore, EPA considers this revised method has adequate calibration criteria.

2. ASTM D 516–11, sulfate ion, turbidimetric, no substantive changes.

3. ASTM D 858–12 (A–C), manganese, atomic absorption (AA) direct aspiration, AA furnace; the modified method allows for pH adjustments in the laboratory, if the sample is returned within 14 days following sampling. The modified method also allows the use of block digestion systems for trace metal analysis, and quality control procedures now require the lab to analyze a continuing calibration blank and continuing calibration verification at a frequency of 10%.

4. ASTM D 859–10, silica, colorimetric, manual; the modified method allows the use of direct reading spectrophotometer or filter photometer, which is common for most approved colorimetric methods.

5. ASTM D 1067–11, acidity or alkalinity, electrometric endpoint or phenolphthalein endpoint; electrometric or colorimetric titration to pH 4.5, manual; no substantive changes

6. ASTM D 1068–10 (A–C), iron, AA direct aspiration; AA furnace; Colorimetric (Phenanthroline); EPA originally approved Parts A–D, but ASTM discontinued Part B. EPA proposes that Parts C and D in the existing 40 CFR part 136 Table 1B, be shifted to Parts B and C to account for the discontinued Part B. Additionally, ASTM increased the frequency of quality control parameters for Test Method A—Atomic Absorption. The method now includes a method blank, a matrix spike sample and a control sample with every ten samples.

7. ASTM D 1126–12, hardness, titrimetric (EDTA); no substantive changes.

8. ASTM D 1179–10, fluoride ion, electrode, manual; colorimetric, (SPADNS); The revision removed calculation, precision and bias, and quality control procedures (method blank, matrix spike, LCS) previously included for Test Method B–Ion Selective Electrode. The method replaces those requirements with a lab duplicate and a reference sample analysis. This is similar to EPA approved SM 4500–F^- (C, D) currently in 40 CFR part 136. The revision also removed the silver sulfate reagent used to remove chloride from the sample, as it is no longer considered a major interference.

9. ASTM D 1246–10, bromide ion, electrode; no substantive changes.

10. ASTM D 1687–12 (A–C), chromium (total) and dissolved hexavalent chromium, colorimetric (diphenyl-carbazide); AA direct aspiration; AA furnace; ASTM modified the method to allow the use of block digestion systems for trace metal analysis, and now allows for pH adjustments in the laboratory if the sample is returned within 14 days following sampling.

11. ASTM D 1688–12 (A–C), copper, AA direct aspiration, AA furnace; ASTM modified the method to allow the use of block digestion systems for trace metal analysis, and now allows for pH adjustments in the laboratory if the sample is returned within 14 days following sampling. ASTM also requires analysis of a continuing calibration blank and continuing calibration verification at a 10% frequency.

12. ASTM D 1691–12 (A, B), zinc, AA direct aspiration; ASTM modified the method to allow the use of block digestion systems for trace metal analysis, and now allows for pH adjustments in the laboratory if the sample is returned within 14 days following sampling.

13. ASTM D 1976–12, dissolved, total-recoverable, or total elements, inductively coupled plasma/atomic emission spectroscopy (ICP/AES); ASTM modified the method to allow block digestion systems for trace metal analysis.

14. ASTM D 3223–12, total mercury, cold vapor, manual; ASTM modified the method to allow the use of block digestion systems for trace metal analysis, and requires analysis of a continuing calibration blank and continuing calibration verification at a 10% frequency.

15. ASTM D 3373–12, vanadium, AA furnace; ASTM modified the method to allow the use of block digestion systems for trace metal analysis, and requires analysis of a continuing calibration blank and continuing calibration verification at a 10% frequency. ASTM now allows for pH adjustments in the laboratory if the sample is returned within 14 days following sampling.

16. ASTM D 3557–12 (A–D), cadmium, AA direct aspiration, AA furnace, Voltammetry; ASTM modified the method to allow the use of block digestion systems for trace metal analysis, and requires analysis of a continuing calibration blank and continuing calibration verification at a 10% frequency. ASTM now allows for pH adjustments in the laboratory if the sample is returned within 14 days following sampling.

17. ASTM D 3590–11 (A, B), total Kjeldahl nitrogen, manual digestion and distillation or gas diffusion; semi-automated block digester colorimetric (distillation not required); ASTM revised the preservation method to allow storing samples at 2–6 °C, instead of the previous 4 °C. The method includes OI Analytical Flow Injection Analysis (FIA) performance data using an alternative copper sulfate catalyst in place of mercury (note: ''OI Analytical'' is a company name, not an acronym).

18. ASTM D 4382–12, barium, AA furnace; ASTM modified the method to allow the use of block digestion systems for trace metal analysis, and requires analysis of a continuing calibration blank and continuing calibration verification at a 10% frequency.

19. ASTM D 4658–09, sulfide ion, ion selective electrode; no substantive changes.

20. ASTM D 5257–11, dissolved hexavalent chromium, ion chromatography; ASTM recommends buffering samples containing very high levels of anionic species to a pH of 9–9.5, then filtering the sample and storing it at <6 °C for a holding time of 28 days to prevent reduction of Cr(VI) to Cr(III). ASTM added an allowance for alternate holding times in Sections 1.3 and 9.2 if the user ''demonstrates that holding time does not affect sample integrity per US EPA 40 CFR 136 . . .''

21. ASTM D 5673–10, dissolved elements and total-recoverable elements, ICP/MS; no substantive changes.

22. ASTM D 5907–13, filterable matter (total dissolved solids) and nonfilterable matter (total suspended solids), gravimetric, 180° gravimetric, 103–105° post washing of residue; no substantive changes.

23. ASTM D 6508–10, inorganic anions (fluoride, bromide, chloride, nitrite, nitrate, orthophosphate, and sulfate), capillary ion electrophoresis with indirect UV detection; no substantive changes.

24. ASTM D 7284–13, total cyanide, manual distillation with $MgCl_2$ followed by flow injection, gas diffusion amperometry; ASTM modified the method to include the use of a collector tube of the micro distillation apparatus with 1.5 ml of 1.0 M NaOH, and included information regarding the use of this collector tube in the procedure. ASTM also added information regarding the precision and bias associated with this method based on an interlaboratory study.

25. ASTM D 7511–12, total cyanide, segmented flow injection, in-line ultraviolet digestion, followed by gas diffusion amperometry; no substantive changes.

The following changes would apply to Table IC at 40 CFR part 136:

1. ASTM D 7065–11, nonylphenol, bisphenol A, p-tert-octylphenol, nonylphenol monoethoxylate, nonylphenol diethoxylate, gas chromatography/mass spectrometry (GC/MS); no substantive changes.

E. Changes to 40 CFR 136.3 To Include New United States Geological Survey (USGS) Methods

1. EPA proposes to add the USGS Methods I–2547–11 and I–2548–11 titled ''Colorimetric Determination of Nitrate Plus Nitrite in Water by Enzymatic Reduction, Automated Discrete Analyzer Methods,'' to Table IB for the analytes nitrate, nitrite, and combined nitrate-nitrite. Method I–2548–11 is a low level (analytical range) version of Method I–2547–11. They are both included in the same method title. The method can be found in USGS Survey Techniques and Methods, Book 5, Chapter B8. The method is available for free from the USGS Web site. This method follows the same procedure as in ATP Case No. N07–0003—Nitrate Elimination Company Inc.'s (NECi) Method N07–0003, Revision 9.0, March 2014, ''Method for Nitrate Reductase Nitrate-Nitrogen Analysis,'' which EPA also proposes to approve. Additional details on the ATP study and multi-laboratory validation can be found in Section E.1 below.

F. Changes to 40 CFR 136.3 to Include ATPs

To promote method innovation, EPA maintains a program that allows method developers to apply for EPA review of an alternative method to an existing approved method and potentially for EPA approval of that ATP. This ATP program is described for CWA applications at 40 CFR 136.4 and 136.5. EPA proposes for nationwide use six alternate test procedures. Based on EPA's review, the performance of these ATPs is equally effective as other methods already approved for measurement. These proposed new methods include: NECi Method N07–0003, ''Method for Nitrate Reductase Nitrate-Nitrogen Analysis;'' Timberline Instruments, LLC Method Ammonia-001, ''Determination of Inorganic Ammonia by Continuous Flow Gas Diffusion and Conductivity Cell Analysis;'' IDEXX Laboratories, Inc. Colilert®-18, ''Coliform/*E. coli* Enzyme Substrate Test for fecal coliforms in Wastewater;'' NCASI Method TNTP–W10900, ''Total (Kjeldahl) Nitrogen and Total Phosphorus in Pulp and Paper Biologically Treated Effluent by Alkaline Persulfate Digestion;'' Hach Company Method 10242, ''Simplified Spectrophotometric Measurement of Total Kjeldahl Nitrogen in Water and Wastewater;'' and Hach Company Method 10206, ''Spectrophotometric Measurement of Nitrate in Water and Wastewater.'' Descriptions of these new methods included for approval are as follows:

1. The Nitrate Elimination Company Inc. (NECi) Method N07–0003, ''Nitrate Reductase Nitrate-Nitrogen Analysis,'' Revision 9.0, dated March 2014 (The Nitrate Elimination Company, Inc 2014a). The analysis measures nitrate, nitrite, and combined nitrate-nitrite. NECi Method N07–0003 is a ''green'' alternative to the other approved methods which use cadmium, a known carcinogen for the reduction of nitrate to nitrite prior to analyses. NECi Method N07–003 uses automated discreet analysis and spectrophotometry to determine concentrations of nitrate and nitrite, combined or separately in wastewater. The method involves the following steps:

- Enzymatic reduction of nitrate in a sample to nitrite using eukaryotic nitrate reductase;
- Diazotizing the nitrite originally in the sample plus the reduced nitrate with sulfanilamide followed by coupling with N-(1-napthyl)ethylenediamine dihydrochloride under acidic conditions to form a highly colored azo dye;
- Colorimetric determination in which the absorbance of color at 546 nm is directly proportional to the concentration of the nitrite plus the reduced nitrate in the sample;
- Measurement of nitrite separately, if needed, by analysis of the sample while eliminating the reduction step;
- Subtraction of the nitrite value from that of the combined nitrate-nitrite value to measure nitrate separately if needed.

NECi Method N07–0003 can be obtained from The Nitrate Elimination Company, 334 Hecla Street, Lake Linden, Michigan, 49945. Telephone: 906–370–1130.

2. Timberline Instruments, LLC Method Ammonia-001, ''Determination of Inorganic Ammonia by Continuous Flow Gas Diffusion and Conductivity Cell Analysis,'' dated June 24, 2011 (Timberline Instruments, LLC 2011a). Timberline Ammonia-001 is an automated method that uses a gas permeation cell and a conductivity detector to determine concentrations of ammonia in wastewater. The method involves the following steps:

- An aqueous sample is combined with sodium hydroxide to a pH above 11 producing ammonia in a non-ionized form in solution.
- This solution is conveyed to a membrane assembly and the gaseous ammonia in the aqueous sample migrates through the hydrophobic membrane into a borate buffer absorption solution, which is then transported to a conductivity cell.
- The measured changes in conductivity are used to quantitate ammonia in the sample using an external calibration.

Timberline Instruments, LLC Method Ammonia-001 can be obtained from Timberline Instruments, LLC, 1880 South Flatiron Court, Boulder, Colorado 80301. Telephone: 303–440–8779.

3. IDEXX Laboratories, Inc., Colilert®-18, ''Coliform/*E. coli* Enzyme Substrate Test for fecal coliforms in Wastewater'' (ATP Case No. N09–0004). The method is identical to the already approved *E. coli* Colilert®-18 method, with one exception. The current method was designed for total coliforms and *E. coli*, at an incubation temperature of 35 ± 0.5°C for these organisms. The addendum to the IDEXX Colilert®-18 method allows for incubation at 44.5 ± 0.2°C for fecal coliforms.

The Colilert®-18 Coliform/*E. coli* Enzyme Substrate Test can be obtained from IDEXX Laboratories Inc., One IDEXX Drive, Westbrook, ME 04092, Telephone: 1–800–321–0707.

4. National Council for Air and Stream Improvement, Inc. (NCASI) Method TNTP–W10900, ''Total (Kjeldahl) Nitrogen (TKN) and Total Phosphorus in Pulp and Paper Biologically Treated Effluent by Alkaline Persulfate Digestion,'' dated June 2011 (National Council for Air and Stream Improvement, Inc. 2011a). Unlike the other ATPs in the proposed rule, this method is for measurements in pulp, paper and paperboard mill biologically treated effluent only. NCASI Method TNTP–W10900 uses an alkaline persulfate digestion procedure to convert inorganic and organic nitrogen containing compounds to nitrate and inorganic and organic phosphorus containing compounds to orthophosphate which are then measured using a spectrophotometer to determine the concentration of total Kjeldahl nitrogen and total phosphorus in a sample.

The method involves the following steps:

- Oxidation of the inorganic and organic nitrogen containing compounds to nitrate and the inorganic and organic

forms of phosphorus to orthophosphate by heating acidified, unfiltered samples in the presence of persulfate (a strong oxidizer) at 120°C and 15 psi positive pressure for 30 minutes.

• Analysis of the digestate for measurement of nitrate and orthophosphate using the approved colorimetric procedures.

NCASI Method TNTP–W10900 can be obtained from The National Council for Air and Stream Improvement, Inc., Publications Coordinator, P.O. Box 13318, Research Triangle Park, NC 27709–3318, Telephone: 919–941–6400.

5. Hach Company Method 10242, ''Simplified Spectrophotometric Measurement of Total Kjeldahl Nitrogen in Water and Wastewater,'' Revision 1.1, dated January 10, 2013 (Hach Company 2013a). Hach Company Method 10242 is a simplified green chemistry alternative to the other approved methods for measuring TKN. The method uses less toxic reagents (*e.g.,* eliminating the use of mercuric sulfate). Hach Company Method 10242 uses a spectrophotometer to measure the concentration of total Kjeldahl nitrogen in a sample.

The method involves the following steps:

• Oxidation of the inorganic and organic nitrogen containing compounds to nitrate by digestion with peroxodisulfate;

• Reaction of nitrate with 2,6-dimethylphenol in a solution of sulfuric and phosphoric acid to form nitrodimethylphenol;

• Spectrophotometric measurement of the nitrodimethylphenol in which the absorbance of color at 345 nm is directly proportional to the concentration of total nitrogen in the sample;

• Measurement of oxidized forms of nitrogen (nitrite + nitrate) in the original sample in a second test vial;

• Subtraction of the concentration of the oxidized forms of nitrogen from the total nitrogen concentration resulting in the concentration of total Kjeldahl nitrogen in the sample.

Hach Company Method 10242 can be obtained from Hach Company, 5600 Lindbergh Drive, Loveland, CO 80539. Telephone: 970–669–3050.

6. Hach Company Method 10206, ''Spectrophotometric Measurement of Nitrate in Water and Wastewater,'' Revision 2.1, dated January 10, 2013 (Hach Company 2013b). Hach Company Method 1206 is a ''green'' alternative to the other approved methods which use cadmium, a known carcinogen for the reduction of nitrate to nitrite prior to analyses. Hach Company Method 10206 uses a spectrophotometer to measure the concentration of nitrate or combined nitrate-nitrite in a sample.

The method involves the following steps:

• Reaction of nitrate with 2,6-dimethylphenol in a solution of sulfuric and phosphoric acid to form nitrodimethylphenol;

• Spectrophotometric measurement of the nitrodimethylphenol in which the absorbance of color at 345 nm is directly proportional to the concentration of nitrate or, if the sample has been preserved with sulfuric acid, combined nitrate-nitrite in the sample.

Hach Company Method 10206 can be obtained from Hach Company, 5600 Lindbergh Drive, Loveland, CO 80539. Telephone: 970–669–3050.

G. Changes to 40 CFR part 136 to Align With 40 CFR part 122

The procedures approved in 40 CFR part 136 are often required as part of an application for a NPDES Permit NPDES, for reports required to be submitted under NPDES permits and/or for other requests for quantitative or qualitative effluent data under 40 CFR parts 122 and 125. EPA is clarifying the language in 40 CFR 136.1, 136.2, and 136.3 so that the term ''Director'' as used in 40 CFR part 136 parallels that in 40 CFR part 122. These sections use the terms ''Administrator'' and ''State having an authorized program'' and define these terms in 136.3. EPA proposes to revise these provisions to substitute the single term ''Director'' and define ''Director'' in section 40 CFR 136.3(d) by cross-reference to the definition of ''Director'' in the NPDES regulations at section 40 CFR 122.2.

EPA recently revised 40 CFR part 122 to include a definition of ''sufficiently sensitive.'' The term is used to describe what approved methods are adequate for NPDES permits. 40 CFR part 136.6(a)(2) uses the same term ''sufficiently sensitive'' in a different context to describe how sensitive a modified method should be compared to the original method. 40 CFR 136.6(a)(2) currently states that the modified method must be sufficiently sensitive and meet or exceed performance of the approved method(s) for the analyte(s) of interest, as documented by meeting the initial and ongoing quality control requirements in the method.

EPA proposes to delete the words ''be sufficiently sensitive and'' from 40 CFR 136.6(a)(2) to eliminate unnecessary confusion. It will not change the requirements of 40 CFR 136.6(a)(2). If a method modification meets or exceeds the performance of the approved method, this includes sensitivity.

H. Corrections to 40 CFR Part 136

These changes consist of typographical errors, updates that went unnoticed during the last update to 40 CFR part 136 to methods from VCSBs, and technology updates to toxicity methods.

1. EPA proposes to make a number of clarifications and corrections to its Whole Effluent Toxicity acute and chronic methods manuals (Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA–821–R–02–012, October 2002; Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/821/R–02/013, October 2002; and Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, EPA/821/R–02/014, October 2002) listed in Table IA. Clarifications include testing all concentrations rather than only high and low concentrations, definition of terms (*e.g.,* the acronym YCT—yeast, cereal leaves, and trout chow, is not defined), consistency corrections among the three manuals, notation that Cusum figure axes should be log scale, pH and temperature measurements should be done at the beginning of the test (rather than only at the end of the test), etc. Corrections also include deletion of unavailable products, typographical errors, etc.

2. EPA proposes to change the Standard Method listed for *E. coli* most probable number (MPN) in Tables IA and IH. During a previous revision, Standard Methods added sampling as section 9221B.1. As a result, section 9221B.1 in previously approved versions has become section 9221B.2. EPA proposes to change SM 9221B.1 to 9221B.2 in Tables IA and IH for *E. coli* MPN. The related footnotes in Tables IA and IH (12, 14 and 11, 13, respectively) are accurate and EPA does not propose to change them.

3. EPA proposes to change Table IA for Enterococci. EPA proposes to reinstate a line for Enterococci that was erroneously deleted in the 2012 Methods Update Rule. The line ''MPN, multiple tube'' with Standard Method 9230B–2007 should be added.

4. EPA proposes to change one of the Table IB hardness entries that currently states ''Ca plus Mg as their carbonates, by inductively coupled plasma or AA direct aspiration. (See Parameters 13 and 33).'' EPA proposes to revise the entry to ''Ca plus Mg as their carbonates, by any approved method for Ca and Mg (See Parameters 13 and 33), provided

that the sum of the lowest point of quantitation for Ca and Mg is below the NPDES permit requirement for Hardness.'' The rationale behind this change is that if one calcium and magnesium method approved by EPA can be used to calculate hardness, then other approved EPA methods should also be permitted to do so.

5. EPA proposes to edit Table IB, footnote 24. EPA proposes to delete ''p 14'' from the footnote because the method is not on that page.

6. EPA proposes to delete Method 200.5, in Table IB from the cobalt, molybdenum and thallium entries. These analytes have not undergone formal testing by this method, and this method should not have been approved for these analytes.

7. EPA proposes to remove the reference to costs in 40 CFR 136.3 because costs are not included in the referenced documents.

8. EPA proposes to remove the first instance of ''are'' in 40 CFR 136.3(e) because it is an error.

I. Changes to Table II at 40 CFR 136.3(e) to Required Containers, Preservation Techniques, and Holding Times

EPA proposes revisions to Table II at 40 CFR 136.3(e) to amend some of the current requirements.

1. EPA proposes to add rows to Table II that specify holding times for total/fecal coliforms, and fecal streptococci in Table IH. Currently these bacterial tests are unspecified. EPA proposes the same holding time requirements as the other bacterial tests.

2. EPA proposes to change the sodium thiosulfate concentrations in Table II for bacterial tests from 0.0008% sodium thiosulfate to 0.008%. EPA proposed this change in its last update to 40 CFR part 136 (75 FR 58066–58067), but inadvertently omitted it in the publication of the final rule.

3. EPA proposes to re-insert language that was accidentally deleted from footnote 5 of Table II during the last update to 40 CFR part 136. Footnote 5 currently reads ''ASTM D7365–09a specifies treatment options for samples containing oxidants (*e.g.,* chlorine). Also, Section 9060A of Standard Methods for the Examination of Water and Wastewater (20th and 21st editions) addresses dechlorination procedures.'' EPA proposes to revise the footnote to read ''ASTM D7365–09a specifies treatment options for samples containing oxidants (*e.g.,* chlorine) for cyanide analysis. Also, Section 9060A of Standard Methods for the Examination of Water and Wastewater (20th and 21st editions) addresses dechlorination procedures for microbiological analyses.'' The footnote needs to specify that treatment options for samples containing oxidants is specifically for cyanide analysis, and that the dechlorination procedures are specifically for microbiological analyses.

4. EPA seeks comment on how to approve variances to sample preservation, containers or holding times listed in Table II for specific dischargers. Before the 2012 Final Method Update Rule (FR 77: 29758), the regulation required parties requesting a variance from Table II for specific dischargers to send the request to the appropriate EPA regional office for review, and then for the regional office to send the request to the National ATP Coordinator at EPA Headquarters for review and recommendation. Following receipt of such recommendation, the regional office could approve a variance. In the 2012 Final Method Update Rule, EPA changed the requirement so that either the Regional ATP Coordinator or the permitting authority could approve an exception to Table II for specific dischargers. The primary rationale for this change, as stated in the preamble of the 2010 Proposed Method Update Rule (FR 76: 77742) was: ''EPA is revising the text at 136.3(e) to allow a party to explain, without a cumbersome waiver process, to their permitting or other authority their basis for an alternative approach.'' Giving this authority to either the Regional ATP Coordinator or the permitting authority speeds up the approval process. Also, the permitting authority is more likely to know about special circumstances surrounding the local dischargers (*e.g.,* unusual discharge matrices, remote locations, etc.).

This change in the approval process resulted in the following potential complications and EPA is interested in public comment on them. First, it created a parallel authority to approve variances to Table II for specific dischargers. A discharger could make a request to both the Regional ATP Coordinator and the permitting authority, receive contradictory answers, and then choose the answer that the discharger prefers. Second, when there are different authorities approving a Table II variance for specific dischargers, there is potential for the data and documentation required by one authority to differ significantly from that required by the other authority.

EPA seeks comment on potential paths forward that would eliminate these concerns, while streamlining the process so that approval can be granted within the EPA region or by the state permitting authority. One possibility is for the permitting authority and the Regional ATP Coordinator to approve Table II variances for specific dischargers collaboratively. The permitting authority could provide the initial review and approval, and then approved requests could be sent to the Regional ATP Coordinator for final review and approval. Both organizations would need to agree for specific dischargers to be allowed Table II variances. Another option is to give the Regional ATP Coordinator exclusive rights to approve Table II variances for specific dischargers. Another option is to give the permitting authority exclusive rights to approve Table II variances. Other options are also possible, such as leaving 40 CFR 136.3(e) unchanged.

EPA also seeks comment on what data should be submitted to support a request for a Table II variance for a specific discharger. 40 CFR 136.3(e) requires that data be included with any request to modify Table II requirements for a specific discharger. The data would need to prove that the variance does not compromise the analytical results.

J. Clarifications/Corrections to ATP Procedures in 40 CFR 136.4, 136.5 and Allowed Modifications in 136.6

40 CFR 136.4 and 136.5 describe EPA procedures for obtaining approval to use an alternate test procedures either on a national basis, or for limited use by dischargers or facilities specified in the approval. In the 2012 Method Update Rule, EPA made several clarifying changes to the language of these sections. At the same time, however, in many places in 40 CFR 136.4 and 136.5 where the phrase ''Regional Alternate Test Procedures Coordinator'' or ''Regional ATP Coordinator'' appears, EPA inadvertently also inserted the phrase ''or permitting authority'' following the phrase. This error resulted from the use of the ''search and replace'' function on the computer. The effect of the change was to inadvertently authorize *State* permitting authorities to approve ATPs for limited use within the State. EPA never intended this result as is demonstrated by two facts. First, in its proposal for the 2012 Update, EPA did not propose to authorize State NPDES permitting authorities to approve limited use ATPs. Second, the rule states that the approval may be restricted to specific dischargers or facilities, or to all dischargers or facilities ''specified in the approval *for the Region.''* (emphasis added). This language evidences EPA's intent that the Region—not the state—would be

authorized to issue any such limited use ATP approval. Finally, as further evidence of EPA's intent, in several places, the text of the rule makes more sense if read to authorize only the Regional ATP Coordinator, and not the State permitting authority, to approve limited use ATPs. For example, 40 CFR 136.5(d)(1) provides that after a review of the application by the Alternate Test Procedure Regional ATP Coordinator or permitting authority, the Regional ATP Coordinator or permitting authority notifies the applicant and the appropriate State agency of approval or rejection of the use of the alternate test procedure.

As currently written, if the State is acting on a request for approval, the regulation would require the State to inform itself of its own action in approving or rejecting the ATP, a somewhat superfluous requirement.

Consequently, EPA proposes to delete all instances of ''or permitting authority'' from 40 CFR 136.4 and 136.5 to correct this error and revise the rule text to its original intent. Based on this revision, EPA and EPA alone would have the authority to approve limited use ATPs.

EPA also proposes changes to 40 CFR 136.4 and 136.5 to clarify the process for nationwide approval and the Regional ATP Coordinator's role in limited use ATP approvals. These changes do not significantly change the process, the intent is to make wording simpler and clearer.

Finally, EPA proposes to add language to 40 CFR 136.6(b)(1) to clarify that if a method user is uncertain whether or not a modification is allowed under 40 CFR 136.6, the user should contact either its Director or EPA Regional ATP Coordinator.

K. Changes to Appendix B to 40 CFR part 136—Definition and Procedure for the Determination of the MDL

EPA proposes revisions to the procedure for determination of the MDL primarily to address laboratory blank contamination and to better account for intra-laboratory variability. EPA's consideration of revisions to the MDL procedure for this rulemaking is specific to these revisions, and other changes to the procedure are outside the scope of this action. The proposed changes originated from The National Environmental Laboratory Accreditation Conference Institute and also reflect review by EPA, states, and commercial laboratories. The proposed revisions address the following issues and would add new requirements.

Background contamination: laboratories would be required to evaluate the MDL to account for background levels of contamination. As laboratory methods become more and more sensitive, background levels of contamination are more likely to contribute to the result. This modification would reduce false positive detects.

MDLs that represent multiple instruments: if a laboratory uses MDL values that represent multiple instruments, then the laboratory would be required to calculate the MDL using spiked samples and blank samples from all of these instruments. Currently, laboratories can run all of their MDL samples on the most sensitive instrument, and then use that MDL for other instruments. This modification will make the MDL more representative of the laboratory's actual capability.

Ongoing MDL quarterly verification: laboratories would be required to check their MDL values once a quarter. Currently, laboratories can run MDL samples once a year under the most ideal circumstances (*e.g.,* immediately after the instrument has been serviced or after an annual maintenance routine). Quarterly evaluation will determine if the detection limit has significantly drifted during the year. Laboratories would be exempt from running these samples for a method during quarters when no samples are run using that method.

EPA requests comment on whether it should adopt these proposed changes, in part, or in whole.

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This rule is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget for review.

B. Paperwork Reduction Act

This action does not impose an information collection burden under the PRA. This rule does not impose any information collection, reporting, or recordkeeping requirements. This proposal would merely add or revise CWA test procedures.

C. Regulatory Flexibility Act

I certify that this action would not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. This action would approve new and revised versions of CWA testing procedures. Generally, these changes would have a positive impact on small entities by increasing method flexibility, thereby allowing entities to reduce costs by choosing more cost-effective methods. In general, EPA expects the proposed revisions would lead to few, if any, increased costs. As explained previously, most of the proposed changes clarify procedures for EPA approval of ATPs, clarify or improve the instructions in the method, update the technology used in the method, improve the QC instructions, make editorial corrections, or reflect the most recent approval year of an already approved method. In some cases, the proposal would add alternatives to currently approved methods for a particular analyte (*e.g.* Method N07–0003 for Nitrate Reductase Nitrate-Nitrogen Analysis). Because these methods would be alternatives rather than requirements, there are no direct costs associated with their proposal. EPA proposes methods that would be incorporated by reference. If a permittee elected to use these methods, they could incur a small cost associated with obtaining these methods. See Section IV.B. Finally, the proposed changes to the MDL procedure would lead to limited increased costs. In the vast majority of cases, laboratories already collect samples that could be used in the revised procedure and/or would simply adjust the time period of collection. The total number of MDL samples run annually would only increase to any appreciable extent for laboratories that own many instruments. EPA has not estimated costs for these cases, because such costs, if incurred, would be negligible in comparison to overall laboratory expenditures.

D. Unfunded Mandates Reform Act

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This proposed rule does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This proposed rule does not have tribal implications as specified in Executive Order 13175. This rule would merely approve new and revised versions of test procedures. EPA does not expect the proposal would lead to any costs to any tribal governments, and if incurred, projects they would be minimal. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

EPA interprets EO 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act of 1995

This action involved technical standards. The EPA proposes to approve the use of technical standards developed and recommended by the Standard Methods Committee and ASTM International for use in compliance monitoring where EPA determined that those standards meet the needs of CWA programs. As explained in Section IV.C, EPA does not propose to add one SM method because it did not receive data to demonstrate that the method had undergone full inter-laboratory validation. EPA proposes all other methods recommended by VCSBs in advance of the proposed rule.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes the human health or environmental risk addressed by this action will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations.

List of Subjects in 40 CFR Part 136

Environmental protection, Incorporation by reference, Reporting and recordkeeping requirements, Test procedures, Water pollution control.

Dated: February 5, 2015.

Gina McCarthy,

Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended as follows:

PART 136—GUIDELINES ESTABLISHING TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS

■ 1. The authority citation for part 136 continues to read as follows:

Authority: Secs. 301, 304(h), 307 and 501(a), Pub. L. 95–217, 91 Stat. 1566, *et seq.*

(33 U.S.C. 1251, *et seq.*) (the Federal Water Pollution Control Act Amendments of 1972 as amended by the Clean Water Act of 1977).

■ 2. Section 136.1 is amended by revising paragraph (a) to read as follows:

§ 136.1 Applicability.

(a) The procedures prescribed herein shall, except as noted in §§ 136.4, 136.5, and 136.6, be used to perform the measurements indicated whenever the waste constituent specified is required to be measured for:

(1) An application submitted to the Director and/or reports required to be submitted under NPDES permits or other requests for quantitative or qualitative effluent data under parts 122 to 125 of this chapter; and

(2) Reports required to be submitted by dischargers under the NPDES established by parts 124 and 125 of this chapter; and

(3) Certifications issued by States pursuant to section 401 of the Clean Water Act (CWA), as amended.

* * * * *

■ 3. Section 136.2 is amended by revising paragraph (d) to read as follows:

§ 136.2 Definitions.

* * * * *

(d) *Director* means the director as defined in 40 CFR 122.2.

* * * * *

■ 4. In § 136.3:

■ a. Revise paragraph (a) introductory text and tables IA, IB, IC, ID, IF, IG, and IH.

■ b. Revise paragraphs (b) introductory text, (b)(8)(iv), (b)(8)(v), (b)(8)(xiii), (b)(8)(xv), (b)(10)(viii), (b)(10)(x) through (lviii), (b)(10)(lxi) through (lxiii), (b)(10)(lxviii), (b)(15)(v), (b)(15)(viii) through (x), (b)(15)(xii), (b)(15)(xiii), (b)(15)(xv) through (xvii), (b)(15)(xxii) through (xxiv), (b)(15)(xxx), (b)(15)(xxxv), (b)(15)(xxxvii), (b)(15)(xxxix), (b)(15)(xlii), (b)(15)(l), (b)(15)(lii), (b)(15)(lv), (b)(15)(lviii), (b)(15)(lxi), (b)(15)(lxvi), and (b)(15)(lxviii).

■ c. Redesignate paragraphs (b)(19)(vii) and (viii) as paragraphs (b)(19)(ix) and (x), respectively.

■ d. Add paragraphs (b)(19)(vii) and (viii).

■ e. Revise paragraphs (b)(20)(i) through (iv).

■ f. Remove paragraph (b)(20)(v).

■ g. Revise paragraph (b)(25).

■ h. Redesignate paragraphs (b)(33) and (34) as paragraphs (b)(35) and (36), respectively, and redesignate paragraphs (b)(26) through (32) as paragraphs (b)(27) through (33), respectively.

■ i. Add paragraph (b)(26).

■ j. Add paragraph (b)(34).

■ k. Revise newly redesignated paragraph (b)(35).

■ l. Revise paragraph (c) and the table in paragraph (e).

The revisions and additions read as follows:

§ 136.3 Identification of test procedures.

(a) Parameters or pollutants, for which methods are approved, are listed together with test procedure descriptions and references in Tables IA, IB, IC, ID, IE, IF, IG, and IH of this section. The methods listed in Tables IA, IB, IC, ID, IE, IF, IG, and IH are incorporated by reference, see paragraph (b) of this section, with the exception of EPA Methods 200.7, 601–613, 624.1, 625.1, 1613, 1624, and 1625. The full texts of Methods 601–613, 624.1, 625.1, 1613, 1624, and 1625 are printed in appendix A of this part, and the full text of Method 200.7 is printed in appendix C of this part. The full text for determining the method detection limit when using the test procedures is given in appendix B of this part. In the event of a conflict between the reporting requirements of 40 CFR parts 122 and 125 and any reporting requirements associated with the methods listed in these tables, the provisions of 40 CFR parts 122 and 125 are controlling and will determine a permittee's reporting requirements. The full text of the referenced test procedures are incorporated by reference into Tables IA, IB, IC, ID, IE, IF, IG, and IH. The date after the method number indicates the latest editorial change of the method. The discharge parameter values for which reports are required must be determined by one of the standard analytical test procedures incorporated by reference and described in Tables IA,

IB, IC, ID, IE, IF, IG, and IH or by any alternate test procedure which has been approved by the Administrator under the provisions of paragraph (d) of this section and §§ 136.4 and 136.5. Under certain circumstances paragraph (c) of this section, § 136.5(a) through (d) or 40 CFR 401.13, other additional or alternate test procedures may be used.

TABLE IA—LIST OF APPROVED BIOLOGICAL METHODS FOR WASTEWATER AND SEWAGE SLUDGE

Parameter and units	Method [1]	EPA	Standard methods	AOAC, ASTM, USGS	Other
Bacteria:					
1. Coliform (fecal), number per 100 mL or number per gram dry weight.	Most Probable Number (MPN), 5 tube, 3 dilution, or.	p. 132 [3] 1680 [11 15] 1681 [11 20]	9221 C E–2006		
	Multiple tube/multiple well, or.	.....		.....	Colilert-18® [13 18 29]
	Membrane filter (MF) [2], single step.	p. 124 [3]	9222 D–2006 [30]	B–0050–85 [4].	
2. Coliform (fecal) in presence of chlorine, number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 132 [3]	9221 C E–2006		
	MF [2], single step [5]	p. 124 [3]	9222 D–2006 [30]		
3. Coliform (total), number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 114 [3]	9221 B–2006		
	MF [2], single step or two step.	p. 108 [3]	9222 B–2006	B–0025–85 [4].	
4. Coliform (total), in presence of chlorine, number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 114 [3]	9221 B–2006		
	MF [2] with enrichment [5]	p. 111 [3]	9222 B – 2006		
5. *E. coli,* number per 100 mL [21]	MPN [6 8 16] multiple tube, or	.....	9221B.2–2006/ 9221F–2006 [12 14]		
	multiple tube/multiple well, or.	.....	9223 B–2004 [13]	991.15 [10] ..	Colilert® [13 18] Colilert-18® [13 17 18]
	MF [2 6 7 8] single step	1603 [22]		.....	mColiBlue-24® [19]
6. Fecal streptococci, number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 139 [3]	9230 B–2007		
	MF [2], or	p. 136 [3]	9230 C–2007	B–0055–85 [4].	
	Plate count	p. 143 [3].			
7. Enterococci, number per 100 mL [21].	MPN, 5 tube, 3 dilution, or	p. 139 [3]	9230 B–2007		
	MPN [6 8], multiple tube/multiple well, or.	.....	9230 D–2007	D6503–99 [9].	Enterolert® [13 24]
	MF [2 6 7 8] single step or	1600 [25]	9230 C–2007		
	Plate count	p. 143 [3].			
8. *Salmonella*, number per gram dry weight [11].	MPN multiple tube	1682 [23].			
Aquatic Toxicity:					
9. Toxicity, acute, fresh water organisms, LC_{50}, percent effluent.	*Ceriodaphnia dubia* acute	2002.0 [26].			
	Daphnia puplex and *Daphnia magna* acute.	2021.0 [26].			
	Fathead Minnow, *Pimephales promelas,* and Bannerfin shiner, *Cyprinella leedsi,* acute.	2000.0 [26].			
	Rainbow Trout, *Oncorhynchus mykiss,* and brook trout, *Salvelinus fontinalis,* acute.	2019.0 [26].			
10. Toxicity, acute, estuarine and marine organisms of the Atlantic Ocean and Gulf of Mexico, LC_{50}, percent effluent.	Mysid, *Mysidopsis bahia,* acute.	2007.0 [26].			
	Sheepshead Minnow, *Cyprinodon variegatus,* acute.	2004.0 [26].			

TABLE IA—LIST OF APPROVED BIOLOGICAL METHODS FOR WASTEWATER AND SEWAGE SLUDGE—Continued

Parameter and units	Method [1]	EPA	Standard methods	AOAC, ASTM, USGS	Other
	Silverside, *Menidia beryllina, Menidia menidia,* and *Menidia peninsulae,* acute.	2006.0 [26].			
11. Toxicity, chronic, fresh water organisms, NOEC or IC_{25}, percent effluent.	Fathead minnow, *Pimephales promelas,* larval survival and growth.	1000.0 [27].			
	Fathead minnow, *Pimephales promelas,* embryo-larval survival and teratogenicity.	1001.0 [27].			
	Daphnia, *Ceriodaphnia dubia,* survival and reproduction.	1002.0 [27].			
	Green alga, *Selenastrum capricornutum,* growth.	1003.0 [27].			
12. Toxicity, chronic, estuarine and marine organisms of the Atlantic Ocean and Gulf of Mexico, NOEC or IC_{25}, percent effluent.	Sheepshead minnow, *Cyprinodon variegatus,* larval survival and growth.	1004.0 [28].			
	Sheepshead minnow, *Cyprinodon variegatus,* embryo-larval survival and teratogenicity.	1005.0 [28].			
	Inland silverside, *Menidia beryllina,* larval survival and growth.	1006.0 [28].			
	Mysid, *Mysidopsis bahia,* survival, growth, and fecundity.	1007.0 [28].			
	Sea urchin, *Arbacia punctulata,* fertilization.	1008.0 [28].			

Table IA notes:

[1] The method must be specified when results are reported.

[2] A 0.45-μm membrane filter (MF) or other pore size certified by the manufacturer to fully retain organisms to be cultivated and to be free of extractables which could interfere with their growth.

[3] Microbiological Methods for Monitoring the Environment, Water, and Wastes, EPA/600/8–78/017. 1978. US EPA.

[4] U.S. Geological Survey Techniques of Water-Resource Investigations, Book 5, Laboratory Analysis, Chapter A4, Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples. 1989. USGS.

[5] Because the MF technique usually yields low and variable recovery from chlorinated wastewaters, the Most Probable Number method will be required to resolve any controversies.

[6] Tests must be conducted to provide organism enumeration (density). Select the appropriate configuration of tubes/filtrations and dilutions/volumes to account for the quality, character, consistency, and anticipated organism density of the water sample.

[7] When the MF method has been used previously to test waters with high turbidity, large numbers of noncoliform bacteria, or samples that may contain organisms stressed by chlorine, a parallel test should be conducted with a multiple-tube technique to demonstrate applicability and comparability of results.

[8] To assess the comparability of results obtained with individual methods, it is suggested that side-by-side tests be conducted across seasons of the year with the water samples routinely tested in accordance with the most current Standard Methods for the Examination of Water and Wastewater or EPA alternate test procedure (ATP) guidelines.

[9] Annual Book of ASTM Standards-Water and Environmental Technology, Section 11.02. 2000, 1999, 1996. ASTM International.

[10] Official Methods of Analysis of AOAC International. 16th Edition, 4th Revision, 1998. AOAC International.

[11] Recommended for enumeration of target organism in sewage sludge.

[12] The multiple-tube fermentation test is used in 9221B.2–2006. Lactose broth may be used in lieu of lauryl tryptose broth (LTB), if at least 25 parallel tests are conducted between this broth and LTB using the water samples normally tested, and this comparison demonstrates that the false-positive rate and false-negative rate for total coliform using lactose broth is less than 10 percent. No requirement exists to run the completed phase on 10 percent of all total coliform-positive tubes on a seasonal basis.

[13] These tests are collectively known as defined enzyme substrate tests, where, for example, a substrate is used to detect the enzyme β-glucuronidase produced by *E. coli.*

[14] After prior enrichment in a presumptive medium for total coliform using 9221B.2–2006, all presumptive tubes or bottles showing any amount of gas, growth or acidity within 48 h ± 3 h of incubation shall be submitted to 9221F–2006. Commercially available EC–MUG media or EC media supplemented in the laboratory with 50 μg/mL of MUG may be used.

[15] Method 1680: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation Using Lauryl-Tryptose Broth (LTB) and EC Medium, EPA–821–R–14–009. September 2014. U.S. EPA.

[16] Samples shall be enumerated by the multiple-tube or multiple-well procedure. Using multiple-tube procedures, employ an appropriate tube and dilution configuration of the sample as needed and report the Most Probable Number (MPN). Samples tested with Colilert® may be enumerated with the multiple-well procedures, Quanti-Tray® and the MPN calculated from the table provided by the manufacturer.

[17] Colilert-18® is an optimized formulation of the Colilert® for the determination of total coliforms and *E. coli* that provides results within 18 h of incubation at 35°C rather than the 24 h required for the Colilert® test and is recommended for marine water samples.

[18] Descriptions of the Colilert®, Colilert-18®, and Quanti-Tray® may be obtained from IDEXX Laboratories, Inc.

[19] A description of the mColiBlue24® test, is available from Hach Company.

[20] Method 1681: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation using A–1 Medium, EPA–821–R–06–013. July 2006. U.S. EPA.

[21] Recommended for enumeration of target organism in wastewater effluent.

[22] Method 1603: *Escherichia coli* (*E. coli*) in Water by Membrane Filtration Using Modified membrane-Thermotolerant *Escherichia coli* Agar (modified mTEC), EPA–821–R–14–010. September 2014. U.S. EPA.
[23] Method 1682: *Salmonella* in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis (MSRV) Medium, EPA–821–R–14–012. July 2014. U.S. EPA.
[24] A description of the Enterolert® test may be obtained from IDEXX Laboratories Inc.
[25] Method 1600: Enterococci in Water by Membrane Filtration Using membrane-Enterococcus Indoxyl-β-D-Glucoside Agar (mEI), EPA–821–R–14–011. September 2014. U.S. EPA.
[26] Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA–821–R–02–012. Fifth Edition, October 2002. U.S. EPA.
[27] Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA–821–R–02–013. Fourth Edition, October 2002. U.S. EPA.
[28] Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, EPA–821–R–02–014. Third Edition, October 2002. U.S. EPA.
[29] Colilert-18® is an optimized formulation of the Colilert® for the determination of total coliforms and *E. coli* that has been adapted to detect fecal coliforms. To use Colilert-18® to assay for fecal coliforms, the incubation temperature is 44.5 + 0.2°C. This test is recommended for wastewater samples.
[30] The verification frequency is at least five typical and five atypical colonies per sampling site on the day of sample collection and analysis.

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
1. Acidity, as $CaCO_3$, mg/L.	Electrometric endpoint or phenolphthalein endpoint.	.....	2310 B–2011	D1067–11	I–1020–85. [2]
2. Alkalinity, as $CaCO_3$, mg/L.	Electrometric or Colorimetric titration to pH 4.5, Manual.	.....	2320 B–1997	D1067–11	973.43 [3], I–1030–85. [2]
	Automatic	310.2 (Rev. 1974) [1].	.....	.....	I–2030–85. [2]
3. Aluminum—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration [36].	.....	3111 D–2011 or 3111 E–2011.	.....	I–3051–85. [2]
	AA furnace	.....	3113 B–2010.		
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.5, Rev 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14[3], I–4471–97. [50]
	Direct Current Plasma (DCP) [36].	.....	.....	D4190–08	See footnote. [34]
	Colorimetric (Eriochrome cyanine R).	.....	3500–Al B–2011.		
4. Ammonia (as N), mg/L	Manual distillation [6] or gas diffusion (pH > 11), followed by any of the following:	350.1, Rev. 2.0 (1993).	4500–NH_3 B–2011	.....	973.49. [3]
	Nesslerization	.....	.....	D1426–08 (A) ..	973.49 [3], I–3520–85. [2]
	Titration	.....	4500–NH_3 C–2011.		
	Electrode	.....	4500–NH_3 D–2011 or E–2011.	D1426–08 (B).	
	Manual phenate, salicylate, or other substituted phenols in Berthelot reaction based methods.	.....	4500–NH_3 F–2011	.....	See footnote. [60]
	Automated phenate, salicylate, or other substituted phenols in Berthelot reaction based methods.	350.1 [30], Rev. 2.0 (1993).	4500–NH_3 G–2011 ..... 4500–NH_3 H–2011	.....	I–4523–85. [2]
	Automated electrode	.....	.....	.....	See footnote. [7]
	Ion Chromatography	.....	.....	D6919–09.	
	Automated gas diffusion, followed by conductivity cell analysis.	.....	.....	.....	Timberline Ammonia–001 [74]
5. Antimony—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration [36].	.....	3111 B–2011.		
	AA furnace	.....	3113 B–2010.		
	STGFAA	200.9, Rev. 2.2 (1994).			

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
	ICP/AES [36]	200.5, Rev 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4471–97. [50]
6. Arsenic-Total, [4] mg/L	Digestion [4], followed by any of the following:	206.5 (Issued 1978) [1].			
	AA gaseous hydride		3114 B–2011 or 3114 C–2011	D2972–08 (B)	I–3062–85. [2]
	AA furnace		3113 B–2010	D2972–08 (C)	I–4063–98. [49]
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.5, Rev 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12.	
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4020–05. [70]
	Colorimetric (SDDC).		3500–As B–2011	D2972–08 (A)	I–3060–85. [2]
7. Barium-Total, [4] mg/L	Digestion[4], followed by any of the following:				
	AA direct aspiration [36].		3111 D–2011		I–3084–85. [2]
	AA furnace		3113 B–2010	D4382–12.	
	ICP/AES [36]	200.5, Rev 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011		I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14[3], I–4471–97. [50]
	DCP [36]				See footnote. [34]
8. Beryllium—Total, [4] mg/L	Digestion [4], followed by any of the following:				
	AA direct aspiration		3111 D–2011 or 3111 E–2011.	D3645–08 (A)	I–3095–85. [2]
	AA furnace		3113 B–2010	D3645–08 (B).	
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES	200.5, Rev 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4471–97. [50]
	DCP			D4190–08	See footnote. [34]
	Colorimetric (aluminon).		See footnote. [61]		
9. Biochemical oxygen demand (BOD5), mg/L.	Dissolved Oxygen Depletion.		5210 B–2011		973.44 [3], p. 17 [9], I–1578–78 [8], See footnote. [10, 63]
10. Boron—Total, [37] mg/L	Colorimetric (curcumin)		4500–B B–2011		I–3112–85. [2]
	ICP/AES	200.5, Rev 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4471–97. [50]
	DCP			D4190–08	See footnote. [34]
11. Bromide, mg/L	Electrode			D1246–10	I–1125–85. [2]
	Ion Chromatography	300.0, Rev 2.1 (1993) and 300.1–1, Rev 1.0 (1997).	4110 B–2011, C–2011, D–2011.	D4327–03	993.30. [3]
	CIE/UV		4140 B–2011	D6508–10, D6508, Rev. 2 [54].	
12. Cadmium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
	AA direct aspiration [36].	.....	3111 B–2011 ..... or 3111 C–2011	D3557–12 (A or B).	974.27 [3], p. 37 [9], I–3135–85 [2] or I–3136–85. [2]
	AA furnace	.....	3113 B–2010	D3557–12 (D) ..	I–4138–89. [51]
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.5, Rev 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–1472–85 [2] or I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4471–97. [50]
	DCP [36]	.....	.....	D4190–08	See footnote. [34]
	Voltametry [11]	.....	.....	D3557–12 (C).	
	Colorimetric (Dithizone).	.....	3500–Cd–D–1990.		
13. Calcium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 B–2011	D511–09(B)	I–3152–85. [2]
	ICP/AES	200.5, Rev 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	.....	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14. [3]
	DCP	.....	.....	.....	See footnote. [34]
	Titrimetric (EDTA) ..	.....	3500–Ca B–2011	D511–09 (A).	
	Ion Chromatography.	.....	.....	D6919–09.	
14. Carbonaceous biochemical oxygen demand ($CBOD_5$), mg/L [12].	Dissolved Oxygen Depletion with nitrification inhibitor.	.....	5210 B–2011	.....	See footnote. [35, 63]
15. Chemical oxygen demand (COD), mg/L.	Titrimetric	410.3 (Rev. 1978) [1].	5220 B–2011 ..... or C–2011	D1252–06 (A) ..	973.46 [3], p. 17 [9], I–3560–85. [2]
	Spectrophotometric, manual or automatic.	410.4, Rev. 2.0 (1993).	5220 D–2011	D1252–06 (B) ..	See footnotes. [13, 14], I–3561–85. [2]
16. Chloride, mg/L	Titrimetric: (silver nitrate)	.....	4500–Cl^- B–2011	D512–04 (B)	I–1183–85. [2]
	(Mercuric nitrate)	.....	4500–Cl^- C–2011	D512–04 (A)	973.51 [3], I–1184–85. [2]
	Colorimetric: manual.	.....	.....	.....	I–1187–85. [2]
	Automated (ferricyanide).	.....	4500–Cl^- E–2011	.....	I–2187–85. [2]
	Potentiometric Titration.	.....	4500–Cl^- D–2011.		
	Ion Selective Electrode.	.....	.....	D512–04 (C).	
	Ion Chromatography.	300.0, Rev 2.1 (1993) and 300.1–1, Rev 1.0 (1997).	4110 B–2011 or 4110 C–2011.	D4327–03	993.30 [3], I–2057–90. [51]
	CIE/UV	.....	4140 B–2011	D6508–10, D6508, Rev. 2 [54].	
17. Chlorine—Total residual, mg/L.	Amperometric direct	.....	4500–Cl D–2011	D1253–08.	
	Amperometric direct (low level).	.....	4500–Cl E–2011.		
	Iodometric direct	.....	4500–Cl B–2011.		
	Back titration ether end-point [15].	.....	4500–Cl C–2011.		
	DPD–FAS	.....	4500–Cl F–2011.		
	Spectrophotometric, DPD.	.....	4500–Cl G–2011.		
	Electrode	.....	.....	.....	See footnote. [16]
17A. Chlorine-Free Available, mg/L.	Amperometric direct	.....	4500–Cl D–2011	D1253–08.	
	Amperometric direct (low level).	.....	4500–Cl E–2011.		
	DPD–FAS	.....	4500–Cl F–2011.		
	Spectrophotometric, DPD.	.....	4500–Cl G–2011.		

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
18. Chromium VI dissolved, mg/L.	0.45-micron filtration followed by any of the following:				
	AA chelation-extraction.	.....	3111 C–2011	.....	I–1232–85. [2]
	Ion Chromatography.	218.6, Rev. 3.3 (1994).	3500–Cr C–2011	D5257–11	993.23.
	Colorimetric (diphenyl-carbazide).	.....	3500–Cr B–2011	D1687–12 (A) ..	I–1230–85. [2]
19. Chromium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration [36].	.....	3111 B–2011	D1687–12 (B) ..	974.27 [3], I–3236–85. [2]
	AA chelation-extraction.	.....	3111 C–2011.		
	AA furnace	.....	3113 B–2010	D1687–12 (C) ..	I–3233–93. [46]
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.5, Rev 4.2 (2003) [68], 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4020–05. [70]
	DCP [36]	.....	.....	D4190–08	See footnote. [34]
	Colorimetric (diphenyl-carbazide).	.....	3500–Cr B–2011.		
20. Cobalt—Total, [4] mg/L	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 B–2011 or 3111 C–2011.	D3558–08 (A or B).	p. 37 [9], I–3239–85. [2]
	AA furnace	.....	3113 B–2010	D3558–08 (C) ..	I–4243–89. [51]
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4020–05. [70]
	DCP	.....	.....	D4190–08	See footnote. [34]
21. Color, platinum cobalt units or dominant wavelength, hue, luminance purity.	Colorimetric (ADMI)	.....	2120 F–2011	.....	See footnote. [18]
	(Platinum cobalt) Spectrophotometric.	.....	2120 B–2011	.....	I–1250–85. [2]
22. Copper—Total, [4] mg/L	Digestion [4], followed by any of the following:				
	AA direct aspiration [36].	.....	3111 B–2011 or 3111 C–2011	D1688–12 (A or B).	974.27 [3], p. 37 [9], I–3270–85 [2] or I–3271–85. [2]
	AA furnace	.....	3113 B–2010	D1688–12 (C) ..	I–4274–89. [51]
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.5, Rev 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4020–05. [70]
	DCP [36]	.....	.....	D4190–08	See footnote. [34]
	Colorimetric (Neocuproine).	.....	3500–Cu B–2011.		
	Colorimetric (Bathocuproine).	.....	3500–Cu C–2011	.....	See footnote. [19]
23. Cyanide—Total, mg/L	Automated UV digestion/distillation and Colorimetry.	.....	.....	.....	Kelada–01. [55]

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
	Segmented Flow Injection, In-Line Ultraviolet Digestion, followed by gas diffusion amperometry.	.....	.....	D7511–12.	
	Manual distillation with $MgCl_2$, followed by any of the following:	335.4, Rev. 1.0 (1993) [57].	4500–CN − B–2011 and C–2011.	D2036–09(A), D7284–13.	10–204–00–1–X. [56]
	Flow Injection, gas diffusion amperometry.	.....	.....	D2036–09(A) D7284–13.	
	Titrimetric	.....	4500–CN − D–2011	D2036–09(A)	p. 22. [9]
	Spectrophotometric, manual.	.....	4500–CN − E–2011	D2036–09(A)	I–3300–85. [2]
	Semi-Automated [20]	335.4, Rev. 1.0 (1993) [57].	.....	.....	10–204–00–1–X [56], I–4302–85. [2]
	Ion Chromatography.	.....	.....	D2036–09(A).	
	Ion Selective Electrode.	.....	4500–CN − F–2011	D2036–09(A).	
24. Cyanide-Available, mg/L.	Cyanide Amenable to Chlorination (CATC); Manual distillation with $MgCl_2$, followed by Titrimetric or Spectrophotometric.	.....	4500–CN − G–2011	D2036–09(B).	
	Flow injection and ligand exchange, followed by gas diffusion amperometry [59].	.....	.....	D6888–09	OIA–1677–09. [44]
	Automated Distillation and Colorimetry (no UV digestion).	.....	.....	.....	Kelada–01. [55]
24.A Cyanide-Free, mg/L	Flow Injection, followed by gas diffusion amperometry.	.....	.....	D7237–10	OIA–1677–09. [44]
	Manual micro-diffusion and colorimetry.	.....	.....	D4282–02.	
25. Fluoride—Total, mg/L	Manual distillation [6], followed by any of the following:	.....	4500–F − B–2011.		
	Electrode, manual ..	.....	4500–F − C–2011	D1179–10 (B).	
	Electrode, automated.	.....	.....	.....	I–4327–85. [2]
	Colorimetric, (SPADNS).	.....	4500–F − D–2011	D1179–10 (A).	
	Automated complexone.	.....	4500–F − E–2011.		
	Ion Chromatography.	300.0, Rev 2.1 (1993) and 300.1–1, Rev 1.0 (1997).	4110 B–2011 or C–2011	D4327–03	993.30. [3]
	CIE/UV	.....	4140 B–2011	D6508–10, D6508, Rev. 2 [54].	
26. Gold—Total, [4] mg/L ...	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 B–2011.		
	AA furnace	231.2 (Issued 1978) [1].	3113 B–2010.		
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14. [3]
	DCP	.....	.....	.....	See footnote. [34]
27. Hardness—Total, as $CaCO_3$, mg/L.	Automated colorimetric	130.1 (Issued 1971) [1].			
	Titrimetric (EDTA) ..	.....	2340 C–2011	D1126–12	973.52B [3], I–1338–85. [2]

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
	Ca plus Mg as their carbonates, by any approved method for Ca and Mg (See Parameters 13 and 33), provided that the sum of the lowest point of quantitation for Ca and Mg is below the NPDES permit requirement for Hardness.	.....	2340 B–2011.		
28. Hydrogen ion (pH), pH units.	Electrometric measurement.	.....	4500–H^+ B–2011	D1293–99 (A or B).	973.41 [3], I–1586–85. [2]
	Automated electrode.	150.2 (Dec. 1982) [1].	.....	.....	See footnote [21], I–2587–85. [2]
29. Iridium—Total, [4] mg/L	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 B–2011.		
	AA furnace	235.2 (Issued 1978) [1].			
	ICP/MS	.....	3125 B–2011.		
30. Iron—Total, [4] mg/L	Digestion [4], followed by any of the following:				
	AA direct aspiration [36].	.....	3111 B–2011 or 3111 C–2011	D1068–10 (A) ..	974.27 [3], I–3381–85. [2]
	AA furnace	.....	3113 B–2010	D1068–10 (B).	
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14. [3]
	DCP [36]	.....	.....	D4190–08	See footnote. [34]
	Colorimetric (Phenanthroline).	.....	3500–Fe–2011	D1068–10 (C) ..	See footnote. [22]
31. Kjeldahl Nitrogen [5]—Total, (as N), mg/L.	Manual digestion [20] and distillation or gas diffusion, followed by any of the following:	.....	4500–N_{org} B–2011 or C–2011 and 4500–NH_3 B–2011.	D3590–11 (A) ..	I–4515–91. [45]
	Titration	.....	4500–NH_3 C–2011	.....	973.48. [3]
	Nesslerization	.....	.....	D1426–08 (A).	
	Electrode	.....	4500–NH_3 D–2011 or E–2011.	D1426–08 (B).	
	Semi-automated phenate.	350.1, Rev. 2.0 (1993).	4500–NH_3 G–2011 ..... 4500–NH_3 H–2011.		
	Manual phenate, salicylate, or other substituted phenols in Berthelot reaction based methods.	.....	4500–NH_3 F–2011	.....	See footnote. [60]
	Automated Methods for TKN that do not require manual distillation.				
	Automated phenate, salicylate, or other substituted phenols in Berthelot reaction based methods colorimetric (auto digestion and distillation).	351.1 (Rev. 1978) [1].	.....	.....	I–4551–78. [8]

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
	Semi-automated block digestor colorimetric (distillation not required).	351.2, Rev. 2.0 (1993).	4500–N_{org} D–2011	D3590–11 (B)	I–4515–91 [45]
	Block digester, followed by Auto distillation and Titration.				See footnote. [39]
	Block digester, followed by Auto distillation and Nesslerization.				See footnote. [40]
	Block Digester, followed by Flow injection gas diffusion (distillation not required).				See footnote. [41]
	Digestion with peroxdisulfate, followed by Spectrophotometric (2,6-dimethyl phenol).				Hach 10242. [75]
	Digestion with persulfate, followed by Colorimetric.				NCASI TNTP W10900. [77]
32. Lead—Total, [4] mg/L	Digestion [4], followed by any of the following:				
	AA direct aspiration [36].		3111 B–2011 or 3111 C–2011.	D3559–08 (A or B).	974.27 [3], I–3399–85. [2]
	AA furnace		3113 B–2010	D3559–08 (D)	I–4403–89. [51]
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4471–97. [50]
	DCP [36]			D4190–08	See footnote. [34]
	Voltametry [11]			D3559–08 (C).	
	Colorimetric (Dithizone).		3500–Pb B–2011.		
33. Magnesium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration		3111 B–2011	D511–09 (B)	974.27 [3], I–3447–85. [2]
	ICP/AES	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14. [3]
	DCP				See footnote. [34]
	Ion Chromatography.			D6919–09.	
34. Manganese—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration [36].		3111 B–2011	D858–12 (A or B).	974.27 [3], I–3454–85. [2]
	AA furnace		3113 B–2010	D858–12 (C).	
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4471–97. [50]
	DCP [36]			D4190–08	See footnote. [34]

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
	Colorimetric (Persulfate).	.....	3500–Mn B–2011	.....	920.203. [3]
	Colorimetric (Periodate).	.....	.....	.....	See footnote. [23]
35. Mercury—Total, [4] mg/L.	Cold vapor, Manual	245.1, Rev. 3.0 (1994).	3112 B–2011	D3223–12	977.22 [3], I–3462–85. [2]
	Cold vapor, Automated.	245.2 (Issued 1974) [1].			
	Cold vapor atomic fluorescence spectrometry (CVAFS).	245.7 Rev. 2.0 (2005) [17].	.....	.....	I–4464–01. [71]
	Purge and Trap CVAFS.	1631E [43].			
36. Molybdenum—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 D–2011	.....	I–3490–85. [2]
	AA furnace	.....	3113 B–2010	.....	I–3492–96. [47]
	ICP/AES [36]	200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4471–97. [50]
	DCP	.....	.....	.....	See footnote. [34]
37. Nickel—Total, [4] mg/L	Digestion [4], followed by any of the following:				
	AA direct aspiration [36].	.....	3111 B–2011 or 3111 C–2011	D1886–08 (A or B).	I–3499–85. [2]
	AA furnace	.....	3113 B–2010	D1886–08 (C) ..	I–4503–89. [51]
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4020–05. [70]
	DCP [36]	.....	.....	D4190–08	See footnote. [34]
38. Nitrate (as N), mg/L ..	Ion Chromatography	300.0, Rev. 2.1 (1993) and 300.1–1, Rev. 1.0 (1997).	4110 B–2011 or C–2011	D4327–03	993.30. [3]
	CIE/UV	.....	4140 B–2011	D6508–10, D6508, Rev. 2 [54].	
	Ion Selective Electrode.	.....	4500–NO_3^- D–2011.		
	Colorimetric (Brucine sulfate).	352.1 (Issued 1971) [1].	.....	.....	973.50 [3], 419D [1,7], p. 28. [9]
	Spectrophotometric (2,6–dimethylphenol).	.....	.....	.....	Hach 10206. [75]
	Nitrate-nitrite N minus Nitrite N (See parameters 39 and 40).	.....	.....	.....	See footnote. [62]
	Enzymatic reduction, followed by automated colorimetric determination.	.....	.....	.....	I–2547–11. [72] I–2548–11. [72] N07–0003. [73]
39. Nitrate-nitrite (as N), mg/L.	Cadmium reduction, Manual.	.....	4500–NO_3^- E–2011	D3867–04 (B).	
	Cadmium reduction, Automated.	353.2, Rev. 2.0 (1993).	4500–NO_3^- F–2011	D3867–04 (A) ..	I–2545–90. [51]
	Automated hydrazine.	.....	4500–NO_3^- H–2011.		
	Reduction/Colorimetric.	.....	.....	.....	See footnote. [62]
	Ion Chromatography.	300.0, Rev. 2.1 (1993) and 300.1–1, Rev. 1.0 (1997).	4110 B–2011 or C–2011	D4327–03	993.30. [3]

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
	CIE/UV		4140 B–2011	D6508–10	D6508, Rev. 2. [54]
	Enzymatic reduction, followed by automated colorimetric determination.				I–2547–11. [72] I–2548–11. [72] N07–0003. [73]
	Spectrophotometric (2,6-dimethylphenol).				Hach 10206. [75]
40. Nitrite (as N), mg/L	Spectrophotometric: Manual.		4500–NO_2^- B–2011		See footnote. [25]
	Automated (Diazotization).				I–4540–85 [2], See footnote. [62]
	Automated (*bypass cadmium reduction).	353.2, Rev. 2.0 (1993).	4500–NO_3^- F–2011	D3867–04 (A)	I–4545–85. [2]
	Manual (*bypass cadmium reduction).		4500–NO_3^- E–2011	D3867–04 (B).	
	Ion Chromatography.	300.0, Rev. 2.1 (1993) and 300.1–1, Rev. 1.0 (1997).	4110 B–2011 or C–2011	D4327–03	993.30. [3]
	CIE/UV		4140 B–2011	D6508–10, D6508, Rev. 2 [54].	
	Enzymatic reduction, followed by automated colorimetric determination.				I–2547–11. [72] I–2548–11. [72] N07–0003. [73]
41. Oil and grease—Total recoverable, mg/L.	Hexane extractable material (HEM): n-Hexane extraction and gravimetry.	1664 Rev. A; 1664 Rev. B [42].	5520 B–2011 [38].		
	Silica gel treated HEM (SGT–HEM): Silica gel treatment and gravimetry.	1664 Rev. A; 1664 Rev. B [42].	5520 B–2011 [38] and 5520 F–2011 [38].		
42. Organic carbon—Total (TOC), mg/L.	Combustion		5310 B–2011	D7573–09	973.47 [3], p. 14. [24]
	Heated persulfate or UV persulfate oxidation.		5310 C–2011 5310 D–2011	D4839–03	973.47 [3], p. 14. [24]
43. Organic nitrogen (as N), mg/L.	Total Kjeldahl N (Parameter 31) minus ammonia N (Parameter 4).				
44. Ortho-phosphate (as P), mg/L.	Ascorbic acid method:				
	Automated	365.1, Rev. 2.0 (1993).	4500–P F–2011 or G–2011.		973.56 [3], I–4601–85. [2]
	Manual single reagent.		4500–P E–2011	D515–88 (A)	973.55. [3]
	Manual two reagent	365.3 (Issued 1978) [1].			
	Ion Chromatography.	300.0, Rev. 2.1 (1993) and 300.1–1, Rev. 1.0 (1997).	4110 B–2011 or C–2000	D4327–03	993.30. [3]
	CIE/UV		4140 B–2011	D6508–10, D6508, Rev. 2 [54].	
45. Osmium—Total [4], mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration		3111 D–2011.		
	AA furnace	252.2 (Issued 1978) [1].			
46. Oxygen, dissolved, mg/L.	Winkler (Azide modification).		4500–O (B–F)–2011	D888–09 (A)	973.45B [3], I–1575–78. [8]
	Electrode		4500–O G–2011	D888–09 (B)	I–1576–78. [8]

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
	Luminescence Based Sensor.	.....	.....	D888–09 (C)	See footnote. [63] See footnote. [64]
47. Palladium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 B–2011.		
	AA furnace	253.2 (Issued 1978) [1].			
	ICP/MS	.....	3125 B–2011.		
	DCP	.....	.....	.....	See footnote. [34]
48. Phenols, mg/L	Manual distillation [26], followed by any of the following:	420.1 (Rev. 1978) [1].	5530 B–2010	D1783–01.	
	Colorimetric (4AAP) manual.	420.1 (Rev. 1978) [1].	5530 D–2010 [27]	D1783–01 (A or B).	
	Automated colorimetric (4AAP).	420.4 Rev. 1.0 (1993).			
49. Phosphorus (elemental), mg/L.	Gas-liquid chromatography.	.....	.....	.....	See footnote. [28]
50. Phosphorus—Total, mg/L.	Digestion [20], followed by any of the following:	.....	4500–P B(5)–2011	.....	973.55. [3]
	Manual	365.3 (Issued 1978) [1].	4500–P E–2011	D515–88 (A).	
	Automated ascorbic acid reduction.	365.1 Rev. 2.0 (1993).	4500–P (F–H)–2011	.....	973.56 [3], I–4600–85. [2]
	ICP/AES [4, 36]	200.7, Rev. 4.4 (1994).	3120 B–2011	.....	I–4471–97. [50]
	Semi-automated block digestor (TKP digestion).	365.4 (Issued 1974) [1].	.....	D515–88 (B)	I–4610–91. [48]
	Digestion with persulfate, followed by Colorimetric.	.....	.....	.....	NCASI TNTP W10900. [77]
51. Platinum—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 B–2011.		
	AA furnace	255.2 (Issued 1978) [1].			
	ICP/MS	.....	3125 B–2011.		
	DCP	.....	.....	.....	See footnote. [34]
52. Potassium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 B–2011	.....	973.53 [3], I–3630–85. [2]
	ICP/AES	200.7, Rev. 4.4 (1994).	3120 B–2011.		
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14. [3]
	Flame photometric	.....	3500–K B–2011.		
	Electrode	.....	3500–K C–2011.		
	Ion Chromatography.	.....	.....	D6919–09.	
53. Residue—Total, mg/L	Gravimetric, 103–105° ..	.....	2540 B–2011	.....	I–3750–85. [2]
54. Residue—filterable, mg/L.	Gravimetric, 180°	.....	2540 C–2011	D5907–13	I–1750–85. [2]
55. Residue—non-filterable (TSS), mg/L.	Gravimetric, 103–105° post washing of residue.	.....	2540 D–2011	D5907–13	I–3765–85. [2]
56. Residue—settleable, mg/L.	Volumetric, (Imhoff cone), or gravimetric.	.....	2540 F–2011.		
57. Residue—Volatile, mg/L.	Gravimetric, 550°	160.4 (Issued 1971) [1].	2540–E–2011	.....	I–3753–85. [2]
58. Rhodium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration, or.	.....	3111 B–2011.		
	AA furnace	265.2 (Issued 1978) [1].			
	ICP/MS	.....	3125 B–2011.		
59. Ruthenium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration, or.	.....	3111 B–2011.		

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
	AA furnace	267.2 [1].			
	ICP/MS		3125 B–2011.		
60. Selenium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA furnace		3113 B–2010	D3859–08 (B)	I–4668–98. [49]
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES [36]	200.5, Rev 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12.	
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4020–05. [70]
	AA gaseous hydride		3114 B–2011, or 3114 C–2011.	D3859–08 (A)	I–3667–85. [2]
61. Silica—Dissolved, [37] mg/L.	0.45-micron filtration followed by any of the following:				
	Colorimetric, Manual.		4500–SiO_2 C–2011	D859–10	I–1700–85. [2]
	Automated (Molybdosilicate).		4500–SiO_2 E–2011 or F–2011.		I–2700–85. [2]
	ICP/AES	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011		I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14. [3]
62. Silver—Total, [4] [31] mg/L	Digestion [4, 29], followed by any of the following:				
	AA direct aspiration		3111 B–2011 or 3111 C–2011		974.27 [3], p. 37 [9], I–3720–85. [2]
	AA furnace		3113 B–2010		I–4724–89. [51]
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4471–97. [50]
	DCP				See footnote. [34]
63. Sodium—Total, [4] mg/L	Digestion [4], followed by any of the following:				
	AA direct aspiration		3111 B–2011		973.54 [3], I–3735–85. [2]
	ICP/AES	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011		I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14. [3]
	DCP				See footnote. [34]
	Flame photometric		3500–Na B–2011.		
	Ion Chromatography.			D6919–09.	
64. Specific conductance, micromhos/cm at 25 °C.	Wheatstone bridge	120.1 (Rev. 1982) [1].	2510 B–2011	D1125–95(99) (A).	973.40 [3], I–2781–85. [2]
65. Sulfate (as SO_4), mg/L.	Automated colorimetric	375.2, Rev. 2.0 (1993).	4500–SO_4^{2-} F–2011 or G–2011.		
	Gravimetric		4500–SO_4^{2-} C–2011 or D–2011.		925.54. [3]
	Turbidimetric		4500–SO_4^{2-} E–2011	D516–11.	
	Ion Chromatography.	300.0, Rev. 2.1 (1993) and 300.1–1, Rev. 1.0 (1997).	4110 B–2011 or C–2011	D4327–03	993.30 [3], I–4020–05. [70]
	CIE/UV		4140 B–2011	D6508–1010	D6508, Rev. 2. [54]
66. Sulfide (as S), mg/L	Sample Pretreatment		4500–S^{2-}>B, C–2011.		
	Titrimetric (iodine)		4500–S^{2-} F–2011		I–3840–85. [2]
	Colorimetric (methylene blue).		4500–S^{2-} D–2011.		

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
	Ion Selective Electrode.	.....	4500–S^{2-} G–2011	D4658–09.	
67. Sulfite (as SO_3), mg/L	Titrimetric (iodine-iodate)	.....	4500–SO_3^{2-} B–2011.		
68. Surfactants, mg/L	Colorimetric (methylene blue).	.....	5540 C–2011	D2330–02.	
69. Temperature, °C	Thermometric	.....	2550 B–2010	.....	See footnote. [32]
70. Thallium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 B–2011.		
	AA furnace	279.2 (Issued 1978) [1].	3113 B–2010.		
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES	200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12.	
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4471–97. [50]
71. Tin—Total, [4] mg/L	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 B–2011	.....	I–3850–78. [8]
	AA furnace	.....	3113 B–2010.		
	STGFAA	200.9, Rev. 2.2 (1994).			
	ICP/AES	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).			
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14. [3]
72. Titanium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 D–2011.		
	AA furnace	283.2 (Issued 1978) [1].			
	ICP/AES	200.7, Rev. 4.4 (1994).			
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14. [3]
	DCP	.....	.....	.....	See footnote. [34]
73. Turbidity, NTU [53]	Nephelometric	180.1, Rev. 2.0 (1993).	2130 B–2011	D1889–00	I–3860–85. [2] See footnote. [65] See footnote. [66] See footnote. [67]
74. Vanadium—Total, [4] mg/L.	Digestion [4], followed by any of the following:				
	AA direct aspiration	.....	3111 D–2011.		
	AA furnace	.....	3113 B–2010	D3373–12.	
	ICP/AES	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4020–05. [70]
	DCP	.....	.....	D4190–08	See footnote. [34]
	Colorimetric (Gallic Acid).	.....	3500–V B–2011.		
75. Zinc—Total [4], mg/L	Digestion [4], followed by any of the following:				
	AA direct aspiration [36].	.....	3111 B–2011 or 3111 C–2011.	D1691–12 (A or B).	974.27 [3], p. 37 [9], I–3900–85. [2]
	AA furnace	289.2 (Issued 1978) [1].			
	ICP/AES [36]	200.5, Rev. 4.2 (2003) [68]; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. [50]
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–10	993.14 [3], I–4020–05 [70]
	DCP [36]	.....	.....	D4190–08	See footnote. [34]
	Colorimetric (Zincon).	.....	3500 Zn B–2011	.....	See footnote. [33]

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology [58]	EPA [52]	Standard methods	ASTM	USGS/AOAC/Other
76. Acid Mine Drainage ...	.....	1627 [69].			

Table IB Notes:

[1] Methods for Chemical Analysis of Water and Wastes, EPA–600/4–79–020. Revised March 1983 and 1979, where applicable. U.S. EPA.

[2] Methods for Analysis of Inorganic Substances in Water and Fluvial Sediments, Techniques of Water-Resource Investigations of the U.S. Geological Survey, Book 5, Chapter A1., unless otherwise stated. 1989. USGS.

[3] Official Methods of Analysis of the Association of Official Analytical Chemists, Methods Manual, Sixteenth Edition, 4th Revision, 1998. AOAC International.

[4] For the determination of total metals (which are equivalent to total recoverable metals) the sample is not filtered before processing. A digestion procedure is required to solubilize analytes in suspended material and to break down organic-metal complexes (to convert the analyte to a detectable form for colorimetric analysis). For non-platform graphite furnace atomic absorption determinations a digestion using nitric acid (as specified in Section 4.1.3 of Methods for the Chemical Analysis of Water and Wastes) is required prior to analysis. The procedure used should subject the sample to gentle, acid refluxing and at no time should the sample be taken to dryness. For direct aspiration flame atomic absorption determinations (FLAA) a combination acid (nitric and hydrochloric acids) digestion is preferred prior to analysis. The approved total recoverable digestion is described as Method 200.2 in Supplement I of ''Methods for the Determination of Metals in Environmental Samples'' EPA/600R–94/111, May, 1994, and is reproduced in EPA Methods 200.7, 200.8, and 200.9 from the same Supplement. However, when using the gaseous hydride technique or for the determination of certain elements such as antimony, arsenic, selenium, silver, and tin by non-EPA graphite furnace atomic absorption methods, mercury by cold vapor atomic absorption, the noble metals and titanium by FLAA, a specific or modified sample digestion procedure may be required and in all cases the referenced method write-up should be consulted for specific instruction and/or cautions. For analyses using inductively coupled plasma-atomic emission spectrometry (ICP–AES), the direct current plasma (DCP) technique or EPA spectrochemical techniques (platform furnace AA, ICP–AES, and ICP–MS) use EPA Method 200.2 or an approved alternate procedure (*e.g.,* CEM microwave digestion, which may be used with certain analytes as indicated in Table IB); the total recoverable digestion procedures in EPA Methods 200.7, 200.8, and 200.9 may be used for those respective methods. Regardless of the digestion procedure, the results of the analysis after digestion procedure are reported as ''total'' metals.

[5] Copper sulfate or other catalysts that have been found suitable may be used in place of mercuric sulfate.

[6] Manual distillation is not required if comparability data on representative effluent samples are on file to show that this preliminary distillation step is not necessary: however, manual distillation will be required to resolve any controversies. In general, the analytical method should be consulted regarding the need for distillation. If the method is not clear, the laboratory may compare a minimum of 9 different sample matrices to evaluate the need for distillation. For each matrix, a matrix spike and matrix spike duplicate are analyzed both with and without the distillation step. (A total of 36 samples, assuming 9 matrices). If results are comparable, the laboratory may dispense with the distillation step for future analysis. Comparable is defined as < 20% RPD for all tested matrices). Alternatively the two populations of spike recovery percentages may be compared using a recognized statistical test.

[7] Industrial Method Number 379–75 WE Ammonia, Automated Electrode Method, Technicon Auto Analyzer II. February 19, 1976. Bran & Luebbe Analyzing Technologies Inc.

[8] The approved method is that cited in Methods for Determination of Inorganic Substances in Water and Fluvial Sediments, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A1. 1979. USGS.

[9] American National Standard on Photographic Processing Effluents. April 2, 1975. American National Standards Institute.

[10] In-Situ Method 1003–8–2009, Biochemical Oxygen Demand (BOD) Measurement by Optical Probe. 2009. In-Situ Incorporated.

[11] The use of normal and differential pulse voltage ramps to increase sensitivity and resolution is acceptable.

[12] Carbonaceous biochemical oxygen demand ($CBOD_5$) must not be confused with the traditional BOD_5 test method which measures ''total BOD.'' The addition of the nitrification inhibitor is not a procedural option, but must be included to report the $CBOD_5$ parameter. A discharger whose permit requires reporting the traditional BOD_5 may not use a nitrification inhibitor in the procedure for reporting the results. Only when a discharger's permit specifically states $CBOD_5$ is required can the permittee report data using a nitrification inhibitor.

[13] OIC Chemical Oxygen Demand Method. 1978. Oceanography International Corporation.

[14] Method 8000, Chemical Oxygen Demand, Hach Handbook of Water Analysis, 1979. Hach Company.

[15] The back titration method will be used to resolve controversy.

[16] Orion Research Instruction Manual, Residual Chlorine Electrode Model 97–70. 1977. Orion Research Incorporated. The calibration graph for the Orion residual chlorine method must be derived using a reagent blank and three standard solutions, containing 0.2, 1.0, and 5.0 mL 0.00281 N potassium iodate/100 mL solution, respectively.

[17] Method 245.7, Mercury in Water by Cold Vapor Atomic Fluorescence Spectrometry, EPA–821–R–05–001. Revision 2.0, February 2005. US EPA.

[18] National Council of the Paper Industry for Air and Stream Improvement (NCASI) Technical Bulletin 803, May 2000.

[19] Method 8506, Biocinchoninate Method for Copper, Hach Handbook of Water Analysis. 1979. Hach Company.

[20] When using a method with block digestion, this treatment is not required.

[21] Industrial Method Number 378–75WA, Hydrogen ion (pH) Automated Electrode Method, Bran & Luebbe (Technicon) Autoanalyzer II. October 1976. Bran & Luebbe Analyzing Technologies.

[22] Method 8008, 1,10-Phenanthroline Method using FerroVer Iron Reagent for Water. 1980. Hach Company.

[23] Method 8034, Periodate Oxidation Method for Manganese, Hach Handbook of Wastewater Analysis. 1979. Hach Company.

[24] Methods for Analysis of Organic Substances in Water and Fluvial Sediments, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A3, (1972 Revised 1987). 1987. USGS.

[25] Method 8507, Nitrogen, Nitrite-Low Range, Diazotization Method for Water and Wastewater. 1979. Hach Company.

[26] Just prior to distillation, adjust the sulfuric-acid-preserved sample to pH 4 with 1 + 9 NaOH.

[27] The colorimetric reaction must be conducted at a pH of 10.0 ± 0.2.

[28] Addison, R.F., and R.G. Ackman. 1970. Direct Determination of Elemental Phosphorus by Gas-Liquid Chromatography, *Journal of Chromatography*, 47(3):421–426.

[29] Approved methods for the analysis of silver in industrial wastewaters at concentrations of 1 mg/L and above are inadequate where silver exists as an inorganic halide. Silver halides such as the bromide and chloride are relatively insoluble in reagents such as nitric acid but are readily soluble in an aqueous buffer of sodium thiosulfate and sodium hydroxide to pH of 12. Therefore, for levels of silver above 1 mg/L, 20 mL of sample should be diluted to 100 mL by adding 40 mL each of 2 M $Na_2S_2O_3$ and NaOH. Standards should be prepared in the same manner. For levels of silver below 1 mg/L the approved method is satisfactory.

[30] The use of EDTA decreases method sensitivity. Analysts may omit EDTA or replace with another suitable complexing reagent provided that all method specified quality control acceptance criteria are met.

[31] For samples known or suspected to contain high levels of silver (*e.g.,* in excess of 4 mg/L), cyanogen iodide should be used to keep the silver in solution for analysis. Prepare a cyanogen iodide solution by adding 4.0 mL of concentrated NH_4OH, 6.5 g of KCN, and 5.0 mL of a 1.0 N solution of I_2 to 50 mL of reagent water in a volumetric flask and dilute to 100.0 mL. After digestion of the sample, adjust the pH of the digestate to >7 to prevent the formation of HCN under acidic conditions. Add 1 mL of the cyanogen iodide solution to the sample digestate and adjust the volume to 100 mL with reagent water (NOT acid). If cyanogen iodide is added to sample digestates, then silver standards must be prepared that contain cyanogen iodide as well. Prepare working standards by diluting a small volume of a silver stock solution with water and adjusting the pH>7 with NH_4OH. Add 1 mL of the cyanogen iodide solution and let stand 1 hour. Transfer to a 100-mL volumetric flask and dilute to volume with water.

[32] ''Water Temperature-Influential Factors, Field Measurement and Data Presentation,'' Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 1, Chapter D1. 1975. USGS.

[33] Method 8009, Zincon Method for Zinc, Hach Handbook of Water Analysis, 1979. Hach Company.

[34] Method AES0029, Direct Current Plasma (DCP) Optical Emission Spectrometric Method for Trace Elemental Analysis of Water and Wastes. 1986—Revised 1991. Thermo Jarrell Ash Corporation.

[35] In-Situ Method 1004–8–2009, Carbonaceous Biochemical Oxygen Demand (CBOD) Measurement by Optical Probe. 2009. In-Situ Incorporated.

[36] Microwave-assisted digestion may be employed for this metal, when analyzed by this methodology. Closed Vessel Microwave Digestion of Wastewater Samples for Determination of Metals. April 16, 1992. CEM Corporation

[37] When determining boron and silica, only plastic, PTFE, or quartz laboratory ware may be used from start until completion of analysis.

[38] Only use n-hexane (n-Hexane—85% minimum purity, 99.0% min. saturated C6 isomers, residue less than 1 mg/L) extraction solvent when determining Oil and Grease parameters—Hexane Extractable Material (HEM), or Silica Gel Treated HEM (analogous to EPA Methods 1664 Rev. A and 1664 Rev. B). Use of other extraction solvents is prohibited.

[39] Method PAI–DK01, Nitrogen, Total Kjeldahl, Block Digestion, Steam Distillation, Titrimetric Detection. Revised December 22, 1994. OI Analytical.

[40] Method PAI–DK02, Nitrogen, Total Kjeldahl, Block Digestion, Steam Distillation, Colorimetric Detection. Revised December 22, 1994. OI Analytical.

[41] Method PAI–DK03, Nitrogen, Total Kjeldahl, Block Digestion, Automated FIA Gas Diffusion. Revised December 22, 1994. OI Analytical.

[42] Method 1664 Rev. B is the revised version of EPA Method 1664 Rev. A. U.S. EPA. February 1999, Revision A. Method 1664, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT–HEM; Non-polar Material) by Extraction and Gravimetry. EPA–821–R–98–002. U.S. EPA. February 2010, Revision B. Method 1664, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT–HEM; Non-polar Material) by Extraction and Gravimetry. EPA–821–R–10–001.

[43] Method 1631, Revision E, Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry, EPA–821–R–02–019. Revision E. August 2002, U.S. EPA. The application of clean techniques described in EPA's Method 1669: *Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels,* EPA–821–R–96–011, are recommended to preclude contamination at low-level, trace metal determinations.

[44] Method OIA–1677–09, Available Cyanide by Ligand Exchange and Flow Injection Analysis (FIA). 2010. OI Analytical.

[45] Open File Report 00–170, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Ammonium Plus Organic Nitrogen by a Kjeldahl Digestion Method and an Automated Photometric Finish that Includes Digest Cleanup by Gas Diffusion. 2000. USGS.

[46] Open File Report 93–449, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Chromium in Water by Graphite Furnace Atomic Absorption Spectrophotometry. 1993. USGS.

[47] Open File Report 97–198, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Molybdenum by Graphite Furnace Atomic Absorption Spectrophotometry. 1997. USGS.

[48] Open File Report 92–146, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Total Phosphorus by Kjeldahl Digestion Method and an Automated Colorimetric Finish That Includes Dialysis. 1992. USGS.

[49] Open File Report 98–639, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Arsenic and Selenium in Water and Sediment by Graphite Furnace-Atomic Absorption Spectrometry. 1999. USGS.

[50] Open File Report 98–165, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Elements in Whole-water Digests Using Inductively Coupled Plasma-Optical Emission Spectrometry and Inductively Coupled Plasma-Mass Spectrometry. 1998. USGS.

[51] Open File Report 93–125, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments. 1993. USGS.

[52] Unless otherwise indicated, all EPA methods, excluding EPA Method 300.1–1, are published in U.S. EPA. May 1994. Methods for the Determination of Metals in Environmental Samples, Supplement I, EPA/600/R–94/111; or U.S. EPA. August 1993. Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R–93/100. EPA Method 300.1 is US EPA. Revision 1.0, 1997, including errata cover sheet April 27, 1999. Determination of Inorganic Ions in Drinking Water by Ion Chromatography.

[53] Styrene divinyl benzene beads (*e.g.,* AMCO–AEPA–1 or equivalent) and stabilized formazin (*e.g.,* Hach StablCal™ or equivalent) are acceptable substitutes for formazin.

[54] Method D6508–10, Test Method for Determination of Dissolved Inorganic Anions in Aqueous Matrices Using Capillary Ion Electrophoresis and Chromate Electrolyte. 2010. ASTM.

[55] Kelada-01, Kelada Automated Test Methods for Total Cyanide, Acid Dissociable Cyanide, and Thiocyanate, EPA 821–B–01–009, Revision 1.2, August 2001. US EPA. Note: A 450–W UV lamp may be used in this method instead of the 550–W lamp specified if it provides performance within the quality control (QC) acceptance criteria of the method in a given instrument. Similarly, modified flow cell configurations and flow conditions may be used in the method, provided that the QC acceptance criteria are met.

[56] QuikChem Method 10–204–00–1–X, Digestion and Distillation of Total Cyanide in Drinking and Wastewaters using MICRO DIST and Determination of Cyanide by Flow Injection Analysis. Revision 2.2, March 2005. Lachat Instruments.

[57] When using sulfide removal test procedures described in EPA Method 335.4–1, reconstitute particulate that is filtered with the sample prior to distillation.

[58] Unless otherwise stated, if the language of this table specifies a sample digestion and/or distillation ''followed by'' analysis with a method, approved digestion and/or distillation are required prior to analysis.

[59] Samples analyzed for available cyanide using OI Analytical method OIA–1677–09 or ASTM method D6888–09 that contain particulate matter may be filtered only after the ligand exchange reagents have been added to the samples, because the ligand exchange process converts complexes containing available cyanide to free cyanide, which is not removed by filtration. Analysts are further cautioned to limit the time between the addition of the ligand exchange reagents and sample filtration to no more than 30 minutes to preclude settling of materials in samples.

[60] Analysts should be aware that pH optima and chromophore absorption maxima might differ when phenol is replaced by a substituted phenol as the color reagent in Berthelot Reaction (''phenol-hypochlorite reaction'') colorimetric ammonium determination methods. For example when phenol is used as the color reagent, pH optimum and wavelength of maximum absorbance are about 11.5 and 635 nm, respectively—see, Patton, C.J. and S.R. Crouch. March 1977. Anal. Chem. 49:464–469. These reaction parameters increase to pH > 12.6 and 665 nm when salicylate is used as the color reagent—see, Krom, M.D. April 1980. The Analyst 105:305–316.

[61] If atomic absorption or ICP instrumentation is not available, the aluminon colorimetric method detailed in the 19th Edition of *Standard Methods* may be used. This method has poorer precision and bias than the methods of choice.

[62] Easy (1-Reagent) Nitrate Method, Revision November 12, 2011. Craig Chinchilla.

[63] Hach Method 10360, Luminescence Measurement of Dissolved Oxygen in Water and Wastewater and for Use in the Determination of BOD_5 and $cBOD_5$. Revision 1.2, October 2011. Hach Company. This method may be used to measure dissolved oxygen when performing the methods approved in Table IB for measurement of biochemical oxygen demand (BOD) and carbonaceous biochemical oxygen demand (CBOD).

[64] In-Situ Method 1002–8–2009, Dissolved Oxygen (DO) Measurement by Optical Probe. 2009. In-Situ Incorporated.

[65] Mitchell Method M5331, Determination of Turbidity by Nephelometry. Revision 1.0, July 31, 2008. Leck Mitchell.

[66] Mitchell Method M5271, Determination of Turbidity by Nephelometry. Revision 1.0, July 31, 2008. Leck Mitchell.

[67] Orion Method AQ4500, Determination of Turbidity by Nephelometry. Revision 5, March 12, 2009. Thermo Scientific.

[68] EPA Method 200.5, Determination of Trace Elements in Drinking Water by Axially Viewed Inductively Coupled Plasma-Atomic Emission Spectrometry, EPA/600/R–06/115. Revision 4.2, October 2003. US EPA.

[69] Method 1627, Kinetic Test Method for the Prediction of Mine Drainage Quality, EPA–821–R–09–002. December 2011. US EPA.

[70] Techniques and Methods Book 5–B1, Determination of Elements in Natural-Water, Biota, Sediment and Soil Samples Using Collision/Reaction Cell Inductively Coupled Plasma-Mass Spectrometry, Chapter 1, Section B, Methods of the National Water Quality Laboratory, Book 5, Laboratory Analysis, 2006. USGS.

[71] Water-Resources Investigations Report 01–4132, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Organic Plus Inorganic Mercury in Filtered and Unfiltered Natural Water with Cold Vapor-Atomic Fluorescence Spectrometry, 2001. USGS.

[72] USGS Techniques and Methods 5–B8, Chapter 8, Section B, Methods of the National Water Quality Laboratory Book 5, Laboratory Analysis, 2011 USGS.

[73] NECi Method N07–0003, Revision 9.0, March 2014, Method for Nitrate Reductase Nitrate-Nitrogen Analysis, The Nitrate Elimination Co., Inc.

[74] Timberline Instruments, LLC Method Ammonia-001, Timberline Instruments, LLC.

[75] Hach Company Method 10206, Hach Company.

[76] Hach Company Method 10242, Hach Company.

[77] National Council for Air and Stream Improvement (NCASI) Method TNTP–W10900, Total (Kjeldahl) Nitrogen and Total Phosphorus in Pulp and Paper Biologically Treated Effluent by Alkaline Persulfate Digestion. June 2011.

TABLE IC—LIST OF APPROVED TEST PROCEDURES FOR NON-PESTICIDE ORGANIC COMPOUNDS

Parameter [1]	Method	EPA [2 7]	Standard methods	ASTM	Other
1. Acenaphthene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
2. Acenaphthylene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
3. Acrolein	GC	603			
	GC/MS	624.1 [4],1624B			
4. Acrylonitrile	GC	603			
	GC/MS	624.1 [4],1624B			
5. Anthracene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440B–2005	D4657–92 (98)	
6. Benzene	GC	602	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
7. Benzidine	Spectro-photo-metric.				See footnote [3], p.1.
	GC/MS	625.1 [5], 1625B	6410 B–2000		
	HPLC	605			
8. Benzo(a)anthracene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
9. Benzo(a)pyrene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
10. Benzo(b)fluoranthene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
11. Benzo(g,h,i)perylene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
12. Benzo(k)fluoranthene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
13. Benzyl chloride	GC				See footnote [3], p. 130.
	GC/MS				See footnote [6], p. S102.
14. Butyl benzyl phthalate	GC	606			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
15. bis(2-Chloroethoxy) methane	GC	611			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
16. bis(2-Chloroethyl) ether	GC	611			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
17. bis(2-Ethylhexyl) phthalate	GC	606			

TABLE IC—LIST OF APPROVED TEST PROCEDURES FOR NON-PESTICIDE ORGANIC COMPOUNDS—Continued

Parameter [1]	Method	EPA [2 7]	Standard methods	ASTM	Other
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
18. Bromodichloromethane	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
19. Bromoform	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
20. Bromomethane	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
21. 4-Bromophenyl phenyl ether	GC	611			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
22. Carbon tetrachloride	GC	601	6200 C–2011		See footnote [3], p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		
23. 4-Chloro-3-methyl phenol	GC	604	6420 B–2000		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
24. Chlorobenzene	GC	601, 602	6200 C–2011		See footnote [3], p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		
25. Chloroethane	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
26. 2-Chloroethylvinyl ether	GC	601			
	GC/MS	624.1, 1624B			
27. Chloroform	GC	601	6200 C–2011		See footnote [3], p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		
28. Chloromethane	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
29. 2-Chloronaphthalene	GC	612			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
30. 2-Chlorophenol	GC	604	6420 B–2000		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
31. 4-Chlorophenyl phenyl ether	GC	611			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
32. Chrysene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
33. Dibenzo(a,h)anthracene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
34. Dibromochloromethane	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
35. 1,2-Dichlorobenzene	GC	601, 602	6200 C–2011		
	GC/MS	625.1, 1625B	6200 B–2011		See footnote [9], p. 27.
36. 1,3-Dichlorobenzene	GC	601, 602	6200 C–2011		
	GC/MS	624.1, 1625B	6200 B–2011		See footnote [9], p. 27.
37. 1,4-Dichlorobenzene	GC	601, 602	6200 C–2011		
	GC/MS	624.1, 1625B	6200 B–2011		See footnote [9], p. 27.
38. 3,3′-Dichlorobenzidine	GC/MS	625.1, 1625B	6410 B–2000		
	HPLC	605			
39. Dichlorodifluoromethane	GC	601			
	GC/MS		6200 C–2011		
40. 1,1-Dichloroethane	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
41. 1,2-Dichloroethane	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
42. 1,1-Dichloroethene	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
43. trans-1,2-Dichloroethene	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
44. 2,4-Dichlorophenol	GC	604	6420 B–2000		

TABLE IC—LIST OF APPROVED TEST PROCEDURES FOR NON-PESTICIDE ORGANIC COMPOUNDS—Continued

Parameter [1]	Method	EPA [2 7]	Standard methods	ASTM	Other
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
45. 1,2-Dichloropropane	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
46. cis-1,3-Dichloropropene	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
47. trans-1,3-Dichloropropene	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
48. Diethyl phthalate	GC	606			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
49. 2,4-Dimethylphenol	GC	604	6420 B–2000		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
50. Dimethyl phthalate	GC	606			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
51. Di-n-butyl phthalate	GC	606			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
52. Di-n-octyl phthalate	GC	606			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
53. 2, 4-Dinitrophenol	GC	604	6420 B–2000		See footnote [9], p. 27.
	GC/MS	625.1, 1625B	6410 B–2000		
54. 2,4-Dinitrotoluene	GC	609			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
55. 2,6-Dinitrotoluene	GC	609			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
56. Epichlorohydrin	GC				See footnote [3], p. 130.
	GC/MS				See footnote [6], p. S102.
57. Ethylbenzene	GC	602	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
58. Fluoranthene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
59. Fluorene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
60. 1,2,3,4,6,7,8-Heptachloro-dibenzofuran	GC/MS	1613B			
61. 1,2,3,4,7,8,9-Heptachloro-dibenzofuran	GC/MS	1613B			
62. 1,2,3,4,6,7,8- Heptachloro-dibenzo-*p*-dioxin	GC/MS	1613B			
63. Hexachlorobenzene	GC	612			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
64. Hexachlorobutadiene	GC	612			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
65. Hexachlorocyclopentadiene	GC	612			
	GC/MS	625.1 [5], 1625B	6410 B–2000		See footnote [9], p. 27.
66. 1,2,3,4,7,8-Hexachloro-dibenzofuran	GC/MS	1613B			
67. 1,2,3,6,7,8-Hexachloro-dibenzofuran	GC/MS	1613B			
68. 1,2,3,7,8,9-Hexachloro-dibenzofuran	GC/MS	1613B			
69. 2,3,4,6,7,8-Hexachloro-dibenzofuran	GC/MS	1613B			
70. 1,2,3,4,7,8-Hexachloro-dibenzo-*p*-dioxin	GC/MS	1613B			
71. 1,2,3,6,7,8-Hexachloro-dibenzo-*p*-dioxin	GC/MS	1613B			
72. 1,2,3,7,8,9-Hexachloro-dibenzo-*p*-dioxin	GC/MS	1613B			
73. Hexachloroethane	GC	612			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
74. Indeno(1,2,3-c,d) pyrene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.

TABLE IC—LIST OF APPROVED TEST PROCEDURES FOR NON-PESTICIDE ORGANIC COMPOUNDS—Continued

Parameter [1]	Method	EPA [2 7]	Standard methods	ASTM	Other
	HPLC	610	6440 B–2005	D4657–92 (98)	
75. Isophorone	GC	609			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
76. Methylene chloride	GC	601	6200 C–2011		See footnote [3], p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		
77. 2-Methyl-4,6-dinitrophenol	GC	604	6420 B–2000		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
78. Naphthalene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005		
79. Nitrobenzene	GC	609			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC			D4657–92 (98)	
80. 2-Nitrophenol	GC	604	6420 B–2000		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
81. 4-Nitrophenol	GC	604	6420 B–2000		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
82. N-Nitrosodimethylamine	GC	607			
	GC/MS	625.1 [5], 1625B	6410 B–2000		See footnote [9], p. 27.
83. N-Nitrosodi-n-propylamine	GC	607			
	GC/MS	625.1 [5], 1625B	6410 B–2000		See footnote [9], p. 27.
84. N-Nitrosodiphenylamine	GC	607			
	GC/MS	625.1 [5], 1625B	6410 B–2000		See footnote [9], p. 27.
85. Octachlorodibenzofuran	GC/MS	1613B [10]			
86. Octachlorodibenzo-*p*-dioxin	GC/MS	1613B [10]			
87. 2,2′-oxybis(1-chloropropane) [12] [also known as bis(2-Chloro-1-methylethyl) ether].	GC	611			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
88. PCB–1016	GC	608.3			See footnote [3], p. 43; See footnote. [8]
	GC/MS	625.1	6410 B–2000		
89. PCB–1221	GC	608.3			See footnote [3], p. 43; See footnote. [8]
	GC/MS	625.1	6410 B–2000		
90. PCB–1232	GC	608.3			See footnote [3], p. 43; See footnote. [8]
	GC/MS	625.1	6410 B–2000		
91. PCB–1242	GC	608.3			See footnote [3], p. 43; See footnote. [8]
	GC/MS	625.1	6410 B–2000		
92. PCB–1248	GC	608.3			See footnote [3], p. 43; See footnote. [8]
	GC/MS	625.1	6410 B–2000		
93. PCB–1254	GC	608.3			See footnote [3], p. 43; See footnote. [8]
	GC/MS	625.1	6410 B–2000		
94. PCB–1260	GC	608.3			See footnote [3], p. 43; See footnote. [8]
	GC/MS	625.1	6410 B–2000		
95. 1,2,3,7,8-Pentachloro-dibenzofuran	GC/MS	1613B			
96. 2,3,4,7,8-Pentachloro-dibenzofuran	GC/MS	1613B			
97. 1,2,3,7,8,-Pentachloro-dibenzo-*p*-dioxin	GC/MS	1613B			

TABLE IC—LIST OF APPROVED TEST PROCEDURES FOR NON-PESTICIDE ORGANIC COMPOUNDS—Continued

Parameter [1]	Method	EPA [2 7]	Standard methods	ASTM	Other
98. Pentachlorophenol	GC	604	6420 B–2000		See footnote [3], p. 140.
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
99. Phenanthrene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98)	
100. Phenol	GC	604	6420 B–2000		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
101. Pyrene	GC	610			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98).	
102. 2,3,7,8-Tetrachloro-dibenzofuran	GC/MS	1613B [10]			
103. 2,3,7,8-Tetrachloro-dibenzo-*p*-dioxin	GC/MS	613, 625.1 [5a], 1613B			
104. 1,1,2,2-Tetrachloroethane	GC	601	6200 C–2011		See footnote [3], p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		
105. Tetrachloroethene	GC	601	6200 C–2011		See footnote [3], p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		
106. Toluene	GC	602	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
107. 1,2,4-Trichlorobenzene	GC	612			See footnote [3], p. 130.
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
108. 1,1,1-Trichloroethane	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
109. 1,1,2-Trichloroethane	GC	601	6200 C–2011		See footnote [3], p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		
110. Trichloroethene	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
111. Trichlorofluoromethane	GC	601	6200 C–2011		
	GC/MS	624.1	6200 B–2011		
112. 2,4,6-Trichlorophenol	GC	604	6420 B–2000		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote [9], p. 27.
113. Vinyl chloride	GC	601	6200 C–2011		
	GC/MS	624.1, 1624B	6200 B–2011		
114. Nonylphenol	GC/MS			D7065–11	
115. Bisphenol A (BPA)	GC/MS			D7065–11	
116. p-tert-Octylphenol (OP)	GC/MS			D7065–11	
117. Nonylphenol Monoethoxylate (NP1EO)	GC/MS			D7065–11	
118. Nonylphenol Diethoxylate (NP2EO)	GC/MS			D7065–11	
119. Adsorbable Organic Halides (AOX)	Adsorption and Coulometric Titration.	1650 [11]			
120. Chlorinated Phenolics	In Situ Acetylation and GC/MS.	1653 [11]			

Table IC notes:

[1] All parameters are expressed in micrograms per liter (μg/L) except for Method 1613B, in which the parameters are expressed in picograms per liter (pg/L).

[2] The full text of Methods 601–613, 1613B, 1624B, and 1625B are provided at Appendix A, Test Procedures for Analysis of Organic Pollutants, of this Part 136. The standardized test procedure to be used to determine the method detection limit (MDL) for these test procedures is given at Appendix B, Definition and Procedure for the Determination of the Method Detection Limit, of this Part 136. Methods 608.3, 624.1, and 625.1 are available at: *water.epa.gov/scitech/methods/cwa/methods_index.cfm.*

[3] Methods for Benzidine: Chlorinated Organic Compounds, Pentachlorophenol and Pesticides in Water and Wastewater. September 1978. U.S. EPA.

[4] Method 624.1 may be used for quantitative determination of acrolein and acrylonitrile, provided that the laboratory has documentation to substantiate the ability to detect and quantify these analytes at levels necessary to comply with any associated regulations. In addition, the use of sample introduction techniques other than simple purge-and-trap may be required. QC acceptance criteria from Method 603 should be used when analyzing samples for acrolein and acrylonitrile in the absence of such criteria in Method 624.1.

[5] Method 625.1 may be extended to include benzidine, hexachlorocyclopentadiene, N-nitrosodimethylamine, N-nitrosodi-n-propylamine, and N-nitrosodiphenylamine. However, when they are known to be present, Methods 605, 607, and 612, or Method 1625B, are preferred methods for these compounds.

[5a] Method 625.1 screening only.

[6] Selected Analytical Methods Approved and Cited by the United States Environmental Protection Agency, Supplement to the 15th Edition of *Standard Methods for the Examination of Water and Wastewater* 1981. American Public Health Association (APHA).

[7] Each analyst must make an initial, one-time demonstration of their ability to generate acceptable precision and accuracy with Methods 601–603, 1624B, and 1625B in accordance with procedures each in Section 8.2 of each of these Methods. Additionally, each laboratory, on an ongoing basis must spike and analyze 10% (5% for Methods 624.1 and 625.1 and 100% for methods 1624B and 1625B) of all samples to monitor and evaluate laboratory data quality in accordance with Sections 8.3 and 8.4 of these methods. When the recovery of any parameter falls outside the warning limits, the analytical results for that parameter in the unspiked sample are suspect. The results should be reported, but cannot be used to demonstrate regulatory compliance. These quality control requirements also apply to the Standard Methods, ASTM Methods, and other methods cited.

[8] Organochlorine Pesticides and PCBs in Wastewater Using Empore™ Disk. Revised October 28, 1994. 3M Corporation.

[9] Method O–3116–87 is in Open File Report 93–125, Methods of Analysis by U.S. Geological Survey National Water Quality Laboratory—Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments. 1993. USGS.

[10] Analysts may use Fluid Management Systems, Inc. Power-Prep system in place of manual cleanup provided the analyst meets the requirements of Method 1613B (as specified in Section 9 of the method) and permitting authorities. Method 1613, Revision B, Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS. Revision B, 1994. U.S. EPA. The full text of this method is provided in Appendix A to 40 CFR part 136 and at *http://water.epa.gov/scitech/methods/cwa/index.cfm.*

[11] Method 1650, Adsorbable Organic Halides by Adsorption and Coulometric Titration. Revision C, 1997 U.S. EPA. Method 1653, Chlorinated Phenolics in Wastewater by In Situ Acetylation and GCMS. Revision A, 1997 U.S. EPA. The full text for both of these methods is provided at Appendix A in part 430, The Pulp, Paper, and Paperboard Point Source Category.

[12] The compound was formerly inaccurately labeled as 2,2′-oxybis(2-chloropropane) and bis(2-chloroisopropyl) ether. Some versions of Methods 611, and 1625 inaccurately list the analyte as ''bis(2-chloroisopropyl)ether,'' but use the correct CAS number of 108–60–1.

TABLE ID—LIST OF APPROVED TEST PROCEDURES FOR PESTICIDES [1]

Parameter	Method	EPA [2 7 10]	Standard methods	ASTM	Other
1. Aldrin	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96 (02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote, [8] 3M0222.
	GC/MS	625.1	6410 B–2000.		
2. Ametryn	GC	507, 619			See footnote,[3] p. 83; See footnote,[9] O–3106–93; See footnote,[6] p. S68.
	GC/MS	525.2, 625.1			See footnote,[14] O–1121–91.
3. Aminocarb	TLC				See footnote,[3] p. 94; See footnote,[6] p. S60.
	HPLC	632.			
4. Atraton	GC	619			See footnote,[3] p. 83; See footnote,[6] p. S68.
	GC/MS	625.1.			
5. Atrazine	GC	507, 619, 608.3			See footnote,[3] p. 83; See footnote,[6] p. S68; See footnote,[9] O–3106–93.
	HPLC/MS				See footnote,[12] O–2060–01.
	GC/MS	525.1, 525.2, 625.1			See footnote,[11] O–1126–95.
6. Azinphos methyl	GC	614, 622, 1657			See footnote,[3] p. 25; See footnote,[6] p. S51.
	GC–MS	625.1			See footnote,[11] O–1126–95.
7. Barban	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.
	HPLC	632.			
	GC/MS	625.1.			
8. α-BHC	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[8] 3M0222.
	GC/MS	625.1 [5]	6410 B–2000		See footnote,[11] O–1126–95.
9. β-BHC	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[8] 3M0222.
	GC/MS	625.1	6410 B–2000.		
10. δ-BHC	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[8] 3M0222.
	GC/MS	625.1	6410 B–2000.		
11. γ-BHC (Lindane)	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote,[8] 3M0222.
	GC/MS	625.1 [5]	6410 B–2000		See footnote,[11] O–1126–95.
12. Captan	GC	617, 608.3	6630 B–2007	D3086–90, D5812–96(02).	See footnote,[3] p. 7.
13. Carbaryl	TLC				See footnote,[3] p. 94, See footnote,[6] p. S60.

TABLE ID—LIST OF APPROVED TEST PROCEDURES FOR PESTICIDES [1]—Continued

Parameter	Method	EPA [2 7 10]	Standard methods	ASTM	Other
	HPLC	531.1, 632.			
	HPLC/MS	553			See footnote,[12] O–2060–01.
	GC/MS	625.1			See footnote,[11] O–1126–95.
14. Carbophenothion	GC	617, 608.3	6630 B–2007		See footnote,[4] page 27; See footnote,[6] p. S73.
	GC/MS	625.1.			
15. Chlordane	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote,[8] 3M0222.
	GC/MS	625.1	6410 B–2000.		
16. Chloropropham	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.
	HPLC	632.			
	GC/MS	625.1.			
17. 2,4-D	GC	615	6640 B–2006		See footnote,[3] p. 115; See footnote,[4] O–3105–83.
	HPLC/MS				See footnote,[12] O–2060–01.
18. 4,4′-DDD	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3105–83; See footnote,[8] 3M0222.
	GC/MS	625.1	6410 B–2000.		
19. 4,4′-DDE	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote,[8] 3M0222.
	GC/MS	625.1	6410 B–2000		See footnote,[11] O–1126–95.
20. 4,4′-DDT	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote,[8] 3M0222.
	GC/MS	625.1	6410 B–2000.		
21. Demeton-O	GC	614, 622			See footnote,[3] p. 25; See footnote,[6] p. S51.
	GC/MS	625.1.			
22. Demeton-S	GC	614, 622			See footnote,[3] p. 25; See footnote,[6] p. S51.
	GC/MS	625.1.			
23. Diazinon	GC	507, 614, 622, 1657.			See footnote,[3] p. 25; See footnote,[4] O–3104–83; See footnote,[6] p. S51.
	GC/MS	525.2, 625.1			See footnote,[11] O–1126–95.
24. Dicamba	GC	615			See footnote,[3] p. 115.
	HPLC/MS				See footnote,[12] O–2060–01.
25. Dichlofenthion	GC	622.1			See footnote,[4] page 27; See footnote,[6] p. S73.
26. Dichloran	GC	608.2, 617, 608.3	6630 B–2007		See footnote,[3] p. 7;
27. Dicofol	GC	617, 608.3			See footnote,[4] O–3104–83.
28. Dieldrin	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote,[8] 3M0222.
	GC/MS	625.1	6410 B–2000		See footnote,[11] O–1126–95.
29. Dioxathion	GC	614.1, 1657			See footnote,[4] page 27; See footnote,[6] p. S73.
30. Disulfoton	GC	507, 614, 622, 1657.			See footnote,[3] p. 25; See footnote,[6] p. S51.
	GC/MS	525.2, 625.1			See footnote,[11] O–1126–95.
31. Diuron	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.

TABLE ID—LIST OF APPROVED TEST PROCEDURES FOR PESTICIDES [1]—Continued

Parameter	Method	EPA [2 7 10]	Standard methods	ASTM	Other
	HPLC	632.			
	HPLC/MS	553			See footnote,[12] O–2060–01.
32. Endosulfan I	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote,[8] 3M0222.
	GC/MS	625.1 [5]	6410 B–2000		See footnote,[13] O–2002–01.
33. Endosulfan II	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[8] 3M0222.
	GC/MS	625.1 [5]	6410 B–2000		See footnote,[13] O–2002–01.
34. Endosulfan Sulfate	GC	617, 608.3	6630 C–2007		See footnote,[8] 3M0222.
	GC/MS	625.1	6410 B–2000.		
35. Endrin	GC	505, 508, 617, 1656, 608.3.	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote,[8] 3M0222.
	GC/MS	525.1, 525.2, 625.1 [5].	6410 B–2000.		
36. Endrin aldehyde	GC	617, 608.3	6630 C–2007		See footnote,[8] 3M0222.
	GC/MS	625.1.			
37. Ethion	GC	614, 614.1,1657			See footnote,[4] page 27; See footnote,[6] p. S73.
	GC/MS	625.1			See footnote,[13] O–2002–01.
38. Fenuron	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.
	HPLC	632.			
	HPLC/MS				See footnote,[12] O–2060–01.
39. Fenuron-TCA	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.
	HPLC	632.			
40. Heptachlor	GC	505, 508, 617, 1656, 608.3.	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote,[8] 3M0222.
	GC/MS	525.1, 525.2, 625.1	6410 B–2000.		
41. Heptachlor epoxide	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote,[6] p. S73; See footnote,[8] 3M0222.
	GC/MS	625.1	6410 B–2000.		
42. Isodrin	GC	617, 608.3	6630 B–2007 & C–2007.		See footnote,[4] O–3104–83; See footnote,[6] p. S73.
	GC/MS	625.1.			
43. Linuron	GC				See footnote,[3] p. 104; See footnote,[6] p. S64.
	HPLC	632.			
	HPLC/MS	553			See footnote,[12] O–2060–01.
	GC/MS				Seeootnote,[11] O–1126–95.
44. Malathion	GC	614, 1657	6630 B–2007		See footnote,[3] p. 25; See footnote,[6] p. S51.
	GC/MS	625.1			See footnote,[11] O–1126–95.
45. Methiocarb	TLC				See footnote,[3] p. 94; See footnote,[6] p. S60.
	HPLC	632.			
	HPLC/MS				See footnote,[12] O–2060–01.
46. Methoxychlor	GC	505, 508, 608.2, 617, 1656, 608.3.	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83; See footnote,[8] 3M0222.

TABLE ID—LIST OF APPROVED TEST PROCEDURES FOR PESTICIDES [1]—Continued

Parameter	Method	EPA [2 7 10]	Standard methods	ASTM	Other
	GC/MS	525.1, 525.2, 625.1			See footnote,[11] O–1126–95.
47. Mexacarbate	TLC				See footnote,[3] p. 94; See footnote,[6] p. S60.
	HPLC	632.			
	GC/MS	625.1.			
48. Mirex	GC	617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[4] O–3104–83.
	GC/MS	625.1.			
49. Monuron	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.
	HPLC	632.			
50. Monuron-TCA	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.
	HPLC	632.			
51. Neburon	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.
	HPLC	632.			
	HPLC/MS				See footnote,[12] O–2060–01.
52. Parathion methyl	GC	614, 622, 1657	6630 B–2007		See footnote,[4] page 27; See footnote,[3] p. 25.
	GC/MS	625.1			See footnote,[11] O–1126–95.
53. Parathion ethyl	GC	614	6630 B–2007		See footnote,[4] page 27; See footnote,[3] p. 25.
	GC/MS				See footnote,[11] O–1126–95.
54. PCNB	GC	608.1, 617, 608.3	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7.
55. Perthane	GC	617, 608.3		D3086–90, D5812–96(02).	See footnote,[4] O–3104–83.
56. Prometon	GC	507, 619			See footnote,[3] p. 83; See footnote,[6] p. S68; See footnote,[9] O–3106–93.
	GC/MS	525.2, 625.1			See footnote,[11] O–1126–95.
57. Prometryn	GC	507, 619			See footnote,[3] p. 83; See footnote,[6] p. S68; See footnote,[9] O–3106–93.
	GC/MS	525.1, 525.2, 625.1			See footnote,[13] O–2002–01.
58. Propazine	GC	507, 619, 1656, 608.3.			See footnote,[3] p. 83; See footnote,[6] p. S68; See footnote,[9] O–3106–93.
	GC/MS	525.1, 525.2, 625.1.			
59. Propham	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.
	HPLC	632.			
	HPLC/MS				See footnote,[12] O–2060–01.
60. Propoxur	TLC				See footnote,[3] p. 94; See footnote,[6] p. S60.
	HPLC	632.			
61. Secbumeton	TLC				See footnote,[3] p. 83; See footnote,[6] p. S68.
	GC	619.			
62. Siduron	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.
	HPLC	632.			
	HPLC/MS				See footnote,[12] O–2060–01.
63. Simazine	GC	505, 507, 619, 1656, 608.3.			See footnote,[3] p. 83; See footnote,[6] p. S68; See footnote,[9] O–3106–93.
	GC/MS	525.1, 525.2, 625.1			See footnote,[11] O–1126–95.
64. Strobane	GC	617, 608.3	6630 B–2007 & C–2007.		See footnote,[3] p. 7.
65. Swep	TLC				See footnote,[3] p. 104; See footnote,[6] p. S64.

TABLE ID—LIST OF APPROVED TEST PROCEDURES FOR PESTICIDES [1]—Continued

Parameter	Method	EPA [2 7 10]	Standard methods	ASTM	Other
	HPLC	632.			
66. 2,4,5-T	GC	615	6640 B–2006		See footnote,[3] p. 115; See footnote,[4] O–3105–83.
67. 2,4,5-TP (Silvex)	GC	615	6640 B–2006		See footnote,[3] p. 115; See footnote,[4] O–3105–83.
68. Terbuthylazine	GC	619, 1656, 608.3			See footnote,[3] p. 83; See footnote,[6] p. S68.
	GC/MS				See footnote,[13] O–2002–01.
69. Toxaphene	GC	505, 508, 617, 1656, 608.3.	6630 B–2007 & C–2007.	D3086–90, D5812–96(02).	See footnote,[3] p. 7; See footnote,[8]; See footnote,[4] O–3105–83.
	GC/MS	525.1, 525.2, 625.1	6410 B–2000.		
70. Trifluralin	GC	508, 617, 627, 1656, 608.3.	6630 B–2007		See footnote,[3] p. 7; See footnote,[9] O–3106–93.
	GC/MS	525.2, 625.1			See footnote,[11] O–1126–95.

Table ID notes:

[1] Pesticides are listed in this table by common name for the convenience of the reader. Additional pesticides may be found under Table IC, where entries are listed by chemical name.

[2] The standardized test procedure to be used to determine the method detection limit (MDL) for these test procedures is given at Appendix B, Definition and Procedure for the Determination of the Method Detection Limit, of this Part 136.

[3] Methods for Benzidine, Chlorinated Organic Compounds, Pentachlorophenol and Pesticides in Water and Wastewater. September 1978. U.S. EPA. This EPA publication includes thin-layer chromatography (TLC) methods.

[4] Methods for the Determination of Organic Substances in Water and Fluvial Sediments, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A3. 1987. USGS.

[5] The method may be extended to include α-BHC, γ-BHC, endosulfan I, endosulfan II, and endrin. However, when they are known to exist, Method 608.3 is the preferred method.

[6] Selected Analytical Methods Approved and Cited by the United States Environmental Protection Agency, Supplement to the 15th Edition of *Standard Methods for the Examination of Water and Wastewater.* 1981. American Public Health Association (APHA).

[7] Each analyst must make an initial, one-time, demonstration of their ability to generate acceptable precision and accuracy with Methods 608.3 and 625.1 in accordance with procedures given in Section 8.2 of each of these methods. Additionally, each laboratory, on an on-going basis, must spike and analyze 5% of all samples analyzed with Method 608.3 or 5% of all samples analyzed with Method 625.1 to monitor and evaluate laboratory data quality in accordance with Sections 8.3 and 8.4 of these methods. When the recovery of any parameter falls outside the warning limits, the analytical results for that parameter in the unspiked sample are suspect. The results should be reported, but cannot be used to demonstrate regulatory compliance. These quality control requirements also apply to the Standard Methods, ASTM Methods, and other methods cited.

[8] Organochlorine Pesticides and PCBs in Wastewater Using Empore™ Disk. Revised October 28, 1994. 3M Corporation.

[9] Method O–3106–93 is in Open File Report 94–37, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Triazine and Other Nitrogen-Containing Compounds by Gas Chromatography With Nitrogen Phosphorus Detectors. 1994. USGS.

[10] EPA Methods 608.1, 608.2, 614, 614.1, 615, 617, 619, 622, 622.1, 627, and 632 are found in Methods for the Determination of Nonconventional Pesticides in Municipal and Industrial Wastewater, EPA 821–R–92–002, April 1992, U.S. EPA. EPA Methods 505, 507, 508, 525.1, 531.1 and 553 are in Methods for the Determination of Nonconventional Pesticides in Municipal and Industrial Wastewater, Volume II, EPA 821–R–93–010B, 1993, U.S. EPA. EPA Method 525.2 is in Determination of Organic Compounds in Drinking Water by Liquid-Solid Extraction and Capillary Column Gas Chromatography/Mass Spectrometry, Revision 2.0, 1995, U.S. EPA. EPA methods 1656 and 1657 are in Methods for the Determination of Nonconventional Pesticides in Municipal and Industrial Wastewater, Volume I, EPA 821–R–93–010A, 1993, U.S. EPA. Methods 608.3 and 625.1 are available at: *http://water.epa.gov/scitech/methods/cwa/methods_index.cfm* (this is a placeholder for now).

[11] Method O–1126–95 is in Open-File Report 95–181, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of pesticides in water by C–18 solid-phase extraction and capillary-column gas chromatography/mass spectrometry with selected-ion monitoring. 1995. USGS.

[12] Method O–2060–01 is in Water-Resources Investigations Report 01–4134, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Pesticides in Water by Graphitized Carbon-Based Solid-Phase Extraction and High-Performance Liquid Chromatography/Mass Spectrometry. 2001. USGS.

[13] Method O–2002–01 is in Water-Resources Investigations Report 01–4098, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of moderate-use pesticides in water by C–18 solid-phase extraction and capillary-column gas chromatography/mass spectrometry. 2001. USGS.

[14] Method O–1121–91 is in Open-File Report 91–519, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of organonitrogen herbicides in water by solid-phase extraction and capillary-column gas chromatography/mass spectrometry with selected-ion monitoring. 1992. USGS.

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TABLE 1F—LIST OF APPROVED METHODS FOR PHARMACEUTICAL POLLUTANTS

Pharmaceuticals pollutants	CAS Registry No.	Analytical method number
Acetonitrile	75–05–8	1666/1671/D3371/D3695/624.1.
n-Amyl acetate	628–63–7	1666/D3695.
n-Amyl alcohol	71–41–0	1666/D3695.
Benzene	71–43–2	D4763/D3695/502.2/524.2/624.1.

TABLE 1F—LIST OF APPROVED METHODS FOR PHARMACEUTICAL POLLUTANTS—Continued

Pharmaceuticals pollutants	CAS Registry No.	Analytical method number
n-Butyl-acetate	123–86–4	1666/D3695.
tert-Butyl alcohol	75–65–0	1666/624.1.
Chlorobenzene	108–90–7	502.2/524.2/624.1.
Chloroform	67–66–3	502.2/524.2/551/624.1.
o-Dichlorobenzene	95–50–1	1625C/502.2/524.2/624.1.
1,2-Dichloroethane	107–06–2	D3695/502.2/524.2/624.1.
Diethylamine	109–89–7	1666/1671.
Dimethyl sulfoxide	67–68–5	1666/1671.
Ethanol	64–17–5	1666/1671/D3695/624.1.
Ethyl acetate	141–78–6	1666/D3695/624.1.
n-Heptane	142–82–5	1666/D3695.
n-Hexane	110–54–3	1666/D3695.
Isobutyraldehyde	78–84–2	1666/1667.
Isopropanol	67–63–0	1666/D3695.
Isopropyl acetate	108–21–4	1666/D3695.
Isopropyl ether	108–20–3	1666/D3695.
Methanol	67–56–1	1666/1671/D3695/624.1.
Methyl Cellosolve ® (2-Methoxy ethanol)	109–86–4	1666/1671.
Methylene chloride	75–09–2	502.2/524.2/624.1.
Methyl formate	107–31–3	1666.
4-Methyl-2-pentanone (MIBK)	108–10–1	1624C/1666/D3695/D4763/524.2/624.1.
Phenol	108–95–2	D4763.
n-Propanol	71–23–8	1666/1671/D3695/624.1.
2-Propanone (Acetone)	67–64–1	D3695/D4763/524.2/624.1.
Tetrahydrofuran	109–99–9	1666/524.2/624.1.
Toluene	108–88–3	D3695/D4763/502.2/524.2/624.1.
Triethlyamine	121–44–8	1666/1671.
Xylenes	(Note 1)	1624C/1666/624.1.

Table 1F note:
[1] 1624C: *m*-xylene 108–38–3, *o,p*-xylene, E–14095 (Not a CAS number; this is the number provided in the Environmental Monitoring Methods Index [EMMI] database.); 1666: m,p-xylene 136777–61–2, *o*-xylene 95–47–6.

TABLE 1G—TEST METHODS FOR PESTICIDE ACTIVE INGREDIENTS (40 CFR PART 455)

EPA survey code	Pesticide name	CAS No.	EPA analytical method No.(s) [3]
8	Triadimefon	43121–43–3	507/633/525.1/525.2/1656/625.1.
12	Dichlorvos	62–73–7	1657/507/622/525.1/525.2/625.1.
16	2,4–D; 2,4–D Salts and Esters [2,4-Dichlorophenoxyacetic acid].	94–75–7	1658/515.1/615/515.2/555.
17	2,4–DB; 2,4–DB Salts and Esters [2,4-Dichlorophenoxybutyric acid].	94–82–6	1658/515.1/615/515.2/555.
22	Mevinphos	7786–34–7	1657/507/622/525.1/525.2/625.1.
25	Cyanazine	21725–46–2	629/507/608.3/625.1.
26	Propachlor	1918–16–7	1656/508/608.1/525.1/525.2/608.3/625.1.
27	MCPA; MCPA Salts and Esters [2-Methyl-4-chlorophenoxyacetic acid].	94–74–6	1658/615/555.
30	Dichlorprop; Dichlorprop Salts and Esters [2-(2,4-Dichlorophenoxy) propionic acid].	120–36–5	1658/515.1/615/515.2/555.
31	MCPP; MCPP Salts and Esters [2-(2-Methyl-4-chlorophenoxy) propionic acid].	93–65–2	1658/615/555.
35	TCMTB [2-(Thiocyanomethylthio) benzo-thiazole].	21564–17–0	637.
39	Pronamide	23950–58–5	525.1/525.2/507/633.1/625.1.
41	Propanil	709–98–8	632.1/1656/608.3.
45	Metribuzin	21087–64–9	507/633/525.1/525.2/1656/608.3/6 625.1.
52	Acephate	30560–19–1	1656/1657/608.3.
53	Acifluorfen	50594–66–6	515.1/515.2/555.
54	Alachlor	15972–60–8	505/507/645/525.1/525.2/1656/608.3/625.1.
55	Aldicarb	116–06–3	531.1.
58	Ametryn	834–12–8	507/619/525.2/625.1.
60	Atrazine	1912–24–9	505/507/619/525.1/525.2/1656/6 608.3/625.1.
62	Benomyl	17804–35–2	631.
68	Bromacil; Bromacil Salts and Esters	314–40–9	507/633/525.1/525.2/1656/608.3/6 625.1.
69	Bromoxynil	1689–84–5	1625/1661/625.1.
69	Bromoxynil octanoate	1689–99–2	1656/608.3.
70	Butachlor	23184–66–9	507/645/525.1/525.2/1656/608.3/625.1.
73	Captafol	2425–06–1	1656/608.3/625.1.
75	Carbaryl [Sevin]	63–25–2	531.1/632/553/625.1.
76	Carbofuran	1563–66–2	531.1/632/625.1.

TABLE 1G—TEST METHODS FOR PESTICIDE ACTIVE INGREDIENTS (40 CFR PART 455)—Continued

EPA survey code	Pesticide name	CAS No.	EPA analytical method No.(s) [3]
80	Chloroneb	2675–77–6	1656/508/608.1/525.1/525.2/608.3/625.1.
82	Chlorothalonil	1897–45–6	508/608.2/525.1/525.2/1656/608.3/625.1.
84	Stirofos	961–11–5	1657/507/622/525.1/525.2/625.1.
86	Chlorpyrifos	2921–88–2	1657/508/622/625.1.
90	Fenvalerate	51630–58–1	1660.
103	Diazinon	333–41–5	1657/507/614/622/525.2/625.1.
107	Parathion methyl	298–00–0	1657/614/622/625.1.
110	DCPA [Dimethyl 2,3,5,6-tetrachloroterephthalate].	1861–32–1	508/608.2/525.1/525.2/515.1 [2]/515.2 [2]/1656/608.3/625.1.
112	Dinoseb	88–85–7	1658/515.1/615/515.2/555/625.1.
113	Dioxathion	78–34–2	1657/614.1.
118	Nabonate [Disodium cyanodithioimidocarbonate].	138–93–2	630.1.
119	Diuron	330–54–1	632/553.
123	Endothall	145–73–3	548/548.1.
124	Endrin	72–20–8	1656/505/508/617/525.1/525.2/608.3/625.1.
125	Ethalfluralin	55283–68–6	1656/627/608.3 See footnote 1.
126	Ethion	563–12–2	1657/614/614.1/625.1.
127	Ethoprop	13194–48–4	1657/507/622/525.1/525.2/625.1.
132	Fenarimol	60168–88–9	507/633.1/525.1/525.2/1656/608.3/625.1.
133	Fenthion	55–38–9	1657/622/625.1.
138	Glyphosate [N-(Phosphonomethyl) glycine]	1071–83–6	547.
140	Heptachlor	76–44–8	1656/505/508/617/525.1/525.2/608.3/625.1.
144	Isopropalin	33820–53–0	1656/627/608.3.
148	Linuron	330–55–2	553/632.
150	Malathion	121–75–5	1657/614/625.1.
154	Methamidophos	10265–92–6	1657.
156	Methomyl	16752–77–5	531.1/632.
158	Methoxychlor	72–43–5	1656/505/508/608.2/617/525.1/525.2/608.3/625.1.
172	Nabam	142–59–6	630/630.1.
173	Naled	300–76–5	1657/622/625.1.
175	Norflurazon	27314–13–2	507/645/525.1/525.2/1656/608.3/625.1.
178	Benfluralin	1861–40–1	1656/627/608.3 See footnote 1.
182	Fensulfothion	115–90–2	1657/622/625.1.
183	Disulfoton	298–04–4	1657/507/614/622/525.2/625.1.
185	Phosmet	732–11–6	1657/622.1/625.1.
186	Azinphos Methyl	86–50–0	1657/614/622/625.1.
192	Organo-tin pesticides	12379–54–3	Ind-01/200.7/200.9.
197	Bolstar	35400–43–2	1657/622.
203	Parathion	56–38–2	1657/614/625.1.
204	Pendimethalin	40487–42–1	1656.
205	Pentachloronitrobenzene	82–68–8	1656/608.1/617/608.3/625.1.
206	Pentachlorophenol	87–86–5	1625/515.2/555/515.1/525.1/525.2/625.1.
208	Permethrin	52645–53–1	608.2/508/525.1/525.2/1656/1660/608.3 [4]/625.1 [4].
212	Phorate	298–02–2	1657/622/625.1.
218	Busan 85 [Potassium dimethyldithiocarbamate].	128–03–0	630/630.1.
219	Busan 40 [Potassium N-hydroxymethyl-N-methyldithiocarbamate].	51026–28–9	630/630.1.
220	KN Methyl [Potassium N-methyldithiocarbamate].	137–41–7	630/630.1.
223	Prometon	1610–18–0	507/619/525.2/625.1.
224	Prometryn	7287–19–6	507/619/525.1/525.2/625.1.
226	Propazine	139–40–2	507/619/525.1/525.2/1656/608.3/625.1.
230	Pyrethrin I	121–21–1	1660.
232	Pyrethrin II	121–29–9	1660.
236	DEF [S,S,S-Tributyl phosphorotrithioate]	78–48–8	1657.
239	Simazine	122–34–9	505/507/619/525.1/525.2/1656/608.3/625.1.
241	Carbam-S [Sodium dimethyldithio-carbamate]	128–04–1	630/630.1.
243	Vapam [Sodium methyldithiocarbamate]	137–42–8	630/630.1.
252	Tebuthiuron	34014–18–1	507/525.1/525.2/625.1.
254	Terbacil	5902–51–2	507/633/525.1/525.2/1656/608.3/625.1.
255	Terbufos	13071–79–9	1657/507/614.1/525.1/525.2/625.1.
256	Terbuthylazine	5915–41–3	619/1656/608.3.
257	Terbutryn	886–50–0	507/619/525.1/525.2/625.1.
259	Dazomet	533–74–4	630/630.1/1659.
262	Toxaphene	8001–35–2	1656/505/508/617/525.1/525.2/608.3/625.1.
263	Merphos [Tributyl phosphorotrithioate]	150–50–5	1657/507/525.1/525.2/622/625.1.
264	Trifluralin [1]	1582–09–8	1656/508/617/627/525.2/608.3/625.1.

TABLE 1G—TEST METHODS FOR PESTICIDE ACTIVE INGREDIENTS (40 CFR PART 455)—Continued

EPA survey code	Pesticide name	CAS No.	EPA analytical method No.(s) [3]
268	Ziram [Zinc dimethyldithiocarbamate]	137–30–4	630/630.1.

Table 1G notes:

[1] Monitor and report as total Trifluralin.

[2] Applicable to the analysis of DCPA degradates.

[3] EPA Methods 608.1 through 645, 1645 through 1661, and Ind-01 are available in Methods for the Determination of Nonconventional Pesticides in Municipal and Industrial Wastewater, Volume I, EPA 821–R–93–010A, Revision I, August 1993, U.S. EPA. EPA Methods 200.9 and 505 through 555 are available in Methods for the Determination of Nonconventional Pesticides in Municipal and Industrial Wastewater, Volume II, EPA 821–R–93–010B, August 1993, U.S. EPA. The full text of Methods 608.3, 625.1, and 1625 are provided at Appendix A of this part 136. The full text of Method 200.7 is provided at Appendix C of this part 136. Methods 608.3 and 625.1 are available at: *http://water.epa.gov/scitech/methods/cwa/methods_index.cfm* (this is a placeholder for now).

[4] Permethrin is not listed within methods 608.3 and 625.1; however, cis-permethrin and trans-permethrin are listed. Permethrin can be calculated by adding the results of cis and trans-permethrin.

TABLE 1H—LIST OF APPROVED MICROBIOLOGICAL METHODS FOR AMBIENT WATER

Parameter and units	Method [1]	EPA	Standard methods	AOAC, ASTM, USGS	Other
Bacteria:					
1. Coliform (fecal), number per 100 mL or number per gram dry weight.	Most Probable Number (MPN), 5 tube, 3 dilution, or.	p. 132 [3]	9221 C E–2006		
	Membrane filter (MF),[2] single step.	p. 124 [3]	9222 D–2006 [27]	B–0050–85 [4]	
2. Coliform (fecal) in presence of chlorine, number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 132 [3]	9221 C E–2006		
	MF [2], single step [5]	p. 124 [3]	9222 D–2006 [27]		
3. Coliform (total), number per 100 mL	MPN, 5 tube, 3 dilution, or	p. 114 [3]	9221 B–2006		
	MF [2], single step or two step	p. 108 [3]	9222 B–2006	B–0025–85 [4]	
4. Coliform (total), in presence of chlorine, number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 114 [3]	9221 B–2006		
	MF [2] with enrichment	p. 111 [3]	9222 B–2006		
5. *E. coli,* number per 100 mL	MPN,[6 8 14] multiple tube, or		9221 B.2–2006/9221 F–2006 [11 13]		
	Multiple tube/multiple well, or		9223 B–2004 [12]	991.15 [10]	Colilert® [12 16], Colilert-® [12 15 16]
	MF [2 5 6 7 8], two step, or	1103.1 [19]	9222 B–2006/9222 G–2006,[18] 9213 D–2007	D5392–93 [9]	
	Single step	1603 [20], 1604 [21].			mColiBlue–24® [17]
6. Fecal streptococci, number per 100 mL	MPN, 5 tube, 3 dilution, or	p. 139 [3]	9230 B–2007		
	MF [2], or	p. 136 [3]	9230 C–2007	B–0055–85 [4]	
	Plate count	p. 143 [3].			
7. Enterococci, number per 100 mL	MPN,[6 8] multiple tube/multiple well, or.		9230 D–2007	D6503–99 [9]	Enterolert® [12 22]
	MF [2 5 6 7 8] two step, or	1106.1 [23]	9230 C–2007	D5259–92 [9]	
	Single step, or	1600 [24]	9230 C–2007		
	Plate count	p. 143 [3].			
Protozoa:.					
8. *Cryptosporidium*	Filtration/IMS/FA	1622 [25], 1623 [26].			
9. *Giardia*	Filtration/IMS/FA	1623 [26].			

Table 1H notes:

[1] The method must be specified when results are reported.

[2] A 0.45-µm membrane filter (MF) or other pore size certified by the manufacturer to fully retain organisms to be cultivated and to be free of extractables which could interfere with their growth.

[3] Microbiological Methods for Monitoring the Environment, Water, and Wastes. EPA/600/8–78/017. 1978. US EPA.

[4] U.S. Geological Survey Techniques of Water-Resource Investigations, Book 5, Laboratory Analysis, Chapter A4, Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples. 1989. USGS.

[5] Because the MF technique usually yields low and variable recovery from chlorinated wastewaters, the Most Probable Number method will be required to resolve any controversies.

[6] Tests must be conducted to provide organism enumeration (density). Select the appropriate configuration of tubes/filtrations and dilutions/volumes to account for the quality, character, consistency, and anticipated organism density of the water sample.

[7] When the MF method has not been used previously to test waters with high turbidity, large numbers of noncoliform bacteria, or samples that may contain organisms stressed by chlorine, a parallel test should be conducted with a multiple-tube technique to demonstrate applicability and comparability of results.

[8] To assess the comparability of results obtained with individual methods, it is suggested that side-by-side tests be conducted across seasons of the year with the water samples routinely tested in accordance with the most current Standard Methods for the Examination of Water and Wastewater or EPA alternate test procedure (ATP) guidelines.

[9] Annual Book of ASTM Standards—Water and Environmental Technology. Section 11.02. 2000, 1999, 1996. ASTM International.

[10] Official Methods of Analysis of AOAC International, 16th Edition, Volume I, Chapter 17. 1995. AOAC International.

[11] The multiple-tube fermentation test is used in 9221B.2–2006. Lactose broth may be used in lieu of lauryl tryptose broth (LTB), if at least 25 parallel tests are conducted between this broth and LTB using the water samples normally tested, and this comparison demonstrates that the false-positive rate and false-negative rate for total coliform using lactose broth is less than 10 percent. No requirement exists to run the completed phase on 10 percent of all total coliform-positive tubes on a seasonal basis.

[12] These tests are collectively known as defined enzyme substrate tests, where, for example, a substrate is used to detect the enzyme β-glucuronidase produced by *E. coli.*

[13] After prior enrichment in a presumptive medium for total coliform using 9221B.2–2006, all presumptive tubes or bottles showing any amount of gas, growth or acidity within 48 h ± 3 h of incubation shall be submitted to 9221F–2006. Commercially available EC–MUG media or EC media supplemented in the laboratory with 50 μg/mL of MUG may be used.

[14] Samples shall be enumerated by the multiple-tube or multiple-well procedure. Using multiple-tube procedures, employ an appropriate tube and dilution configuration of the sample as needed and report the Most Probable Number (MPN). Samples tested with Colilert® may be enumerated with the multiple-well procedures, Quanti-Tray® or Quanti-Tray®/2000, and the MPN calculated from the table provided by the manufacturer.

[15] Colilert-18® is an optimized formulation of the Colilert® for the determination of total coliforms and *E. coli* that provides results within 18 h of incubation at 35 °C, rather than the 24 h required for the Colilert® test, and is recommended for marine water samples.

[16] Descriptions of the Colilert®, Colilert-18®, Quanti-Tray®, and Quanti-Tray®/2000 may be obtained from IDEXX Laboratories Inc.

[17] A description of the mColiBlue24® test may be obtained from Hach Company.

[18] Subject total coliform positive samples determined by 9222B–1997 or other membrane filter procedure to 9222G–1997 using NA–MUG media.

[19] Method 1103.1: *Escherichia coli* (*E. coli*) in Water by Membrane Filtration Using membrane-Thermotolerant *Escherichia coli* Agar (mTEC), EPA–821–R–10–002. March 2010. US EPA.

[20] Method 1603: *Escherichia coli* (*E. coli*) in Water by Membrane Filtration Using Modified membrane-Thermotolerant *Escherichia coli* Agar (Modified mTEC), EPA–821–R–14–010. September 2014. US EPA.

[21] Preparation and use of MI agar with a standard membrane filter procedure is set forth in the article, Brenner et al. 1993. New Medium for the Simultaneous Detection of Total Coliform and *Escherichia coli* in Water. Appl. Environ. Microbiol. 59:3534–3544 and in Method 1604: Total Coliforms and *Escherichia coli* (*E. coli*) in Water by Membrane Filtration by Using a Simultaneous Detection Technique (MI Medium), EPA 821–R–02–024, September 2002, US EPA.

[22] A description of the Enterolert® test may be obtained from IDEXX Laboratories Inc.

[23] Method 1106.1: Enterococci in Water by Membrane Filtration Using membrane-Enterococcus-Esculin Iron Agar (mE–EIA), EPA–821–R–09–015. December 2009. US EPA.

[24] Method 1600: Enterococci in Water by Membrane Filtration Using membrane-Enterococcus Indoxyl-β-D-Glucoside Agar (mEI), EPA–821–R–14–011. September 2014. US EPA.

[25] Method 1622 uses a filtration, concentration, immunomagnetic separation of oocysts from captured material, immunofluorescence assay to determine concentrations, and confirmation through vital dye staining and differential interference contrast microscopy for the detection of *Cryptosporidium.* Method 1622: *Cryptosporidium* in Water by Filtration/IMS/FA, EPA–821–R–05–001. December 2005. US EPA.

[26] Method 1623 uses a filtration, concentration, immunomagnetic separation of oocysts and cysts from captured material, immunofluorescence assay to determine concentrations, and confirmation through vital dye staining and differential interference contrast microscopy for the simultaneous detection of *Cryptosporidium* and *Giardia* oocysts and cysts. Method 1623: *Cryptosporidium* and *Giardia* in Water by Filtration/IMS/FA. EPA–821–R–05–002. December 2005. US EPA.

[27] The verification frequency is at least five typical and five atypical colonies per sampling site on the day of sample collection and analysis.

(b) The documents required in this section are incorporated by reference into this section in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the documents may be obtained from the sources listed in paragraph (b) of this section. Documents may be inspected at EPA's Water Docket, EPA West, 1301 Constitution Avenue NW., Room 3334, Washington, DC 20004, (Telephone: 202–566–2426); or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.* These test procedures are incorporated as they exist on the day of approval and a notice of any change in these test procedures will be published in the **Federal Register**. The full texts of the methods from the following references which are cited in Tables IA, IB, IC, ID, IE, IF, IG and IH of this section are incorporated by reference into this regulation and may be obtained from the source identified.

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(iv) Method 1600: Enterococci in Water by Membrane Filtration Using membrane-Enterococcus Indoxyl-β-D-Glucoside Agar (mEI). September 2014. EPA–821–R–14–011. Table IA, Note 25; Table IH, Note 24.

(v) Method 1603: *Escherichia coli* (*E. coli*) in Water by Membrane Filtration Using Modified membrane-Thermotolerant *Escherichia coli* Agar (Modified mTEC). September 2014. EPA–821–R–14–010. Table IA, Note 22; Table IH, Note 20.

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(xiii) Method 1680: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation using Lauryl Tryptose Broth (LTB) and EC Medium. September 2014. EPA–821–R–14–009. Table IA, Note 15.

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(xv) Method 1682: *Salmonella* in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis (MSRV) Medium. September 2014. EPA 821–R–14–012. Table IA, Note 23.

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(viii) 2120, Color. 2011. Table IB.

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(x) 2310, Acidity. 2011. Table IB.

(xi) 2320, Alkalinity. 2011. Table IB.

(xii) 2340, Hardness. 2011. Table IB.

(xiii) 2510, Conductivity. 2011. Table IB.

(xiv) 2540, Solids. 2011. Table IB.

(xv) 2550, Temperature. 2011. Table IB.

(xvi) 3111, Metals by Flame Atomic Absorption Spectrometry. 2011. Table IB.

(xvii) 3112, Metals by Cold-Vapor Atomic Absorption Spectrometry. 2011. Table IB.

(xviii) 3113, Metals by Electrothermal Atomic Absorption Spectrometry. 2010. Table IB.

(xix) 3114, Arsenic and Selenium by Hydride Generation/Atomic Absorption Spectrometry. 2011. Table IB.

(xx) 3120, Metals by Plasma Emission Spectroscopy. 2011. Table IB.

(xxi) 3125, Metals by Inductively Coupled Plasma-Mass Spectrometry. 2011. Table IB.

(xxii) 3500-Al, Aluminum. 2011. Table IB.

(xxiii) 3500-As, Arsenic. 2011. Table IB.

(xxiv) 3500-Ca, Calcium. 2011. Table IB.

(xxv) 3500-Cr, Chromium. 2011. Table IB.

(xxvi) 3500-Cu, Copper. 2011. Table IB.

(xxvii) 3500-Fe, Iron. 2011. Table IB.

(xxviii) 3500-Pb, Lead. 2011. Table IB.

(xxix) 3500-Mn, Manganese. 2011. Table IB.

(xxx) 3500-K, Potassium. 2011. Table IB.

(xxxi) 3500-Na, Sodium. 2011. Table IB.

(xxxii) 3500-V, Vanadium. 2011. Table IB.

(xxxiii) 3500-Zn, Zinc. 2011. Table IB.

(xxxiv) 4110, Determination of Anions by Ion Chromatography. 2011. Table IB.

(xxxv) 4140, Inorganic Anions by Capillary Ion Electrophoresis. 2011. Table IB.

(xxxvi) 4500-B, Boron. 2011. Table IB.

(xxxvii) 4500-Cl^-, Chloride. 2011. Table IB.

(xxxviii) 4500-Cl, Chlorine (Residual). 2011. Table IB.

(xxxix) 4500-CN^-, Cyanide. 2011. Table IB.

(xl) 4500-F^-, Fluoride. 2011. Table IB.

(xli) 4500-H^+, pH Value. 2011. Table IB.

(xlii) 4500-NH_3, Nitrogen (Ammonia). 2011. Table IB.

(xliii) 4500-NO_2^-, Nitrogen (Nitrite). 2011. Table IB.

(xliv) 4500-NO_3^-, Nitrogen (Nitrate). 2011. Table IB.

(xlv) 4500-N_{org}, Nitrogen (Organic). 2011. Table IB.

(xlvi) 4500-O, Oxygen (Dissolved). 2011. Table IB.

(xlvii) 4500-P, Phosphorus. 2011. Table IB.

(xlviii) 4500-SiO_2, Silica. 2011. Table IB.

(xlix) 4500-$S^{2\cdot}$, Sulfide. 2011. Table IB.

(l) 4500-$SO_3^{2\cdot}$, Sulfite. 2011. Table IB.

(li) 4500-$SO_4^{2\cdot}$, Sulfate. 2011. Table IB.

(lii) 5210, Biochemical Oxygen Demand (BOD). 2011. Table IB.

(liii) 5220, Chemical Oxygen Demand (COD). 2011. Table IB.

(liv) 5310, Total Organic Carbon (TOC). 2011. Table IB.

(lv) 5520, Oil and Grease. 2011. Table IB.

(lvi) 5530, Phenols. 2010. Table IB.

(lvii) 5540, Surfactants. 2011. Table IB.

(lviii) 6200, Volatile Organic Compounds. 2011. Table IC.

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(lxi) 6440, Polynuclear Aromatic Hydrocarbons. 2005. Table IC.

(lxii) 6630, Organochlorine Pesticides. 2007. Table ID.

(lxiii) 6640, Acidic Herbicide Compounds. 2006. Table ID.

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(lxviii) 9222, Membrane Filter Technique for Members of the Coliform Group. 2006. Table IA; Table IH, Note 18.

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(v) ASTM D511–09, Standard Test Methods for Calcium and Magnesium in Water. May 2009. Table IB.

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(viii) ASTM D516–11, Standard Test Method for Sulfate Ion in Water, September 2011. Table IB.

(ix) ASTM D858–12, Standard Test Methods for Manganese in Water. September 2012. Table IB.

(x) ASTM D859–10, Standard Test Method for Silica in Water. July 2010. Table IB.

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(xii) ASTM D1067–11, Standard Test Methods for Acidity or Alkalinity of Water. April 2011. Table IB.

(xiii) ASTM D1068–10, Standard Test Methods for Iron in Water. October 2010. Table IB.

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(xv) ASTM D1126–12, Standard Test Method for Hardness in Water. March 2012. Table IB.

(xvi) ASTM D1179–10, Standard Test Methods for Fluoride Ion in Water. July 2010. Table IB.

(xvii) ASTM D1246–10, Standard Test Method for Bromide Ion in Water. July 2010. Table IB.

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(xxii) ASTM D1687–12 (Approved September 1, 2012), Standard Test Methods for Chromium in Water. August 2007. Table IB.

(xxiii) ASTM D1688–12, Standard Test Methods for Copper in Water. September 2012. Table IB.

(xxiv) ASTM D1691–12, Standard Test Methods for Zinc in Water. September 2012. Table IB.

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(xxx) ASTM D1976–12, Standard Test Method for Elements in Water by Inductively-Coupled Argon Plasma Atomic Emission Spectroscopy. March 2012. Table IB.

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(xxxv) ASTM D3223–12, Standard Test Method for Total Mercury in Water. September 2012. Table IB.

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(xxxvii) ASTM D3373–12, Standard Test Method for Vanadium in Water. September 2012. Table IB.

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(xxxix) ASTM D3557–12, Standard Test Method for Cadmium in Water. September 2012. Table IB.

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(xlii) ASTM D3590–11, Standard Test Methods for Total Kjeldahl Nitrogen in Water. April 2011. Table IB.

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(l) ASTM D4382–12, Standard Test Method for Barium in Water, Atomic Absorption Spectrophotometry, Graphite Furnace. September 2012. Table IB.

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(lii) ASTM D4658–09, Standard Test Method for Sulfide Ion in Water. May 2009. Table IB.

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(lv) ASTM D5257–11, Standard Test Method for Dissolved Hexavalent Chromium in Water by Ion Chromatography. April 2011. Table IB.

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(lviii) ASTM D5673–10, Standard Test Method for Elements in Water by Inductively Coupled Plasma—Mass Spectrometry. September 2010. Table IB.

(lix) ASTM D5907–13, Standard Test Method for Filterable and Nonfilterable Matter in Water. July 2013. Table IB.

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(lxi) ASTM. D6508–10, Standard Test Method for Determination of Dissolved Inorganic Anions in Aqueous Matrices Using Capillary Ion Electrophoresis and Chromate Electrolyte. October 2010. Table IB, Note 54.

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(lxvi) ASTM. D7284–13, Standard Test Method for Total Cyanide in Water by Micro Distillation followed by Flow Injection Analysis with Gas Diffusion Separation and Amperometric Detection. July 2013. Table IB.

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(lxviii) ASTM. D7511–12, Standard Test Method for Total Cyanide by Segmented Flow Injection Analysis, In-Line Ultraviolet Digestion and Amperometric Detection. January 2012. Table IB.

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(vii) Method 10206, TNTplus 835–836 Nitrate Method, Spectrophotometric Measurement of Nitrate in Water and

Wastewater. Revision 2.1, January 10, 2013. Table IB, Note 75.

(viii) Method 10242, TNTplus 880 Total Kjeldahl Nitrogen Method, Simplified Spectrophotometric Measurement of Total Kjeldahl Nitrogen in Water and Wastewater. Revision 1.1, January 10, 2013. Table IB, Note 75.

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(i) Colilert®. 2013. Table IA, Notes 17 and 18; Table IH, Notes 14, 15 and 16.

(ii) Colilert-18®. 2013. Table IA, Notes 17 and 18; Table IH, Notes 14, 15 and 16.

(iii) Enterolert®. 2013. Table IA, Note 24; Table IH, Note 12.

(iv) Quanti-Tray®. 2013. Table IA, Note 18; Table IH, Notes 14 and 16.

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(25) National Council of the Paper Industry for Air and Stream Improvements, Inc. (NCASI), 260 Madison Avenue, New York NY 10016.

(i) NCASI Methods TNTP–W10900 as an Alternative Testing Procedure to EPA Method 351.2 and EPA Method 365.4. June 2011. Table IB, Note 77.

(ii) NCASI Technical Bulletin No. 253, An Investigation of Improved Procedures for Measurement of Mill Effluent and Receiving Water Color. December 1971. Table IB, Note 18.

(iii) NCASI Technical Bulletin No. 803, An Update of Procedures for the Measurement of Color in Pulp Mill Wastewaters. May 2000. Table IB, Note 18.

(26) The Nitrate Elimination Co., Inc. (NECi), 334 Hecla St., Lake Linden NI 49945.

(i) NECi Method N07–0003, Method for Nitrate Reductase Nitrate-Nitrogen Analysis. Revision 9.0. March 2014. Table IB, Note 73.

(ii) [Reserved]

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(34) Timberline Instruments, LLC, 1880 South Flatiron Ct., Unit I, Boulder CO 80301.

(i) Determination of Inorganic Ammonia by Continuous Flow Gas Diffusion and Conductivity Cell Analysis. June 24, 2011. Table IB, Note 74.

(ii) [Reserved]

(35) U.S. Geological Survey (USGS), U.S. Department of the Interior, Reston, Virginia. Available from USGS Books and Open-File Reports (OFR) Section, Federal Center, Box 25425, Denver, CO 80225.

(i) Colorimetric determination of nitrate plus nitrite in water by enzymatic reduction, automated discrete analyzer methods. U.S. Geological Survey Techniques and Methods, Book 5, Chapter B8. 2011. Table IB, Note 72.

(ii) Methods for Determination of Inorganic Substances in Water and Fluvial Sediments, editors, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A1. 1979. Table IB, Note 8.

(iii) Methods for Determination of Inorganic Substances in Water and Fluvial Sediments, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A1. 1989. Table IB, Note 2.

(iv) Methods for the Determination of Organic Substances in Water and Fluvial Sediments. Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A3. 1987. Table IB, Note 24; Table ID, Note 4.

(v) OFR 76–177, Selected Methods of the U.S. Geological Survey of Analysis of Wastewaters. 1976. Table IE, Note 2.

(vi) OFR 91–519, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Organonitrogen Herbicides in Water by Solid-Phase Extraction and Capillary-Column Gas Chromatography/Mass Spectrometry With Selected-Ion Monitoring. 1992. Table ID, Note 14.

(vii) OFR 92–146, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Total Phosphorus by a Kjeldahl Digestion Method and an Automated Colorimetric Finish That Includes Dialysis. 1992. Table IB, Note 48.

(viii) OFR 93–125, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments. 1993. Table IB, Note 51; Table IC, Note 9.

(ix) OFR 93–449, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Chromium in Water by Graphite Furnace Atomic Absorption Spectrophotometry. 1993. Table IB, Note 46.

(x) OFR 94–37, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Triazine and Other Nitrogen-containing Compounds by Gas Chromatography with Nitrogen Phosphorus Detectors. 1994. Table ID, Note 9.

(xi) OFR 95–181, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Pesticides in Water by C–18 Solid-Phase Extraction and Capillary-Column Gas Chromatography/Mass Spectrometry With Selected-Ion Monitoring. 1995. Table ID, Note 11.

(xii) OFR 97–198, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Molybdenum in Water by Graphite Furnace Atomic Absorption Spectrophotometry. 1997. Table IB, Note 47.

(xiii) OFR 98–165, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Elements in Whole-Water Digests Using Inductively Coupled Plasma-Optical Emission Spectrometry and Inductively Coupled Plasma-Mass Spectrometry. 1998. Table IB, Note 50.

(xiv) OFR 98–639, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Arsenic and Selenium in Water and Sediment by Graphite Furnace—Atomic Absorption Spectrometry. 1999. Table IB, Note 49.

(xv) OFR 00–170, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Ammonium Plus Organic Nitrogen by a Kjeldahl Digestion Method and an Automated Photometric Finish that Includes Digest Cleanup by Gas Diffusion. 2000. Table IB, Note 45.

(xvi) Techniques and Methods Book 5–B1, Determination of Elements in Natural-Water, Biota, Sediment and Soil Samples Using Collision/Reaction Cell Inductively Coupled Plasma-Mass Spectrometry. Chapter 1, Section B, Methods of the National Water Quality Laboratory, Book 5, Laboratory Analysis. 2006. Table IB, Note 70.

(xvii) U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Laboratory Analysis, Chapter A4, Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples. 1989. Table IA, Note 4; Table IH, Note 4.

(xviii) Water-Resources Investigation Report 01–4098, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Moderate-Use Pesticides and Selected Degradates in Water by C–18 Solid-Phase Extraction and Gas Chromatography/Mass Spectrometry. 2001. Table ID, Note 13.

(xix) Water-Resources Investigations Report 01–4132, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Organic Plus Inorganic Mercury in Filtered and Unfiltered Natural Water With Cold Vapor-Atomic Fluorescence Spectrometry. 2001. Table IB, Note 71.

(xx) Water-Resources Investigation Report 01–4134, Methods of Analysis by

the U.S. Geological Survey National Water Quality Laboratory—Determination of Pesticides in Water by Graphitized Carbon-Based Solid-Phase Extraction and High-Performance Liquid Chromatography/Mass Spectrometry. 2001. Table ID, Note 12.

(xxi) Water Temperature—Influential Factors, Field Measurement and Data Presentation, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 1, Chapter D1. 1975. Table IB, Note 32.

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(c) Under certain circumstances, the Director may establish limitations on the discharge of a parameter for which there is no test procedure in this part or in 40 CFR parts 405 through 499. In these instances the test procedure shall be specified by the Director.

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TABLE II—REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES

Parameter number/name	Container [1]	Preservation [2 3]	Maximum holding time [4]
Table IA—Bacterial Tests:			
1–5. Coliform, total, fecal, and *E. coli*	PA, G	Cool, <10 °C, 0.008% $Na_2S_2O_3$[5].	8 hours [22 23].
6. Fecal streptococci	PA, G	Cool, <10 °C, 0.008% $Na_2S_2O_3$[5].	8 hours [22].
7. Enterococci	PA, G	Cool, <10 °C, 0.008% $Na_2S_2O_3$[5].	8 hours [22].
8. Salmonella	PA, G	Cool, <10 °C, 0.008% $Na_2S_2O_3$[5].	8 hours [22].
Table IA—Aquatic Toxicity Tests:			
9–12. Toxicity, acute and chronic	P, FP, G	Cool, ≤6 °C [16]	36 hours.
Table IB—Inorganic Tests:			
1. Acidity	P, FP, G	Cool, ≤6 °C [18]	14 days.
2. Alkalinity	P, FP, G	Cool, ≤6 °C [18]	14 days.
4. Ammonia	P, FP, G	Cool, ≤6 °C [18], H_2SO_4 to pH <2.	28 days.
9. Biochemical oxygen demand	P, FP, G	Cool, ≤6 °C [18]	48 hours.
10. Boron	P, FP, or Quartz.	HNO_3 to pH <2	6 months.
11. Bromide	P, FP, G	None required	28 days.
14. Biochemical oxygen demand, carbonaceous	P, FP G	Cool, ≤6 °C [18]	48 hours.
15. Chemical oxygen demand	P, FP, G	Cool, ≤6 °C [18], H_2SO_4 to pH <2.	28 days.
16. Chloride	P, FP, G	None required	28 days.
17. Chlorine, total residual	P, G	None required	Analyze within 15 minutes.
21. Color	P, FP, G	Cool, ≤6 °C [18]	48 hours.
23–24. Cyanide, total or available (or CATC) and free	P, FP, G	Cool, ≤6 °C [18], NaOH to pH >10 [5 6], reducing agent if oxidizer present.	14 days.
25. Fluoride	P	None required	28 days.
27. Hardness	P, FP, G	HNO_3 or H_2SO_4 to pH <2	6 months.
28. Hydrogen ion (pH)	P, FP, G	None required	Analyze within 15 minutes.
31, 43. Kjeldahl and organic N	P, FP, G	Cool, ≤6 °C [18], H_2SO_4 to pH <2.	28 days.
Table IB—Metals: [7]			
18. Chromium VI	P, FP, G	Cool, ≤6 °C [18], pH = 9.3–9.7 [20].	28 days.
35. Mercury (CVAA)	P, FP, G	HNO_3 to pH <2	28 days.
35. Mercury (CVAFS)	FP, G; and FP-lined cap [17].	5 mL/L 12N HCl or 5 mL/L BrCl [17].	90 days [17].
3, 5–8, 12, 13, 19, 20, 22, 26, 29, 30, 32–34, 36, 37, 45, 47, 51, 52, 58–60, 62, 63, 70–72, 74, 75. Metals, except boron, chromium VI, and mercury.	P, FP, G	HNO_3 to pH <2, or at least 24 hours prior to analysis [19].	6 months.
38. Nitrate	P, FP, G	Cool, ≤6 °C [18]	48 hours.
39. Nitrate-nitrite	P, FP, G	Cool, ≤6 °C [18], H_2SO_4 to pH <2.	28 days.
40. Nitrite	P, FP, G	Cool, ≤6 °C [18]	48 hours.
41. Oil and grease	G	Cool to ≤6 °C [18], HCl or H_2SO_4 to pH <2.	28 days.
42. Organic Carbon	P, FP, G	Cool to ≤6 °C [18], HCl, H_2SO_4, or H_3PO_4 to pH <2.	28 days.
44. Orthophosphate	P, FP, G	Cool, to ≤6 °C [18 24]	Filter within 15 minutes; Analyze within 48 hours.

TABLE II—REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES—Continued

Parameter number/name	Container [1]	Preservation [2 3]	Maximum holding time [4]
46. Oxygen, Dissolved Probe	G, Bottle and top.	None required	Analyze within 15 minutes.
47. Winkler	G, Bottle and top.	Fix on site and store in dark	8 hours.
48. Phenols	G	Cool, ≤6 °C [18], H_2SO_4 to pH <2.	28 days.
49. Phosphorous (elemental)	G	Cool, ≤6 °C [18]	48 hours.
50. Phosphorous, total	P, FP, G	Cool, ≤6 °C [18], H_2SO_4 to pH <2.	28 days.
53. Residue, total	P, FP, G	Cool, ≤6 °C [18]	7 days.
54. Residue, Filterable	P, FP, G	Cool, ≤6 °C [18]	7 days.
55. Residue, Nonfilterable (TSS)	P, FP, G	Cool, ≤6 °C [18]	7 days.
56. Residue, Settleable	P, FP, G	Cool, ≤6 °C [18]	48 hours.
57. Residue, Volatile	P, FP, G	Cool, ≤6 °C [18]	7 days.
61. Silica	P or Quartz	Cool, ≤6 °C [18]	28 days.
64. Specific conductance	P, FP, G	Cool, ≤6 °C [18]	28 days.
65. Sulfate	P, FP, G	Cool, ≤6 °C [18]	28 days.
66. Sulfide	P, FP, G	Cool, ≤6 °C [18], add zinc acetate plus sodium hydroxide to pH >9.	7 days.
67. Sulfite	P, FP, G	None required	Analyze within 15 minutes.
68. Surfactants	P, FP, G	Cool, ≤6 °C [18]	48 hours.
69. Temperature	P, FP, G	None required	Analyze.
73. Turbidity	P, FP, G	Cool, ≤6 °C [18]	48 hours.
Table IC—Organic Tests: [8]			
13, 18–20, 22, 24–28, 34–37, 39–43, 45–47, 56, 76, 104, 105, 108–111, 113. Purgeable Halocarbons.	G, FP-lined septum.	Cool, ≤6 °C [18], 0.008% $Na_2S_2O_3$[5].	14 days.
6, 57, 106. Purgeable aromatic hydrocarbons	G, FP-lined septum.	Cool, ≤6 °C [18], 0.008% $Na_2S_2O_3$[5], HCl to pH 2 [9].	14 days [9].
3, 4. Acrolein and acrylonitrile	G, FP-lined septum.	Cool, ≤6 °C [18], 0.008% $Na_2S_2O_3$, pH to 4–5 [10].	14 days [10].
23, 30, 44, 49, 53, 77, 80, 81, 98, 100, 112. Phenols [11]	G, FP-lined cap.	Cool, ≤6 °C [18], 0.008% $Na_2S_2O_3$.	7 days until extraction, 40 days after extraction.
7, 38. Benzidines [11 12]	G, FP-lined cap.	Cool, ≤6 °C [18], 0.008% $Na_2S_2O_3$[5].	7 days until extraction [13].
14, 17, 48, 50–52. Phthalate esters [11]	G, FP-lined cap.	Cool, ≤6 °C [18]	7 days until extraction, 40 days after extraction.
82–84. Nitrosamines [11 14]	G, FP-lined cap.	Cool, ≤6 °C [18], store in dark, 0.008% $Na_2S_2O_3$[5].	7 days until extraction, 40 days after extraction.
88–94. PCBs [11]	G, FP-lined cap.	Cool, ≤6 °C [18]	1 year until extraction, 1 year after extraction.
54, 55, 75, 79. Nitroaromatics and isophorone [11]	G, FP-lined cap.	Cool, ≤6 °C [18], store in dark, 0.008% $Na_2S_2O_3$ [5].	7 days until extraction, 40 days after extraction.
1, 2, 5, 8–12, 32, 33, 58, 59, 74, 78, 99, 101. Polynuclear aromatic hydrocarbons [11].	G, FP-lined cap.	Cool, ≤6 °C [18], store in dark, 0.008% $Na_2S_2O_3$[5].	7 days until extraction, 40 days after extraction.
15, 16, 21, 31, 87. Haloethers [11]	G, FP-lined cap.	Cool, ≤6 °C [18], 0.008% $Na_2S_2O_3$[5].	7 days until extraction, 40 days after extraction.
29, 35–37, 63–65, 107. Chlorinated hydrocarbons [11]	G, FP-lined cap.	Cool, ≤6 °C [18]	7 days until extraction, 40 days after extraction.
60–62, 66–72, 85, 86, 95–97, 102, 103. CDDs/CDFs [11]	G	See footnote 11	See footnote 11.
Aqueous Samples: Field and Lab Preservation	G	Cool, ≤6 °C [18], 0.008% $Na_2S_2O_3$[5], pH <9.	1 year.
Solids and Mixed-Phase Samples: Field Preservation	G	Cool, ≤6 °C [18]	7 days.
Tissue Samples: Field Preservation	G	Cool, ≤6 °C [18]	24 hours.
Solids, Mixed-Phase, and Tissue Samples: Lab Preservation.	G	Freeze, ≤ −10 °C	1 year.
114–118. Alkylated phenols	G	Cool, <6 °C, H_2SO_4 to pH <2	28 days until extraction, 40 days after extraction.
119. Adsorbable Organic Halides (AOX)	G	Cool, <6 °C, 0.008% $Na_2S_2O_3$, HNO_3 to pH <2.	Hold *at least* 3 days, but not more than 6 months.
120. Chlorinated Phenolics	G, FP-lined cap.	Cool, <6 °C, 0.008% $Na_2S_2O_3$, H_2SO_4 to pH <2.	30 days until acetylation, 30 days after acetylation.
Table ID—Pesticides Tests:			
1–70. Pesticides [11]	G, FP-lined cap.	Cool, ≤6 °C [18], pH 5–9 [15]	7 days until extraction, 40 days after extraction.

TABLE II—REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES—Continued

Parameter number/name	Container [1]	Preservation [2 3]	Maximum holding time [4]
Table IE—Radiological Tests:			
1–5. Alpha, beta, and radium	P, FP, G	HNO_3 to pH <2	6 months.
Table IH—Bacterial Tests:			
1–4. Coliform, total, fecal	PA, G	Cool, <10 °C, 0.008% $Na_2S_2O_3$[5].	8 hours [22 23].
5. *E. coli*	PA, G	Cool, <10 °C, 0.008% $Na_2S_2O_3$[5].	8 hours [22].
6. Fecal streptococci	PA, G	Cool, <10 °C, 0.008% $Na_2S_2O_3$[5].	8 hours [22].
7. Enterococci	PA, G	Cool, <10 °C, 0.008% $Na_2S_2O_3$[5].	8 hours [22].
Table IH—Protozoan Tests:			
8. Cryptosporidium	LDPE; field filtration.	1–10 °C	96 hours [21].
9. Giardia	LDPE; field filtration.	1–10 °C	96 hours [21].

[1] "P" is for polyethylene; "FP" is fluoropolymer (polytetrafluoroethylene (PTFE); Teflon®), or other fluoropolymer, unless stated otherwise in this Table II; "G" is glass; "PA" is any plastic that is made of a sterilizable material (polypropylene or other autoclavable plastic); "LDPE" is low density polyethylene.

[2] Except where noted in this Table II and the method for the parameter, preserve each grab sample within 15 minutes of collection. For a composite sample collected with an automated sample (*e.g.,* using a 24-hour composite sample; see 40 CFR 122.21(g)(7)(i) or 40 CFR part 403, appendix E), refrigerate the sample at ≤ 6 °C during collection unless specified otherwise in this Table II or in the method(s). For a composite sample to be split into separate aliquots for preservation and/or analysis, maintain the sample at ≤ 6 °C, unless specified otherwise in this Table II or in the method(s), until collection, splitting, and preservation is completed. Add the preservative to the sample container prior to sample collection when the preservative will not compromise the integrity of a grab sample, a composite sample, or aliquot split from a composite sample within 15 minutes of collection. If a composite measurement is required but a composite sample would compromise sample integrity, individual grab samples must be collected at prescribed time intervals (*e.g.,* 4 samples over the course of a day, at 6-hour intervals). Grab samples must be analyzed separately and the concentrations averaged. Alternatively, grab samples may be collected in the field and composited in the laboratory if the compositing procedure produces results equivalent to results produced by arithmetic averaging of results of analysis of individual grab samples. For examples of laboratory compositing procedures, see EPA Method 1664 Rev. A (oil and grease) and the procedures at 40 CFR 141.24(f)(14)(iv) and (v) (volatile organics).

[3] When any sample is to be shipped by common carrier or sent via the U.S. Postal Service, it must comply with the Department of Transportation Hazardous Materials Regulations (49 CFR part 172). The person offering such material for transportation is responsible for ensuring such compliance. For the preservation requirement of Table II, the Office of Hazardous Materials, Materials Transportation Bureau, Department of Transportation has determined that the Hazardous Materials Regulations do not apply to the following materials: Hydrochloric acid (HCl) in water solutions at concentrations of 0.04% by weight or less (pH about 1.96 or greater; Nitric acid (HNO_3) in water solutions at concentrations of 0.15% by weight or less (pH about 1.62 or greater); Sulfuric acid (H_2SO_4) in water solutions at concentrations of 0.35% by weight or less (pH about 1.15 or greater); and Sodium hydroxide (NaOH) in water solutions at concentrations of 0.080% by weight or less (pH about 12.30 or less).

[4] Samples should be analyzed as soon as possible after collection. The times listed are the maximum times that samples may be held before the start of analysis and still be considered valid. Samples may be held for longer periods only if the permittee or monitoring laboratory have data on file to show that, for the specific types of samples under study, the analytes are stable for the longer time, and has received a variance from the Regional ATP Coordinator under § 136.3(e). For a grab sample, the holding time begins at the time of collection. For a composite sample collected with an automated sampler (*e.g.,* using a 24-hour composite sampler; see 40 CFR 122.21(g)(7)(i) or 40 CFR part 403, appendix E), the holding time begins at the time of the end of collection of the composite sample. For a set of grab samples composited in the field or laboratory, the holding time begins at the time of collection of the last grab sample in the set. Some samples may not be stable for the maximum time period given in the table. A permittee or monitoring laboratory is obligated to hold the sample for a shorter time if it knows that a shorter time is necessary to maintain sample stability. See § 136.3(e) for details. The date and time of collection of an individual grab sample is the date and time at which the sample is collected. For a set of grab samples to be composited, and that are all collected on the same calendar date, the date of collection is the date on which the samples are collected. For a set of grab samples to be composited, and that are collected across two calendar dates, the date of collection is the dates of the two days; *e.g.,* November 14–15. For a composite sample collected automatically on a given date, the date of collection is the date on which the sample is collected. For a composite sample collected automatically, and that is collected across two calendar dates, the date of collection is the dates of the two days; *e.g.,* November 14–15. For static-renewal toxicity tests, each grab or composite sample may also be used to prepare test solutions for renewal at 24 h, 48 h, and/or 72 h after first use, if stored at 0–6 °C, with minimum head space.

[5] ASTM D7365–09a specifies treatment options for samples containing oxidants (*e.g.,* chlorine) for cyanide analyses. Also, Section 9060A of Standard Methods for the Examination of Water and Wastewater (20th and 21st editions) addresses dechlorination procedures for microbiological analyses.

[6] Sampling, preservation and mitigating interferences in water samples for analysis of cyanide are described in ASTM D7365–09a. There may be interferences that are not mitigated by the analytical test methods or D7365–09a. Any technique for removal or suppression of interference may be employed, provided the laboratory demonstrates that it more accurately measures cyanide through quality control measures described in the analytical test method. Any removal or suppression technique not described in D7365–09a or the analytical test method must be documented along with supporting data.

[7] For dissolved metals, filter grab samples within 15 minutes of collection and before adding preservatives. For a composite sample collected with an automated sampler (*e.g.,* using a 24-hour composite sampler; see 40 CFR 122.21(g)(7)(i) or 40 CFR part 403, appendix E), filter the sample within 15 minutes after completion of collection and before adding preservatives. If it is known or suspected that dissolved sample integrity will be compromised during collection of a composite sample collected automatically over time (*e.g.,* by interchange of a metal between dissolved and suspended forms), collect and filter grab samples to be composited (footnote 2) in place of a composite sample collected automatically.

[8] Guidance applies to samples to be analyzed by GC, LC, or GC/MS for specific compounds.

[9] If the sample is not adjusted to pH 2, then the sample must be analyzed within seven days of sampling.

[10] The pH adjustment is not required if acrolein will not be measured. Samples for acrolein receiving no pH adjustment must be analyzed within 3 days of sampling.

[11] When the extractable analytes of concern fall within a single chemical category, the specified preservative and maximum holding times should be observed for optimum safeguard of sample integrity (*i.e.,* use all necessary preservatives and hold for the shortest time listed). When the analytes of concern fall within two or more chemical categories, the sample may be preserved by cooling to ≤ 6 °C, reducing residual chlorine with 0.008% sodium thiosulfate, storing in the dark, and adjusting the pH to 6–9; samples preserved in this manner may be held for seven days before extraction and for forty days after extraction. Exceptions to this optional preservation and holding time procedure are noted in footnote 5 (regarding the requirement for thiosulfate reduction), and footnotes 12, 13 (regarding the analysis of benzidine).

[12] If 1,2-diphenylhydrazine is likely to be present, adjust the pH of the sample to 4.0 ± 0.2 to prevent rearrangement to benzidine.

[13] Extracts may be stored up to 30 days at < 0 °C.

[14] For the analysis of diphenylnitrosamine, add 0.008% $Na_2S_2O_3$ and adjust pH to 7–10 with NaOH within 24 hours of sampling.

[15] The pH adjustment may be performed upon receipt at the laboratory and may be omitted if the samples are extracted within 72 hours of collection. For the analysis of aldrin, add 0.008% $Na_2S_2O_3$.

[16] Place sufficient ice with the samples in the shipping container to ensure that ice is still present when the samples arrive at the laboratory. However, even if ice is present when the samples arrive, immediately measure the temperature of the samples and confirm that the preservation temperature maximum has not been exceeded. In the isolated cases where it can be documented that this holding temperature cannot be met, the permittee can be given the option of on-site testing or can request a variance. The request for a variance should include supportive data which show that the toxicity of the effluent samples is not reduced because of the increased holding temperature. Aqueous samples must not be frozen. Hand-delivered samples used on the day of collection do not need to be cooled to 0 to 6 °C prior to test initiation.

[17] Samples collected for the determination of trace level mercury (<100 ng/L) using EPA Method 1631 must be collected in tightly-capped fluoropolymer or glass bottles and preserved with BrCl or HCl solution within 48 hours of sample collection. The time to preservation may be extended to 28 days if a sample is oxidized in the sample bottle. A sample collected for dissolved trace level mercury should be filtered in the laboratory within 24 hours of the time of collection. However, if circumstances preclude overnight shipment, the sample should be filtered in a designated clean area in the field in accordance with procedures given in Method 1669. If sample integrity will not be maintained by shipment to and filtration in the laboratory, the sample must be filtered in a designated clean area in the field within the time period necessary to maintain sample integrity. A sample that has been collected for determination of total or dissolved trace level mercury must be analyzed within 90 days of sample collection.

[18] Aqueous samples must be preserved at ≤ 6 °C, and should not be frozen unless data demonstrating that sample freezing does not adversely impact sample integrity is maintained on file and accepted as valid by the regulatory authority. Also, for purposes of NPDES monitoring, the specification of "≤ °C" is used in place of the "4 °C" and "< 4 °C" sample temperature requirements listed in some methods. It is not necessary to measure the sample temperature to three significant figures (1/100th of 1 degree); rather, three significant figures are specified so that rounding down to 6 °C may not be used to meet the ≤6 °C requirement. The preservation temperature does not apply to samples that are analyzed immediately (less than 15 minutes).

[19] An aqueous sample may be collected and shipped without acid preservation. However, acid must be added at least 24 hours before analysis to dissolve any metals that adsorb to the container walls. If the sample must be analyzed within 24 hours of collection, add the acid immediately (see footnote 2). Soil and sediment samples do not need to be preserved with acid. The allowances in this footnote supersede the preservation and holding time requirements in the approved metals methods.

[20] To achieve the 28-day holding time, use the ammonium sulfate buffer solution specified in EPA Method 218.6. The allowance in this footnote supersedes preservation and holding time requirements in the approved hexavalent chromium methods, unless this supersession would compromise the measurement, in which case requirements in the method must be followed.

[21] Holding time is calculated from time of sample collection to elution for samples shipped to the laboratory in bulk and calculated from the time of sample filtration to elution for samples filtered in the field.

[22] Sample analysis should begin as soon as possible after receipt; sample incubation must be started no later than 8 hours from time of collection.

[23] For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1680 (LTB–EC) or 1681 (A–1): Class A composted, Class B aerobically digested, and Class B anaerobically digested.

[24] The immediate filtration requirement in orthophosphate measurement is to assess the dissolved or bio-available form of orthophosphorus (*i.e.,* that which passes through a 0.45-micron filter), hence the requirement to filter the sample immediately upon collection (*i.e.,* within 15 minutes of collection).

■ 5. Section 136.4 is amended by revising paragraphs (a) introductory text, (b), and (c) to read as follows:

§ 136.4 Application for and approval of alternate test procedures for nationwide use.

(a) A written application for review of an alternate test procedure (alternate method) for nationwide use may be made by letter via email or by hard copy in triplicate to the National Alternate Test Procedure (ATP) Program Coordinator (National Coordinator), Office of Science and Technology (4303T), Office of Water, U.S. Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460. Any application for an ATP under this paragraph (a) shall:

* * * * *

(b) The National Coordinator may request additional information and analyses from the applicant in order to evaluate whether the alternate test procedure satisfies the applicable requirements of this part.

(c) *Approval for nationwide use.* (1) After a review of the application and any additional analyses requested from the applicant, the National Coordinator will notify the applicant, in writing, of whether the National Coordinator will recommend approval or disapproval of the alternate test procedure for nationwide use in CWA programs. If the application is not recommended for approval, the National Coordinator may specify what additional information might lead to a reconsideration of the application and notify the Regional Alternate Test Procedure Coordinators of the disapproval recommendation. Based on the National Coordinator's recommended disapproval of a proposed alternate test procedure and an assessment of any current approvals for limited uses for the unapproved method, the Regional ATP Coordinator may decide to withdraw approval of the method for limited use in the Region.

(2) Where the National Coordinator has recommended approval of an applicant's request for nationwide use of an alternate test procedure, the National Coordinator will notify the applicant. The National Coordinator will also notify the Regional ATP Coordinators that they may consider approval of this alternate test procedure for limited use in their Regions based on the information and data provided in the application until the alternate test procedure is approved by publication in a final rule in the **Federal Register**.

(3) EPA will propose to amend this part to include the alternate test procedure in § 136.3. EPA shall make available for review all the factual bases for its proposal, including the method, any performance data submitted by the applicant and any available EPA analysis of those data.

(4) Following public comment, EPA shall publish in the **Federal Register** a final decision on whether to amend this part to include the alternate test procedure as an approved analytical method for nationwide use.

(5) Whenever the National Coordinator has recommended approval of an applicant's ATP request for nationwide use, any person may request an approval of the method for limited use under § 136.5 from the EPA Region.

■ 6. Section 136.5 is amended by revising paragraphs (a), (b), (c)(1), and (d) to read as follows:

§ 136.5 Approval of alternate test procedures for limited use.

(a) Any person may request the Regional ATP Coordinator to approve the use of an alternate test procedure in the Region.

(b) When the request for the use of an alternate test procedure concerns use in a State with an NPDES permit program approved pursuant to section 402 of the Act, the requestor shall first submit an application for limited use to the Director of the State agency having responsibility for issuance of NPDES permits within such State (*i.e.,* permitting authority). The Director will forward the application to the Regional ATP Coordinator with a recommendation for or against approval.

(c) * * *

(1) Provide the name and address of the applicant and the applicable ID number of the existing or pending permit(s) and issuing agency for which use of the alternate test procedure is requested, and the discharge serial number.

* * * * *

(d) *Approval for limited use.* (1) The Regional ATP Coordinator will review the application and notify the applicant and the appropriate State agency of approval or rejection of the use of the alternate test procedure. The approval may be restricted to use only with respect to a specific discharge or facility (and its laboratory) or, at the discretion of the Regional ATP Coordinator, to all dischargers or facilities (and their associated laboratories) specified in the approval for the Region. If the application is not approved, the Regional ATP Coordinator shall specify what additional information might lead to a reconsideration of the application.

(2) The Regional ATP Coordinator will forward a copy of every approval and rejection notification to the National Alternate Test Procedure Coordinator.

■ 7. In § 136.6:

■ a. Revise paragraphs (b)(1) and (2) introductory text.

■ b. Remove paragraph (b)(4)(xvi).

■ c. Redesignate paragraphs (b)(4)(xvii) through (xxii) as paragraphs (b)(4)(xvi) through (xxi), respectively.

■ d. Add paragraph (c).

The revision and addition read as follows:

§ 136.6 Method modifications and analytical requirements.

* * * * *

(b) *Method modifications.* (1) If the underlying chemistry and determinative technique in a modified method are essentially the same as an approved part 136 method, then the modified method is an equivalent and acceptable alternative to the approved method provided the requirements of this section are met. However, those who develop or use a modification to an approved (part 136) method must document that the performance of the modified method, in the matrix to which the modified method will be applied, is equivalent to the performance of the approved method. If such a demonstration cannot be made and documented, then the modified method is not an acceptable alternative to the approved method. Supporting documentation must, if applicable, include the routine initial demonstration of capability and ongoing QC including determination of precision and accuracy, detection limits, and matrix spike recoveries. Initial demonstration of capability typically includes analysis of four replicates of a mid-level standard and a method detection limit study. Ongoing quality control typically includes method blanks, mid-level laboratory control samples, and matrix spikes (QC is as specified in the method). The method is considered equivalent if the quality control requirements in the reference method are achieved. The method user's Standard Operating Procedure (SOP) must clearly document the modifications made to the reference method. Examples of allowed method modifications are listed in this section. If the method user is uncertain whether a method modification is allowed, the Regional ATP Coordinator or Director should be contacted for approval *prior* to implementing the modification. The method user should also complete necessary performance checks to verify that acceptable performance is achieved with the method modification *prior* to analyses of compliance samples.

(2) *Requirements.* The modified method must meet or exceed performance of the approved method(s) for the analyte(s) of interest, as documented by meeting the initial and ongoing quality control requirements in the method.

* * * * *

(c) The permittee must notify their permitting authority of the intent to use a modified method. Such notification should be of the form ''Method xxx has been modified within the flexibility allowed in 40 CFR 136.6.'' The permittee may indicate the specific paragraph of § 136.6 allowing the method modification. Specific details of the modification need not be provided, but must be documented in the Standard Operating Procedure (SOP) and maintained by the analytical laboratory that performs the analysis.

■ 8. In Appendix A to part 136:

■ a. Revise Method 608.

■ b. Revise Method 611, section 1.1.

■ c. Revise Method 624.

■ d. Revise Method 625.

The revisions read as follows:

Appendix A to Part 136—Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater

* * * * *

Method 608.3—Organochlorine Pesticides And PCBs By GC/HSD

1. Scope and Application

1.1 This method is for determination of organochlorine pesticides and polychlorinated biphenyls (PCBs) in industrial discharges and other environmental samples by gas chromatography (GC) combined with a halogen-specific detector (HSD; *e.g.,* electron capture, electrolytic conductivity), as provided under 40 CFR 136.1. This revision is based on a previous protocol (Reference 1), on the revision promulgated October 26, 1984 (49 FR 43234), on an inter-laboratory method validation study (Reference 2), and on EPA Method 1656 (Reference 16). The analytes that may be qualitatively and quantitatively determined using this method and their CAS Registry numbers are listed in Table 1.

1.2 This method may be extended to determine the analytes listed in Table 2. However, extraction or gas chromatography challenges for some of these analytes may make quantitative determination difficult.

1.3 When this method is used to analyze unfamiliar samples for an analyte listed in Table 1 or Table 2, analyte identification must be supported by at least one additional qualitative technique. This method gives analytical conditions for a second GC column that can be used to confirm and quantify measurements.

Additionally, Method 625 provides gas chromatograph/mass spectrometer (GC/MS) conditions appropriate for the qualitative confirmation of results for the analytes listed in Tables 1 and 2 using the extract produced by this method, and Method 1699 (Reference 18) provides high resolution GC/MS conditions for qualitative confirmation of results using the original sample. When such methods are used to confirm the identifications of the target analytes, the quantitative results should be derived from the procedure with the

calibration range and sensitivity that are most appropriate for the intended application.

1.4 The large number of analytes in Tables 1 and 2 makes testing difficult if all analytes are determined simultaneously. Therefore, it is necessary to determine and perform quality control (QC) tests for the ''analytes of interest'' only. The analytes of interest are those required to be determined by a regulatory/control authority or in a permit, or by a client. If a list of analytes is not specified, the analytes in Table 1 must be determined, at a minimum, and QC testing must be performed for these analytes. The analytes in Table 1 and some of the analytes in Table 2 have been identified as Toxic Pollutants (40 CFR 401.15), expanded to a list of Priority Pollutants (40 CFR part 423, appendix A).

1.5 In this revision to Method 608, Chlordane has been listed as the alpha- and gamma-isomers in Table 1. Reporting may be by the individual isomers, or as the sum of the concentrations of these isomers, as requested or required by a regulatory/control authority or in a permit. Technical Chlordane is listed in Table 2 and may be used in cases where historical reporting has only been the Technical Chlordane. Toxaphene and the PCBs have been moved from Table 1 to Table 2 (Additional Analytes) to distinguish these analytes from the analytes required in quality control tests (Table 1). QC acceptance criteria for Toxaphene and the PCBs have been retained in Table 4 and may continue to be applied if desired, or if these analytes are requested or required by a regulatory/control authority or in a permit. Method 1668C (Reference 17) may be useful for determination of PCBs as individual chlorinated biphenyl congeners, and Method 1699 (Reference 18) may be useful for determination of the pesticides listed in this method. However, at the time of writing of this revision, Methods 1668C and 1699 had not been approved for use at 40 CFR part 136.

1.6 Method detection limits (MDLs; Reference 3) for the analytes in Tables 1 and some of the analytes in Table 2 are listed in those tables. These MDLs were determined in reagent water (Reference 3). Advances in analytical technology, particularly the use of capillary (open-tubular) columns, allowed laboratories to routinely achieve MDLs for the analytes in this method that are 2–10 times lower than those in the version promulgated in 1984 (40 FR 43234). The MDL for an analyte in a specific wastewater may differ from those listed, depending upon the nature of interferences in the sample matrix.

1.6.1 EPA has promulgated this method at 40 CFR part 136 for use in wastewater compliance monitoring under the National Pollutant Discharge Elimination System (NPDES). The data reporting practices described in Section 15.2 are focused on such monitoring needs and may not be relevant to other uses of the method.

1.6.2 This method includes ''reporting limits'' based on EPA's ''minimum level'' (ML) concept (see the glossary in Section 23). Tables 1 and 2 contain MDL values and ML values for many of the analytes. The MDL for an analyte in a specific wastewater may differ from those listed in Tables 1 or 2, depending upon the nature of interferences in the sample matrix.

1.7 The separatory funnel and continuous liquid-liquid sample extraction and concentration steps in this method are essentially the same as those steps in Methods 606, 609, 611, and 612. Thus, a single sample may be extracted to measure the analytes included in the scope of each of these methods. Samples may also be extracted using a disk-based solid-phase extraction (SPE) procedure developed by the 3M Corporation and approved by EPA as an Alternate Test Procedure (ATP) for wastewater analyses in 1995 (Reference 20).

1.8 This method is performance-based. It may be modified to improve performance (*e.g.,* to overcome interferences or improve the accuracy of results) provided all performance requirements are met.

1.8.1 Examples of allowed method modifications are described at 40 CFR 136.6. Other examples of allowed modifications specific to this method are described in Section 8.1.2.

1.8.2 Any modification beyond those expressly permitted at 40 CFR 136.6 or in Section 8.1.2 of this method shall be considered a major modification subject to application and approval of an alternate test procedure under 40 CFR 136.4 and 136.5.

1.8.3 For regulatory compliance, any modification must be demonstrated to produce results equivalent or superior to results produced by this method when applied to relevant wastewaters (Section 8.1.2).

1.9 This method is restricted to use by or under the supervision of analysts experienced in the use of GC/HSD. The laboratory must demonstrate the ability to generate acceptable results with this method using the procedure in Section 8.2.

1.10 Terms and units of measure used in this method are given in the glossary at the end of the method.

2. Summary of Method

2.1 A measured volume of sample, the amount required to meet an MDL or reporting limit (nominally 1–L), is extracted with methylene chloride using a separatory funnel, a continuous liquid/liquid extractor, or disk-based solid-phase extraction equipment. The extract is dried and concentrated for cleanup, if required. After cleanup, or if cleanup is not required, the extract is exchanged into an appropriate solvent and concentrated to the volume necessary to meet the required compliance or detection limit, and analyzed by GC/HSD.

2.2 Qualitative identification of an analyte in the extract is performed using the retention times on dissimilar GC columns. Quantitative analysis is performed using the peak areas or peak heights for the analyte on the dissimilar columns with either the external or internal standard technique.

2.3 Florisil®, alumina, a C18 solid-phase cleanup, and an elemental sulfur cleanup procedure are provided to aid in elimination of interferences that may be encountered. Other cleanup procedures may be used if demonstrated to be effective for the analytes in a wastewater matrix.

3. Contamination and Interferences

3.1 Solvents, reagents, glassware, and other sample processing lab ware may yield artifacts, elevated baselines, or matrix interferences causing misinterpretation of chromatograms. All materials used in the analysis must be demonstrated free from contamination and interferences by running blanks initially and with each extraction batch (samples started through the extraction process in a given 24-hour period, to a maximum of 20 samples). Specific selection of reagents and purification of solvents by distillation in all-glass systems may be required. Where possible, lab ware is cleaned by extraction or solvent rinse, or baking in a kiln or oven. All materials used must be routinely demonstrated to be free from interferences under the conditions of the analysis by running blanks as described in Section 8.5.

3.2 Glassware must be scrupulously cleaned (Reference 4). Clean all glassware as soon as possible after use by rinsing with the last solvent used in it. Solvent rinsing should be followed by detergent washing with hot water, and rinses with tap water and reagent water. The glassware should then be drained dry, and heated at 400 °C for

15–30 minutes. Some thermally stable materials, such as PCBs, may require higher temperatures and longer baking times for removal. Solvent rinses with pesticide quality acetone, hexane, or other solvents may be substituted for heating. Volumetric lab ware should not be heated excessively or for long periods of time. After drying and cooling, glassware should be sealed and stored in a clean environment to prevent accumulation of dust or other contaminants. Store inverted or capped with aluminum foil.

3.3 Interferences by phthalate esters can pose a major problem in pesticide analysis when using the electron capture detector. The phthalate esters generally appear in the chromatogram as large late eluting peaks, especially in the 15 and 50% fractions from Florisil®. Common flexible plastics contain varying amounts of phthalates that may be extracted or leached from such materials during laboratory operations. Cross contamination of clean glassware routinely occurs when plastics are handled during extraction steps, especially when solvent-wetted surfaces are handled. Interferences from phthalates can best be minimized by avoiding use of non-fluoropolymer plastics in the laboratory. Exhaustive cleanup of reagents and glassware may be required to eliminate background phthalate contamination (References 5 and 6). Interferences from phthalate esters can be avoided by using a microcoulometric or electrolytic conductivity detector.

3.4 Matrix interferences may be caused by contaminants co-extracted from the sample. The extent of matrix interferences will vary considerably from source to source, depending upon the nature and diversity of the industrial complex or municipality being sampled. Interferences extracted from samples high in total organic carbon (TOC) may result in elevated baselines, or by enhancing or suppressing a signal at or near the retention time of an analyte of interest. Analyses of the matrix spike and duplicate (Section 8.3) may be useful in identifying matrix interferences, and the cleanup procedures in Section 11 may aid in eliminating these interferences. EPA has provided guidance that may aid in overcoming matrix interferences (Reference 7); however, unique samples may require additional cleanup approaches to achieve the MDLs listed in Table 3.

4. Safety

4.1 The toxicity or carcinogenicity of each reagent used in this method has not been precisely defined; however, each chemical compound should be treated as a potential health hazard. From this viewpoint, exposure to these chemicals must be reduced to the lowest possible level by whatever means available. The laboratory is responsible for maintaining a current awareness file of OSHA regulations regarding the safe handling of the chemicals specified in this method. A reference file of safety data sheets (SDSs, OSHA, 29 CFR 1910.1200(g)) should also be made available to all personnel involved in sample handling and chemical analysis. Additional references to laboratory safety are available and have been identified (References 8 and 9) for the information of the analyst.

4.2 The following analytes covered by this method have been tentatively classified as known or suspected human or mammalian carcinogens: 4,4′-DDT, 4,4′-DDD, the BHCs, and the PCBs. Primary standards of these toxic analytes should be prepared in a chemical fume hood, and a NIOSH/MESA approved toxic gas respirator should be worn when high concentrations are handled.

4.3 This method allows the use of hydrogen as a carrier gas in place of helium (Section 5.8.2). The laboratory should take the necessary precautions in dealing with hydrogen, and should limit hydrogen flow at the source to prevent buildup of an explosive mixture of hydrogen in air.

5. Apparatus and Materials

Note: Brand names and suppliers are for illustration purposes only. No endorsement is implied. Equivalent performance may be achieved using equipment and materials other than those specified here. Demonstrating that the equipment and supplies used in the laboratory achieve the required performance is the responsibility of the laboratory. Suppliers for equipment and materials in this method may be found through an on-line search. Please do not contact EPA for supplier information.

5.1 Sampling equipment, for discrete or composite sampling

5.1.1 Grab sample bottle—amber glass bottle large enough to contain the necessary sample volume (nominally 1 L), fitted with a fluoropolymer-lined screw cap. Foil may be substituted for fluoropolymer if the sample is not corrosive. If amber bottles are not available, protect samples from light. Unless pre-cleaned, the bottle and cap liner must be washed, rinsed with acetone or methylene chloride, and dried before use to minimize contamination.

5.1.2 Automatic sampler (optional)—the sampler must use a glass or fluoropolymer container and tubing for sample collection. If the sampler uses a peristaltic pump, a minimum length of compressible silicone rubber tubing may be used. Before use, however, the compressible tubing should be thoroughly rinsed with methanol, followed by repeated rinsing with reagent water to minimize the potential for sample contamination. An integrating flow meter is required to collect flow proportional composites. The sample container must be kept refrigerated at <6 °C and protected from light during compositing.

5.2. Lab ware

5.2.1 Extraction

5.2.1.1 pH measurement

5.2.1.1.1 pH meter, with combination glass electrode

5.2.1.1.2 pH paper, wide range (Hydrion Papers, or equivalent)

5.2.1.2 Separatory funnel—Size appropriate to hold the sample and extraction solvent volumes, equipped with fluoropolymer stopcock.

5.2.1.3 Continuous liquid-liquid extractor—Equipped with fluoropolymer or glass connecting joints and stopcocks requiring no lubrication. (Hershberg-Wolf Extractor, Ace Glass Company, Vineland, NJ, or equivalent.)

5.2.1.3.1 Round-bottom flask, 500-mL, with heating mantle

5.2.1.3.2 Condenser, Graham, to fit extractor

5.2.1.4 Solid-phase extractor—90-mm filter apparatus (Figure 2) or multi-position manifold

5.2.1.4.1 Vacuum system—Capable of achieving 0.1 bar (25 inch) Hg (house vacuum, vacuum pump, or water aspirator), equipped with shutoff valve and vacuum gauge

5.2.1.4.2 Vacuum trap—Made from 500-mL sidearm flask fitted with single-hole rubber stopper and glass tubing

Note: The approved ATP for solid-phase extraction is limited to disk-based extraction media and associated peripheral equipment.

5.2.2 Filtration

5.2.2.1 Glass powder funnel, 125- to 250-mL

5.2.2.2 Filter paper for above, Whatman 41, or equivalent

5.2.2.3 Prefiltering aids—90-mm 1-µm glass fiber filter or Empore® Filter Aid 400

5.2.3 Drying column

5.2.3.1 Chromatographic column—approximately 400 mm long × 15 mm ID, with fluoropolymer stopcock and coarse frit filter disc (Kontes or equivalent).

5.2.3.2 Glass wool—Pyrex, extracted with methylene chloride or baked at 450 °C for 1 hour minimum

5.2.4 Column for Florisil® or alumina cleanup—approximately 300

mm long × 10 mm ID, with fluoropolymer stopcock. (This column is not required if cartridges containing Florisil® are used.)

5.2.5 Concentration/evaporation

Note: Use of a solvent recovery system with the K–D or other solvent evaporation apparatus is strongly recommended.

5.2.5.1 Kuderna-Danish concentrator

5.2.5.1.1 Concentrator tube, Kuderna-Danish—10-mL, graduated (Kontes or equivalent). Calibration must be checked at the volumes employed for extract volume measurement. A ground-glass stopper is used to prevent evaporation of extracts.

5.2.5.1.2 Evaporative flask, Kuderna-Danish—500-mL (Kontes or equivalent). Attach to concentrator tube with connectors.

5.2.5.1.3 Snyder column, Kuderna/Danish—Three-ball macro (Kontes or equivalent)

5.2.5.1.4 Snyder column—Two-ball micro (Kontes or equivalent)

5.2.5.1.5 Water bath—Heated, with concentric ring cover, capable of temperature control (± 2 °C), installed in a hood using appropriate engineering controls to limit exposure to solvent vapors.

5.2.5.2 Nitrogen evaporation device—Equipped with heated bath that can be maintained at an appropriate temperature for the solvent and analytes. (N-Evap, Organomation Associates, Inc., or equivalent)

5.2.5.3 Rotary evaporator—Buchi/Brinkman-American Scientific or equivalent, equipped with a variable temperature water bath, vacuum source with shutoff valve at the evaporator, and vacuum gauge.

5.2.5.2.1 A recirculating water pump and chiller are recommended, as use of tap water for cooling the evaporator wastes large volumes of water and can lead to inconsistent performance as water temperatures and pressures vary.

5.2.5.2.2 Round-bottom flask—100-mL and 500-mL or larger, with ground-glass fitting compatible with the rotary evaporator

Note: This equipment is used to prepare copper foil or copper powder for removing sulfur from sample extracts (see Section 6.7.4).

5.2.5.4 Automated concentrator—Equipped with glassware sufficient to concentrate 3–400 mL extract to a final volume of 1–10 mL under controlled conditions of temperature and nitrogen flow (Turbovap, or equivalent). Follow manufacturer's directions and requirements.

5.2.5.5 Boiling chips—Glass, silicon carbide, or equivalent, approximately 10/40 mesh. Heat at 400 °C for 30 minutes, or solvent rinse or Soxhlet extract with methylene chloride.

5.2.5 Solid-phase extraction disks—90-mm extraction disks containing 2 g of 8-µm octadecyl (C18) bonded silica uniformly enmeshed in a matrix of inert PTFE fibrils (3M Empore® or equivalent). The disks should not contain any organic compounds, either from the PTFE or the bonded silica, which will leach into the methylene chloride eluant. One liter of reagent water should pass through the disks in 2–5 minutes, using a vacuum of at least 25 inches of mercury.

Note: Extraction disks from other manufacturers may be used in this procedure, provided that they use the same solid phase materials (*i.e.,* octadecyl bonded silica). Disks of other diameters also may be used, but may adversely affect the flow rate of the sample through the disk.

5.3 Vials

5.3.1 Extract storage—10- to 15-mL, amber glass, with fluoropolymer-lined screw cap

5.3.2 GC autosampler—1- to 5-mL, amber glass, with fluoropolymer-lined screw- or crimp-cap, to fit GC autosampler

5.4 Balances

5.4.1 Analytical—capable of accurately weighing 0.1 mg

5.4.2 Top loading—capable of weighing 10 mg

5.5 Sample cleanup

5.5.1 Oven—For baking and storage of adsorbents, capable of maintaining a constant temperature (± 5 °C) in the range of 105–250 °C.

5.5.2 Muffle furnace—Capable of cleaning glassware or baking sodium sulfate in the range of 400–450 °C.

5.5.3 Vacuum system and cartridges for solid-phase cleanup (see Section 11.2)

5.5.3.1 Vacuum system—Capable of achieving 0.1 bar (25 in.) Hg (house vacuum, vacuum pump, or water aspirator), equipped with shutoff valve and vacuum gauge

5.5.3.2 VacElute Manifold (Analytichem International, or equivalent)

5.5.3.3 Vacuum trap—Made from 500-mL sidearm flask fitted with single-hole rubber stopper and glass tubing

5.5.3.4 Rack for holding 50-mL volumetric flasks in the manifold

5.5.3.5 Cartridge—Mega Bond Elute, Non-polar, C18 Octadecyl, 10 g/60 mL (Analytichem International or equivalent), used for solid-phase cleanup of sample extracts (see Section 11.2)

5.5.3.5.1 Cartridge certification—Each cartridge lot must be certified to ensure recovery of the analytes of interest and removal of 2,4,6-trichlorophenol. To make the test mixture, add the trichlorophenol solution (Section 6.7.2.1) to the same standard used to prepare the Quality Control Check Sample (Section 6.8.3). Transfer the mixture to the column and dry the column. Pre-elute with three 10-mL portions of elution solvent, drying the column between elutions. Elute the cartridge with 10 mL each of methanol and water, as in Section 11.2.3.3.

5.5.3.5.2 Concentrate the eluant to per Section 10.3.3, exchange to isooctane or hexane per Section 10.3.3, and inject 1.0 µL of the concentrated eluant into the GC using the procedure in Section 12. The recovery of all analytes (including the unresolved GC peaks) shall be within the ranges for calibration verification (Section 13.6 and Table 4), and the peak for trichlorophenol shall not be detectable; otherwise the SPE cartridge is not performing properly and the cartridge lot shall be rejected.

5.5.4 Sulfur removal tube—40- to 50-mL bottle, test tube, or Erlenmeyer flask with fluoropolymer-lined screw cap

5.6 Centrifuge apparatus

5.6.1 Centrifuge—Capable of rotating 500-mL centrifuge bottles or 15-mL centrifuge tubes at 5,000 rpm minimum

5.6.2 Centrifuge bottle—500-mL, with screw cap, to fit centrifuge

5.6.3 Centrifuge tube—15-mL, with screw cap, to fit centrifuge

5.7 Miscellaneous lab ware—graduated cylinders, pipettes, beakers, volumetric flasks, vials, syringes, and other lab ware necessary to support the operations in this method

5.8 Gas chromatograph—Dual-column with simultaneous split/splitless, temperature programmable split/splitless (PTV), or on-column injection; temperature program with isothermal holds, and all required accessories including syringes, analytical columns, gases, and detectors. An autosampler is highly recommended because it injects volumes more reproducibly than manual injection techniques. Alternatively, two separate single-column gas chromatographic systems may be employed.

5.8.1 Example columns and operating conditions

5.8.1.1 DB–608 (or equivalent), 30-m long × 0.53-mm ID fused-silica capillary, 0.83-µm film thickness.

5.8.1.2 DB–1701 (or equivalent), 30-m long × 0.53-mm ID fused-silica capillary, 1.0-µm film thickness.

5.8.1.3 Suggested operating conditions used to meet the retention times shown in Table 3 are:

Carrier gas flow rate: approximately 7 mL/min

Initial temperature: 150 °C for 0.5 minute,
Temperature program: 150–270 °C at 5 °C/min, and
Final temperature: 270 °C, until trans-Permethrin elutes

Note: Other columns, internal diameters, film thicknesses, and operating conditions may be used, provided that the performance requirements in this method are met. However, the column pair chosen must have dissimilar phases/chemical properties in order to separate the compounds of interest in different retention time order. Columns that only differ in the length, ID, or film thickness, but use the same stationary phase do not qualify as ''dissimilar.''

5.8.2 Carrier gas—Helium or hydrogen. Data in the tables in this method were obtained using helium carrier gas. If hydrogen is used, analytical conditions may need to be adjusted for optimum performance, and calibration and all QC tests must be performed with hydrogen carrier gas. See Section 4.3 for precautions regarding the use of hydrogen as a carrier gas.

5.8.3 Detector—Halogen-specific detector (electron capture detector (ECD), electrolytic conductivity detector (ELCD), or equivalent). The ECD has proven effective in the analysis of wastewaters for the analytes listed in Tables 1 and 2, and was used to develop the method performance data in Section 17 and Tables 4 and 5.

5.8.4 Data system—A computer system must be interfaced to the GC that allows continuous acquisition and storage of data from the detectors throughout the chromatographic program. The computer must have software that allows searching GC data for specific analytes, and for plotting responses versus time. Software must also be available that allows integrating peak areas or peak heights in selected retention time windows and calculating concentrations of the analytes.

6. Reagents and Standards

6.1 pH adjustment

6.1.1 Sodium hydroxide solutions

6.1.1.1 Concentrated (10 M)—Dissolve 40 g of NaOH (ACS) in reagent water and dilute to 100 mL.

6.1.1.2 Dilute (1 M)—Dissolve 40 g NaOH in 1 L of reagent water.

6.1.2 Sulfuric acid (1 + 1)—Slowly add 50 mL of H_2SO_4 (ACS, sp. gr. 1.84) to 50 mL of reagent water.

6.1.3 Hydrochloric acid—Reagent grade, 6 N

6.2 Sodium thiosulfate—(ACS) granular.

6.3 Sodium sulfate—Sodium sulfate, reagent grade, granular anhydrous (Baker or equivalent), rinsed with methylene chloride (20 mL/g), baked in a shallow tray at 450 °C for 1 hour minimum, cooled in a desiccator, and stored in a pre-cleaned glass bottle with screw cap which prevents moisture from entering. If, after heating, the sodium sulfate develops a noticeable grayish cast (due to the presence of carbon in the crystal matrix), that batch of reagent is not suitable for use and should be discarded. Extraction with methylene chloride (as opposed to simple rinsing) and baking at a lower temperature may produce sodium sulfate suitable for use.

6.4 Reagent water—Reagent water is defined as water in which the analytes of interest and interfering compounds are not observed at the MDLs of the analytes in this method.

6.5 Solvents—methylene chloride, acetone, methanol, hexane, acetonitrile, and isooctane, high purity pesticide quality, or equivalent, demonstrated to be free of the analytes and interferences (Section 3). Purification of solvents by distillation in all-glass systems may be required.

Note: The standards and final sample extracts must be prepared in the same final solvent.

6.6 Ethyl ether—Nanograde, redistilled in glass if necessary

Ethyl ether must be shown to be free of peroxides before use, as indicated by EM Laboratories Quant test strips (available from Scientific Products Co. and other suppliers). Procedures recommended for removal of peroxides are provided with the test strips. After removal of peroxides, add 20 mL of ethyl alcohol preservative to each liter of ether.

6.7 Materials for sample cleanup

6.7.1 Florisil®—PR grade (60/100 mesh), activated at 650—700 °C, stored in the dark in a glass container with fluoropolymer-lined screw cap. Activate each batch immediately prior to use for 16 hours minimum at 130 °C in a foil-covered glass container and allow to cool. Alternatively, 500 mg cartridges (J.T. Baker, or equivalent) may be used.

6.7.2 Solutions for solid-phase cleanup

6.7.2.1 SPE cartridge calibration solution—2,4,6-trichlorophenol, 0.1 µg/mL in acetone.

6.7.2.2 SPE elution solvent—methylene chloride:acetonitrile:hexane (50:3:47).

6.7.3 Alumina, neutral, Brockman Activity I, 80–200 mesh (Fisher Scientific certified, or equivalent). Heat in a glass bottle for 16 hours at 400 to 450 °C. Seal and cool to room temperature. Add 7% (w/w) reagent water and mix for 10 to 12 hours. Keep bottle tightly sealed.

6.7.4 Sulfur removal

6.7.4.1 Copper foil or powder—Fisher, Alfa Aesar, or equivalent. Cut copper foil into approximately 1-cm squares. Copper must be activated on each day it will be used, as described below.

6.7.4.1.1 Place the quantity of copper needed for sulfur removal (Section 11.5.1.3) in a ground-glass-stoppered Erlenmeyer flask or bottle. Cover the foil or powder with methanol.

6.7.4.1.2 Add HCl dropwise (0.5—1.0 mL) while swirling, until the copper brightens.

6.7.4.1.3 Pour off the methanol/HCl and rinse 3 times with reagent water to remove all traces of acid, then 3 times with acetone, then 3 times with hexane.

6.7.4.1.4 For copper foil, cover with hexane after the final rinse. Store in a stoppered flask under nitrogen until used. For the powder, dry on a rotary evaporator. Store in a stoppered flask under nitrogen until used.

6.7.4.2 Tetrabutylammonium sulfite (TBA sulfite)

6.7.4.2.1 Tetrabutylammonium hydrogen sulfate, $[CH_3(CH_2)_3]_4NHSO_4$

6.7.4.2.2 Sodium sulfite, Na_2SO_3

6.7.4.2.3 Dissolve approximately 3 g tetrabutylammonium hydrogen sulfate in 100 mL of reagent water in an amber bottle with fluoropolymer-lined screw cap. Extract with three 20-mL portions of hexane and discard the hexane extracts.

6.7.4.2.4 Add 25 g sodium sulfite to produce a saturated solution. Store at room temperature. Replace after 1 month.

6.8 Standard solutions—Purchase as solutions or mixtures with certification to their purity, concentration, and authenticity, or prepare from materials of known purity and composition. If compound purity is 96% or greater, the weight may be used without correction to compute the concentration of the standard. Store neat standards or single analyte standards in the dark at −20 to −10 °C in screw-cap vials with fluoropolymer-lined caps. Store multi-analyte standards at 4 °C or per manufacturer's recommendations. Place a mark on the vial at the level of the solution so that solvent evaporation loss can be detected. Bring the vial to room temperature prior to use to re-dissolve any precipitate.

6.8.1 Stock standard solutions—Standard solutions may be prepared from pure standard materials or purchased as certified solutions. Traceability must be to a national standard, when available. Except as noted below for solutions spiked into samples, prepare stock standards in isooctane or hexane. Observe the safety

precautions in Section 4. The following procedure may be used to prepare standards from neat materials.

6.8.1.1 Dissolve an appropriate amount of assayed reference material in solvent. For example, weigh 10 mg of aldrin in a 10-mL ground-glass-stoppered volumetric flask and fill to the mark with isooctane or hexane. Larger volumes may be used at the convenience of the laboratory. After the aldrin is completely dissolved, transfer the solution to a 15-mL vial with fluoropolymer-lined cap.

6.8.1.2 Check for signs of degradation prior to preparation of calibration or performance-test standards.

6.8.1.3 Replace stock solutions after 12 months, or sooner if comparison with quality control check standards indicates a change in concentration.

6.8.2 Calibration solutions—It is necessary to prepare calibration solutions for the analytes of interest (Section 1.4) only using an appropriate solvent (isooctane or hexane may be used). Whatever solvent is used, both the calibration standards and the final sample extracts must use the same solvent. Other analytes may be included as desired.

6.8.2.1 Prepare calibration standards for the single-component analytes of interest and surrogates at a minimum of three concentration levels (five are suggested) by adding appropriate volumes of one or more stock standards to volumetric flasks. One of the calibration standards should be at a concentration of the analyte near the ML in Table 1 or 2. The ML value may be rounded to a whole number that is more convenient for preparing the standard, but must not exceed the ML values listed in Tables 1 or 2 for those analytes which list ML values. Alternatively, the laboratory may establish the ML for each analyte based on the concentration of the lowest calibration standard in a series of standards obtained from a commercial vendor, again, provided that the ML values does not exceed the MLs in Table 1 and 2, and provided that the resulting calibration meets the acceptance criteria in Section 7.5.2. based on the RSD, RSE, or R^2.

The other concentrations should correspond to the expected range of concentrations found in real samples or should define the working range of the GC system. A minimum of six concentration levels is required for a second order, non-linear (*e.g.,* quadratic; $ax^2 + bx + c$) calibration. Calibrations higher than second order are not allowed.

Given the number of analytes included in this method, it is highly likely that some will coelute on one or both of the GC columns used for the analysis. Therefore, divide the analytes two or more groups and prepare separate calibration standards for each group, at multiple concentrations (*e.g.,* a five-point calibration will require ten solutions to cover two groups of analytes).

Note: Many commercially available standards are divided into separate mixtures to address this issue.

The other concentrations should correspond to the expected range of concentrations found in real samples or should define the working range of the GC system. A separate standard near the MDL may be analyzed as a check on sensitivity, but should not be included in the linearity assessment. A minimum of six concentration levels is required for a non-linear (*e.g.,* quadratic) calibration (Section 7.5.2 or 7.6.2). The solvent for the standards must match the final solvent for the sample extracts (*e.g.,* isooctane or hexane).

Note: The option for non-linear calibration may be necessary to address specific instrumental techniques. However, it is not EPA's intent to allow non-linear calibration to be used to compensate for detector saturation or to avoid proper instrument maintenance.

6.8.2.2 Multi-component analytes (*e.g.,* PCBs as Aroclors, and Toxaphene)

6.8.2.2.1 A standard containing a mixture of Aroclor 1016 and Aroclor 1260 will include many of the peaks represented in the other Aroclor mixtures. As a result, a multi-point initial calibration employing a mixture of Aroclors 1016 and 1260 at three to five concentrations should be sufficient to demonstrate the linearity of the detector response without the necessity of performing multi-point initial calibrations for each of the seven Aroclors. In addition, such a mixture can be used as a standard to demonstrate that a sample does not contain peaks that represent any one of the Aroclors. This standard can also be used to determine the concentrations of either Aroclor 1016 or Aroclor 1260, should they be present in a sample.

Therefore, prepare a minimum of three calibration standards containing equal concentrations of both Aroclor 1016 and Aroclor 1260 by dilution of the stock standard with isooctane or hexane. The concentrations should correspond to the expected range of concentrations found in real samples and should bracket the linear range of the detector.

6.8.2.2.2 Single standards of each of the other five Aroclors are required to aid the analyst in pattern recognition. Assuming that the Aroclor 1016/1260 standards described in Section 6.8.2.2.1 have been used to demonstrate the linearity of the detector, these single standards of the remaining five Aroclors also may be used to determine the calibration factor for each Aroclor. Prepare a standard for each of the other Aroclors. The concentrations should generally correspond to the mid-point of the linear range of the detector, but lower concentrations may be employed at the discretion of the analyst based on project requirements.

6.8.2.2.3 For Toxaphene, prepare a minimum of three calibration standards containing Toxaphene by dilution of the stock standard with isooctane or hexane. The concentrations should correspond to the expected range of concentrations found in real samples and should bracket the linear range of the detector.

6.8.3 Quality Control (QC) Check Sample—Also known as the Laboratory Control Sample (LCS). Prepare a mid-level standard mixture in acetone (or water miscible solvent) from a stock solution from the same source as the calibration standards. This standard will be used to generate extracts to evaluate the capability of the laboratory.

6.8.4 Second Source Standard—Obtain standards from a second source (different manufacturer or different certified lot), and prepare a mid-level standard mixture in isooctane or hexane. This standard will be analyzed with the calibration curve to verify the accuracy of the calibration.

6.8.5 Internal standard solution—If the internal standard calibration technique is to be used, prepare pentachloronitrobenzene (PCNB) at a concentration of 10 µg/mL in ethyl acetate. Alternative and multiple internal standards; *e.g.*, tetrachloro-m-xylene, 4,4′-dibromobiphenyl, and/or decachlorobiphenyl may be used provided that the laboratory performs all QC tests and meets all QC acceptance criteria with the alternate or additional internal standard(s) as an integral part of this method.

6.8.6 Surrogate solution—Prepare a solution containing one or more surrogates at a concentration of 2 µg/mL in acetone. Potential surrogates include: Dibutyl chlorendate (DBC), tetrachloro-*m*-xylene (TCMX), 4,4′-dibromobiphenyl, or decachlorobiphenyl provided that the laboratory performs all QC tests and meets all QC acceptance criteria with the alternative surrogate(s) as an integral part of this method. If the internal standard calibration technique is used, do not use the internal standard as a surrogate.

6.8.7 DDT and endrin decomposition (breakdown) solution—Prepare a solution containing endrin at a concentration of 1 µg/mL and 4,4′-DDT at a concentration of 2 µg/mL, in isooctane or hexane.

6.8.8 Quality control check sample (laboratory control sample; LCS) concentrate—See Sections 8.2.1 and 8.4.

6.8.9 Stability of solutions—Analyze all standard solutions (Sections 6.8.1 through 6.8.8) within 48 hours of preparation. Replace purchased certified stock standard solutions per the expiration date. Replace stock standard solutions prepared by the laboratory or mixed with purchased solutions after one year, or sooner if comparison with QC check samples indicates a problem.

7. Calibration

7.1 Establish gas chromatographic operating conditions equivalent to those in Section 5.8.1 and Footnote 2 to Table 3. Alternative temperature program and flow rate conditions may be used. The system may be calibrated using the external standard technique (Section 7.5) or the internal standard technique (Section 7.6). It is necessary to calibrate the system for the analytes of interest (Section 1.4) only.

7.2 Separately inject the mid-level calibration standard for each calibration mixture. Store the retention time on each GC column.

7.3 Demonstrate that each column/detector system meets the MDLs in Table 3 or demonstrates sufficient sensitivity for the intended application and passes the DDT/endrin decomposition test (Section 13.5).

7.4 Injection of calibration solutions—Inject a constant volume in the range of 0.5 to 2.0 µL of each calibration solution into the GC column/detector pairs. Beginning with the lowest level mixture and proceeding to the highest level mixture may limit the risk of carryover from one standard to the next, but other sequences may be used. A blank sample should be analyzed after the highest standard to demonstrate that there is no carry-over within the system for this calibration range. For each analyte, compute, record, and store, as a function of the concentration injected, the retention time and peak area on each column/detector system. If multi-component analytes are to be analyzed, store the retention time and peak area for the three to five exclusive (unique large) peaks for each PCB or technical chlordane. Use four to six peaks for toxaphene.

7.5 External standard calibration

7.5.1 From the calibration data (Section 7.4), calculate the calibration factor (CF) for each analyte at each concentration according to the following equation:

$$CF = \frac{A_s}{C_s}$$

where:

C_s = Concentration of the analyte in the standard (ng/mL)

A_s = Peak height or area

For multi-component analytes, choose a series of characteristic peaks for each analyte (3 to 5 for each Aroclor, 4 to 6 for toxaphene) and calculate individual calibration factors for each peak. Alternatively, for toxaphene, sum the areas of all of the peaks in the standard chromatogram and use the summed area to determine the calibration factor. (If this alternative is used, the same approach must be used to quantitate the analyte in the samples.)

7.5.2 Calculate the mean (average) and relative standard deviation (RSD) of the calibration factors. If the RSD is less than 20%, linearity through the origin can be assumed and the average CF can be used for calculations. Alternatively, the results can be used to fit a linear or quadratic regression of response ratios, A_s/A_{is}, vs. concentration ratios C_s/C_{is}. If used, the regression must be weighted inversely proportional to concentration. The coefficient of determination (R^2) of the weighted regression must be greater than 0.99. Alternatively, the relative standard error (Reference 10) may be used as an acceptance criterion. As with the RSD, the RSE must be less than 20%. If an RSE less than 20% cannot be achieved for a quadratic regression, system performance is unacceptable and the system must be adjusted and re-calibrated.

Note: Regression calculations are not included in this method because the calculations are cumbersome and because many GC/ECD data systems allow selection of weighted regression for calibration and calculation of analyte concentrations.

7.6 Internal standard calibration

7.6.1 From the calibration data (Section 7.4), calculate the response factor (RF) for each analyte at each concentration according to the following equation:

$$RF = \frac{(A_s \text{ x } C_{is})}{(A_{is} \text{ x } C_s)}$$

where:

A_s = Response for the analyte to be measured.

A_{is} = Response for the internal standard.

C_{is} = Concentration of the internal standard (ng/mL)

C_s = Concentration of the analyte to be measured (ng/mL).

7.6.2 Calculate the mean (average) and relative standard deviation (RSD) of the response factors. If the RSD is less than 15%, linearity through the origin can be assumed and the average RF can be used for calculations. Alternatively, the results can be used to prepare a calibration curve of response ratios, A_s/A_{is}, vs. concentration ratios, C_s/C_{is}, for the analyte. A minimum of six concentration levels is required for a non-linear (*e.g.*, quadratic) regression. If used, the regression must be weighted inversely proportional to concentration, and the correlation coefficient of the weighted regression must be greater than 0.99. The relative standard error (Reference 11) may also be used as an acceptance criterion. As with the RSD, the RSE must be less than 15%. If an RSE less than 15% cannot be achieved for a quadratic regression, system performance is unacceptable and the system must be adjusted and re-calibrated.

7.7 Second source standard—After the calibration curves are analyzed, analyze a second source standard at the mid-level concentration. This standard confirms the accuracy of the calibration curve. The concentrations must be within 20% difference of the true value. If the observed concentration exceeds this criteria, a third source may be analyzed to determine which standard was not accurate, and subsequent corrective actions taken.

7.8 The working calibration curve, CF, or RF must be verified at the beginning and end of each 24-hour shift by the analysis of a mid-level calibration standard or the combined QC standard (Section 6.8.2.1.3). Requirements for calibration verification are given in Section 13.6 and Table 4. Alternatively, calibration verification may be performed after a set number of injections (*e.g.*, every 20 injections), to include injection of extracts of field samples, QC samples, instrument blanks, etc. (*i.e.*, it is based on the number of injections performed, not sample extracts).

Note: The 24-hour shift begins after analysis of the combined QC standard (calibration verification) and ends 24 hours later. The ending calibration verification standard is run immediately after the last sample run during the 24-hour shift, so the beginning and ending calibration verifications are outside of the 24-hour shift. If calibration verification is based on the number of injections instead of time, then the ending verification standard for one group of 20 injections may be used as the beginning

verification for the next group of 20 injections.

7.9 Florisil® calibration—The column cleanup procedure in Section 11.3 utilizes Florisil column chromatography. Florisil® from different batches or sources may vary in adsorptive capacity. To standardize the amount of Florisil® which is used, use of the lauric acid value (Reference 11) is suggested. The referenced procedure determines the adsorption from a hexane solution of lauric acid (mg) per g of Florisil®. The amount of Florisil® to be used for each column is calculated by dividing 110 by this ratio and multiplying by 20 g. If cartridges containing Florisil® are used, then this step is not necessary.

8. Quality Control

8.1 Each laboratory that uses this method is required to operate a formal quality assurance program. The minimum requirements of this program consist of an initial demonstration of laboratory capability and ongoing analysis of spiked samples and blanks to evaluate and document data quality. The laboratory must maintain records to document the quality of data generated. Ongoing data quality checks are compared with established performance criteria to determine if the results of analyses meet performance requirements of this method. A quality control check standard (LCS, Section 8.4) must be prepared and analyzed with each batch of samples to confirm that the measurements were performed in an in-control mode of operation. A laboratory may develop its own performance criteria (as QC acceptance criteria), provided such criteria are as or more restrictive than the criteria in this method.

8.1.1 The laboratory must make an initial demonstration of the capability (IDC) to generate acceptable precision and recovery with this method. This demonstration is detailed in Section 8.2. On a continuing basis, the laboratory should repeat demonstration of capability (DOC) annually.

8.1.2 In recognition of advances that are occurring in analytical technology, and to overcome matrix interferences, the laboratory is permitted certain options (Section 1.8 and 40 CFR 136.6(b) [Reference 12]) to improve separations or lower the costs of measurements. These options may include alternative extraction (*e.g.*, other solid-phase extraction materials and formats), concentration, and cleanup procedures, and changes in GC columns (Reference 12). Alternative determinative techniques, such as the substitution of spectroscopic or immunoassay techniques, and changes that degrade method performance, are not allowed. If an analytical technique other than the techniques specified in this method is used, that technique must have a specificity equal to or greater than the specificity of the techniques in this method for the analytes of interest. The laboratory is also encouraged to participate in performance evaluation studies (see Section 8.8).

8.1.2.1 Each time a modification listed above is made to this method, the laboratory is required to repeat the procedure in Section 8.2. If the detection limit of the method will be affected by the change, the laboratory is required to demonstrate that the MDLs (40 CFR part 136, appendix B) are lower than one-third the regulatory compliance limit or as low as the MDLs in this method, whichever are greater. If calibration will be affected by the change, the instrument must be recalibrated per Section 7. Once the modification is demonstrated to produce results equivalent or superior to results produced by this method as written, that modification may be used routinely thereafter, so long as the other requirements in this method are met (*e.g.*, matrix spike/matrix spike duplicate recovery and relative percent difference).

8.1.2.1.1 If an allowed method modification, is to be applied to a specific discharge, the laboratory must prepare and analyze matrix spike/matrix spike duplicate (MS/MSD) samples (Section 8.3) and LCS samples (Section 8.4). The laboratory must include surrogates (Section 8.7) in each of the samples. The MS/MSD and LCS samples must be fortified with the analytes of interest (Section 1.4). If the modification is for nationwide use, MS/MSD samples must be prepared from a minimum of nine different discharges (See Section 8.1.2.1.2), and all QC acceptance criteria in this method must be met. This evaluation only needs to be performed once other than for the routine QC required by this method (for example it could be performed by the vendor of an alternate material) but any laboratory using that specific material must have the results of the study available. This includes a full data package with the raw data that will allow an independent reviewer to verify each determination and calculation performed by the laboratory (see Section 8.1.2.2.5, items a–q).

8.1.2.1.2 Sample matrices on which MS/MSD tests must be performed for nationwide use of an allowed modification:

(a) Effluent from a POTW

(b) ASTM D5905 Standard Specification for Substitute Wastewater

(c) Sewage sludge, if sewage sludge will be in the permit

(d) ASTM D1141 Standard Specification for Substitute Ocean Water, if ocean water will be in the permit

(e) Untreated and treated wastewaters up to a total of nine matrix types (see *http://water.epa.gov/scitech/wastetech/guide/industry.cfm*) for a list of industrial categories with existing effluent guidelines).

At least one of the above wastewater matrix types must have at least one of the following characteristics:

(i) Total suspended solids greater than 40 mg/L

(ii) Total dissolved solids greater than 100 mg/L

(iii) Oil and grease greater than 20 mg/L

(iv) NaCl greater than 120 mg/L

(v) $CaCO_3$ greater than 140 mg/L

The interim acceptance criteria for MS, MSD recoveries that do not have recovery limits specified in Table 5, and recoveries for surrogates that do not have recovery limits specified in Table 8, must be no wider than 60–140%, and the relative percent difference (RPD) of the concentrations in the MS and MSD that do not have RPD limits specified in Table 5 must be less than 30%. Alternatively, the laboratory may use the laboratory's in-house limits if they are tighter.

(f) A proficiency testing (PT) sample from a recognized provider, in addition to tests of the nine matrices (Section 8.1.2.1.1).

8.1.2.2 The laboratory must maintain records of modifications made to this method. These records include the following, at a minimum:

8.1.2.2.1 The names, titles, street addresses, telephone numbers, and email addresses of the analyst(s) that performed the analyses and modification, and of the quality control officer that witnessed and will verify the analyses and modifications.

8.1.2.2.2 A list of analytes, by name and CAS Registry number.

8.1.2.2.3 A narrative stating reason(s) for the modifications.

8.1.2.2.4 Results from all quality control (QC) tests comparing the modified method to this method, including:

(a) Calibration (Section 7).

(b) Calibration verification (Section 13.6).

(c) Initial demonstration of capability (Section 8.2).

(d) Analysis of blanks (Section 8.5).

(e) Matrix spike/matrix spike duplicate analysis (Section 8.3).

(f) Laboratory control sample analysis (Section 8.4).

8.1.2.2.5 Data that will allow an independent reviewer to validate each determination by tracing the instrument output (peak height, area, or other signal) to the final result. These data are to include:

(a) Sample numbers and other identifiers.

(b) Extraction dates.

(c) Analysis dates and times.

(d) Analysis sequence/run chronology.

(e) Sample weight or volume (Section 10).

(f) Extract volume prior to each cleanup step (Sections 10 and 11).

(g) Extract volume after each cleanup step (Section 11).

(h) Final extract volume prior to injection (Sections 10 and 12).

(i) Injection volume (Sections 12.3 and 13.2).

(j) Sample or extract dilution (Section 15.4).

(k) Instrument and operating conditions.

(l) Column (dimensions, material, etc).

(m) Operating conditions (temperatures, flow rates, etc).

(n) Detector (type, operating conditions, etc).

(o) Chromatograms and other recordings of raw data.

(p) Quantitation reports, data system outputs, and other data to link the raw data to the results reported.

(q) A written Standard Operating Procedure (SOP)

8.1.2.2.6 Each individual laboratory wishing to use a given modification must perform the start-up tests in Section 8.1.2 (*e.g.,* DOC, MDL), with the modification as an integral part of this method prior to applying the modification to specific discharges. Results of the DOC must meet the QC acceptance criteria in Table 5 for the analytes of interest (Section 1.4), and the MDLs must be equal to or lower than the MDLs in Table 3 for the analytes of interest.

8.1.3 Before analyzing samples, the laboratory must analyze a blank to demonstrate that interferences from the analytical system, lab ware, and reagents, are under control. Each time a batch of samples is extracted or reagents are changed, a blank must be extracted and analyzed as a safeguard against laboratory contamination. Requirements for the blank are given in Section 8.5.

8.1.4 The laboratory must, on an ongoing basis, spike and analyze a minimum of 5% of all samples in a batch (Section 22.2) or from a given site or discharge, in duplicate, to monitor and evaluate method and laboratory performance on the sample matrix. This procedure is described in Section 8.3.

8.1.5 The laboratory must, on an ongoing basis, demonstrate through analysis of a quality control check sample (laboratory control sample, LCS; on-going precision and recovery sample, OPR) that the measurement system is in control. This procedure is described in Section 8.4.

8.1.6 The laboratory should maintain performance records to document the quality of data that is generated. This procedure is given in Section 8.7.

8.1.7 The large number of analytes tested in performance tests in this method present a substantial probability that one or more will fail acceptance criteria when all analytes are tested simultaneously, and a re-test (reanalysis) is allowed if this situation should occur. If, however, continued re-testing results in further repeated failures, the laboratory should document the failures and either avoid reporting results for the analytes that failed or report the problem and failures with the data. A QC failure does not relieve a discharger or permittee of reporting timely results.

8.2 Demonstration of capability (DOC)—To establish the ability to generate acceptable recovery and precision, the laboratory must perform the DOC in Sections 8.2.1 through 8.2.6 for the analytes of interest initially and in an on-going manner at least annually. The laboratory must also establish MDLs for the analytes of interest using the MDL procedure at 40 CFR part 136, appendix B. The laboratory's MDLs must be equal to or lower than those listed in Table 3 or lower than one-third the regulatory compliance limit, whichever is greater. For MDLs not listed in Tables 1 or 2, the laboratory must determine the MDLs using the MDL procedure at 40 CFR part 136, appendix B under the same conditions used to determine the MDLs for the analytes listed in Tables 1 and 2. All procedures used in the analysis, including cleanup procedures, must be included in the DOC.

8.2.1 For the DOC, a QC check sample concentrate containing each analyte of interest (Section 1.4) is prepared in a water-miscible solvent using the solution in Section 6.8.3. The QC check sample concentrate must be prepared independently from those used for calibration, but should be from the same source and prepared in a water-miscible solvent. The concentrate should produce concentrations of the analytes of interest in water at or below the mid-point of the calibration range. Multiple solutions may be required.

Note: QC check sample concentrates are no longer available from EPA.

8.2.2 Using a pipet or syringe, prepare four QC check samples by adding an appropriate volume of the concentrate and of the surrogate(s) to each of four 1–L aliquots of reagent water. Swirl or stir to mix.

8.2.3 Extract and analyze the well-mixed QC check samples according to the method beginning in Section 10.

8.2.4 Calculate the average percent recovery ($\bar{X}$) and the standard deviation (s) of the percent recovery for each analyte using the four results.

8.2.5 For each analyte, compare s and $\bar{X}$ with the corresponding acceptance criteria for precision and recovery in Table 4. For analytes in Table 2 that are not listed in Table 4, QC acceptance criteria must be developed by the laboratory. EPA has provided guidance for development of QC acceptance criteria (References 12 and 13). If s and $\bar{X}$ for all analytes of interest meet the acceptance criteria, system performance is acceptable and analysis of blanks and samples can begin. If any individuals exceeds the precision limit or any individual $\bar{X}$ falls outside the range for recovery, system performance is unacceptable for that analyte.

Note: The large number of analytes in Tables 1 and 2 present a substantial probability that one or more will fail at least one of the acceptance criteria when many or all analytes are determined simultaneously.

8.2.6 When one or more of the analytes tested fail at least one of the acceptance criteria, repeat the test for only the analytes that failed. If results for these analytes pass, system performance is acceptable and analysis of samples and blanks may proceed. If one or more of the analytes again fail, system performance is unacceptable for the analytes that failed the acceptance criteria. Correct the problem and repeat the test (Section 8.2). See Section 8.1.7 for disposition of repeated failures.

Note: To maintain the validity of the test and re-test, system maintenance and/or adjustment is not permitted between this pair of tests.

8.3 Matrix spike and matrix spike duplicate (MS/MSD)—The laboratory must, on an ongoing basis, spike at least 5% of the samples in duplicate from each sample site being monitored to assess accuracy (recovery and precision). The data user should identify the sample and the analytes of interest (Section 1.4) to be spiked. If direction cannot be obtained, the laboratory must spike at least one

sample in duplicate per extraction batch of up to 20 samples (Section 22.2) with the analytes in Table 1. Spiked sample results should be reported only to the data user whose sample was spiked, or as requested or required by a regulatory/control authority.

8.3.1. If, as in compliance monitoring, the concentration of a specific analyte will be checked against a regulatory concentration limit, the concentration of the spike should be at that limit; otherwise, the concentration of the spike should be one to five times higher than the background concentration determined in Section 8.3.2, at or near the midpoint of the calibration range, or at the concentration in the LCS (Section 8.4) whichever concentration would be larger. When no information is available, the mid-point of the calibration may be used, as long as it is the same or less than the regulatory limit.

8.3.2 Analyze one sample aliquot to determine the background concentration (B) of the each analyte of interest. If necessary to meet the requirement in Section 8.3.1, prepare a new check sample concentrate (Section 8.2.1) appropriate for the background concentration. Spike and analyze two additional sample aliquots of the same volume as the original sample, and determine the concentrations after spiking (A_1 and A_2) of each analyte. Calculate the percent recoveries (P_1 and P_2) as:

$$P_x = \frac{A_x - B}{T} \times 100$$

where T is the known true value of the spike.

Also calculate the relative percent difference (RPD) between the concentrations (A_1 and A_2):

$$RPD = \frac{|A_1 - A_2|}{\frac{A_1 + A_2}{2}} \times 100$$

8.3.3 Compare the percent recoveries (P_1 and P_2) and the RPD for each analyte in the MS/MSD aliquots with the corresponding QC acceptance criteria for recovery (P) and RPD in Table 4.

If any individual P falls outside the designated range for recovery in either aliquot, or the RPD limit is exceeded, the result for the analyte in the unspiked sample is suspect and may not be reported or used for permitting or regulatory compliance. See Section 8.1.7 for disposition of failures.

For analytes in Table 2 not listed in Table 5, QC acceptance criteria must be developed by the laboratory. EPA has provided guidance for development of QC acceptance criteria (References 12 and 13).

8.3.4 After analysis of a minimum of 20 MS/MSD samples for each target analyte and surrogate, the laboratory must calculate and apply in-house QC limits for recovery and RPD of future MS/MSD samples (Section 8.3). The QC limits for recovery are calculated as the mean observed recovery ±3 standard deviations, and the upper QC limit for RPD is calculated as the mean RPD plus 3 standard deviations of the RPDs. The in-house QC limits must be updated at least every two years and re-established after any major change in the analytical instrumentation or process. At least 80% of the analytes tested in the MS/MSD must have in-house QC acceptance criteria that are tighter than those in Table 4. If an in-house QC limit for the RPD is greater than the limit in Table 4, then the limit in Table 4 must be used. Similarly, if an in-house lower limit for recovery is below the lower limit in Table 4, then the lower limit in Table 4 must be used, and if an in-house upper limit for recovery is above the upper limit in Table 4, then the upper limit in Table 4 must be used. The laboratory must evaluate surrogate recovery data in each sample against its in-house surrogate recovery limits. The laboratory may use 60–140% as interim acceptance criteria for surrogate recoveries until in-house limits are developed.

8.4 Laboratory control sample (LCS)—A QC check sample (laboratory control sample, LCS; on-going precision and recovery sample, OPR) containing each single-component analyte of interest (Section 1.4) must be extracted, concentrated, and analyzed with each extraction batch of up to 20 samples (Section 3.1) to demonstrate acceptable recovery of the analytes of interest from a clean sample matrix. If multi-peak analytes are required, extract and prepare at least one as an LCS for each batch. Alternatively, the laboratory may set up a program where multi-peak LCS is rotated with a single-peak LCS.

8.4.1 Prepare the LCS by adding QC check sample concentrate (Section 8.2.1) to reagent water. Include all analytes of interest (Section 1.4) in the LCS. The volume of reagent water must be the same as the nominal volume used for the sample, the DOC (Section 8.2), the blank (Section 8.5), and the MS/MSD (Section 8.3). Also add a volume of the surrogate solution (Section 6.8.6).

8.4.2 Analyze the LCS prior to analysis of samples in the extraction batch (Section 3.1). Determine the concentration (A) of each analyte. Calculate the percent recovery as:

$$P_s = \frac{A}{T} \times 100$$

where T is the true value of the concentration in the LCS.

8.4.3 For each analyte, compare the percent recovery (P) with its corresponding QC acceptance criterion in Table 4. For analytes of interest in Table 2 not listed in Table 4, use the QC acceptance criteria developed for the MS/MSD (Section 8.3.3.2). If the recoveries for all analytes of interest fall within the designated ranges, analysis of blanks and field samples may proceed. If any individual recovery falls outside the range, proceed according to Section 8.4.4.

Note: The large number of analytes in Tables 1 and 2 present a substantial probability that one or more will fail the acceptance criteria when all analytes are tested simultaneously. Because a re-test is allowed in event of failure (Sections 8.1.7 and 8.4.4), it may be prudent to extract and analyze two LCSs together and evaluate results of the second analysis against the QC acceptance criteria only if an analyte fails the first test.

8.4.4 Repeat the test only for those analytes that failed to meet the acceptance criteria (P). If these analytes now pass, system performance is acceptable and analysis of blanks and samples may proceed. Repeated failure, however, will confirm a general problem with the measurement system. If this occurs, repeat the test using a fresh LCS (Section 8.2.1) or an LCS prepared with a fresh QC check sample concentrate (Section 8.2.1), or perform and document system repair. Subsequent to repair, repeat the LCS test (Section 8.4). See Section 8.1.7 for disposition of repeated failures.

8.4.5 After analysis of 20 LCS samples, the laboratory must calculate and apply in-house QC limits for recovery to future LCS samples (Section 8.4). Limits for recovery in the LCS are calculated as the mean recovery ±3 standard deviations. A minimum of 80% of the analytes tested for in the LCS must have QC acceptance criteria tighter than those in Table 4. As noted in Section 8.6, each laboratory must develop QC acceptance criteria for the surrogates they employ. The laboratory should use 60–140% as interim acceptance criteria for recoveries of spiked analytes and surrogates until in-house LCS and surrogate limits are developed. If an in-house lower limit for LCS recovery is lower than the lower limit in Table 4, the lower limit in Table 4 must be used, and if an in-house upper limit for recovery is higher than the upper limit in Table 4, the upper limit in Table 4 must be used.

8.5 Blank—Extract and analyze a blank with each extraction batch (Section 22.2) to demonstrate that the reagents and equipment used for preparation and analysis are free from contamination.

8.5.1 Prepare the blank from reagent water and spike it with the surrogates. The volume of reagent water must be the same as the volume used for samples, the DOC (Section 8.2), the LCS (Section 8.4), and the MS/MSD (Section 8.3). Extract, concentrate, and analyze the blank using the same procedures and reagents used for the samples, LCS, and MS/MSD in the batch. Analyze the blank immediately after analysis of the LCS (Section 8.4) and prior to analysis of the MS/MSD and samples to demonstrate freedom from contamination.

8.5.2 If any analyte of interest is found in the blank at a concentration greater than the MDL for the analyte, at a concentration greater than one-third the regulatory compliance limit, or at a concentration greater than one-tenth the concentration in a sample in the batch (Section 3.1), whichever is greatest, analysis of samples must be halted and samples in the batch must be re-extracted and the extracts reanalyzed. Samples in a batch must be associated with an uncontaminated blank before the results for those samples may be reported or used for permitting or regulatory compliance purposes. If re-testing of blanks results in repeated failures, the laboratory should document the failures and report the problem and failures with the data.

8.6 Surrogate recovery—As a quality control check, the laboratory must spike all samples with the surrogate standard spiking solution (Section 6.8.6) per Section 10.2.2 or 10.4.2, analyze the samples, and calculate the percent recovery of each surrogate. QC acceptance criteria for surrogates must be developed by the laboratory. EPA has provided guidance for development of QC acceptance criteria (References 12 and 13). If any recovery fails its criterion, attempt to find and correct the cause of the failure, and if sufficient volume is available, re-extract another aliquot of the affected sample. Surrogate recoveries from the blank and LCS may be used as pass/fail criteria by the laboratory or as required by a regulatory authority, or may be used to diagnose problems with the analytical system.

8.7 As part of the QC program for the laboratory, it is suggested but not required that method accuracy for wastewater samples be assessed and records maintained. After analysis of five or more spiked wastewater samples as in Section 8.4, calculate the average percent recovery ($\bar{X}$) and the standard deviation of the percent recovery (sp). Express the accuracy assessment as a percent interval from $\bar{X} - 2sp$ to $\bar{X} + 2sp$. For example, if $\bar{X} = 90\%$ and sp = 10%, the accuracy interval is expressed as 70–110%. Update the accuracy assessment for each analyte on a regular basis to ensure process control (*e.g.,* after each 5–10 new accuracy measurements).

8.8 It is recommended that the laboratory adopt additional quality assurance practices for use with this method. The specific practices that are most productive depend upon the needs of the laboratory and the nature of the samples. Field duplicates may be analyzed to assess the precision of environmental measurements. When doubt exists over the identification of a peak on the chromatogram, confirmatory techniques such as gas chromatography with another dissimilar column, specific element detector, or mass spectrometer must be used. Whenever possible, the laboratory should analyze standard reference materials and participate in relevant performance evaluation studies.

9. Sample Collection, Preservation, and Handling

9.1 Collect samples as grab samples in glass bottles, or in refrigerated bottles using automatic sampling equipment. Collect 1–L of ambient waters, effluents, and other aqueous samples. If high concentrations of the analytes of interest are expected (*e.g.,* for untreated effluents or in-process waters), collect a smaller volume (*e.g.,* 250 mL), but not less than 100 mL, in addition to the 1–L sample. Follow conventional sampling practices, except do not pre-rinse the bottle with sample before collection. Automatic sampling equipment must be as free as possible of polyvinyl chloride or other tubing or other potential sources of contamination. If needed, collect additional sample(s) for the MS/MSD (Section 8.3).

9.2 Ice or refrigerate the sample at <6 °C from the time of collection until extraction, but do not freeze. If aldrin is to be determined and residual chlorine is present, add 80 mg/L of sodium thiosulfate but do not add excess. Any method suitable for field use may be employed to test for residual chlorine (Reference 14). If sodium thiosulfate interferes in the determination of the analytes, an alternative preservative (*e.g.,* ascorbic acid or sodium sulfite) may be used.

9.3 Extract all samples within seven days of collection and completely analyze within 40 days of extraction (Reference 1). If the sample will not be extracted within 72 hours of collection, adjust the sample pH to range of 5.0–9.0 with sodium hydroxide solution or sulfuric acid. Record the volume of acid or base used.

10. Sample Extraction

10.1 This section contains procedures for separatory funnel liquid-liquid extraction (SFLLE, Section 10.2), continuous liquid-liquid extraction (CLLE, Section 10.4), and disk-based solid-phase extraction (SPE, Section 10.5). SFLLE is faster, but may not be as effective as CLLE for extracting polar analytes. SFLLE is labor intensive and may result in formation of emulsions that are difficult to break. CLLE is less labor intensive, avoids emulsion formation, but requires more time (18–24 hours), more hood space, and may require more solvent. SPE can be faster, unless the particulate load in an aqueous sample is so high that it slows the filtration process. If an alternative extraction scheme to those detailed in this method is used, all QC tests must be performed and all QC acceptance criteria must be met with that extraction scheme as an integral part of this method.

10.2 Separatory funnel liquid-liquid extraction (SFLLE).

10.2.1 The SFLLE procedure below assumes a sample volume of 1 L. When a different sample volume is extracted, adjust the volume of methylene chloride accordingly.

10.2.2 Mark the water meniscus on the side of the sample bottle for later determination of sample volume. Pour the entire sample into the separatory funnel. Pipet the surrogate standard spiking solution (Section 6.8.6) into the separatory funnel. If the sample will be used for the LCS or MS or MSD, pipet the appropriate QC check sample concentrate (Section 8.2.1) into the separatory funnel. Mix well. If the sample arrives in a larger sample bottle, 1 L may be measured in a graduated cylinder, then added to the separatory funnel.

Note: Instances in which the sample is collected in an oversized bottle should be reported by the laboratory to the data user. Of particular concern is that fact that this practice precludes rinsing the empty bottle with solvent as described below, which could leave hydrophobic pesticides on the wall of the bottle, and underestimate the actual sample concentrations.

10.2.3 Add 60 mL of methylene chloride to the sample bottle, seal, and shake for 30 seconds to rinse the inner surface. Transfer the solvent to the separatory funnel and extract the sample by shaking the funnel for two

minutes with periodic venting to release excess pressure. Allow the organic layer to separate from the water phase for a minimum of 10 minutes. If an emulsion forms and the emulsion interface between the layers is more than one-third the volume of the solvent layer, employ mechanical techniques to complete the phase separation. The optimum technique depends upon the sample, but may include stirring, filtration of the emulsion through glass wool, centrifugation, freezing, or other physical methods. Collect the methylene chloride extract in a flask. If the emulsion cannot be broken (recovery of less than 80% of the methylene chloride, corrected for the water solubility of methylene chloride), transfer the sample, solvent, and emulsion into the extraction chamber of a continuous extractor and proceed as described in Section 10.4.

10.2.4 Add a second 60-mL volume of methylene chloride to the sample bottle and repeat the extraction procedure a second time, combining the extracts in the flask. Perform a third extraction in the same manner. Proceed to macro-concentration (Section 10.3.1).

10.2.5 Determine the original sample volume by refilling the sample bottle to the mark and transferring the liquid to an appropriately sized graduated cylinder. Record the sample volume to the nearest 5 mL. Sample volumes may also be determined by weighing the container before and after extraction or filling to the mark with water.

10.3 Concentration.

10.3.1 Macro concentration.

10.3.1.1 Assemble a Kuderna-Danish (K–D) concentrator by attaching a 10-mL concentrator tube to a 500-mL evaporative flask. Other concentration devices or techniques may be used in place of the K–D concentrator so long as the requirements of Section 8.2 are met.

10.3.1.2 Pour the extract through a solvent-rinsed drying column containing about 10 cm of anhydrous sodium sulfate, and collect the extract in the K–D concentrator. Rinse the flask and column with 20–30 mL of methylene chloride to complete the quantitative transfer.

10.3.1.3 If no cleanup is to be performed on the sample, add 500 µL (0.5 mL) of isooctane to the extract to act as a keeper during concentration.

10.3.1.4 Add one or two clean boiling chips and attach a three-ball Snyder column to the K–D evaporative flask. Pre-wet the Snyder column by adding about 1 mL of methylene chloride to the top. Place the K–D apparatus on a hot water bath (60–65 °C) so that the concentrator tube is partially immersed in the hot water, and the entire lower rounded surface of the flask is bathed with hot vapor. Adjust the vertical position of the apparatus and the water temperature as required to complete the concentration in 15–20 minutes. At the proper rate of evaporation the balls of the column will actively chatter but the chambers will not flood with condensed solvent. When the apparent volume of liquid reaches 1 mL or other determined amount, remove the K–D apparatus from the water bath and allow it to drain and cool for at least 10 minutes.

10.3.1.5 If the extract is to be cleaned up by a procedure for sulfur removal, remove the Snyder column and rinse the flask and its lower joint into the concentrator tube with 1 to 2 mL of methylene chloride. A 5-mL syringe is recommended for this operation. Adjust the final volume to 10 mL in methylene chloride and proceed to sulfur removal (Section 11.5). If the extract is to cleaned up using one of the other cleanup procedures or is to be injected into the GC, proceed to Kuderna-Danish micro-concentration (Section 10.3.2) or nitrogen evaporation and solvent exchange (Section 10.3.3).

10.3.2 Kuderna-Danish micro concentration.

10.3.2.1 Add another one or two clean boiling chips to the concentrator tube and attach a two-ball micro-Snyder column. Pre-wet the Snyder column by adding about 0.5 mL of methylene chloride to the top. Place the K–D apparatus on a hot water bath (60–65 °C) so that the concentrator tube is partially immersed in hot water. Adjust the vertical position of the apparatus and the water temperature as required to complete the concentration in 5–10 minutes. At the proper rate of distillation the balls of the column will actively chatter but the chambers will not flood with condensed solvent. When the apparent volume of liquid reaches approximately 1 mL or other required amount, remove the K–D apparatus from the water bath and allow it to drain and cool for at least 10 minutes. Remove the Snyder column and rinse the flask and its lower joint into the concentrator tube with approximately 0.2 mL of methylene chloride, and proceed to Section 10.3.3 for nitrogen evaporation and solvent exchange.

10.3.3 Nitrogen evaporation and solvent exchange—Extracts to be subjected to solid-phase cleanup (SPE) are exchanged into 1.0 mL of the SPE elution solvent (Section 6.7.2.2). Extracts to be subjected to Florisil® or alumina cleanups are exchanged into hexane. Extracts that have been cleaned up and are ready for analysis are exchanged into isooctane or hexane, to match the solvent used for the calibration standards.

10.3.3.1 Transfer the vial containing the sample extract to the nitrogen evaporation (blowdown) device (Section 5.2.5.2). Lower the vial into a 50–55 °C water bath and begin concentrating. During the solvent evaporation process, do not allow the extract to become dry. Adjust the flow of nitrogen so that the surface of the solvent is just visibly disturbed. A large vortex in the solvent may cause analyte loss.

10.3.3.2 Solvent exchange.

10.3.3.2.1 When the volume of the liquid is approximately 500 µL, add 2 to 3 mL of the desired solvent (SPE elution solvent for SPE cleanup, hexane for Florisil or alumina, or isooctane for final injection into the GC) and continue concentrating to approximately 500 µL. Repeat the addition of solvent and concentrate once more.

10.3.3.3.2 Adjust the volume of an extract to be cleaned up by SPE, Florisil®, or alumina to 1.0 mL. Proceed to extract cleanup (Section 11).

10.3.3.3 Extracts that have been cleaned up and are ready for analysis—Adjust the final extract volume to be consistent with the volume extracted and the sensitivity desired. The goal is for a full-volume sample (*e.g.,* 1–L) to have a final extract volume of 10 mL, but other volumes may be used.

10.3.4 Transfer the concentrated extract to a vial with fluoropolymer-lined cap. Seal the vial and label with the sample number. Store in the dark at room temperature until ready for GC analysis. If GC analysis will not be performed on the same day, store the vial in the dark at 4 °C. Analyze the extract by GC per the procedure in Section 12.

10.4 Continuous liquid/liquid extraction (CLLE).

10.4.1 Use CLLE when experience with a sample from a given source indicates an emulsion problem, or when an emulsion is encountered using SFLLE. CLLE may be used for all samples, if desired.

10.4.2 Mark the water meniscus on the side of the sample bottle for later determination of sample volume. Transfer the sample to the continuous extractor and, using a pipet, add surrogate standard spiking solution. If the sample will be used for the LCS, MS, or MSD, pipet the appropriate check sample concentrate (Section 8.2.1 or 8.3.2) into the separatory funnel. Mix well. Add 60 mL of methylene chloride to the sample bottle, seal, and shake for 30 seconds to rinse the inner surface. Transfer the solvent to the extractor.

10.4.3 Repeat the sample bottle rinse with two additional 50–100 mL portions

of methylene chloride and add the rinses to the extractor.

10.4.4 Add a suitable volume of methylene chloride to the distilling flask (generally 200–500 mL) and sufficient reagent water to ensure proper operation of the extractor, and extract the sample for 18–24 hours. A shorter or longer extraction time may be used if all QC acceptance criteria are met. Test and, if necessary, adjust the pH of the water during the second or third hour of the extraction. After extraction, allow the apparatus to cool, then detach the distilling flask. Dry, concentrate, solvent exchange, and transfer the extract to a vial with fluoropolymer-lined cap, per Section 10.3.

10.4.5 Determine the original sample volume by refilling the sample bottle to the mark and transferring the liquid to an appropriately sized graduated cylinder. Record the sample volume to the nearest 5 mL. Sample volumes may also be determined by weighing the container before and after extraction or filling to the mark with water.

10.5 Solid-phase extraction of aqueous samples.

The steps in this section address the extraction of aqueous field samples using disk-based solid-phase extraction (SPE) media, based on an ATP approved by EPA in 1995 (Reference 20). This application of SPE is distinct from that used in this method for the cleanup of sample extracts in Section 11.2. Analysts must be careful not to confuse the equipment, supplies, or the procedural steps from these two different uses of SPE.

Note: Changes to the extraction conditions described below may be made by the laboratory under the allowance for method flexibility described in Section 8.1, provided that the performance requirements in Section 8.2 are met. However, changes in SPE materials, formats, and solvents must meet the requirements in Section 8.1.2 and its subsections.

10.5.1 Mark the water meniscus on the side of the sample bottle for later determination of sample volume. If the sample contains particulates, let stand to settle out the particulates before extraction.

10.5.2 Extract the sample as follows:

10.5.2.1 Place a 90-mm standard filter apparatus on a vacuum filtration flask or manifold and attach to a vacuum source. The vacuum gauge should read at least 25 in. of mercury when all valves are closed. Position a 90-mm C18 extraction disk onto the filter screen. Wet the entire disk with methanol. To aid in filtering samples with particulates, a 1-µm glass fiber filter or Empore® Filter Aid 400 can be placed on the top of the disk and wetted with methanol. Install the reservoir and clamp. Resume vacuum to dry the disk. Interrupt the vacuum. Wash the disk and reservoir with 20 mL of methylene chloride. Resume the vacuum briefly to pull methylene chloride through the disk. Interrupt the vacuum and allow the disk to soak for about a minute. Resume vacuum and completely dry the disk.

10.5.2.2 Condition the disk with 20 mL of methanol. Apply vacuum until nearly all the solvent has passed through the disk, interrupting it while solvent remains on the disk. Allow the disk to soak for about a minute. Resume vacuum to pull most of the methanol through, but interrupting it to leave a layer of methanol on the surface of the disk. Do not allow disk to dry.

For uniform flow and good recovery, it is critical the disk not be allowed to dry from now until the end of the extraction. Discard waste solvent. Rinse the disk with 20 mL of deionized water. Resume vacuum to pull most of the water through, but interrupt it to leave a layer of water on the surface of the disk. Do not allow the disk to dry. If disk does dry, recondition with methanol as above.

10.5.2.3 Add the water sample to the reservoir and immediately apply the vacuum. If particulates have settled in the sample, gently decant the clear layer into the apparatus until most of the sample has been processed. Then pour the remainder including the particulates into the reservoir. Empty the sample bottle completely. When the filtration is complete, dry the disk for three minutes. Turn off the vacuum.

10.5.3 Discard sample filtrate. Insert tube to collect the eluant. The tube should fit around the drip tip of the base. Reassemble the apparatus. Add 5.0 mL of acetone to the center of the disk, allowing it to spread evenly over the disk. Turn the vacuum on and quickly off when the filter surface nears dryness but still remains wet. Allow to soak for 15 seconds. Add 20 mL of methylene chloride to the sample bottle, seal and shake to rinse the inside of the bottle. Transfer the methylene chloride from the bottle to the filter. Resume the vacuum slowly so as to avoid splashing.

Interrupt the vacuum when the filter surface nears dryness but still remains wet. Allow disk to soak in solvent for 20 seconds. Rinse the reservoir glass and disk with 10 mL of methylene chloride. Resume vacuum slowly. Interrupt vacuum when disk is covered with solvent. Allow to soak for 20 seconds. Resume vacuum to dry the disk. Remove the sample tube.

10.5.4 Dry, concentrate, solvent exchange, and transfer the extract to a vial with fluoropolymer-lined cap, per Section 10.3.

10.5.5 Determine the original sample volume by refilling the sample bottle to the mark and transferring the liquid to an appropriately sized graduated cylinder. Record the sample volume to the nearest 5 mL. Sample volumes may also be determined by weighing the container before and after extraction or filling to the mark with water.

11. Extract Cleanup

11.1 Cleanup may not be necessary for a relatively clean sample matrix. If particular circumstances require the use of a cleanup procedure, the laboratory may use any or all of the procedures below or any other appropriate procedure (*e.g.,* gel permeation chromatography). However, the laboratory must first repeat the tests in Sections 8.2, 8.3, and 8.4 to demonstrate that the requirements of those sections can be met using the cleanup procedure(s) as an integral part of this method. This is particularly important when the target analytes for the analysis include any of the single component pesticides in Table 2, because some cleanups have not been optimized for all of those analytes.

11.1.1 The solid-phase cartridge (Section 11.2) removes polar organic compounds such as phenols.

11.1.2 The Florisil® column (Section 11.3) allows for selected fractionation of the organochlorine analytes and will also eliminate polar interferences.

11.1.3 Alumina column cleanup (Section 11.4) also removes polar materials.

11.1.4 Elemental sulfur, which interferes with the electron capture gas chromatography of some of the pesticides, may be removed using activated copper, or TBA sulfite. Sulfur removal (Section 11.5) is required when sulfur is known or suspected to be present. Some chlorinated pesticides which also contain sulfur may be removed by this cleanup.

11.2 Solid-phase extraction (SPE) as a cleanup.

In order to use the C18 SPE cartridge in Section 5.5.3.5 as a cleanup procedure, the sample extract must be exchanged from methylene chloride to methylene chloride: acetonitrile:hexane. Follow the solvent exchange steps in Section 10.3.3.2 prior to attempting solid-phase cleanup.

Note: This application of SPE is distinct from that used in this method for the extraction of aqueous samples in Section 10.5. Analysts must be careful not to confuse the equipment, supplies, or procedural steps from these two different uses of SPE.

11.2.1 Setup.

11.2.1.1 Attach the VacElute Manifold (Section 5.5.3.2) to a water aspirator or vacuum pump with the trap and gauge installed between the manifold and vacuum source.

11.2.1.2 Place the SPE cartridges in the manifold, turn on the vacuum source, and adjust the vacuum to 5 to 10 psi.

11.2.2 Cartridge washing—Pre-elute each cartridge prior to use sequentially with 10-mL portions each of hexane, methanol, and water using vacuum for 30 seconds after each eluting solvent. Follow this pre-elution with 1 mL methylene chloride and three 10-mL portions of the elution solvent (Section 6.7.2.2) using vacuum for 5 minutes after each eluting solvent. Tap the cartridge lightly while under vacuum to dry between solvent rinses. The three portions of elution solvent may be collected and used as a cartridge blank, if desired. Finally, elute the cartridge with 10 mL each of methanol and water, using the vacuum for 30 seconds after each eluant.

11.2.3 Extract cleanup.

11.2.3.1 After cartridge washing (Section 11.2.2), release the vacuum and place the rack containing the 50-mL volumetric flasks (Section 5.5.3.4) in the vacuum manifold. Re-establish the vacuum at 5 to 10 psi.

11.2.3.2 Using a pipette or a 1-mL syringe, transfer 1.0 mL of extract to the SPE cartridge. Apply vacuum for five minutes to dry the cartridge. Tap gently to aid in drying.

11.2.3.3 Elute each cartridge into its volumetric flask sequentially with three 10-mL portions of the methylene chloride:acetonitrile:hexane (50:3:47) elution solvent (Section 6.7.2.2), using vacuum for five minutes after each portion. Collect the eluants in the 50-mL volumetric flasks.

11.2.3.4 Release the vacuum and remove the 50-mL volumetric flasks.

11.2.3.5 Concentrate the eluted extracts per Section 10.3.

11.3 Florisil®.

In order to use Florisil cleanup, the sample extract must be exchanged from methylene chloride to hexane. Follow the solvent exchange steps in Section 10.3.3.2 prior to attempting Florisil® cleanup.

Note: Alternative formats for this cleanup may be used by the laboratory, including cartridges containing Florisil®. If an alternative format is used, consult the manufacturer's instructions and develop a formal documented procedure to replace the steps in Section 11.3 of this method and demonstrate that the alternative meets the relevant quality control requirements of this method.

11.3.1 If the chromatographic column does not contain a frit at the bottom, place a small plug of pre-cleaned glass wool in the column (Section 5.2.4) to retain the Florisil®. Place the mass of Florisil® (nominally 20 g) predetermined by calibration (Section 7.9 and Table 6) in a chromatographic column. Tap the column to settle the Florisil® and add 1 to 2 cm of granular anhydrous sodium sulfate to the top.

11.3.2 Add 60 mL of hexane to wet and rinse the sodium sulfate and Florisil®. Just prior to exposure of the sodium sulfate layer to the air, stop the elution of the hexane by closing the stopcock on the chromatographic column. Discard the eluant.

11.3.3 Transfer the concentrated extract (Section 10.3.3) onto the column. Complete the transfer with two 1-mL hexane rinses, drawing the extract and rinses down to the level of the sodium sulfate.

11.3.4 Place a clean 500-mL K–D flask and concentrator tube under the column. Elute Fraction 1 with 200 mL of 6% (v/v) ethyl ether in hexane at a rate of approximately 5 mL/min. Remove the K–D flask and set it aside for later concentration. Elute Fraction 2 with 200 mL of 15% (v/v) ethyl ether in hexane into a second K–D flask. Elute Fraction 3 with 200 mL of 50% (v/v) ethyl ether in hexane into a third K–D flask. The elution patterns for the pesticides and PCBs are shown in Table 6.

11.3.5 Concentrate the fractions as in Section 10.3, except use hexane to prewet the column and set the water bath at about 85 °C. When the apparatus is cool, remove the Snyder column and rinse the flask and its lower joint into the concentrator tube with hexane. Adjust the volume of Fraction 1 to approximately 10 mL for sulfur removal (Section 11.5), if required; otherwise, adjust the volume of the fractions to 10 mL, 1.0 mL, or other volume needed for the sensitivity desired. Analyze the concentrated extract by gas chromatography (Section 12).

11.4 Alumina.

The sample extract must be exchanged from methylene chloride to hexane. Follow the solvent exchange steps in Section 10.3.3.2 prior to attempting alumina cleanup.

11.4.1 If the chromatographic column does not contain a frit at the bottom, place a small plug of pre-cleaned glass wool in the chromatographic column (Section 5.2.4) to retain the alumina. Add 10 g of alumina (Section 6.7.3) on top of the plug. Tap the column to settle the alumina. Place 1–2 g of anhydrous sodium sulfate on top of the alumina.

11.4.2 Close the stopcock and fill the column to just above the sodium sulfate with hexane. Add 25 mL of hexane. Open the stopcock and adjust the flow rate of hexane to approximately 2 mL/min. Do not allow the column to go dry throughout the elutions.

11.4.3 When the level of the hexane is at the top of the column, quantitatively transfer the extract to the column. When the level of the extract is at the top of the column, slowly add 25 mL of hexane and elute the column to the level of the sodium sulfate. Discard the hexane.

11.4.4 Place a K–D flask (Section 5.2.5.1.2) under the column and elute the pesticides with approximately 150 mL of hexane:ethyl ether (80:20 v/v). It may be necessary to adjust the volume of elution solvent for slightly different alumina activities.

11.4.5 Concentrate the extract per Section 10.3.

11.5 Sulfur removal—Elemental sulfur will usually elute in Fraction 1 of the Florisil® column cleanup. If Florisil® cleanup is not used, or to remove sulfur from any of the Florisil® fractions, use one of the sulfur removal procedures below. These procedures may be applied to extracts in hexane, ethyl ether, or methylene chloride.

Note: Separate procedures using copper or TBA sulfite are provided in this section for sulfur removal. They may be used separately or in combination, if desired.

11.5.1 Removal with copper (Reference 15).

Note: Some of the analytes in Table 2 are not amenable to sulfur removal with copper (*e.g.,* atrazine and diazinon). Therefore, before using copper to remove sulfur from an extract that will be analyzed for any of the non-PCB analytes in Table 2, the laboratory must demonstrate that the analytes can be extracted from an aqueous sample matrix that contains sulfur and recovered from an extract treated with copper. Acceptable performance can be demonstrated through the preparation and analysis of a matrix spike sample that meets the QC requirements for recovery.

11.5.1.1 Quantitatively transfer the extract to a 40- to 50-mL flask or bottle. If there is evidence of water in the K–D or round-bottom flask after the transfer, rinse the flask with small portions of hexane:acetone (40:60) and add to the flask or bottle. Mark and set aside the concentration flask for future use.

11.5.1.2 Add 10–20 g of granular anhydrous sodium sulfate to the flask. Swirl to dry the extract.

11.5.1.3 Add activated copper (Section 6.7.4.1.4) and allow to stand for 30–60 minutes, swirling occasionally. If

the copper does not remain bright, add more and swirl occasionally for another 30–60 minutes.

11.5.1.4 After drying and sulfur removal, quantitatively transfer the extract to a nitrogen-evaporation vial or tube and proceed to Section 10.3.3 for nitrogen evaporation and solvent exchange, taking care to leave the sodium sulfate and copper foil in the flask.

11.5.2 Removal with TBA sulfite.

11.5.2.1 Using small volumes of hexane, quantitatively transfer the extract to a 40- to 50-mL centrifuge tube with fluoropolymer-lined screw cap.

11.5.2.2 Add 1–2 mL of TBA sulfite reagent (Section 6.7.4.2.4), 2–3 mL of 2-propanol, and approximately 0.7 g of sodium sulfite (Section 6.7.4.2.2) crystals to the tube. Cap and shake for 1–2 minutes. If the sample is colorless or if the initial color is unchanged, and if clear crystals (precipitated sodium sulfite) are observed, sufficient sodium sulfite is present. If the precipitated sodium sulfite disappears, add more crystalline sodium sulfite in approximately 0.5-g portions until a solid residue remains after repeated shaking.

11.5.2.3 Add 5–10 mL of reagent water and shake for 1–2 minutes. Centrifuge to settle the solids.

11.5.2.4 Quantitatively transfer the hexane (top) layer through a small funnel containing a few grams of granular anhydrous sodium sulfate to a nitrogen-evaporation vial or tube and proceed to Section 10.3.3 for micro-concentration and solvent exchange.

12. Gas Chromatography

12.1 Establish the same operating conditions used in Section 7.1 for instrument calibration.

12.2 If the internal standard calibration procedure is used, add the internal standard solution (Section 6.9.3) to the extract as close as possible to the time of injection to minimize the possibility of loss by evaporation, adsorption, or reaction. For example, add 1 µL of 10 µg/mL internal standard solution into the extract, assuming no dilutions. Mix thoroughly.

12.3 Simultaneously inject an appropriate volume of the sample extract or standard solution onto both columns, using split, splitless, solvent purge, large-volume, or on-column injection. Alternatively, if using a single-column GC configuration, inject an appropriate volume of the sample extract or standard solution onto each GC column independently. If the sample is injected manually, the solvent-flush technique should be used. The injection volume depends upon the technique used and the sensitivity needed to meet MDLs or reporting limits for regulatory compliance. Injected volumes must be the same for all standards and sample extracts. Record the volume injected to the nearest 0.05 µL.

12.4 Set the data system or GC control to start the temperature program upon sample injection, and begin data collection after the solvent peak elutes. Set the data system to stop data collection after the last analyte is expected to elute and to return the column to the initial temperature.

12.5 Perform all qualitative and quantitative measurements as described in Sections 14 and 15. When standards and extracts are not being used for analyses, store them refrigerated at <6 °C, protected from light, in screw-cap vials equipped with un-pierced fluoropolymer-lined septa.

13. System and Laboratory Performance

13.1 At the beginning of each shift during which standards or extracts are analyzed, GC system performance and calibration must be verified for all analytes and surrogates on both column/detector systems. Adjustment and/or recalibration (per Section 7) are performed until all performance criteria are met. Only after all performance criteria are met may samples, blanks and other QC samples, and standards be analyzed.

13.2 Inject an aliquot of the combined QC standard (Section 6.8.4) on both columns. Inject an aliquot of each of the multi-component standards.

13.3 Retention times—The absolute retention times of the peak maxima shall be within ±2 seconds of the retention times in the calibration verification (Section 7.8).

13.4 GC resolution—Resolution is acceptable if the valley height between two peaks (as measured from the baseline) is less than 40% of the shorter of the two peaks.

13.4.1 DB–608 column—DDT and endrin aldehyde.

13.4.2 DB–1701 column—alpha and gamma chlordane.

Note: If using other GC columns or stationary phases, these resolution criteria apply to these four target analytes and any other closely eluting analytes on those other GC columns.

13.5 Decomposition of DDT and endrin—If DDT, endrin, or their breakdown products are to be determined, this test must be performed prior to calibration verification (Section 13.6). DDT decomposes to DDE and DDD. Endrin decomposes to endrin aldehyde and endrin ketone.

13.5.1 Inject 1 µL of the DDT and endrin decomposition solution (Section 6.9.5).

13.5.2 Measure the areas of the peaks for DDT, DDE, DDD, Endrin, Endrin aldehyde, and Endrin ketone in the chromatogram and calculate the percent breakdown as shown in the equations below:

$$\%\ \text{breakdown of DDT} = \frac{\text{sum of degradation peak areas (DDD + DDE)}}{\text{sum of all peak areas (DDT + DDE + DDD)}} \times 100$$

$$\%\ \text{breakdown of Endrin} = \frac{\text{sum of degradation peak areas (Endrin aldehyde + Endrin ketone)}}{\text{sum of all peak areas (Endrin + Endrin aldehyde + Endrin ketone)}} \times 100$$

13.5.3 Both the % breakdown of DDT and of Endrin must be less than 20%, otherwise the system is not performing acceptably for DDT and endrin. In this case, repair the GC column system that failed and repeat the performance tests (Sections 13.2 to 13.6) until the specification is met.

Note: DDT and endrin decomposition are usually caused by accumulations of particulates in the injector and in the front end of the column. Cleaning and silanizing the injection port liner, and breaking off a short section of the front end of the column will usually eliminate the decomposition problem. Either of these corrective actions may affect retention times, GC resolution, and calibration linearity.

13.6 Calibration verification.

13.6.1 Compute the percent recovery of each analyte and of the coeluting analytes, based on the initial calibration data (Section 7.5 or 7.6).

13.6.2 For each analyte or for coeluting analytes, compare the concentration with the limits for calibration verification in Table 4. For coeluting analytes, use the coeluting analyte with the least restrictive

specification (the widest range). For analytes in Table 2 not listed in Table 4, QC acceptance criteria must be developed by the laboratory. EPA has provided guidance for development of QC acceptance criteria (References 13 and 14). If the recoveries for all analytes meet the acceptance criteria, system performance is acceptable and analysis of blanks and samples may continue. If, however, any recovery falls outside the calibration verification range, system performance is unacceptable for that analyte. If this occurs, repair the system and repeat the test (Section 13.6), or prepare a fresh calibration standard and repeat the test, or recalibrate (Section 7). See Section 8.1.7 for information on repeated test failures.

13.7 Laboratory control sample.

13.7.1 Analyze the extract of the combined QC standard (a.k.a. LCS) (Section 6.8.3) extracted with each sample batch (Section 8.4).

13.7.2 Compute the percent recovery of each analyte and of the coeluting analytes.

13.7.3 For each analyte or coeluting analytes, compare the percent recovery with the limits for ''P'' in Table 4. For coeluting analytes, use the coeluting analyte with the least restrictive specification (widest range). If all analytes pass, the extraction, concentration, and cleanup processes are in control and analysis of blanks and samples may proceed. If, however, any of the analytes fail, these processes are not in control. In this event, correct the problem, re-extract the sample batch, and repeat the ongoing precision and recovery test.

13.7.4 It is suggested, but not required, that the laboratory update statements of data quality. Add results that pass the specifications in Section 13.7.3 to initial (Section 8.7) and previous ongoing data. Update QC charts to form a graphic representation of continued laboratory performance. Develop a statement of laboratory data quality for each analyte by calculating the average percent recovery (R) and the standard deviation of percent recovery, sr. Express the accuracy as a recovery interval from R − 2sr to R + 2sr. For example, if R = 95% and sr = 5%, the accuracy is 85 to 105%.

13.8 Internal standard response—If internal standard calibration is used, verify that detector sensitivity has not changed by comparing the response (area or height) of each internal standard in the sample, blank, LCS, MS, and MSD to the response in the combined QC standard (Section 6.8.3). The peak area or height of the internal standard should be within 50% to 200% (½ to 2×) of its respective peak area or height in the verification standard. If the area or height is not within this range, compute the concentration of the analytes using the external standard method (Section 7.5).

14. Qualitative Identification

14.1 Identification is accomplished by comparison of data from analysis of a sample, blank, or other QC sample with data from calibration verification (Section 7.7.1 or 13.5), and with data stored in the retention-time and calibration libraries (Section 7.7). The retention time window is determined as described in Section 14.2. Identification is confirmed when retention time agrees on both GC columns, as described below.

14.2 Establishing retention time windows.

14.2.1 Using the data from the multi-point initial calibration (Section 7.4), determine the retention time in decimal minutes (not minutes:seconds) of each peak representing a single-component target analyte on each column/detector system. For the multi-component analytes, use the retention times of the five largest peaks in the chromatograms on each column/detector system.

14.2.2 Calculate the standard deviation of the retention times for each single-component analyte on each column/detector system and for the three to five exclusive (unique large) peaks for each multi-component analyte.

14.2.3 Define the width of the retention time window as three times that standard deviation. Establish the center of the retention time window for each analyte by using the absolute retention time for each analyte from the calibration verification standard at the beginning of the analytical shift. For samples run during the same shift as an initial calibration, use the retention time of the mid-point standard of the initial calibration. If the calculated RT window is less than 0.02 minutes, then use 0.02 minutes as the window.

Note: Procedures for establishing retention time windows from other sources may be employed provided that they are clearly documented and provide acceptable performance. Such performance may be evaluated using the results for the spiked QC samples described in this method, such as laboratory control samples and matrix spike samples.

14.2.4 New retention time windows must be established when a new GC column is installed or if a GC column has been shortened during maintenance to a degree that the retention times of analytes in the calibration verification standard have shifted close to the lower limits of the established retention time windows.

14.2.5 RT windows should be checked periodically by examining the peaks in spiked samples such as the LCS or MS/MSD to confirm that peaks for known analytes are properly identified.

14.2.6 If the retention time of an analyte in the initial calibration data has been evaluated as described in Section 7.4.1 and it varied by more than 5 seconds across the calibration range as a function of the concentration of the standard (see Section 7.4.2), then using the standard deviation of the retention times to set the width of the retention time window may not adequately serve to identify the analyte in question under routine conditions. In such cases, data from additional analyses of standards may be required to adequately model the chromatographic behavior of the analyte.

14.3 Identifying the analyte in a sample.

14.3.1 In order to identify a single-component analyte from analysis of a sample, blank, or other QC sample, the peak representing the analyst must fall within its respective retention time windows on both column/detector systems (as defined in Section 14.2). That identification is further supported by the comparison of the numerical results on both columns, as described in Section 15.7.

14.3.2 In order to identify a multi-component analyte, pattern matching (fingerprinting) may be used, or the three to five exclusive (unique, baseline resolved, and largest) peaks for that analyte must fall within their respective retention time windows on both column/detector systems (as defined in Section 14.2). That identification is further supported by the comparison of the numerical results on both columns, as described in Section 15.7.

14.4 GC/MS confirmation.

When the concentration of an analyte is sufficient, or if the presence or identity is suspect, its presence should be confirmed by GC/MS. In order to match the sensitivity of the GC/ECD, confirmation will have to be by SIM–GC/MS, or estimated the concentration would have to be 100 times higher than the GC/ECD calibration range.

14.5 Additional information that may aid the laboratory in the identification of an analyte.

The occurrence of peaks eluting near the retention time of an analyte of interest increases the probability of a false positive for the analyte. If the concentration is insufficient for confirmation by GC/MS, the laboratory may use the cleanup procedures in this

method (Section 11) on a new sample aliquot to attempt to remove the interferent. After attempts at cleanup are exhausted, the following steps may be helpful to assure that the substance that appears in the RT windows on both columns is the analyte of interest.

14.5.1 Determine the consistency of the RT data for the analyte on each column. For example, if the RT is very stable (*i.e.,* varies by no more than a few seconds) for the calibration, calibration verification, blank, LCS, and MS/MSD, the RT for the analyte of interest in the sample should be within this variation regardless of the window established in Section 14.2. If the analyte is not within this variation on both columns, it is likely not present.

14.5.2 The possibility exists that the RT for the analyte in a sample could shift if extraneous materials are present. This possibility may be able to be confirmed or refuted by the behavior of the surrogates in the sample. If multiple surrogates are used that span the length of the chromatographic run, the RTs for the surrogates on both columns are consistent with their RTs in calibration, calibration verification, blank, LCS, and MS/MSD, it is unlikely that the RT for the analyte of interest has shifted.

14.5.3 If the RT for the analyte is shifted slightly later on one column and earlier on the other, and the surrogates have not shifted, it is highly unlikely that the analyte is present, because shifts nearly always occur in the same direction on both columns.

15. Quantitative Determination

15.1 External standard quantitation—Calculate the concentration of the analyte in the extract using the calibration curve or average calibration factor determined in calibration (Section 7.5.2) and the following equation:

$$C_{ex} = \frac{A_s}{CF}$$

where:

C_{ex} = Concentration of the analyte in the extract (ng/mL)
A_s = Peak height or area for the analyte in the standard or sample
CF = Calibration factor, as defined in Section 7.5.1

15.2 Internal standard quantitation—Calculate the concentration of the analyte in the extract using the calibration curve or average response factor determined in calibration (Section 7.6.2) and the following equation:

$$C_{ex} = \frac{A_s \times C_{is}}{A_{is} \times RF}$$

where:

C_{ex} = Concentration of the analyte in the extract (ng/mL)
A_s = Peak height or area for the analyte in the standard or sample
C_{is} = Concentration of the internal standard (ng/mL)
A_{is} = Area of the internal standard
RF = Response factor, as defined in Section 7.6.1

15.3 Calculate the concentration of the analyte in the sample using the concentration in the extract, the extract volume, the sample volume, and the dilution factor, per the following equation:

$$C_s = \frac{C_{ex} \times V_{ex} \times DF}{V_s \times 1000}$$

where:

C_s = Concentration of the analyte in the sample (µg/L)
V_{ex} = Final extract volume (mL)
C_{ex} = Concentration in the extract (ng/mL)
V_s = Volume of sample (L)
DF = Dilution factor
and the factor of 1,000 in the denominator converts the final units from ng/L to µg/L

15.4 If the concentration of any target analyte exceeds the calibration range, either extract and analyze a smaller sample volume, or dilute and analyze the diluted extract.

15.5 Quantitation of multi-component analytes

15.5.1 PCBs as Aroclors

Quantify an Aroclor by comparing the sample chromatogram to that of the most similar Aroclor standard as indicated in Section 14.3.2. Compare the responses of 3 to 5 major peaks in the calibration standard for that Aroclor with the peaks observed in the sample extract. The amount of Aroclor is calculated using the individual calibration factor for each of the 3 to 5 characteristic peaks chosen in Sec. 7.5.1. Determine the concentration of each of the characteristic peaks, using the average calibration factor calculated for that peak in Sec. 7.5.2, and then those 3 to 5 concentrations are averaged to determine the concentration of that Aroclor.

15.5.2 Other multi-component analytes

Quantify any other multi-component analytes (technical chlordane or toxaphene) using the same peaks used to develop the average calibration factors in Section 7.5.2. Determine the concentration of each of the characteristic peaks, and then the concentrations represented by those characteristic peaks are averaged to determine the concentration of the analyte. Alternatively, for toxaphene, the analyst may determine the calibration factor in Section 7.5.2 by summing the areas of all of the peaks for the analyte and using the summed of the peak areas in the sample chromatogram to determine the concentration. However, the approach used for toxaphene must be the same for the calibration and the sample analyses.

15.6 Reporting of results.

As noted in Section 1.6.1, EPA has promulgated this method at 40 CFR part 136 for use in wastewater compliance monitoring under the National Pollutant Discharge Elimination System (NPDES). The data reporting practices described here are focused on such monitoring needs and may not be relevant to other uses of the method.

15.6.1 Report results for wastewater samples in µg/L without correction for recovery. (Other units may be used if required by in a permit.) Report all QC data with the sample results.

15.6.2 Reporting level.

Unless otherwise specified in by a regulatory authority or in a discharge permit, results for analytes that meet the identification criteria are reported down to the concentration of the ML established by the laboratory through calibration of the instrument (see Section 7.5 or 7.6 and the glossary for the derivation of the ML). EPA considers the terms ''reporting limit,'' ''quantitation limit,'' and ''minimum level'' to be synonymous.

15.6.2.1 Report the lower result from the two columns (see Section 15.7 below) for each analyte in each sample, blank, or standard at or above the ML to 3 significant figures. Report a result for each analyte found in each sample below the ML as ''ML,'' or as required by the regulatory authority or permit. Results are reported without blank subtraction unless requested or required by a regulatory authority or in a permit. In this case, both the sample result and the blank results must be reported together.

15.6.2.2 In addition to reporting results for samples and blank(s) separately, the concentration of each analyte in a blank or field blank associated with that sample may be subtracted from the result for that sample, but only if requested or required by a regulatory authority or in a permit. In this case, both the sample result and the blank results must be reported together.

15.6.2.3 Report the result for an analyte in a sample or extract that has been diluted at the least dilute level at which the peak area is within the calibration range (*i.e.,* above the ML for the analyte) and the MS/MSD recovery and RPD are within their respective QC acceptance criteria (Table 4). This may

require reporting results for some analytes from different analyses.

The results for each analyte in the MS/MSD samples should be reported from the same GC column as used to report the results for that analyte in the unspiked sample. If the MS/MSD recoveries and RPDs calculated in this manner do not meet the acceptance criteria in Table 4, then the analyst may use the results from the other GC column to determine if the MS/MSD results meet the acceptance criteria. If such a situation occurs, the results for the sample should be recalculated using the same GC column data as used for the MS/MSD samples, and reported with appropriate annotations that alert the data user of the issue.

15.6.2.4 Results from tests performed with an analytical system that is not in control (*i.e.,* that does not meet acceptance criteria for all of QC tests in this method) must not be reported or otherwise used for permitting or regulatory compliance purposes, but do not relieve a discharger or permittee of reporting timely results. If the holding time would be exceeded for a re-analysis of the sample, the regulatory/control authority should be consulted for disposition.

15.6.3 Analyze the sample by GC/MS or on a third column when analytes have co-eluted or interfere with determination on both columns.

Note: Dichlone and kepone do not elute from the DB–1701 column and must be confirmed on a DB–5 column, or by GC/MS.

15.7 Quantitative information that may aid in the confirmation of the presence of an analyte

15.7.1 As noted in Section 14.3, the relative agreement between the numerical results from the two GC columns may be used to support the identification of the target analyte by providing evidence that that co-eluting interferences are not present at the retention time of the target analyte. Calculate the percent difference (%D) between the results for the analyte from both columns, as follows:

$$\%D = \frac{\text{Higher result} - \text{Lower result}}{\text{Higher result}} \text{ x } 100$$

In general, if the %D of the two results is less than 50% (*e.g.,* a factor of 2), then the pesticide is present. This %D is generous and allows for the pesticide that has the largest measurement error.

Note: Laboratories may employ metrics less than 50% for this comparison, including those specified in other analytical methods for these pesticides (*e.g.,* CLP or SW–846).

15.7.2 If the amounts do not agree, and the RT data indicate the presence of the analyte (per Section 14), it is likely that a positive interference is present on the column that yielded the higher result. That interferent may be represented by a separate peak on the other column that does not coincide with the retention time of any of the target analytes. If the interfering peak is evident on the other column, report the result from that column and advise the data user that the interference resulted in a %D value greater than 50%.

If an interferent is not identifiable on the second column, then the results must be reported as ''not detected'' at the lower concentration. In this event, the pesticide is not confirmed and the reporting limit is elevated.

Note: The resulting elevation of the reporting limit may not meet the requirements for compliance monitoring and the use of additional cleanup procedures may be required.

16. Analysis of Complex Samples

16.1 Some samples may contain high levels (greater than 1 µg/L) of the analytes of interest, interfering analytes, and/or polymeric materials. Some samples may not concentrate to 1.0 mL (Section 10.3.3.3.2); others may overload the GC column and/or detector.

16.2 When an interference is known or suspected to be present, the laboratory should attempt to clean up the sample extract using the SPE cartridge (Section 11.2), by Florisil® (Section 11.3), Alumina (Section 11.4), sulfur removal (Section 11.5), or another clean up procedure appropriate to the analytes of interest. If these techniques do not remove the interference, the extract is diluted by a known factor and reanalyzed (Section 12). Dilution until the extract is lightly colored is preferable. Typical dilution factors are 2, 5, and 10.

16.3 Recovery of surrogate(s)—In most samples, surrogate recoveries will be similar to those from reagent water. If surrogate recovery is outside the range developed in Section 8.6, the sample is re-extracted and reanalyzed if there is sufficient sample and if it is within the 7-day extraction holding time. If the surrogate recovery is still outside this range, extract and analyze one-tenth the volume of sample to overcome any matrix interference problems. If a sample is highly colored or suspected to be high in concentration, a 1–L sample aliquot and a 100-mL sample aliquot could be extracted simultaneously and still meet the holding time criteria, while providing information about a complex matrix.

16.4 Recovery of the matrix spike and matrix spike duplicate (MS/MSD)—In most samples, MS/MSD recoveries will be similar to those from reagent water. If either the MS or MSD recovery is outside the range specified in Section 8.3.3, one-tenth the volume of sample is spiked and analyzed. If the matrix spike recovery is still outside the range, the result for the unspiked sample may not be reported or used for permitting or regulatory compliance purposes. Poor matrix spike recovery does not relieve a discharger or permittee of reporting timely results.

17. Method Performance

17.1 This method was tested for linearity of spike recovery from reagent water and has been demonstrated to be applicable over the concentration range from 4x MDL to 1000x MDL with the following exceptions: Chlordane recovery at 4x MDL was low (60%); Toxaphene recovery was demonstrated linear over the range of 10x MDL to 1000x MDL (Reference 3).

17.2 The 1984 version of this method was tested by 20 laboratories using reagent water, drinking water, surface water, and three industrial wastewaters spiked at six concentrations (Reference 2). Concentrations used in the study ranged from 0.5 to 30 µg/L for single-component pesticides and from 8.5 to 400 µg/L for multi-component analytes. These data are for a subset of analytes described in the current version of the method.

17.3 During the development of Method 1656, a similar EPA procedure for the organochlorine pesticides, single-operator precision, overall precision, and method accuracy were found to be directly related to the concentration of the analyte and essentially independent of the sample matrix. Linear equations to describe these relationships are presented in Table 5.

18. Pollution Prevention

18.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Many opportunities for pollution prevention exist in laboratory operations. EPA has established a preferred hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, the laboratory should use pollution prevention techniques to address waste generation. When wastes cannot be reduced at the source, the Agency recommends recycling as the next best option.

18.2 The analytes in this method are used in extremely small amounts and pose little threat to the environment when managed properly. Standards should be prepared in volumes consistent with laboratory use to minimize the disposal of excess volumes of expired standards. This method utilizes significant quantities of methylene chloride. Laboratories are encouraged to recover and recycle this and other solvents during extract concentration.

18.3 For information about pollution prevention that may be applied to laboratories and research institutions, consult Less is Better: Laboratory Chemical Management for Waste Reduction (Reference 19).

19. Waste Management

19.1 The laboratory is responsible for complying with all Federal, State, and local regulations governing waste management, particularly the hazardous waste identification rules and land disposal restrictions, and to protect the air, water, and land by minimizing and controlling all releases from fume hoods and bench operations. Compliance is also required with any sewage discharge permits and regulations. An overview of requirements can be found in Environmental Management Guide for Small Laboratories (EPA 233–B–98–001).

19.2 Samples at pH <2, or pH >12 are hazardous and must be neutralized before being poured down a drain, or must be handled as hazardous waste.

19.3 Many analytes in this method decompose above 500 °C. Low-level waste such as absorbent paper, tissues, animal remains, and plastic gloves may be burned in an appropriate incinerator. Gross quantities of neat or highly concentrated solutions of toxic or hazardous chemicals should be packaged securely and disposed of through commercial or governmental channels that are capable of handling toxic wastes.

20. References

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21. Tables

TABLE 1—PESTICIDES [1]

Analyte	CAS No.	MDL [2] (ng/L)	ML [3] (ng/L)
Aldrin	309–00–2	8	24
alpha-BHC	319–84–6	6	18
beta-BHC	319–85–7	7	21
delta-BHC	319–86–8	5	15
gamma-BHC (Lindane)	58–89–9	1	33
alpha-Chlordane	5103–71–9	9	27
gamma-Chlordane	5103–74–2	8	24
4,4′-DDD	72–54–8	5	15
4,4′-DDE	72–55–9	10	30
4,4′-DDT	50–29–3	12	36
Dieldrin	60–57–1	6	18
Endosulfan I	959–98–8	11	33
Endosulfan II	33213–65–9	8	24
Endosulfan sulfate	1031–07–8	7	21
Endrin	72–20–8	4	12
Endrin aldehyde	7421–93–4	11	33
Heptachlor	76–44–8	5	15
Heptachlor epoxide	1024–57–3	12	36

[1] All analytes in this table are Priority Pollutants (40 CFR part 423, appendix A).
[2] 40 CFR 136, Appendix B. MDLs were obtained by a single laboratory with an electrolytic conductivity detector, and are estimates of what can be achieved using an electron capture detector.
[3] ML = Minimum Level—see Glossary for definition and derivation.

TABLE 2—ADDITIONAL ANALYTES

Analyte	CAS No.	MDL [3] (ng/L)	ML [4] (ng/L)
Acephate	30560–19–1	2,000	6,000
Alachlor	15972–60–8	20	60
Atrazine	1912–24–9	500	1,500
Benfluralin (Benefin)	1861–40–1	20	60
Bromacil	314–40–9	70	210
Bromoxynil octanoate	1689–99–2	30	90
Butachlor	23184–66–9	30	90
Captafol	2425–06–1	100	300
Captan	133–06–2	100	300
Carbophenothion (Trithion)	786–19–6	50	150
Chlorobenzilate	510–15–6	25	75
Chloroneb (Terraneb)	2675–77–6		
Chloropropylate (Acaralate)	5836–10–2		
Chlorothalonil	1897–45–6	15	45
Cyanazine	21725–46–2		
DCPA (Dacthal)	1861–32–1	3	9
2,4′-DDD	53–19–0		
2,4′-DDE	3424–82–6		
2,4′-DDT	789–02–6		
Diallate (Avadex)	2303–16–4	45	135
1,2-Dibromo-3-chloropropane (DBCP)	96–12–8		
Dichlone	117–80–6		
Dichloran	99–30–9		
Dicofol	115–32–2		
Endrin ketone	53494–70–5	8	24
Ethalfluralin (Sonalan)	55283–68–6	5	15
Etridiazole	2593–15–9		
Fenarimol (Rubigan)	60168–88–9	20	30
Hexachlorobenzene [1]	118–74–1		
Hexachlorocyclopentadiene [1]	77–47–4		
Isodrin	465–73–6	13	39
Isopropalin (Paarlan)	33820–53–0	20	60
Kepone	143–50–0	100	300
Methoxychlor	72–43–5	30	90
Metolachlor	51218–45–2		
Metribuzin	21087–64–9	5	15
Mirex	2385–85–5	4	12
Nitrofen (TOK)	1836–75–5	13	39
cis-Nonachlor	5103–73–1		
trans-Nonachlor	39765–80–5		
Norfluorazon	27314–13–2	50	150

TABLE 2—ADDITIONAL ANALYTES—Continued

Analyte	CAS No.	MDL [3] (ng/L)	ML [4] (ng/L)
Octachlorostyrene	29082–74–4		
Oxychlordane	27304–13–8		
PCNB (Pentachloronitrobenzene)	82–68–8	6	18
Pendamethalin (Prowl)	40487–42–1		
cis-Permethrin	61949–76–6	200	600
trans-Permethrin	61949–77–7	200	600
Perthane (Ethylan)	72–56–0		
Propachlor	1918–16–7		
Propanil	709–98–8		
Propazine	139–40–2		
Quintozene	82–68–8		
Simazine	122–34–9	400	1,200
Strobane	8001–50–1		
Technazene	117–18–0		
Technical Chlordane [2]			
Terbacil	5902–51–2	200	600
Terbuthylazine	5915–41–3	300	900
Toxaphene [1]	8001–35–2	910	2,730
Trifluralin	1582–09–8	50	150
PCB–1016 [1]	12674–11–2	150	450
PCB–1221 [1]	11104–28–2	150	450
PCB–1232 [1]	11141–16–5	150	450
PCB–1242 [1]	53469–21–9	150	450
PCB–1248 [1]	12672–29–6	150	450
PCB–1254 [1]	11097–69–1	150	450
PCB–1260 [1]	11096–82–5	140	420

[1] Priority Pollutants (40 CFR part 423, appendix A).
[2] Technical Chlordane may be used in cases where historical reporting has only been for this form of Chlordane.
[3] 40 CFR part 136, appendix B. MDLs were obtained by a single laboratory with an electrolytic conductivity detector, and are estimates of what can be achieved using an electron capture detector.
[4] ML = Minimum Level—see Glossary for definition and derivation.

TABLE 3—EXAMPLE RETENTION TIMES [1]

Analyte	Retention time (min) [2]	
	DB-608	DB-1701
Acephate	5.03	([3])
Trifluralin	5.16	6.79
Ethalfluralin	5.28	6.49
Benfluralin	5.53	6.87
Diallate-A	7.15	6.23
Diallate-B	7.42	6.77
alpha-BHC	8.14	7.44
PCNB	9.03	7.58
Simazine	9.06	9.29
Atrazine	9.12	9.12
Terbuthylazine	9.17	9.46
gamma-BHC (Lindane)	9.52	9.91
beta-BHC	9.86	11.90
Heptachlor	10.66	10.55
Chlorothalonil	10.66	10.96
Dichlone	10.80	([4])
Terbacil	11.11	12.63
delta-BHC	11.20	12.98
Alachlor	11.57	11.06
Propanil	11.60	14.10
Aldrin	11.84	11.46
DCPA	12.18	12.09
Metribuzin	12.80	11.68
Triadimefon	12.99	13.57
Isopropalin	13.06	13.37
Isodrin	13.47	11.12
Heptachlor epoxide	13.97	12.56
Pendamethalin	14.21	13.46
Bromacil	14.39	([3])

TABLE 3—EXAMPLE RETENTION TIMES [1]—Continued

Analyte	Retention time (min) [2]	
	DB-608	DB-1701
alpha-Chlordane	14.63	14.20
Butachlor	15.03	15.69
gamma-Chlordane	15.24	14.36
Endosulfan I	15.25	13.87
4,4′-DDE	16.34	14.84
Dieldrin	16.41	15.25
Captan	16.83	15.43
Chlorobenzilate	17.58	17.28
Endrin	17.80	15.86
Nitrofen (TOK)	17.86	17.47
Kepone	17.92	([3 5])
4,4′-DDD	18.43	17.77
Endosulfan II	18.45	18.57
Bromoxynil octanoate	18.85	18.57
4,4′-DDT	19.48	18.32
Carbophenothion	19.65	18.21
Endrin aldehyde	19.72	19.18
Endosulfan sulfate	20.21	20.37
Captafol	22.51	21.22
Norfluorazon	20.68	22.01
Mirex	22.75	19.79
Methoxychlor	22.80	20.68
Endrin ketone	23.00	21.79
Fenarimol	24.53	23.79
cis-Permethrin	25.00	23.59
trans-Permethrin	25.62	23.92
PCB-1242.		
PCB-1232.		
PCB-1016.		
PCB-1221.		

TABLE 3—EXAMPLE RETENTION TIMES [1]—Continued

Analyte	Retention time (min) [2]	
	DB-608	DB-1701
PCB-1248.		
PCB-1254.		
PCB-1260 (5 peaks)	15.44	14.64
	15.73	15.36
	16.94	16.53
	17.28	18.70
	19.17	19.92
Toxaphene (5 peaks)	16.60	16.60
	17.37	17.52
	18.11	17.92
	19.46	18.73
	19.69	19.00

[1] Data from EPA Method 1656 (Reference 16).
[2] Columns: 30-m long × 0.53-mm ID fused-silica capillary; DB-608, 0.83 μm; and DB-1701, 1.0 μm.
Conditions suggested to meet retention times shown: 150 °C for 0.5 minute, 150–270 °C at 5 °C/min, and 270 °C until *trans*-Permethrin elutes.
Carrier gas flow rates approximately 7 mL/min.
[3] Does not elute from DB-1701 column at level tested.
[4] Not recovered from water at the levels tested.
[5] Dichlone and Kepone do not elute from the DB-1701 column and should be confirmed on DB-5.

TABLE 4—QC ACCEPTANCE CRITERIA

Analyte	Calibration verification (%)	Test concentration (µg/L)	Limit for s (% SD)	Range for $\overline{X}$ (%)	Range for P (%)	Maximum MS/MSD RPD (%)
Aldrin	75–125	2.0	25	54–130	42–140	35
alpha-BHC	69–125	2.0	28	49–130	37–140	36
beta-BHC	75–125	2.0	38	39–130	17–147	44
delta-BHC	75–125	2.0	43	51–130	19–140	52
gamma-BHC	75–125	2.0	29	43–130	32–140	39
alpha-Chlordane	73–125	50.0	24	55–130	45–140	35
gamma-Chlordane	75–125	50.0	24	55–130	45–140	35
4,4′-DDD	75–125	10.0	32	48–130	31–141	39
4,4′-DDE	75–125	2.0	30	54–130	30–145	35
4,4′-DDT	75–125	10.0	39	46–137	25–160	42
Dieldrin	48–125	2.0	42	58–130	36–146	49
Endosulfan I	75–125	2.0	25	57–141	45–153	28
Endosulfan II	75–125	10.0	63	22–171	D–202	53
Endosulfan sulfate	70–125	10.0	32	38–132	26–144	38
Endrin	5–125	10.0	42	51–130	30–147	48
Heptachlor	75–125	2.0	28	43–130	34–140	43
Heptachlor epoxide	75–125	2.0	22	57–132	37–142	26
Toxaphene	68–134	50.0	30	56–130	41–140	41
PCB-1016	75–125	50.0	24	61–103	50–140	36
PCB-1221	75–125	50.0	50	44–150	15–178	48
PCB-1232	75–125	50.0	32	28–197	10–215	25
PCB-1242	75–125	50.0	26	50–139	39–150	29
PCB-1248	75–125	50.0	32	58–140	38–158	35
PCB-1254	75–125	50.0	34	44–130	29–140	45
PCB-1260	75–125	50.0	28	37–130	8–140	38

S = Standard deviation of four recovery measurements (Section 8.2.4).

Note: These criteria were developed from data in Table 5 (Reference 2). Where necessary, limits for recovery have been broadened to assure applicability to concentrations below those in Table 5.

TABLE 5—PRECISION AND RECOVERY AS FUNCTIONS OF CONCENTRATION

Analyte	Recovery, X′ (µg/L)	Single analyst precision, s_r' (µg/L)	Overall precision, S′ (µg/L)
Aldrin	0.81C + 0.04	0.16($\overline{X}$) − 0.04	0.20($\overline{X}$) − 0.01
alpha-BHC	0.84C + 0.03	0.13($\overline{X}$) + 0.04	0.23($\overline{X}$) − 0.00
beta-BHC	0.81C + 0.07	0.22($\overline{X}$) − 0.02	0.33($\overline{X}$) − 0.05
delta-BHC	0.81C + 0.07	0.18($\overline{X}$) + 0.09	0.25($\overline{X}$) + 0.03
gamma-BHC (Lindane)	0.82C − 0.05	0.12($\overline{X}$) + 0.06	0.22($\overline{X}$) + 0.04
Chlordane	0.82C − 0.04	0.13 ($\overline{X}$) + 0.13	0.18($\overline{X}$) + 0.18
4,4′-DDD	0.84C + 0.30	0.20($\overline{X}$) − 0.18	0.27($\overline{X}$) − 0.14
4,4′-DDE	0.85C + 0.14	0.13($\overline{X}$) + 0.06	0.28($\overline{X}$) − 0.09
4,4′-DDT	0.93C − 0.13	0.17($\overline{X}$) + 0.39	0.31($\overline{X}$) − 0.21
Dieldrin	0.90C + 0.02	0.12($\overline{X}$) + 0.19	0.16($\overline{X}$) + 0.16
Endosulfan I	0.97C + 0.04	0.10($\overline{X}$) + 0.07	0.18($\overline{X}$) + 0.08
Endosulfan II	0.93C + 0.34	0.41($\overline{X}$) − 0.65	0.47($\overline{X}$) − 0.20
Endosulfan sulfate	0.89C − 0.37	0.13($\overline{X}$) + 0.33	0.24($\overline{X}$) + 0.35
Endrin	0.89C − 0.04	0.20($\overline{X}$) + 0.25	0.24($\overline{X}$) + 0.25
Heptachlor	0.69C + 0.04	0.06($\overline{X}$) + 0.13	0.16($\overline{X}$) + 0.08
Heptachlor epoxide	0.89C + 0.10	0.18($\overline{X}$) − 0.11	0.25($\overline{X}$) − 0.08
Toxaphene	0.80C + 1.74	0.09($\overline{X}$) + 3.20	0.20($\overline{X}$) + 0.22
PCB-1016	0.81C + 0.50	0.13($\overline{X}$) + 0.15	0.15($\overline{X}$) + 0.45
PCB-1221	0.96C + 0.65	0.29($\overline{X}$) − 0.76	0.35($\overline{X}$) − 0.62
PCB-1232	0.91C + 10.8	0.21($\overline{X}$) − 1.93	0.31($\overline{X}$) + 3.50
PCB-1242	0.93C + 0.70	0.11($\overline{X}$) + 1.40	0.21($\overline{X}$) + 1.52
PCB-1248	0.97C + 1.06	0.17($\overline{X}$) + 0.41	0.25($\overline{X}$) − 0.37
PCB-1254	0.76C + 2.07	0.15($\overline{X}$) + 1.66	0.17($\overline{X}$) + 3.62
PCB-1260	0.66C + 3.76	0.22($\overline{X}$) − 2.37	0.39($\overline{X}$) − 4.86

X′ = Expected recovery for one or more measurements of a sample containing a concentration of C, in µg/L.

TABLE 6—DISTRIBUTION OF CHLORINATED PESTICIDES AND PCBS INTO FLORISIL® COLUMN FRACTIONS

Analyte	Percent recovery by fraction [1]		
	1	2	3
Aldrin	100		
alpha-BHC	100		
beta-BHC	97		
delta-BHC	98		
gamma-BHC (Lindane)	100		
Chlordane	100		
4,4′-DDD	99		
4,4′-DDE	.....	98	
4,4′-DDT	100		
Dieldrin	0	100	

TABLE 6—DISTRIBUTION OF CHLORINATED PESTICIDES AND PCBS INTO FLORISIL® COLUMN FRACTIONS—Continued

Analyte	Percent recovery by fraction [1]		
	1	2	3
Endosulfan I	37	64	.....
Endosulfan II	0	7	91
Endosulfan sulfate	0	0	106
Endrin	4	96	
Endrin aldehyde	0	68	26
Heptachlor	100		
Heptachlor epoxide	100		
Toxaphene	96		
PCB-1016	97		
PCB-1221	97		

TABLE 6—DISTRIBUTION OF CHLORINATED PESTICIDES AND PCBS INTO FLORISIL® COLUMN FRACTIONS—Continued

Analyte	Percent recovery by fraction [1]		
	1	2	3
PCB-1232	95	4	
PCB-1242	97		
PCB-1248	103		
PCB-1254	90		
PCB-1260.			

[1] Eluant composition:
Fraction 1—6% ethyl ether in hexane
Fraction 2—15% ethyl ether in hexane
Fraction 3—50% ethyl ether in hexane.

BILLING CODE 6560–50–P

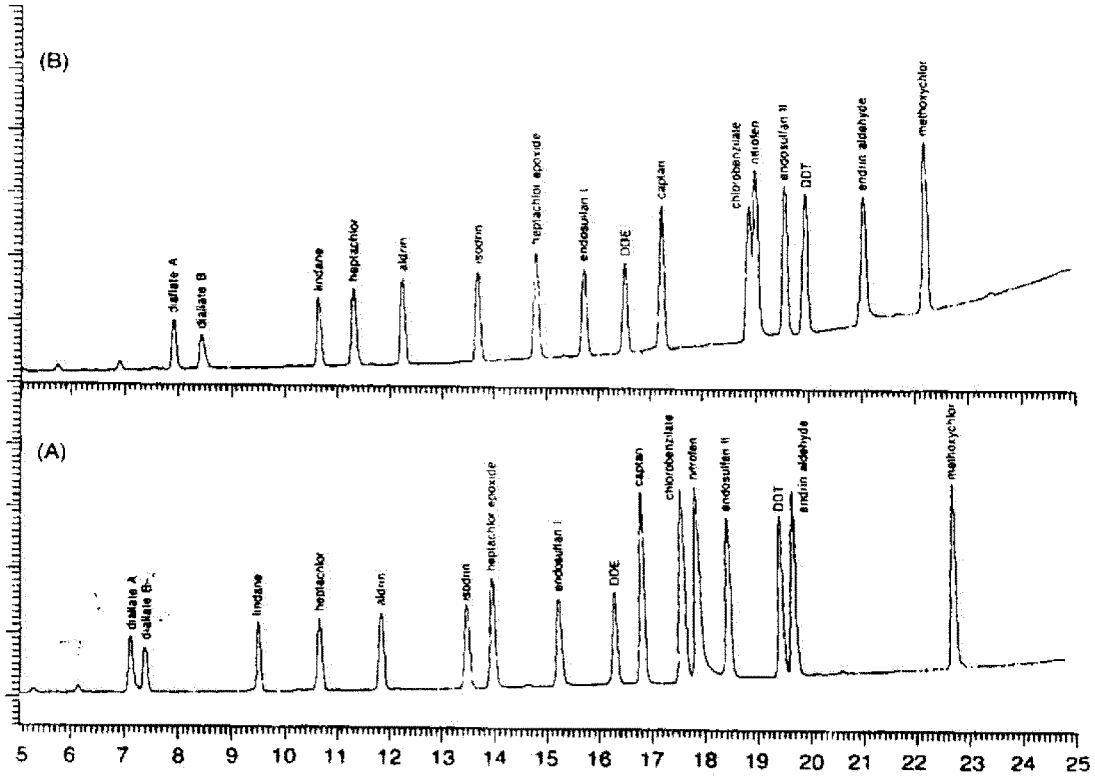

Figure 1 Example Chromatogram of Selected Organochlorine Pesticides

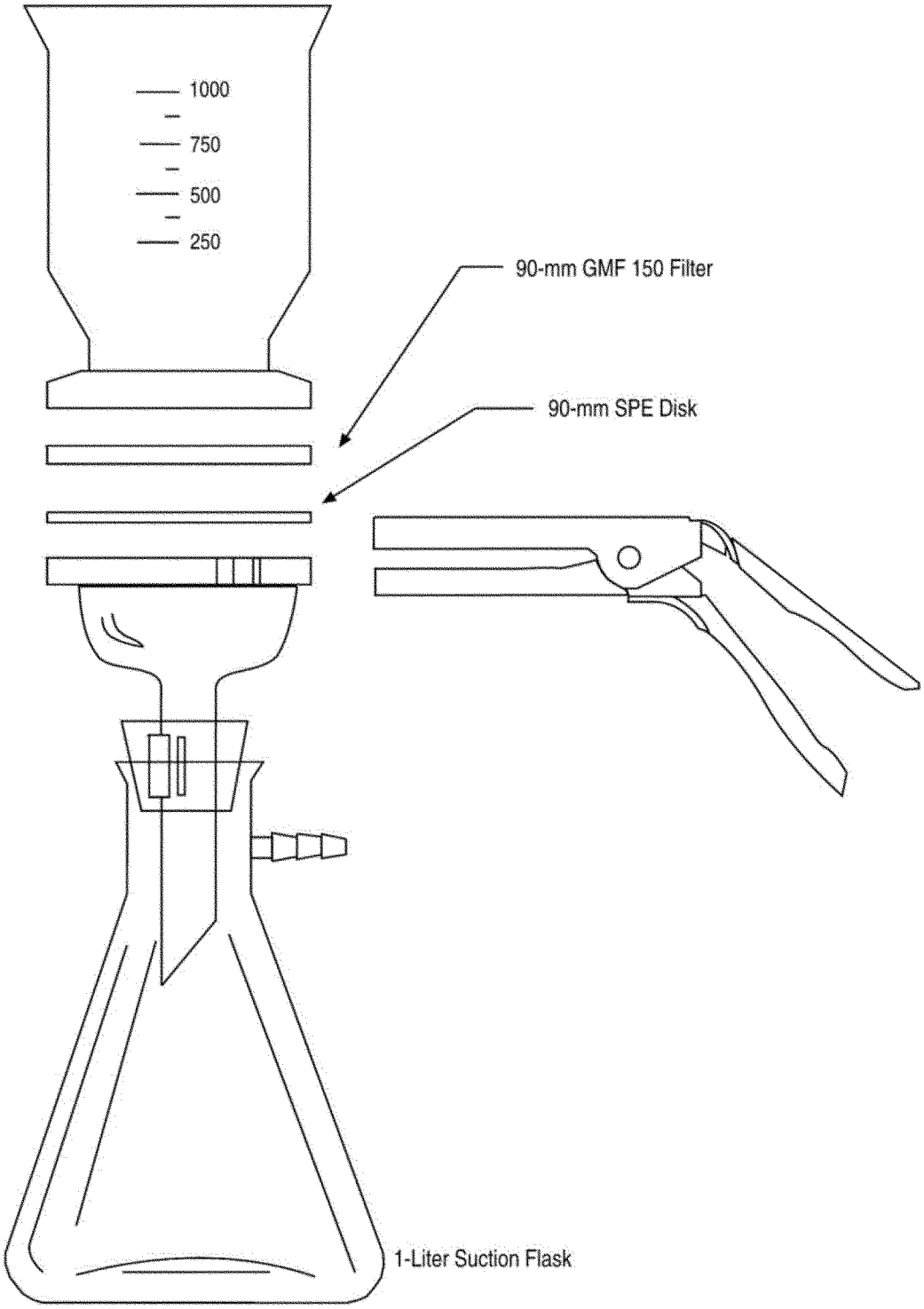

Figure 2 Disk-based solid-phase extraction apparatus

23. Glossary

These definitions and purposes are specific to this method but have been conformed to common usage to the extent possible.

23.1 Units of weight and measure and their abbreviations.

23.1.1 Symbols

°C degrees Celsius
µg microgram
µL microliter
< less than
≤ less than or equal to
> greater than
% percent

23.1.2 Abbreviations (in alphabetical order)

cm centimeter
g gram

hr hour
ID inside diameter
in. inch
L liter
M molar solution—one mole or gram molecular weight of solute in one liter of solution
mg milligram
min minute
mL milliliter
mm millimeter
N Normality—one equivalent of solute in one liter of solution
ng nanogram
psia pounds-per-square inch absolute
psig pounds-per-square inch gauge
v/v volume per unit volume
w/v weight per unit volume

23.2 Definitions and acronyms (in alphabetical order)

Analyte—A compound or mixture of compounds (*e.g.,* PCBs) tested for by this method. The analytes are listed in Tables 1 and 2.

Analytical batch—The set of samples analyzed on a given instrument during a 24-hour period that begins and ends with calibration verification (Sections 7.8 and 13). See also ''Extraction batch.''

Blank (method blank; laboratory blank)—An aliquot of reagent water that is treated exactly as a sample including exposure to all glassware, equipment, solvents, reagents, internal standards, and surrogates that are used with samples. The blank is used to determine if analytes or interferences are present in the laboratory environment, the reagents, or the apparatus.

Calibration factor (CF)—See Section 7.5.1.

Calibration standard—A solution prepared from stock solutions and/or a secondary standards and containing the analytes of interest, surrogates, and internal standards. This standard is used to model the response of the GC instrument against analyte concentration.

Calibration verification—The process of confirming that the response of the analytical system remains within specified limits of the calibration.

Calibration verification standard—The combined QC standard (Section 7.7) used to verify calibration (Section 13.5) and for LCS tests (Section 8.4).

Extraction Batch—A set of up to 20 field samples (not including QC samples) started through the extraction process in a given 24-hour shift. Each extraction batch of 20 or fewer samples must be accompanied by a blank (Section 8.5), a laboratory control sample (LCS, Section 8.4), a matrix spike and duplicate (MS/MSD; Section 8.3), resulting in a minimum of five samples (1 field sample, 1 blank, 1 LCS, 1 MS, and 1 MSD) and a maximum of 24 samples (20 field samples, 1 blank, 1 LCS, 1 MS, and 1 MSD) for the batch. If greater than 20 samples are to be extracted in a 24-hour shift, the samples must be separated into extraction batches of 20 or fewer samples.

Field Duplicates—Two samples collected at the same time and place under identical conditions, and treated identically throughout field and laboratory procedures. Results of analyses the field duplicates provide an estimate of the precision associated with sample collection, preservation, and storage, as well as with laboratory procedures.

Field blank—An aliquot of reagent water or other reference matrix that is placed in a sample container in the field, and treated as a sample in all respects, including exposure to sampling site conditions, storage, preservation, and all analytical procedures. The purpose of the field blank is to determine if the field or sample transporting procedures and environments have contaminated the sample. See also ''Blank.''

GC—Gas chromatograph or gas chromatography

Gel-permeation chromatography (GPC)—A form of liquid chromatography in which the analytes are separated based on exclusion from the solid phase by size.

Internal standard—A compound added to an extract or standard solution in a known amount and used as a reference for quantitation of the analytes of interest and surrogates. Also see Internal standard quantitation.

Internal standard quantitation—A means of determining the concentration of an analyte of interest (Tables 1 and 2) by reference to a compound not expected to be found in a sample.

IDC—Initial Demonstration of Capability (Section 8.2); four aliquots of a reference matrix spiked with the analytes of interest and analyzed to establish the ability of the laboratory to generate acceptable precision and recovery. An IDC is performed prior to the first time this method is used and any time the method or instrumentation is modified.

Laboratory Control Sample (LCS; laboratory fortified blank; Section 8.4)—An aliquot of reagent water spiked with known quantities of the analytes of interest and surrogates. The LCS is analyzed exactly like a sample. Its purpose is to assure that the results produced by the laboratory remain within the limits specified in this method for precision and recovery.

Laboratory Fortified Sample Matrix—See Matrix spike.

Laboratory reagent blank—See blank.

Matrix spike (MS) and matrix spike duplicate (MSD) (laboratory fortified sample matrix and duplicate)—Two aliquots of an environmental sample to which known quantities of the analytes of interest and surrogates are added in the laboratory. The MS/MSD are prepared and analyzed exactly like a field sample. Their purpose is to quantify any additional bias and imprecision caused by the sample matrix. The background concentrations of the analytes in the sample matrix must be determined in a separate aliquot and the measured values in the MS/MSD corrected for background concentrations.

May—This action, activity, or procedural step is neither required nor prohibited.

May not—This action, activity, or procedural step is prohibited.

Method detection limit (MDL)—A detection limit determined by the procedure at 40 CFR part 136, appendix B. The MDLs determined by EPA are listed in Tables 1 and 2. As noted in Sec. 1.6, use the MDLs in Tables 1 and 2 in conjunction with current MDL data from the laboratory actually analyzing samples to assess the sensitivity of this procedure relative to project objectives and regulatory requirements (where applicable).

Minimum level (ML)—The term ''minimum level'' refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor of 3. For the purposes of NPDES compliance monitoring, EPA considers the following terms to be synonymous: ''quantitation limit,'' ''reporting limit,'' and ''minimum level.''

MS—Mass spectrometer or mass spectrometry.

Must—This action, activity, or procedural step is required.

Preparation blank—See blank.

Quality control sample (QCS)—A sample containing analytes of interest at known concentrations. The QCS is obtained from a source external to the laboratory or is prepared from standards obtained from a different source than the calibration standards. The purpose is to check laboratory performance using test materials that have been prepared independent of the normal preparation process.

Reagent water—Water demonstrated to be free from the analytes of interest and potentially interfering substances at the MDLs for the analytes in this method.

Regulatory compliance limit—A limit on the concentration or amount of a pollutant or contaminant specified in a nationwide standard, in a permit, or otherwise established by a regulatory/control authority.

Relative standard deviation (RSD)—The standard deviation times 100 divided by the mean. Also termed ''coefficient of variation.''

RF—Response factor. See Section 7.6.2.

RPD—Relative percent difference.

RSD—See relative standard deviation.

Safety Data Sheet (SDS)—Written information on a chemical's toxicity, health hazards, physical properties, fire, and reactivity, including storage, spill, and handling precautions that meet the requirements of OSHA, 29 CFR 1910.1200(g) and appendix D to § 1910.1200. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009.

Should—This action, activity, or procedural step is suggested but not required.

SPE—Solid-phase extraction; a sample extraction or extract cleanup technique in which an analyte is selectively removed from a sample or extract by passage over or through a material capable of reversibly adsorbing the analyte.

Stock solution—A solution containing an analyte that is prepared using a reference material traceable to EPA, the National Institute of Science and Technology (NIST), or a source that will attest to the purity and authenticity of the reference material.

Surrogate—A compound unlikely to be found in a sample, which is spiked into the sample in a known amount before extraction, and which is quantified with the same procedures used to quantify other sample components. The purpose of the surrogate is to monitor method performance with each sample.

* * * * *

Method 611—Haloethers

1. Scope and Application

1.1 This method covers the determination of certain haloethers. The following parameters can be determined by this method:

Parameter	STORET No.	CAS No.
Bis(2-chloroethyl) ether	34273	111–44–4
Bis(2-chloroethoxy) methane	34278	111–91–1
2, 2′-oxybis (1-chloropropane)	34283	108–60–1
4-Bromophenyl phenyl ether	34636	101–55–3
4-Chlorophenyl phenyl either	34641	7005–72–3

* * * * *

Method 624.1—Purgeables by GC/MS

1. Scope and Application

1.1 This method is for determination of purgeable organic pollutants in industrial discharges and other environmental samples by gas chromatography combined with mass spectrometry (GC/MS), as provided under 40 CFR 136.1. This revision is based on previous protocols (References 1–3), on the revision promulgated October 26, 1984 (49 FR 43234), and on an interlaboratory method validation study (Reference 4). Although this method was validated through an interlaboratory study conducted more than 29 years ago, the fundamental chemistry principles used in this method remain sound and continue to apply.

1.2 The analytes that may be qualitatively and quantitatively determined using this method and their CAS Registry numbers are listed in Table 1. The method may be extended to determine the analytes listed in Table 2; however, poor purging efficiency or gas chromatography of some of these analytes may make quantitative determination difficult. For example, an elevated temperature may be required to purge some analytes from water. If an elevated temperature is used, calibration and all quality control (QC) tests must be performed at the elevated temperature. EPA encourages the use of this method to determine additional compounds amenable to purge-and-trap GC/MS.

1.3 The large number of analytes in Tables 1 and 2 of this method makes testing difficult if all analytes are determined simultaneously. Therefore, it is necessary to determine and perform QC tests for ''analytes of interest'' only. Analytes of interest are those required to be determined by a regulatory/control authority or in a permit, or by a client. If a list of analytes is not specified, the analytes in Table 1 must be determined, at a minimum, and QC testing must be performed for these analytes. The analytes in Table 1 and some of the analytes in Table 2 have been identified as Toxic Pollutants (40 CFR 401.15), expanded to a list of Priority Pollutants (40 CFR part 423, appendix A).

1.4 Method detection limits (MDLs; Reference 5) for the analytes in Table 1 are listed in that table. These MDLs were determined in reagent water (Reference 6). Advances in analytical technology, particularly the use of capillary (open-tubular) columns, allowed laboratories to routinely achieve MDLs for the analytes in this method that are 2–10 times lower than those in the version promulgated in 1984 (40 FR 43234). The MDL for a specific wastewater may differ from those listed, depending on the nature of interferences in the sample matrix.

1.4.1 EPA has promulgated this method at 40 CFR part 136 for use in wastewater compliance monitoring under the National Pollutant Discharge Elimination System (NPDES). The data reporting practices described in Section 13.2 are focused on such monitoring needs and may not be relevant to other uses of the method.

1.4.2 This method includes ''reporting limits'' based on EPA's ''minimum level'' (ML) concept (see the glossary in Section 20). Table 1 contains MDL values and ML values for many of the analytes. The MDL for an analyte in a specific wastewater may differ from that listed in Table 1, depending upon the nature of interferences in the sample matrix.

1.5 This method is performance-based. It may be modified to improve performance (*e.g.,* to overcome interferences or improve the accuracy of results) provided all performance requirements are met.

1.5.1 Examples of allowed method modifications are described at 40 CFR 136.6. Other examples of allowed modifications specific to this method are described in Section 8.1.2.

1.5.2 Any modification beyond those expressly allowed at 40 CFR 136.6 or in Section 8.1.2 of this method shall be considered a major modification that is subject to application and approval of an alternate test procedure under 40 CFR 136.4 and 136.5.

1.5.3 For regulatory compliance, any modification must be demonstrated to produce results equivalent or superior to results produced by this method when applied to relevant wastewaters (Section 8.3).

1.6 This method is restricted to use by or under the supervision of analysts experienced in the operation of a purge-and-trap system and a gas chromatograph/mass spectrometer and in the interpretation of mass spectra. Each analyst must demonstrate the ability to generate acceptable results with this method using the procedure in Section 8.2.

1.7 Terms and units of measure used in this method are given in the glossary at the end of the method.

2. Summary of Method

2.1 A gas is bubbled through a measured volume of water in a specially-designed purging chamber (Figure 1). The purgeables are efficiently transferred from the aqueous phase to the vapor phase. The vapor is swept through a sorbent trap where the purgeables are trapped (Figure 2). After purging is completed, the trap is heated and backflushed with the gas to desorb the purgeables onto a gas chromatographic column (Figures 3 and 4). The column is temperature programmed to separate the purgeables which are then detected with a mass spectrometer.

2.2 Different sample sizes in the range of 5–25 mL are allowed in order to meet differing sensitivity requirements. Calibration and QC samples must have the same volume as field samples.

3. Interferences

3.1 Impurities in the purge gas, organic compounds outgassing from the plumbing ahead of the trap, and solvent vapors in the laboratory account for the majority of contamination problems. The analytical system must be demonstrated to be free from contamination under the conditions of the analysis by analyzing blanks as described in Section 8.5. Fluoropolymer tubing, fittings, and thread sealant should be used to avoid contamination.

3.2 Samples can be contaminated by diffusion of volatile organics (particularly fluorocarbons and methylene chloride) through the septum seal into the sample during shipment and storage. Protect samples from sources of volatiles during collection, shipment, and storage. A reagent water field blank carried through sampling and analysis can serve as a check on such contamination.

3.3 Contamination by carry-over can occur whenever high level and low level samples are analyzed sequentially. To reduce the potential for carry-over, the purging device and sample syringe must be rinsed with reagent water between sample analyses. Whenever an unusually concentrated sample is encountered, it should be followed by an analysis of a blank to check for cross contamination. For samples containing large amounts of water-soluble materials, suspended solids, high boiling compounds or high purgeable levels, it may be necessary to wash the purging device with a detergent solution, rinse it with distilled water, and then dry it in a 105 °C oven between analyses. The trap and other parts of the system are also subject to contamination; therefore, frequent bakeout and purging of the entire system may be required. Screening samples at high dilution may prevent introduction of contaminants into the system.

4. Safety

4.1 The toxicity or carcinogenicity of each reagent used in this method has not been precisely defined; however, each chemical compound should be treated as a potential health hazard. From this viewpoint, exposure to these chemicals must be reduced to the lowest possible level. The laboratory is responsible for maintaining a current awareness file of OSHA regulations regarding the safe handling of the chemicals specified in this method. A reference file of safety data sheets (SDSs, OSHA, 29 CFR 1910.1200(g)) should also be made available to all personnel involved in sample handling and chemical analysis. Additional references to laboratory safety are available and have been identified (References 7–9) for the information of the analyst.

4.2. The following analytes covered by this method have been tentatively classified as known or suspected human or mammalian carcinogens: Benzene; carbon tetrachloride; chloroform; 1,4-dichlorobenzene; 1,2-dichloroethane; 1,2-dichloropropane; methylene chloride; tetrachloroethylene; trichloroethylene; and vinyl chloride. Primary standards of these toxic compounds should be prepared in a chemical fume hood, and a NIOSH/MESA approved toxic gas respirator should be worn when handling high concentrations of these compounds.

4.3 This method allows the use of hydrogen as a carrier gas in place of helium (Section 5.3.1.2). The laboratory should take the necessary precautions in dealing with hydrogen, and should limit hydrogen flow at the source to prevent buildup of an explosive mixture of hydrogen in air.

5. Apparatus and Materials

Note: Brand names, suppliers, and part numbers are cited for illustration purposes only. No endorsement is implied. Equivalent performance may be achieved using equipment and materials other than those specified here. Demonstration of equivalent performance that meets the requirements of this method is the responsibility of the laboratory. Suppliers for equipment and materials in this method may be found through an on-line search.

5.1 Sampling equipment for discrete sampling.

5.1.1 Vial—25 or 40 mL capacity, or larger, with screw cap with a hole in the center (Pierce #13075 or equivalent). Unless pre-cleaned, detergent wash, rinse with tap and reagent water, and dry at 105 °C before use.

5.1.2 Septum—Fluoropolymer-faced silicone (Pierce #12722 or equivalent). Unless pre-cleaned, detergent wash, rinse with tap and reagent water, and dry at 105 ± 5 °C for one hour before use.

5.2 Purge-and-trap system—The purge-and-trap system consists of three separate pieces of equipment: A purging device, trap, and desorber. Several complete systems are commercially available. Any system that meets the performance requirements in this method may be used.

5.2.1 The purging device should accept 5- to 25-mL samples with a water column at least 3 cm deep. The purge gas must pass though the water column as finely divided bubbles. The purge gas must be introduced no more than 5 mm from the base of the water column. The purging device illustrated in Figure 1 meets these design criteria. Purge devices of a different volume may be used so long as the performance requirements in this method are met.

5.2.2 The trap should be at least 25 cm long and have an inside diameter of at least 0.105 in. The trap should be packed to contain the following minimum lengths of adsorbents: 1.0 cm of methyl silicone coated packing (Section 6.3.2), 15 cm of 2,6-diphenylene oxide polymer (Section 6.3.1), and 8 cm of silica gel (Section 6.3.3). The minimum specifications for the trap are illustrated in Figure 2. A trap with different dimensions and packing materials is acceptable so long as the performance requirements in this method are met.

5.2.3 The desorber should be capable of rapidly heating the trap to the temperature necessary to desorb the analytes of interest, and of maintaining

this temperature during desorption. The trap should not be heated higher than the maximum temperature recommended by the manufacturer. The desorber illustrated in Figure 2 meets these design criteria.

5.2.4 The purge-and-trap system may be assembled as a separate unit or coupled to a gas chromatograph as illustrated in Figures 3 and 4.

5.3 GC/MS system.

5.3.1 Gas chromatograph (GC)—An analytical system complete with a temperature programmable gas chromatograph and all required accessories, including syringes and analytical columns. Autosamplers designed for purge-and-trap analysis of volatiles also may be used.

5.3.1.1 Injection port—Volatiles interface, split, splitless, temperature programmable split/splitless (PTV), large volume, on-column, backflushed, or other.

5.3.1.2 Carrier gas—Data in the tables in this method were obtained using helium carrier gas. If another carrier gas is used, analytical conditions may need to be adjusted for optimum performance, and calibration and all QC tests must be performed with the alternate carrier gas. See Section 4.3 for precautions regarding the use of hydrogen as a carrier gas.

5.3.2 GC column—See the footnote to Table 3. Other columns or column systems may be used provided all requirements in this method are met.

5.3.3 Mass spectrometer—Capable of repetitively scanning from 35–260 Daltons (amu) every 2 seconds or less, utilizing a 70 eV (nominal) electron energy in the electron impact ionization mode, and producing a mass spectrum which meets all criteria in Table 4 when 50 ng or less of 4-bromofluorobenzene (BFB) is injected through the GC inlet. If acrolein, acrylonitrile, chloromethane, and vinyl chloride are to be determined, it may be necessary to scan from below 25 Daltons to measure the peaks in the 26—35 Dalton range for reliable identification.

5.3.4 GC/MS interface—Any GC to MS interface that meets all performance requirements in this method may be used.

5.3.5 Data system—A computer system must be interfaced to the mass spectrometer that allows continuous acquisition and storage of mass spectra throughout the chromatographic program. The computer must have software that allows searching any GC/MS data file for specific m/z's (masses) and plotting m/z abundances versus time or scan number. This type of plot is defined as an extracted ion current profile (EICP). Software must also be available that allows integrating the abundance at any EICP between specified time or scan number limits.

5.4 Syringes—Graduated, 5–25 mL, glass hypodermic with Luerlok tip, compatible with the purging device.

5.5 Micro syringes—Graduated, 25–1000 µL, with 0.006 in. ID needle.

5.6 Syringe valve—Two-way, with Luer ends.

5.7 Syringe—5 mL, gas-tight with shut-off valve.

5.8 Bottle—15 mL, screw-cap, with Teflon cap liner.

5.9 Balance—Analytical, capable of accurately weighing 0.0001 g.

6. Reagents

6.1 Reagent water—Reagent water is defined as water in which the analytes of interest and interfering compounds are not detected at the MDLs of the analytes of interest. It may be generated by passing deionized water, distilled water, or tap water through a carbon bed, passing the water through a water purifier, or heating the water to between 90 and 100 °C while bubbling contaminant free gas through it for approximately 1 hour. While still hot, transfer the water to screw-cap bottles and seal with a fluoropolymer-lined cap.

6.2 Sodium thiosulfate—(ACS) Granular.

6.3 Trap materials.

6.3.1 2,6-Diphenylene oxide polymer—Tenax, 60/80 mesh, chromatographic grade, or equivalent.

6.3.2 Methyl silicone packing—3% OV–1 on Chromosorb-W, 60/80 mesh, or equivalent.

6.3.3 Silica gel—35/60 mesh, Davison, Grade-15 or equivalent.

Other trap materials are acceptable if performance requirements in this method are met.

6.4 Methanol—Demonstrated to be free from the target analytes and potentially interfering compounds.

6.5 Stock standard solutions—Stock standard solutions may be prepared from pure materials, or purchased as certified solutions. Traceability must be to the National Institute of Standards and Technology (NIST) or other national standard. Stock solution concentrations alternate to those below may be used. Prepare stock standard solutions in methanol using assayed liquids or gases as appropriate. Because some of the compounds in this method are known to be toxic, primary dilutions should be prepared in a hood, and a NIOSH/MESA approved toxic gas respirator should be worn when high concentrations of neat materials are handled. The following procedure may be used to prepare standards from neat materials:

6.5.1 Place about 9.8 mL of methanol in a 10-mL ground-glass-stoppered volumetric flask. Allow the flask to stand, unstoppered, for about 10 minutes or until all alcohol wetted surfaces have dried. Weigh the flask to the nearest 0.1 mg.

6.5.2 Add the assayed reference material.

6.5.2.1 Liquids—Using a 100 µL syringe, immediately add two or more drops of assayed reference material to the flask. Be sure that the drops fall directly into the alcohol without contacting the neck of the flask. Reweigh, dilute to volume, stopper, then mix by inverting the flask several times. Calculate the concentration in µg/µL from the net gain in weight.

6.5.2.2 Gases—To prepare standards for any of compounds that boil below 30 °C, fill a 5-mL valved gas-tight syringe with reference standard vapor to the 5.0 mL mark. Lower the needle to 5 mm above the methanol meniscus. Slowly introduce the vapor above the surface of the liquid (the vapor will rapidly dissolve in the methanol). Reweigh, dilute to volume, stopper, then mix by inverting the flask several times. Calculate the concentration in µg/µL from the net gain in weight.

6.5.3 When compound purity is assayed to be 96% or greater, the weight may be used without correction to calculate the concentration of the stock standard. Commercially prepared stock standards may be used at any concentration if they are certified by the manufacturer or by an independent source.

6.5.4 Prepare fresh standards weekly for the gases and 2-chloroethylvinyl ether. All standards should be replaced after one month, or sooner if the concentration of an analyte changes by more than 10 percent.

Note: 2-Chloroethylvinyl ether has been shown to be stable for as long as one month if prepared as a separate standard, and the other analytes have been shown to be stable for as long as 2 months if stored at less than −10 °C with minimal headspace in sealed, miniature inert-valved vials.

6.6 Secondary dilution standards—Using stock solutions, prepare secondary dilution standards in methanol that contain the compounds of interest, either singly or mixed. Secondary dilution standards should be prepared at concentrations such that the aqueous calibration standards prepared in Section 7.3.2 will bracket the working range of the analytical system.

6.7 Surrogate standard spiking solution—Select a minimum of three surrogate compounds from Table 5. The surrogates selected should match the purging characteristics of the analytes of interest as closely as possible. Prepare a stock standard solution for each

surrogate in methanol as described in Section 6.5, and prepare a solution for spiking the surrogates into all blanks, LCSs, and MS/MSDs. The spiking solution should be prepared such that spiking a small volume will result in surrogate concentrations near the mid-point of the calibration range. For example, adding 10 µL of a spiking solution containing the surrogates at a concentration of 15 µg/mL in methanol to a 5-mL aliquot of water would result in a concentration of 30 µg/L for each surrogate. Other surrogate concentrations may be used.

6.8 BFB standard—Prepare a solution of BFB in methanol as described in Sections 6.5 and 6.6. The solution should be prepared such that an injection or purging from water will result in introduction of ≤50 ng into the GC. BFB may be included in a mixture with the internal standards and/or surrogates.

6.9 Quality control check sample concentrate—See Section 8.2.1.

6.10 Storage—When not being used, store standard solutions (Sections 6.5–6.9) at −10 to −20 °C, protected from light, in fluoropolymer-sealed glass containers with minimal headspace.

7. Calibration

7.1 Assemble a purge-and-trap system that meets the specifications in Section 5.2. Prior to first use, condition the trap overnight at 180 °C by backflushing with gas at a flow rate of at least 20 mL/min. Condition the trap daily prior to use.

7.2 Connect the purge-and-trap system to the gas chromatograph. The gas chromatograph should be operated using temperature and flow rate conditions equivalent to those given in the footnotes to Table 3. Alternative temperature and flow rate conditions may be used provided that performance requirements in this method are met.

7.3 Internal standard calibration.

7.3.1 Internal standards.

7.3.1.1 Select three or more internal standards similar in chromatographic behavior to the compounds of interest. Suggested internal standards are listed in Table 5. Use the base peak m/z as the primary m/z for quantification of the standards. If interferences are found at the base peak, use one of the next two most intense m/z's for quantitation. Demonstrate that measurement of the internal standards are not affected by method or matrix interferences.

7.3.1.2 To assure accurate analyte identification, particularly when selected ion monitoring (SIM) is used, it may be advantageous to include more internal standards than those suggested in Section 7.3.1.1. An analyte will be located most accurately if its retention time relative to an internal standard is in the range of 0.8 to 1.2.

7.3.1.3 Prepare a stock standard solution for each internal standard surrogate in methanol as described in Section 6.5, and prepare a solution for spiking the internal standards into all blanks, LCSs, and MS/MSDs. The spiking solution should be prepared such that spiking a small volume will result in internal standard concentrations near the mid-point of the calibration range. For example, adding 10 µL of a spiking solution containing the internal standards at a concentration of 15 µg/mL in methanol to a 5-mL aliquot of water would result in a concentration of 30 µg/L for each internal standard. Other concentrations may be used. The internal standard solution and the surrogate standard spiking solution (Section 6.7) may be combined, if desired. Store the solution at <6 °C in fluoropolymer-sealed glass containers with a minimum of headspace. Replace the solution after 1 month, or more frequently if comparison with QC standards indicates a problem.

7.3.2 Calibration.

7.3.2.1 Calibration standards.

7.3.2.1.1 Prepare calibration standards at a minimum of five concentration levels for each analyte of interest by adding appropriate volumes of one or more stock standards to a fixed volume (*e.g.,* 40 mL) of reagent water in volumetric glassware. Fewer levels may be necessary for some analytes based on the sensitivity of the MS. The concentration of the lowest calibration standard for an analyte should be at or near the ML value in Table 1 for an analyte listed in that table. The ML value may be rounded to a whole number that is more convenient for preparing the standard, but must not exceed the ML values listed in Table 1 for those analytes which list ML values. Alternatively, the laboratory may establish the ML for each analyte based on the concentration of the lowest calibration standard in a series of standards obtained from a commercial vendor, again, provided that the ML values does not exceed the MLs in Table 1, and provided that the resulting calibration meets the acceptance criteria in Section 7.3.4, based on the RSD, RSE, or R^2.

The concentrations of the higher standards should correspond to the expected range of concentrations found in real samples, or should define the working range of the GC/MS system for full-scan and/or SIM operation, as appropriate. A minimum of six concentration levels is required for a second order, non-linear (*e.g.,* quadratic; $ax^2 + bx + c$) calibration. Calibrations higher than second order are not allowed.

7.3.2.1.2 To each calibration standard or standard mixture, add a known constant volume of the internal standard spiking solution (Section 7.3.1.3) and surrogate standard spiking solution (Section 6.7) or the combined internal standard solution and surrogate spiking solution (Section 7.3.1.3). Aqueous standards may be stored up to 24 hours, if held in sealed vials with zero headspace as described in Section 9.1. If not so stored, they must be discarded after one hour.

7.3.2.2 Prior to analysis of the calibration standards, analyze the BFB standard (Section 6.8) and adjust the scan rate of the MS to produce a minimum of 5 mass spectra across the BFB GC peak, but do not exceed 2 seconds per scan. Adjust instrument conditions until the BFB criteria in Table 4 are met.

Note: The BFB spectrum may be evaluated by summing the intensities of the m/z's across the GC peak, subtracting the background at each m/z in a region of the chromatogram within 20 scans of but not including any part of the BFB peak. The BFB spectrum may also be evaluated by fitting a Gaussian to each m/z and using the intensity at the maximum for each Gaussian, or by integrating the area at each m/z and using the integrated areas. Other means may be used for evaluation of the BFB spectrum so long as the spectrum is not distorted to meet the criteria in Table 4.

7.3.2.3 Analyze the mid-point standard and enter or review the retention time, relative retention time, mass spectrum, and quantitation m/z in the data system for each analyte of interest, surrogate, and internal standard. If additional analytes (Table 2) are to be quantified, include these analytes in the standard. The mass spectrum for each analyte must be comprised of a minimum of 2 m/z's; 3 to 5 m/z's assure more reliable analyte identification. Suggested quantitation m/z's are shown in Table 6 as the primary m/z. For analytes in Table 6 that do not have a secondary m/z, acquire a mass spectrum and enter one or more secondary m/z's for more reliable identification. If an interference occurs at the primary m/z, use one of the secondary m/z's or an alternate m/z. A single m/z only is required for quantitation.

7.3.2.4 For SIM operation, determine the analytes in each descriptor, the quantitation m/z for each analyte (the quantitation m/z can be the same as for full-scan operation; Section 7.3.2.3), the dwell time on each m/z for each analyte,

and the beginning and ending retention time for each descriptor. Analyze the verification standard in scan mode to verify m/z's and establish retention times for the analytes. There must be a minimum of two m/z's for each analyte to assure analyte identification. To maintain sensitivity, the number of m/z's in a descriptor should be limited. For example, for a descriptor with 10 m/z's and a chromatographic peak width of 5 sec, a dwell time of 100 ms at each m/z would result in a scan time of 1 second and provide 5 scans across the GC peak. The quantitation m/z will usually be the most intense peak in the mass spectrum. The quantitation m/z and dwell time may be optimized for each analyte. However, if a GC peak spans two (or more) descriptors, the dwell time and cycle time (scans/sec) should be set to the same value in both segments in order to maintain equivalent response. The acquisition table used for SIM must take into account the mass defect (usually less than 0.2 Dalton) that can occur at each m/z monitored.

7.3.2.5 For combined scan and SIM operation, set up the scan segments and descriptors to meet requirements in Sections 7.3.2.2–7.3.2.4.

7.3.3 Analyze each calibration standard according to Section 10 and tabulate the area at the quantitation m/z against concentration for each analyte of interest, surrogate, and internal standard. Calculate the response factor (RF) for each compound at each concentration using Equation 1.

$$RF = \frac{(A_s x C_{is})}{(A_{is} x C_s)} \qquad \text{Equation 1}$$

Where:

A_s = Area of the characteristic m/z for the analyte to be measured.

A_{is} = Area of the characteristic m/z for the internal standard.

C_{is} = Concentration of the internal standard (µg/L).

C_s = Concentration of the analyte to be measured (µg/L).

7.3.4 Calculate the mean (average) and relative standard deviation (RSD) of the response factors. If the RSD is less than 35%, the RF can be assumed to be invariant and the average RF can be used for calculations. Alternatively, the results can be used to fit a linear or quadratic regression of response ratios, A_s/A_{is}, vs. concentration ratios Cs/Cis. If used, the regression must be weighted inversely proportional to concentration (1/C). The coefficient of determination (R^2) of the weighted regression must be greater than 0.920 (this value roughly corresponds to the RSD limit of 35%). Alternatively, the relative standard error (Reference 10) may be used as an acceptance criterion. As with the RSD, the RSE must be less than 35%. If an RSE less than 35% cannot be achieved for a quadratic regression, system performance is unacceptable, and the system must be adjusted and re-calibrated.

Note: Using capillary columns and current instrumentation, it is quite likely that a laboratory can calibrate the target analytes in this method and achieve a linearity metric (either RSD or RSE) well below 35%. Therefore, laboratories are permitted to use more stringent acceptance criteria for calibration than described here, for example, to harmonize their application of this method with those from other sources.

7.4 Calibration verification—Because the analytical system is calibrated by purge of the analytes from water, calibration verification is performed using the laboratory control sample (LCS). See Section 8.4 for requirements for calibration verification using the LCS, and the Glossary for further definition.

8. Quality Control

8.1 Each laboratory that uses this method is required to operate a formal quality assurance program. The minimum requirements of this program consist of an initial demonstration of laboratory capability and ongoing analysis of spiked samples and blanks to evaluate and document data quality (40 CFR 136.7). The laboratory must maintain records to document the quality of data generated. Results of ongoing performance tests are compared with established QC acceptance criteria to determine if the results of analyses meet performance requirements of this method. When results of spiked samples do not meet the QC acceptance criteria in this method, a quality control check sample (laboratory control sample; LCS) must be analyzed to confirm that the measurements were performed in an in-control mode of operation. A laboratory may develop its own performance criteria (as QC acceptance criteria), provided such criteria are as or more restrictive than the criteria in this method.

8.1.1 The laboratory must make an initial demonstration of capability (DOC) to generate acceptable precision and recovery with this method. This demonstration is detailed in Section 8.2.

8.1.2 In recognition of advances that are occurring in analytical technology, and to overcome matrix interferences, the laboratory is permitted certain options (Section 1.5 and 40 CFR 136.6(b)) to improve separations or lower the costs of measurements. These options may include an alternate purge-and-trap device, and changes in both column and type of mass spectrometer (see 40 CFR 136.6(b)(4)(xvi)). Alternate determinative techniques, such as substitution of spectroscopic or immunoassay techniques, and changes that degrade method performance, are not allowed. If an analytical technique other than GC/MS is used, that technique must have a specificity equal to or greater than the specificity of GC/MS for the analytes of interest. The laboratory is also encouraged to participate in inter-comparison and performance evaluation studies (see Section 8.9).

8.1.2.1 Each time a modification is made to this method, the laboratory is required to repeat the procedure in Section 8.2. If the detection limit of the method will be affected by the change, the laboratory must demonstrate that the MDLs (40 CFR part 136, appendix B) are lower than one-third the regulatory compliance limit, or at least as low as the MDLs listed in this method, whichever are greater. If calibration will be affected by the change, the instrument must be recalibrated per Section 7. Once the modification is demonstrated to produce results equivalent or superior to results produced by this method, that modification may be used routinely thereafter, so long as the other requirements in this method are met (*e.g.,* matrix spike/matrix spike duplicate recovery and relative percent difference).

8.1.2.1.1 If a modification is to be applied to a specific discharge, the laboratory must prepare and analyze matrix spike/matrix spike duplicate (MS/MSD) samples (Section 8.3) and LCS samples (Section 8.4). The laboratory must include internal standards and surrogates (Section 8.7) in each of the samples. The MS/MSD and LCS samples must be fortified with the analytes of interest (Section 1.3.). If the modification is for nationwide use, MS/

MSD samples must be prepared from a minimum of nine different discharges (See Section 8.1.2.1.2), and all QC acceptance criteria in this method must be met. This evaluation only needs to be performed once, other than for the routine QC required by this method (for example it could be performed by the vendor of the alternate materials) but any laboratory using that specific material must have the results of the study available. This includes a full data package with the raw data that will allow an independent reviewer to verify each determination and calculation performed by the laboratory (see Section 8.1.2.2.5, items a–l).

8.1.2.1.2 Sample matrices on which MS/MSD tests must be performed for nationwide use of an allowed modification:

(a) Effluent from a POTW

(b) ASTM D5905 Standard Specification for Substitute Wastewater

(c) Sewage sludge, if sewage sludge will be in the permit

(d) ASTM D1141 Standard Specification for Substitute Ocean Water, if ocean water will be in the permit

(e) Untreated and treated wastewaters up to a total of nine matrix types (see *http:water.epa.gov/scitech/wastetech/guide/industry.cfm*) for a list of industrial categories with existing effluent guidelines).

At least one of the above wastewater matrix types must have at least one of the following characteristics:

(i) Total suspended solids greater than 40 mg/L

(ii) Total dissolved solids greater than 100 mg/L

(iii) Oil and grease greater than 20 mg/L

(iv) NaCl greater than 120 mg/L

(v) CaCO3 greater than 140 mg/L

The interim acceptance criteria for MS, MSD recoveries that do not have recovery limits specified in Table 7, and recoveries for surrogates that do not have recovery limits specified in Table 7, must be no wider than 60–140%, and the relative percent difference (RPD) of the concentrations in the MS and MSD that do not have RPD limits specified in Table 7 must be less than 30%. Alternatively, the laboratory may use the laboratory's in-house limits if they are tighter.

(f) A proficiency testing (PT) sample from a recognized provider, in addition to tests of the nine matrices (Section 8.1.2.1.1).

8.1.2.2 The laboratory is required to maintain records of modifications made to this method. These records include the following, at a minimum:

8.1.2.2.1 The names, titles, street addresses, telephone numbers, and email addresses of the analyst(s) that performed the analyses and modification, and of the quality control officer that witnessed and will verify the analyses and modifications.

8.1.2.2.2 A list of analytes, by name and CAS Registry Number.

8.1.2.2.3 A narrative stating reason(s) for the modifications.

8.1.2.2.4 Results from all quality control (QC) tests comparing the modified method to this method, including:

(a) Calibration (Section 7).

(b) Calibration verification/LCS (Section 8.4).

(c) Initial demonstration of capability (Section 8.2).

(d) Analysis of blanks (Section 8.5).

(e) Matrix spike/matrix spike duplicate analysis (Section 8.3).

(f) Laboratory control sample analysis (Section 8.4).

8.1.2.2.5 Data that will allow an independent reviewer to validate each determination by tracing the instrument output (peak height, area, or other signal) to the final result. These data are to include:

(a) Sample numbers and other identifiers.

(b) Analysis dates and times.

(c) Analysis sequence/run chronology.

(d) Sample volume (Section 10).

(e) Sample dilution (Section 13.2).

(f) Instrument and operating conditions.

(g) Column (dimensions, material, etc).

(h) Operating conditions (temperature program, flow rate, etc).

(i) Detector (type, operating conditions, etc).

(j) Chromatograms, mass spectra, and other recordings of raw data.

(k) Quantitation reports, data system outputs, and other data to link the raw data to the results reported.

(l) A written Standard Operating Procedure (SOP).

8.1.2.2.6 The individual laboratory wishing to use a given modification must perform the start-up tests in Section 8.1.2 (*e.g.,* DOC, MDL), with the modification as an integral part of this method prior to applying the modification to specific discharges. Results of the DOC must meet the QC acceptance criteria in Table 7 for the analytes of interest (Section 1.3), and the MDLs must be equal to or lower than the MDLs in Table3 for the analytes of interest

8.1.3 Before analyzing samples, the laboratory must analyze a blank to demonstrate that interferences from the analytical system, labware, and reagents are under control. Each time a batch of samples is analyzed or reagents are changed, a blank must be analyzed as a safeguard against laboratory contamination. Requirements for the blank are given in Section 8.5.

8.1.4 The laboratory must, on an ongoing basis, spike and analyze a minimum of one sample, in duplicate, with the batch of samples run during a given 12-hour shift (see the note at Section 8.4). The laboratory must also spike and analyze, in duplicate, a minimum of 5% of all samples from a given site or discharge to monitor and evaluate method and laboratory performance on the sample matrix. The batch and site/discharge samples may be the same. The procedure for spiking and analysis is given in Section 8.3.

8.1.5 The laboratory must, on an ongoing basis, demonstrate through analysis of a quality control check sample (laboratory control sample, LCS; on-going precision and recovery sample, OPR) that the measurement system is in control. This procedure is given in Section 8.4.

8.1.6 The laboratory should maintain performance records to document the quality of data that is generated. This procedure is given in Section 8.8.

8.1.7 The large number of analytes tested in performance tests in this method present a substantial probability that one or more will fail acceptance criteria when many analytes are tested simultaneously, and a re-test is allowed if this situation should occur. If, however, continued re-testing results in further repeated failures, the laboratory should document the failures (*e.g.,* as qualifiers on results) and either avoid reporting results for analytes that failed or report the problem and failures with the data. Failure to report does not relieve a discharger or permittee of reporting timely results. Results for regulatory compliance must be accompanied by QC results that meet all acceptance criteria.

8.2 Initial demonstration of capability (DOC)—To establish the ability to generate acceptable recovery and precision, the laboratory must perform the DOC in Sections 8.2.1 through 8.2.6 for the analytes of interest. The laboratory must also establish MDLs for the analytes of interest using the MDL procedure at 40 CFR part 136, appendix B. The laboratory's MDLs must be equal to or lower than those listed in Table 1 for those analytes which list MDL values, or lower than one-third the regulatory compliance limit, whichever is greater. For MDLs not listed in Table 1, the laboratory must determine the MDLs using the MDL procedure at 40 CFR part 136, appendix B under the same conditions

used to determine the MDLs for the analytes listed in Table 1. All procedures used in the analysis must be included in the DOC.

8.2.1 For the DOC, a QC check sample concentrate containing each analyte of interest (Section 1.3) is prepared in methanol. The QC check sample concentrate must be prepared independently from those used for calibration, but may be from the same source as the second-source standard used for calibration verification/LCS (Sections 7.4 and 8.4). The concentrate should produce concentrations of the analytes of interest in water at the mid-point of the calibration range, and may be at the same concentration as the LCS (Section 8.4).

Note: QC check sample concentrates are no longer available from EPA.

8.2.2 Using a pipet or micro-syringe, prepare four LCSs by adding an appropriate volume of the concentrate to each of four aliquots of reagent water. The volume of reagent water must be the same as the volume that will be used for the sample, blank (Section 8.5), and MS/MSD (Section 8.3). A volume of 5 mL and a concentration of 20 µg/L were used to develop the QC acceptance criteria in Table 7. An alternative volume and sample concentration may be used, provided that all QC tests are performed and all QC acceptance criteria in this method are met. Also add an aliquot of the surrogate spiking solution (Section 6.7) and internal standard spiking solution (Section 7.3.1.3) to the reagent-water aliquots.

8.2.3 Analyze the four LCSs according to the method beginning in Section 10.

8.2.4 Calculate the average percent recovery ($\bar{x}$) and the standard deviation of the percent recovery (s) for each analyte using the four results.

8.2.5 For each analyte, compare s and $\bar{x}$ with the corresponding acceptance criteria for precision and recovery in Table 7. For analytes in Tables 1 and 2 not listed in Table 7, DOC QC acceptance criteria must be developed by the laboratory. EPA has provided guidance for development of QC acceptance criteria (References 11 and 12). If s and $\bar{x}$ for all analytes of interest meet the acceptance criteria, system performance is acceptable and analysis of blanks and samples may begin. If any individual s exceeds the precision limit or any individual $\bar{x}$ falls outside the range for recovery, system performance is unacceptable for that analyte.

Note: The large number of analytes in Tables 1 and 2 present a substantial probability that one or more will fail at least one of the acceptance criteria when many or all analytes are determined simultaneously. Therefore, the analyst is permitted to conduct a ''re-test'' as described in Sec. 8.2.6.

8.2.6 When one or more of the analytes tested fail at least one of the acceptance criteria, repeat the test for only the analytes that failed. If results for these analytes pass, system performance is acceptable and analysis of samples and blanks may proceed. If one or more of the analytes again fail, system performance is unacceptable for the analytes that failed the acceptance criteria. Correct the problem and repeat the test (Section 8.2). See Section 8.1.7 for disposition of repeated failures.

Note: To maintain the validity of the test and re-test, system maintenance and/or adjustment is not permitted between this pair of tests.

8.3 Matrix spike and matrix spike duplicate (MS/MSD)—The laboratory must, on an ongoing basis, spike at least 5% of the samples from each sample site being monitored in duplicate to assess accuracy (recovery and precision). The data user should identify the sample and the analytes of interest (Section 1.3) to be spiked. If direction cannot be obtained, the laboratory must spike at least one sample per batch of samples analyzed on a given 12-hour shift with the analytes in Table 1. Spiked sample results should be reported only to the data user whose sample was spiked, or as requested or required by a regulatory/control authority, or in a permit.

8.3.1 If, as in compliance monitoring, the concentration of a specific analyte will be checked against a regulatory concentration limit, the concentration of the spike should be at that limit; otherwise, the concentration of the spike should be one to five times higher than the background concentration determined in Section 8.3.2, at or near the midpoint of the calibration range, or at the concentration in the LCS (Section 8.4) whichever concentration would be larger.

8.3.2 Analyze one sample aliquot to determine the background concentration (B) of the each analyte of interest. If necessary, prepare a new check sample concentrate (Section 8.2.1) appropriate for the background concentration. Spike and analyze two additional sample aliquots, and determine the concentration after spiking (A_1 and A_2) of each analyte. Calculate the percent recoveries (P_1 and P_2) as 100 $(A_1–B)/T$ and 100 $(A_2–B)/T$, where T is the known true value of the spike. Also calculate the relative percent difference (RPD) between the concentrations (A_1 and A_2) as $200|A_1–A_2|/(A_1 + A_2)$. If necessary, adjust the concentrations used to calculate the RPD to account for differences in the volumes of the spiked aliquots.

8.3.3 Compare the percent recoveries (P_1 and P_2) and the RPD for each analyte in the MS/MSD aliquots with the corresponding QC acceptance criteria in Table 7. A laboratory may develop and apply QC acceptance criteria more restrictive than the criteria in Table 6, if desired.

8.3.3.1 If any individual P falls outside the designated range for recovery in either aliquot, or the RPD limit is exceeded, the result for the analyte in the unspiked sample is suspect and may not be reported or used for permitting or regulatory compliance purposes. See Section 8.1.7 for disposition of failures.

8.3.3.2 The acceptance criteria in Table 7 were calculated to include an allowance for error in measurement of both the background and spike concentrations, assuming a spike to background ratio of 5:1. This error will be accounted for to the extent that the spike to background ratio approaches 5:1 (Reference 13). If spiking is performed at a concentration lower than 20 µg/L, the laboratory must use either the QC acceptance criteria in Table 7, or optional QC acceptance criteria calculated for the specific spike concentration. To use the optional acceptance criteria: (1) Calculate recovery (X′) using the equation in Table 8, substituting the spike concentration (T) for C; (2) Calculate overall precision (S′) using the equation in Table 8, substituting X′ for $\bar{x}$; (3) Calculate the range for recovery at the spike concentration as (100 X′/T) ± 2.44(100 S′/T)% (Reference 4). For analytes of interest in Tables 1 and 2 not listed in Table 7, QC acceptance criteria must be developed by the laboratory. EPA has provided guidance for development of QC acceptance criteria (References 11 and 12).

8.3.4 After analysis of a minimum of 20 MS/MSD samples for each target analyte and surrogate, the laboratory must calculate and apply in-house QC limits for recovery and RPD of future MS/MSD samples (Section 8.3). The QC limits for recovery are calculated as the mean observed recovery ± 3 standard deviations, and the upper QC limit for RPD is calculated as the mean RPD plus 3 standard deviations of the RPDs. The in-house QC limits must be updated at least every two years and re-established after any major change in the analytical instrumentation or process. At least 80% of the analytes tested in the MS/MSD must have in-house QC acceptance criteria that are tighter than those in

Table 7. If an in-house QC limit for the RPD is greater than the limit in Table 7, then the limit in Table 7 must be used. Similarly, if an in-house lower limit for recovery is below the lower limit in Table 7, then the lower limit in Table 7 must be used, and if an in-house upper limit for recovery is above the upper limit in Table 7, then the upper limit in Table 7 must be used. The laboratory must evaluate surrogate recovery data in each sample against its in-house surrogate recovery limits. The laboratory may use 60–140% as interim acceptance criteria for surrogate recoveries until in-house limits are developed.

8.4 Calibration verification/laboratory control sample (LCS)—The working calibration curve or RF must be verified at the beginning of each 12-hour shift by the measurement of an LCS.

Note: The 12-hour shift begins after analysis of the blank that follows the LCS and ends 12 hours later. The blank is outside of the 12-hour shift. The MS and MSD are treated as samples and are analyzed within the 12-hour shift.

8.4.1 Prepare the LCS by adding QC check sample concentrate (Section 8.2.1) to reagent water. Include all analytes of interest (Section 1.3) in the LCS. The LCS may be the same sample prepared for the DOC (Section 8.2.1). The volume of reagent water must be the same as the volume used for the sample, blank (Section 8.5), and MS/MSD (Section 8.3). Also add an aliquot of the surrogate solution (Section 6.7) and internal standard solution (Section 7.3.1.3). The concentration of the analytes in reagent water should be the same as the concentration in the DOC (Section 8.2.2).

8.4.2 Analyze the LCS prior to analysis of field samples in the batch of samples analyzed during the 12-hour shift (see the Note at Section 8.4). Determine the concentration (A) of each analyte. Calculate the percent recovery (Q) as 100 (A/T) %, where T is the true value of the concentration in the LCS.

8.4.3 Compare the percent recovery (Q) for each analyte with its corresponding QC acceptance criterion in Table 7. For analytes of interest in Tables 1 and 2 not listed in Table 7, use the QC acceptance criteria developed for the MS/MSD (Section 8.3.3.2). If the recoveries for all analytes of interest fall within their respective QC acceptance criteria, analysis of blanks and field samples may proceed. If any individual Q falls outside the range, proceed according to Section 8.4.4.

Note: The large number of analytes in Tables 1–2 present a substantial probability that one or more will fail the acceptance criteria when all analytes are tested simultaneously. Because a re-test is allowed in event of failure (Sections 8.1.7 and 8.4.3), it may be prudent to analyze two LCSs together and evaluate results of the second analysis against the QC acceptance criteria only if an analyte fails the first test.

8.4.4 Repeat the test only for those analytes that failed to meet the acceptance criteria (Q). If these analytes now pass, system performance is acceptable and analysis of blanks and samples may proceed. Repeated failure, however, will confirm a general problem with the measurement system. If this occurs, repeat the test using a fresh LCS (Section 8.2.2) or an LCS prepared with a fresh QC check sample concentrate (Section 8.2.1), or perform and document system repair. Subsequent to repair, repeat the calibration verification/LCS test (Section 8.4). If the acceptance criteria for Q cannot be met, re-calibrate the instrument (Section 7). If failure of the LCS indicates a systemic problem with samples analyzed during the 12-hour shift, re-analyze the samples analyzed during that 12-hour shift. See Section 8.1.7 for disposition of repeated failures.

Note: To maintain the validity of the test and re-test, system maintenance and/or adjustment is not permitted between this pair of tests.

8.4.5 After analysis of 20 LCS samples, the laboratory must calculate and apply in-house QC limits for recovery to future LCS samples (Section 8.4). Limits for recovery in the LCS are calculated as the mean recovery ±3 standard deviations. A minimum of 80% of the analytes tested for in the LCS must have QC acceptance criteria tighter than those in Table 7. Many of the analytes and surrogates may not contain recommended acceptance criteria. The laboratory should use 60–140% as interim acceptance criteria for recoveries of spiked analytes and surrogates that do not have recovery limits specified in Table 7, until in-house LCS and surrogate limits are developed. If an in-house lower limit for recovery is lower than the lower limit in Table 7, the lower limit in Table 7 must be used, and if an in-house upper limit for recovery is higher than the upper limit in Table 7, the upper limit in Table 7 must be used.

8.5 Blank—A blank must be analyzed at the beginning of each 12-hour shift to demonstrate freedom from contamination. A blank must also be analyzed after a sample containing a high concentration of an analyte or potentially interfering compound to demonstrate freedom from carry-over.

8.5.1 Spike the internal standards and surrogates into the blank. Analyze the blank immediately after analysis of the LCS (Section 8.4) and prior to analysis of the MS/MSD and samples to demonstrate freedom from contamination.

8.5.2 If any analyte of interest is found in the blank: (1) at a concentration greater than the MDL for the analyte, (2) at a concentration greater than one-third the regulatory compliance limit, or (3) at a concentration greater than one-tenth the concentration in a sample analyzed during the 12-hour shift (Section 8.4), whichever is greater; analysis of samples must be halted and samples affected by the blank must be re-analyzed. Samples must be associated with an uncontaminated blank before they may be reported or used for permitting or regulatory compliance purposes.

8.6 Surrogate recoveries—Spike the surrogates into all samples, blanks, LCSs, and MS/MSDs. Compare surrogate recoveries against the QC acceptance criteria in Table 7. For surrogates in Table 5 without QC acceptance criteria in Table 7, and for other surrogates that may be used by the laboratory, limits must be developed by the laboratory. EPA has provided guidance for development of QC acceptance criteria (References 11 and 12). If any recovery fails its criteria, attempt to find and correct the cause of the failure. Surrogate recoveries from the blank and LCS may be used as pass/fail criteria by the laboratory or as required by a regulatory authority, or may be used to diagnose problems with the analytical system.

8.7 Internal standard responses.

8.7.1 Calibration verification/LCS—The responses (GC peak heights or areas) of the internal standards in the calibration verification/LCS must be within 50% to 200% (½ to 2x) of their respective responses in the mid-point calibration standard. If they are not, repeat the LCS test using a fresh QC check sample (Section 8.4.1) or perform and document system repair. Subsequent to repair, repeat the calibration verification/LCS test (Section 8.4). If the responses are still not within 50% to 200%, re-calibrate the instrument (Section 7) and repeat the calibration verification/LCS test.

8.7.2 Samples, blanks, and MS/MSDs—The responses (GC peak heights or areas) of the internal standards in each sample, blank, and MS/MSD must be within 50% to 200% (½ to 2x) of its respective response in the most recent LCS. If, as a group, all internal standard are not within this range, perform and document system repair, repeat the calibration verification/LCS test

(Section 8.4), and re-analyze the affected samples. If a single internal standard is not within the 50% to 200% range, use an alternate internal standard for quantitation of the analyte referenced to the affected internal standard.

8.8 As part of the QC program for the laboratory, control charts or statements of accuracy for wastewater samples must be assessed and records maintained periodically (see 40 CFR 136.7(c)(1)(viii)). After analysis of five or more spiked wastewater samples as in Section 8.3, calculate the average percent recovery ($\bar{x}$) and the standard deviation of the percent recovery (sp). Express the accuracy assessment as a percent interval from $\bar{x} - 2sp$ to $\bar{x} + 2sp$. For example, if $\bar{x} = 90\%$ and sp = 10%, the accuracy interval is expressed as 70–110%. Update the accuracy assessment for each analyte on a regular basis (*e.g.,* after each 5–10 new accuracy measurements).

8.9 It is recommended that the laboratory adopt additional quality assurance practices for use with this method. The specific practices that are most productive depend upon the needs of the laboratory and the nature of the samples. Field duplicates may be analyzed to assess the precision of environmental measurements. Whenever possible, the laboratory should analyze standard reference materials and participate in relevant performance evaluation studies.

9. Sample Collection, Preservation, and Handling

9.1 Collect the sample as a grab sample in a glass container having a total volume of at least 25 mL. Fill the sample bottle just to overflowing in such a manner that no air bubbles pass through the sample as the bottle is being filled. Seal the bottle so that no air bubbles are entrapped in it. If needed, collect additional sample(s) for the MS/MSD (Section 8.3).

9.2 Ice or refrigerate samples at <6 °C from the time of collection until analysis, but do not freeze. If residual chlorine is present, add sodium thiosulfate preservative (10 mg/40 mL is sufficient for up to 5 ppm Cl_2) to the empty sample bottle just prior to shipping to the sampling site. Any method suitable for field use may be employed to test for residual chlorine (Reference 14). Field test kits are also available for this purpose. If sodium thiosulfate interferes in the determination of the analytes, an alternate preservative (*e.g.,* ascorbic acid or sodium sulfite) may be used. If preservative has been added, shake the sample vigorously for one minute. Maintain the hermetic seal on the sample bottle until time of analysis.

9.3 If acrolein is to be determined, analyze the sample within 3 days. To extend the holding time to 14 days, acidify a separate sample to pH 4–5 with HCl using the procedure in Section 9.7.

9.4 Experimental evidence indicates that some aromatic compounds, notably benzene, toluene, and ethyl benzene are susceptible to rapid biological degradation under certain environmental conditions (Reference 3). Refrigeration alone may not be adequate to preserve these compounds in wastewaters for more than seven days. To extend the holding time for aromatic compounds to 14 days, acidify the sample to approximately pH 2 using the procedure in Section 9.7.

9.5 If halocarbons are to be determined, either use the acidified aromatics sample in Section 9.4 or acidify a separate sample to a pH of about 2 using the procedure in Section 9.7. Aqueous samples should not be preserved with acid if the ethers in Table 2, or the alcohols that they would form upon hydrolysis, are of analytes of interest.

9.6 The ethers listed in Table 2 are prone to hydrolysis at pH 2 when a heated purge is used. Aqueous samples should not be acid preserved if these ethers are of interest, or if the alcohols they would form upon hydrolysis are of interest and the ethers are anticipated to present.

9.7 Sample acidification—Collect about 500 mL of sample in a clean container and adjust the pH of the sample to 4–5 for acrolein (Section 9.3), or to about 2 for the aromatic compounds (Section 9.4) by adding 1+1 HCl while swirling or stirring. Check the pH with narrow range pH paper. Fill a sample container as described in Section 9.1. Alternatively, fill a precleaned vial (Section 5.1.1) that contains approximately 0.25 mL of 1+1 HCl with sample as in Section 9.1. If preserved using this alternative procedure, the pH of the sample can be verified to be <2 after some of the sample is removed for analysis. Acidification will destroy 2-chloroethylvinyl ether; therefore, determine 2-chloroethylvinyl ether from the unacidified sample.

9.8 All samples must be analyzed within 14 days of collection (Reference 3), unless specified otherwise in Sections 9.3–9.7.

10. Sample Purging and Gas Chromatography

10.1 The footnote to Table 3 gives the suggested GC column and operating conditions. Included in Table 3 are retention times and MDLs that can be achieved under these conditions. Sections 10.2 through 10.7 suggest procedures that may be used with a manual purge-and-trap system. Autosamplers and other columns or chromatographic conditions may be used if requirements in this method are met.

10.2 Attach the trap inlet to the purging device, and set the purge-and-trap system to purge (Figure 3). Open the syringe valve located on the purging device sample introduction needle.

10.3 Allow the sample to come to ambient temperature prior to pouring an aliquot into the syringe. Remove the plunger from a syringe and attach a closed syringe valve. Open the sample bottle (or standard) and carefully pour the sample into the syringe barrel to just short of overflowing. Replace the syringe plunger and compress the sample. Open the syringe valve and vent any residual air while adjusting the sample volume. Since this process of taking an aliquot destroys the validity of the sample for future analysis, the analyst should fill a second syringe at this time to protect against possible loss of data. Add the surrogate spiking solution (Section 6.7) and internal standard spiking solution (Section 7.3.1.3) through the valve bore, then close the valve. The surrogate and internal standards may be mixed and added as a single spiking solution. Autosamplers designed for purge-and-trap analysis of volatiles also may be used.

10.4 Attach the syringe valve assembly to the syringe valve on the purging device. Open the syringe valve and inject the sample into the purging chamber.

10.5 Close both valves and purge the sample at a temperature, flow rate, and duration sufficient to purge the less-volatile analytes onto the trap, yet short enough to prevent blowing the more-volatile analytes through the trap. The temperature, flow rate, and time should be determined by test. The same purge temperature, flow rate, and purge time must be used for all calibration, QC, and field samples.

10.6 After the purge, set the purge-and-trap system to the desorb mode (Figure 4), and begin to temperature program the gas chromatograph. Introduce the trapped materials to the GC column by rapidly heating the trap to the desorb temperature while backflushing the trap with carrier gas at the flow rate and for the time necessary to desorb the analytes of interest. The optimum temperature, flow rate, and time should be determined by test. The

same temperature, desorb time, and flow rate must be used for all calibration, QC, and field samples. If heating of the trap does not result in sharp peaks for the early eluting analytes, the GC column may be used as a secondary trap by cooling to an ambient or subambient temperature. To avoid carry-over and interferences, maintain the trap at the desorb temperature and flow rate until the analytes, interfering compounds, and excess water are desorbed. The optimum conditions should be determined by test.

10.7 Start MS data acquisition at the start of the desorb cycle and stop data collection when the analytes of interest, potentially interfering compounds, and water have eluted (see the footnote to Table 3 for conditions).

10.8 Cool the trap to the purge temperature and return the trap to the purge mode (Figure 3). When the trap is cool, the next sample can be analyzed.

11. Performance Tests

11.1 At the beginning of each 12-hour shift during which analyses are to be performed, GC/MS performance must be verified before blanks or samples may be analyzed (Section 8.4). Use the instrument operating conditions in the footnotes to Table 3 for these performance tests. Alternate conditions may be used so as long as all QC requirements are met.

11.2 BFB—Inject 50 ng of BFB solution directly on the column. Alternatively, add BFB to reagent water or an aqueous standard such that 50 ng or less of BFB will be introduced into the GC. Analyze according to Section 10. Confirm that all criteria in Section 7.3.2.2 and Table 4 are met. If all criteria are not met, perform system repair, retune the mass spectrometer, and repeat the test until all criteria are met.

11.3 GC resolution—There must be a valley between 1,2-dibromoethane and chlorobenzene, and the height of the valley must not exceed 25 percent of the shorter of the two peaks. For an alternate GC column, apply this valley height criterion to two representative GC peaks separated by no more than 7 seconds.

11.4 Verify calibration with the LCS (Section 8.4) after the criteria for BFB are met (Reference 15) and prior to analysis of a blank or sample. After verification, analyze a blank (Section 8.5) to demonstrate freedom from contamination and carry-over at the MDL.

12. Qualitative Identification

12.1 Target analytes are identified by comparison of results from analysis of a sample or blank with data stored in the GC/MS data system (Section 7.3.2.3). Identification of an analyte is confirmed per Sections 12.1.1 through 12.1.4.

12.1.1 The signals for all characteristic m/z's stored in the data system (Section 7.3.2.3) for each analyte of interest must be present and must maximize within the same two consecutive scans.

12.1.2 Based on the relative retention time (RRT), the RRT for the analyte must be within ± 0.06 of the RRT of the analyte in the LCS run at the beginning of the shift (Section 8.4). Relative retention time is used to establish the identification window because it compensates for small changes in the GC temperature program whereas the absolute retention time does not (see Section 7.3.1.2).

Note: RRT is a unitless quantity (see Sec. 20.2), although some procedures refer to ''RRT units'' in providing the specification for the agreement between the RRT values in the sample and the LCS or other standard.

12.1.3 Either (1) the background corrected EICP areas, or (2) the corrected relative intensities of the mass spectral peaks at the GC peak maximum, must agree within 50% to 200% (½ to 2 times) for all m/z's in the reference mass spectrum stored in the data system (Section 7.3.2.3), or from a reference library. For example, if a peak has an intensity of 20% relative to the base peak, the analyte is identified if the intensity of the peak in the sample is in the range of 10% to 40% of the base peak.

12.1.4 The m/z's present in the acquired mass spectrum for the sample that are not present in the reference mass spectrum must be accounted for by contaminant or background m/z's. A reference library may be helpful to identify and account for background or contaminant m/z's. If the acquired mass spectrum is contaminated, or if identification is ambiguous, an experienced spectrometrist (Section 1.6) must determine the presence or absence of the compound.

12.2 Structural isomers that have very similar mass spectra can be identified only if the resolution between authentic isomers in a standard mix is acceptable. Acceptable resolution is achieved if the baseline to valley height between the isomers is less than 50% of the height of the shorter of the two peaks. Otherwise, structural isomers are identified as isomeric pairs.

13. Calculations

13.1 When an analyte has been identified, quantitation of that analyte is based on the integrated abundance from the EICP of the primary characteristic m/z in Table 5 or 6. Calculate the concentration using the response factor (RF) determined in Section 7.3.3 and Equation 2. If a calibration curve was used, calculate the concentration using the regression equation for the curve. If the concentration of an analyte exceeds the calibration range, dilute the sample by the minimum amount to bring the concentration into the calibration range, and re-analyze. Determine a dilution factor (DF) from the amount of the dilution. For example, if the extract is diluted by a factor of 2, DF = 2.

$$C_s\ (\mu g/L) = \frac{A_s \times C_{is} \times DF}{A_{is} \times RF}$$

Where:

C_s = Concentration of the analyte in the sample, and the other terms are as defined in Section 7.3.3.

13.2 Reporting of results.

As noted in Section 1.4.1, EPA has promulgated this method at 40 CFR part 136 for use in wastewater compliance monitoring under the National Pollutant Discharge Elimination System (NPDES). The data reporting practices described here are focused on such monitoring needs and may not be relevant to other uses of the method.

13.2.1 Report results for wastewater samples in µg/L without correction for recovery. (Other units may be used if required by in a permit.) Report all QC data with the sample results.

13.2.2 Reporting level.

Unless otherwise specified in by a regulatory authority or in a discharge permit, results for analytes that meet the identification criteria are reported down to the concentration of the ML established by the laboratory through calibration of the instrument (see Section 7.3.2 and the glossary for the derivation of the ML). EPA considers the terms ''reporting limit,'' ''quantitation limit,'' and ''minimum level'' to be synonymous.

13.2.2.1 Report a result for each analyte in each sample, blank, or standard at or above the ML to 3 significant figures. Report a result for each analyte found in each sample below the ML as ''<ML,'' or as required by the regulatory authority or permit. Results are reported without blank subtraction unless requested or required by a regulatory authority or in a permit. In this case, both the sample result and the blank results must be reported together.

13.2.2.2 In addition to reporting results for samples and blanks separately, the concentration of each analyte in a blank associated with the

sample may be subtracted from the result for that sample, but only if requested or required by a regulatory authority or in a permit. In this case, both the sample result and the blank results must be reported together.

13.2.2.3 Report a result for an analyte found in a sample that has been diluted at the least dilute level at which the area at the quantitation m/z is within the calibration range (*i.e.,* above the ML for the analyte) and the MS/MSD recovery and RPD are within their respective QC acceptance criteria (Table 7). This may require reporting results for some analytes from different analyses.

13.2.3 Results from tests performed with an analytical system that is not in control (*i.e.,* that does not meet acceptance criteria for all of QC tests in this method) must not be reported or otherwise used for permitting or regulatory compliance purposes, but do not relieve a discharger or permittee of reporting timely results. If the holding time would be exceeded for a re-analysis of the sample, the regulatory/control authority should be consulted for disposition.

14. Method Performance

14.1 This method was tested by 15 laboratories using reagent water, drinking water, surface water, and industrial wastewaters spiked at six concentrations over the range 5–600 µg/L (References 4 and 16). Single operator precision, overall precision, and method accuracy were found to be directly related to the concentration of the analyte and essentially independent of the sample matrix. Linear equations to describe these relationships are presented in Table 8.

14.2 As noted in Sec. 1.1, this method was validated through an interlaboratory study conducted more than 29 years ago. However, the fundamental chemistry principles used in this method remain sound and continue to apply.

15. Pollution Prevention

15.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Many opportunities for pollution prevention exist in laboratory operations. EPA has established a preferred hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, the laboratory should use pollution prevention techniques to address waste generation. When wastes cannot be reduced at the source, the Agency recommends recycling as the next best option.

15.2 The analytes in this method are used in extremely small amounts and pose little threat to the environment when managed properly. Standards should be prepared in volumes consistent with laboratory use to minimize the disposal of excess volumes of expired standards.

15.3 For information about pollution prevention that may be applied to laboratories and research institutions, consult Less is Better: Laboratory Chemical Management for Waste Reduction, available from the American Chemical Society's Department of Governmental Relations and Science Policy, 1155 16th Street NW., Washington, DC 20036, 202/872–4477.

16. Waste Management

16.1 The laboratory is responsible for complying with all Federal, State, and local regulations governing waste management, particularly the hazardous waste identification rules and land disposal restrictions, and to protect the air, water, and land by minimizing and controlling all releases from fume hoods and bench operations. Compliance is also required with any sewage discharge permits and regulations. An overview of requirements can be found in Environmental Management Guide for Small Laboratories (EPA 233–B–98–001).

16.2 Samples at pH <2, or pH >12, are hazardous and must be neutralized before being poured down a drain, or must be handled and disposed of as hazardous waste.

16.3 Many analytes in this method decompose above 500 °C. Low-level waste such as absorbent paper, tissues, and plastic gloves may be burned in an appropriate incinerator. Gross quantities of neat or highly concentrated solutions of toxic or hazardous chemicals should be packaged securely and disposed of through commercial or governmental channels that are capable of handling these types of wastes.

16.4 For further information on waste management, consult The Waste Management Manual for Laboratory Personnel and Less is Better-Laboratory Chemical Management for Waste Reduction, available from the American Chemical Society's Department of Government Relations and Science Policy, 1155 16th Street NW., Washington, DC 20036, 202/872–4477.

17. References

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4. ''EPA Method Study 29 EPA Method 624-Purgeables,'' EPA 600/4–84–054, National Technical Information Service, PB84–209915, Springfield, Virginia 22161, June 1984.
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8. ''OSHA Safety and Health Standards, General Industry,'' (29 CFR part 1910), Occupational Safety and Health Administration, OSHA 2206 (Revised, January 1976).
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10. 40 CFR 136.6(b)(5)(x).
11. 40 CFR 136.6(b)(2)(i).
12. Protocol for EPA Approval of New Methods for Organic and Inorganic Analytes in Wastewater and Drinking Water (EPA–821–B–98–003) March 1999
13. Provost, L.P. and Elder, R.S. ''Interpretation of Percent Recovery Data,'' American Laboratory, 15, 58–63 (1983).
14. 40 CFR 136.3(a), Table IB, Chlorine—Total residual
15. Budde, W.L. and Eichelberger, J.W. ''Performance Tests for the Evaluation of Computerized Gas Chromatography/Mass Spectrometry Equipment and Laboratories,'' EPA–600/4–80–025, U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268, April 1980.
16. ''Method Performance Data for Method 624,'' Memorandum from R. Slater and T. Pressley, U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268, January 17, 1984.

18. Tables

TABLE 1—PURGEABLES [1]

Analyte	CAS Registry No.	MDL (μg/L) [2]	ML (μg/L) [3]
Acrolein	107–02–8		
Acrylonitrile	107–13–1		
Benzene	71–43–2	4.4	13.2
Bromodichloromethane	75–27–4	2.2	6.6
Bromoform	75–25–2	4.7	14.1
Bromomethane	74–83–9		
Carbon tetrachloride	56–23–5	2.8	8.4
Chlorobenzene	108–90–7	6.0	18.0
Chloroethane	75–00–3		
2-Chloroethylvinyl ether	110–75–8		
Chloroform	67–66–3	1.6	4.8
Chloromethane	74–87–3		
Dibromochloromethane	124–48–1	3.1	9.3
1,2-Dichlorobenzene	95–50–1		
1,3-Dichlorobenzene	541–73–1		
1,4-Dichlorobenzene	106–46–7		
1,1-Dichloroethane	75–34–3	4.7	14.1
1,2-Dichloroethane	107–06–2	2.8	8.4
1,1-Dichloroethene	75–35–4	2.8	8.4
trans-1,2-Dichloroethene	156–60–5	1.6	4.8
1,2-Dichloropropane	78–87–5	6.0	18.0
cis-1,3-Dichloropropene	10061–01–5	5.0	15.0
trans-1,3-Dichloropropene	10061–02–6		
Ethyl benzene	100–41–4	7.2	21.6
Methylene chloride	75–09–2	2.8	8.4
1,1,2,2-Tetrachloroethane	79–34–5	6.9	20.7
Tetrachloroethene	127–18–4	4.1	12.3
Toluene	108–88–3	6.0	18.0
1,1,1-Trichloroethane	71–55–6	3.8	11.4
1,1,2-Trichloroethane	79–00–5	5.0	15.0
Trichloroethene	79–01–6	1.9	5.7
Vinyl chloride	75–01–4		

[1] All the analytes in this table are Priority Pollutants (40 CFR part 423, appendix A)
[2] MDL values from the 1984 promulgated version of Method 624
[3] ML = Minimum Level—see Glossary for definition and derivation

TABLE 2—ADDITIONAL PURGEABLES

Analyte	CAS Registry
Acetone [1]	67–64–1
Acetonitrile [2]	75–05–8
Allyl alcohol [1]	107–18–6
Allyl chloride	107–05–1
t-Amyl ethyl ether (TAEE)	919–94–8
t-Amyl methyl ether (TAME)	994–058
Benzyl chloride	100–44–7
Bromoacetone [2]	598–31–2
Bromobenzene	108–86–1
Bromochloromethane	74–97–5
1,3-Butadiene	106–99–0
n-Butanol [1]	71–36–3
2-Butanone (MEK) [1 2]	78–93–3
t-Butyl alcohol (TBA)	75–65–0
n-Butylbenzene	104–51–8
sec-Butylbenzene	135–98–8
t-Butylbenzene	98–06–6
t-Butyl ethyl ether (ETBE)	637–92–3
Carbon disulfide	75–15–0
Chloral hydrate [2]	302–17–0
Chloroacetonitrile [1]	107–14–2
1-Chlorobutane	109–69–3
Chlorodifluoromethane	75–45–6
2-Chloroethanol [2]	107–07–3
bis (2-Chloroethyl) sulfide [2]	505–60–2
1-Chlorohexanone	20261–68–1
Chloroprene (2-chloro-1,3-butadiene)	126–99–8
3-Chloropropene	107–05–1
3-Chloropropionitrile	542–76–7

TABLE 2—ADDITIONAL PURGEABLES—Continued

Analyte	CAS Registry
2-Chlorotoluene	95–49–8
4-Chlorotoluene	106–43–4
Crotonaldehyde [1 2]	123–73–9
Cyclohexanone	108–94–1
1,2-Dibromo-3-chloropropane	96–12–8
1,2-Dibromoethane	106–93–4
Dibromomethane	74–95–3
cis-1,4-Dichloro-2-butene	1476–11–5
trans-1,4-Dichloro-2-butene	110–57–6
cis-1,2-Dichloroethene	156–59–2
Dichlorodifluoromethane	75–71–8
1,3-Dichloropropane	142–28–9
2,2-Dichloropropane	590–20–7
1,3-Dichloro-2-propanol [2]	96–23–1
1,1-Dichloropropene	563–58–6
cis-1,3-Dichloropropene	10061–01–5
1:2,3:4-Diepoxybutane	1464–53–5
Diethyl ether	60–29–7
Diisopropyl ether (DIPE)	108–20–3
1,4-Dioxane [2]	123–91–1
Epichlorohydrin [2]	106–89–8
Ethanol [2]	64–17–5
Ethyl acetate [2]	141–78–6
Ethyl methacrylate	97–63–2
Ethylene oxide [2]	75–21–8
Hexachlorobutadiene	87–63–3
Hexachloroethane	67–72–1
2-Hexanone [2]	591–78–6
Iodomethane	74–88–4
Isobutyl alcohol [1]	78–83–1

TABLE 2—ADDITIONAL PURGEABLES—Continued

Analyte	CAS Registry
Isopropylbenzene	98–82–8
p-Isopropyltoluene	99–87–6
Methacrylonitrile [2]	126–98–7
Methanol [2]	67–56–1
Malonitrile [2]	109–77–3
Methyl acetate	79–20–9
Methyl acrylate	96–33–3
Methyl cyclohexane	108–87–2
Methyl iodide	74–88–4
Methyl methacrylate	78–83–1
4-Methyl-2-pentanone (MIBK) [2]	108–10–1
Methyl-*t*-butyl ether (MTBE)	1634–04–4
Naphthalene	91–20–3
Nitrobenzene	98–95–3
N-Nitroso-di-*n*-butylamine [2]	924–16–3
2-Nitropropane	79–46–9
Paraldehyde [2]	123–63–7
Pentachloroethane [2]	76–01–7
Pentafluorobenzene	363–72–4
2-Pentanone [2]	107–19–7
2-Picoline [2]	109–06–8
1-Propanol [1]	71–23–8
2-Propanol [1]	67–63–0
Propargyl alcohol [2]	107–19–7
beta-Propiolactone [2]	57–58–8
Propionitrile (ethyl cyanide) [1]	107–12–0
n-Propylamine	107–10–8
n-Propylbenzene	103–65–1
Pyridine [2]	110–86–1

TABLE 2—ADDITIONAL PURGEABLES—Continued

Analyte	CAS Registry
Styrene	100–42–5
1,1,1,2-Tetrachloroethane	630–20–6
Tetrahydrofuran	109–99–9
o-Toluidine [2]	95–53–4
1,2,3-Trichlorobenzene	87–61–6
Trichlorofluoromethane	75–69–4
1,2,3-Trichloropropane	96–18–4
1,2,3-Trimethylbenzene	526–73–8
1,2,4-Trimethylbenzene	95–63–6
1,3,5-Trimethylbenzene	108–67–8
Vinyl acetate	108–05–4
m-Xylene [3]	108–38–3
o-Xylene [3]	95–47–6
p-Xylene [3]	106–42–3
m+o- Xylene [3]	179601–22–0
m+p- Xylene [3]	179601–23–1
o+p- Xylene [3]	136777–61–2

[1] Determined at a purge temperature of 80 °C.
[2] May be detectable at a purge temperature of 80 °C.
[3] Determined in combination separated by GC column. Most GC columns will resolve *o*-xylene from *m+p*-xylene. Report using the CAS number for the individual xylene or the combination, as determined.

TABLE 3—EXAMPLE RETENTION TIMES

Analyte	Retention time (min)
Chloromethane	3.68
Vinyl chloride	3.92
Bromomethane	4.50
Chloroethane	4.65
Trichlorofluoromethane	5.25
Diethyl ether	5.88
Acrolein	6.12
1,1-Dichloroethene	6.30
Acetone	6.40

TABLE 3—EXAMPLE RETENTION TIMES—Continued

Analyte	Retention time (min)
Iodomethane	6.58
Carbon disulfide	6.72
3-Chloropropene	6.98
Methylene chloride	7.22
Acrylonitrile	7.63
trans-1,2-Dichloroethene	7.73
1,1-Dichloroethane	8.45
Vinyl acetate	8.55
Allyl alcohol	8.58
2-Chloro-1,3-butadiene	8.65
Methyl ethyl ketone	9.50
cis-1,2-Dichloroethene	9.50
Ethyl cyanide	9.57
Methacrylonitrile	9.83
Chloroform	10.05
1,1,1-Trichloroethane	10.37
Carbon tetrachloride	10.70
Isobutanol	10.77
Benzene	10.98
1,2-Dichloroethane	11.00
Crotonaldehyde	11.45
Trichloroethene	12.08
1,2-Dichloropropane	12.37
Methyl methacrylate	12.55
p-Dioxane	12.63
Dibromomethane	12.65
Bromodichloromethane	12.95
Chloroacetonitrile	13.27
2-Chloroethylvinyl ether	13.45
cis-1,3-Dichloropropene	13.65
4-Methyl-2-pentanone	13.83
Toluene	14.18
trans-1,3-Dichloropropene	14.57
Ethyl methacrylate	14.70
1,1,2-Trichloroethane	14.93
1,3-Dichloropropane	15.18
Tetrachloroethene	15.22
2-Hexanone	15.30
Dibromochloromethane	15.68
1,2-Dibromoethane	15.90

TABLE 3—EXAMPLE RETENTION TIMES—Continued

Analyte	Retention time (min)
Chlorobenzene	16.78
Ethylbenzene	16.82
1,1,1,2-Tetrachloroethane	16.87
m+p-Xylene	17.08
o-Xylene	17.82
Bromoform	18.27
Bromofluorobenzene	18.80
1,1,2,2-Tetrachloroethane	18.98
1,2,3-Trichloropropane	19.08
trans-1,4-Dichloro-2-butene	19.12

Column: 75 m x 0.53 mm ID x 3.0 μm wide-bore DB–624.
Conditions: 40°C for 4 min, 9°C/min to 200°C, 20°C/min (or higher) to 250°C, hold for 20 min at 250°C to remove water.
Carrier gas flow rate: 6–7 mL/min at 40°C.
Inlet split ratio: 3:1.
Interface split ratio: 7:2.

TABLE 4—BFB KEY M/Z ABUNDANCE CRITERIA [1]

m/z	Abundance criteria
50	15–40% of m/z 95.
75	30–60% of m/z 95.
95	Base Peak, 100% Relative Abundance.
96	5–9% of m/z 95.
173	<2% of m/z 174.
174	>50% of m/z 95.
175	5–9% of m/z 174.
176	>95% but <101% of m/z 174.
177	5–9% of m/z 176.

[1] Abundance criteria are for a quadrupole mass spectrometer; contact the manufacturer for criteria for other types of mass spectrometers.

TABLE 5—SUGGESTED SURROGATE AND INTERNAL STANDARDS

Analyte	Retention time (min) [1]	Primary m/z	Secondary m/z's
Benzene-d_6	10.95	84	
4-Bromofluorobenzene	18.80	95	174, 176
Bromochloromethane	9.88	128	49, 130, 51
2-Bromo-1-chloropropane	14.80	77	79, 156
2-Butanone-d_5	9.33	77	
Chloroethane-d_5	4.63	71	
Chloroform-^{13}C	10.00	86	
1,2-Dichlorobenzene-d_4		152	
1,4-Dichlorobutane	18.57	55	90, 92
1,2-Dichloroethane-d_4	10.88	102	
1,1-Dichloroethene-d_2	6.30	65	
1,2-Dichloropropane-d_6	12.27	67	
trans-1,3-Dichloropropene-d_4	14.50	79	
1,4-Difluorobenzene		114	63, 88
Ethylbenzene-d_{10}	16.77	98	
Fluorobenzene		96	70
2-Hexanone-d_5	15.30	63	
Pentafluorobenzene		168	
1,1,2,2-Tetrachloroethane-d_2	18.93	84	
Toluene-d_8	14.13	100	
Vinyl chloride-d_3	3.87	65	

[1] For chromatographic conditions, see the footnote to Table 3.

TABLE 6—CHARACTERISTIC M/Z'S FOR PURGEABLE ORGANICS

Analyte	Primary m/z	Secondary m/z's
Chloromethane	50	52.
Bromomethane	94	96.
Vinyl chloride	62	64.
Chloroethane	64	66.
Methylene chloride	84	49, 51, and 86.
Trichlorofluoromethane	101	103.
1,1-Dichloroethene	96	61 and 98.
1,1-Dichloroethane	63	65, 83, 85, 98, and 100.
trans-1,2-Dichloroethene	96	61 and 98.
Chloroform	83	85.
1,2-Dichloroethane	98	62, 64, and 100.
1,1,1-Trichloroethane	97	99, 117, and 119.
Carbon tetrachloride	117	119 and 121.
Bromodichloromethane	83	127, 85, and 129.
1,2-Dichloropropane	63	112, 65, and 114.
trans-1,3-Dichloropropene	75	77.
Trichloroethene	130	95, 97, and 132.
Benzene	78	
Dibromochloromethane	127	129, 208, and 206.
1,1,2-Trichloroethane	97	83, 85, 99, 132, and 134.
cis-1,3-Dichloropropene	75	77.
2-Chloroethylvinyl ether	106	63 and 65.
Bromoform	173	171, 175, 250, 252, 254, and 256.
1,1,2,2-Tetrachloroethane	168	83, 85, 131, 133, and 166.
Tetrachloroethene	164	129, 131, and 166.
Toluene	92	91.
Chlorobenzene	112	114.
Ethyl benzene	106	91.
1,3-Dichlorobenzene	146	148 and 111.
1,2-Dichlorobenzene	146	148 and 111.
1,4-Dichlorobenzene	146	148 and 111.

TABLE 7—LCS (Q), DOC (S AND $\overline{X}$), AND MS/MSD (P AND RPD) ACCEPTANCE CRITERIA [1]

Analyte	Range for Q (%)	Limit for s (%)	Range for $\overline{X}$ (%)	Range for P (%)	Limit for RPD
Benzene	65–135	33	75–125	37–151	61
Benzene-d_6				70–130	
Bromodichloromethane	65–135	34	50–140	35–155	56
Bromoform	70–130	25	57–156	45–169	42
Bromomethane	15–185	90	D–206	D–242	61
2-Butanone-d_5				60–140	
Carbon tetrachloride	70–130	26	65–125	70–140	41
Chlorobenzene	65–135	29	82–137	37–160	53
Chloroethane	40–160	47	42–202	14–230	78
Chloroethane-d_5				60–140	
2-Chloroethylvinyl ether	D–225	130	D–252	D–305	71
Chloroform	70–135	32	68–121	51–138	54
Chloroform-^{13}C				70–130	
Chloromethane	D–205	472	D–230	D–273	60
Dibromochloromethane	70–135	30	69–133	53–149	50
1,2-Dichlorobenzene	65–135	31	59–174	18–190	57
1,2-Dichlorobenzene-d_4				70–130	
1,3-Dichlorobenzene	70–130	24	75–144	59–156	43
1,4-Dichlorobenzene	65–135	31	59–174	18–190	57
1,1-Dichloroethane	70–130	24	71–143	59–155	40
1,2-Dichloroethane	70–130	29	72–137	49–155	49
1,2-Dichloroethane-d_4				70–130	
1,1-Dichloroethene	50–150	40	19–212	D–234	32
1,1-Dichloroethene-d_2				70–130	
trans-1,2-Dichloroethene	70–130	27	68–143	54–156	45
1,2-Dichloropropane	35–165	69	19–181	D–210	55
1,2-Dichloropropane-d_6				60–140	
cis-1,3-Dichloropropene	25–175	79	5–195	D–227	58
trans-1,3-Dichloropropene	50–150	52	38–162	17–183	86
trans-1,3-Dichloropropene-d_4				70–130	
Ethyl benzene	60–140	34	75–134	37–162	63
2-Hexanone-d_5				60–140	
Methylene chloride	60–140	192	D–205	D–221	28
1,1,2,2-Tetrachloroethane	60–140	36	68–136	46–157	61
1,1,2,2-Tetrachloroethane-d_2				70–130	
Tetrachloroethene	70–130	23	65–133	64–148	39

TABLE 7—LCS (Q), DOC (S AND $\bar{X}$), AND MS/MSD (P AND RPD) ACCEPTANCE CRITERIA [1]—Continued

Analyte	Range for Q (%)	Limit for s (%)	Range for $\bar{X}$ (%)	Range for P (%)	Limit for RPD
Toluene	70–130	22	75–134	47–150	41
Toluene-d_8	.....	.....	.....	70–130	.....
1,1,1-Trichloroethane	70–130	21	69–151	52–162	36
1,1,2-Trichloroethane	70–130	27	75–136	52–150	45
Trichloroethene	65–135	29	75–138	70–157	48
Trichlorofluoromethane	50–150	50	45–158	17–181	84
Vinyl chloride	5–195	100	D–218	D–251	66
Vinyl chloride-d_3	.....	.....	.....	70–130	.....

[1] Criteria were calculated using an LCS concentration of 20 μg/L
Q = Percent recovery in calibration verification/LCS (Section 8.4)
s = Standard deviation of percent recovery for four recovery measurements (Section 8.2.4)
$\bar{X}$ = Average percent recovery for four recovery measurements (Section 8.2.4)
P = Percent recovery for the MS or MSD (Section 8.3.3)
D = Detected; result must be greater than zero
Notes:
1. Criteria for pollutants are based upon the method performance data in Reference 4. Where necessary, limits for recovery have been broadened to assure applicability to concentrations below those used to develop Table 7.
2. Criteria for surrogates are from EPA CLP SOM01.2D.

TABLE 8—RECOVERY AND PRECISION AS FUNCTIONS OF CONCENTRATION

Analyte	Recovery, X′ (μg/L)	Single analyst precision, s_r' (μg/L)	Overall precision, S′ (μg/L)
Benzene	0.93C+2.00	20.26 $\bar{X}$ − 1.74	0.25 $\bar{X}$ − 1.33
Bromodichloromethane	1.03C − 1.58	0.15 $\bar{X}$+0.59	0.20 $\bar{X}$+1.13
Bromoform	1.18C − 2.35	0.12 $\bar{X}$+0.36	0.17 $\bar{X}$+1.38
Bromomethane [a]	1.00C	0.43 $\bar{X}$	0.58 $\bar{X}$
Carbon tetrachloride	1.10C − 1.68	0.12 $\bar{X}$+0.25	0.11 $\bar{X}$+0.37
Chlorobenzene	0.98C+2.28	0.16 $\bar{X}$ − 0.09	0.26 $\bar{X}$ − 1.92
Chloroethane	1.18C+0.81	0.14 $\bar{X}$+2.78	0.29 $\bar{X}$+1.75
2-Chloroethylvinyl ether [a]	1.00C	0.62 $\bar{X}$	0.84 $\bar{X}$
Chloroform	0.93C+0.33	0.16 $\bar{X}$+0.22	0.18 $\bar{X}$+0.16
Chloromethane	1.03C+0.81	0.37 $\bar{X}$+2.14	0.58 $\bar{X}$+0.43
Dibromochloromethane	1.01C − 0.03	0.17 $\bar{X}$ − 0.18	0.17 $\bar{X}$+0.49
1,2-Dichlorobenzene [b]	0.94C+4.47	0.22 $\bar{X}$ − 1.45	0.30 $\bar{X}$ − 1.20
1,3-Dichlorobenzene	1.06C+1.68	0.14 $\bar{X}$ − 0.48	0.18 $\bar{X}$ − 0.82
1,4-Dichlorobenzene [b]	0.94C+4.47	0.22 $\bar{X}$ − 1.45	0.30 $\bar{X}$ − 1.20
1,1-Dichloroethane	1.05C+0.36	0.13 $\bar{X}$ − 0.05	0.16 $\bar{X}$+0.47
1,2-Dichloroethane	1.02C+0.45	0.17 $\bar{X}$ − 0.32	0.21 $\bar{X}$ − 0.38
1,1-Dichloroethene	1.12C+0.61	0.17 $\bar{X}$+1.06	0.43 $\bar{X}$ − 0.22
trans-1,2,-Dichloroethene	1.05C+0.03	0.14 $\bar{X}$+0.09	0.19 $\bar{X}$+0.17
1,2-Dichloropropane [a]	1.00C	0.33 $\bar{X}$	0.45 $\bar{X}$
cis-1,3-Dichloropropene [a]	1.00C	0.38 $\bar{X}$	0.52 $\bar{X}$
trans-1,3-Dichloropropene [a]	1.00C	0.25 $\bar{X}$	0.34 $\bar{X}$
Ethyl benzene	0.98C+2.48	0.14 $\bar{X}$+1.00	0.26 $\bar{X}$ − 1.72
Methylene chloride	0.87C+1.88	0.15 $\bar{X}$+1.07	0.32 $\bar{X}$+4.00
1,1,2,2-Tetrachloroethane	0.93C+1.76	0.16 $\bar{X}$+0.69	0.20 $\bar{X}$+0.41
Tetrachloroethene	1.06C+0.60	0.13 $\bar{X}$ − 0.18	0.16 $\bar{X}$ − 0.45
Toluene	0.98C+2.03	0.15 $\bar{X}$ − 0.71	0.22 $\bar{X}$ − 1.71
1,1,1-Trichloroethane	1.06C+0.73	0.12 $\bar{X}$ − 0.15	0.21 $\bar{X}$ − 0.39
1,1,2-Trichloroethane	0.95C+1.71	0.14 $\bar{X}$+0.02	0.18 $\bar{X}$+0.00
Trichloroethene	1.04C+2.27	0.13 $\bar{X}$+0.36	0.12 $\bar{X}$+0.59
Trichlorofluoromethane	0.99C+0.39	0.33 $\bar{X}$ − 1.48	0.34 $\bar{X}$ − 0.39
Vinyl chloride	1.00C	0.48 $\bar{X}$	0.65 $\bar{X}$

X′ = Expected recovery for one or more measurements of a sample containing a concentration of C, in μg/L.
S_r' = Expected single analyst standard deviation of measurements at an average concentration found of $\bar{X}$, in μg/L.
S′ = Expected interlaboratory standard deviation of measurements at an average concentration found of $\bar{X}$, in μg/L.
C = True value for the concentration, in μg/L.
X = Average recovery found for measurements of samples containing a concentration of C, in μg/L.
[a] Estimates based upon the performance in a single laboratory (References 4 and 16).
[b] Due to coelutions, performance statements for these isomers are based upon the sums of their concentrations.

19. Figures

BILLING CODE 6560–50–P

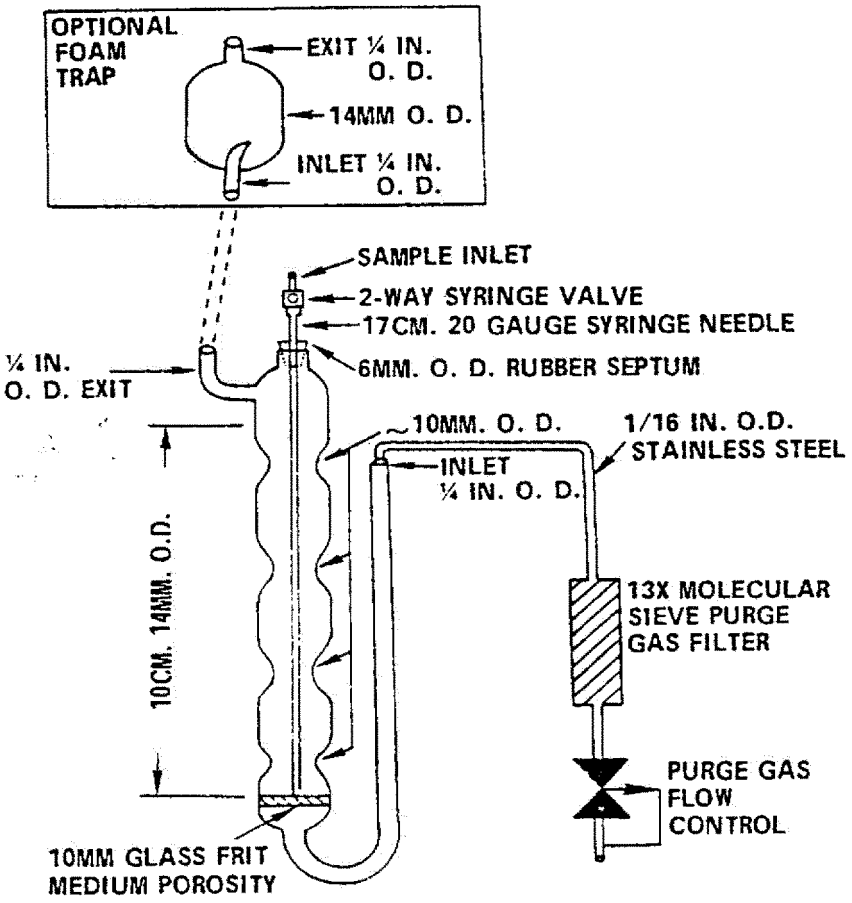

Figure 1. Purging device.

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20. Glossary

These definitions and purposes are specific to this method, but have been conformed to common usage to the extent possible.

20.1 Units of weight and measure and their abbreviations

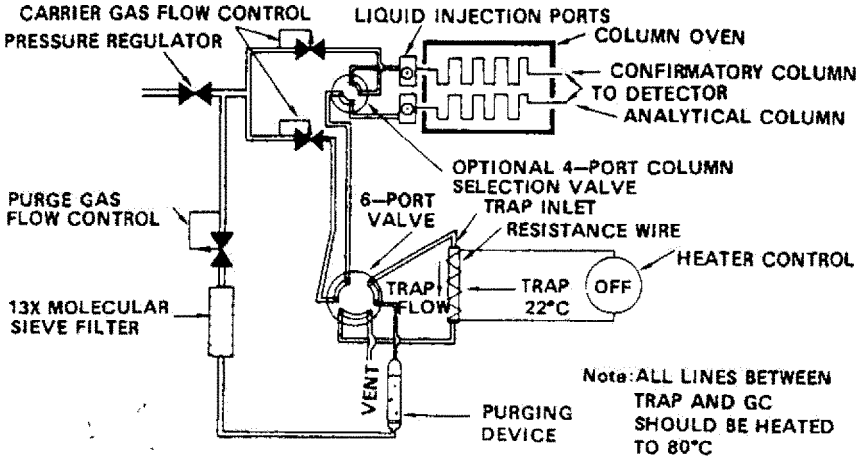

Figure 3. Purge and trap system - purge mode.

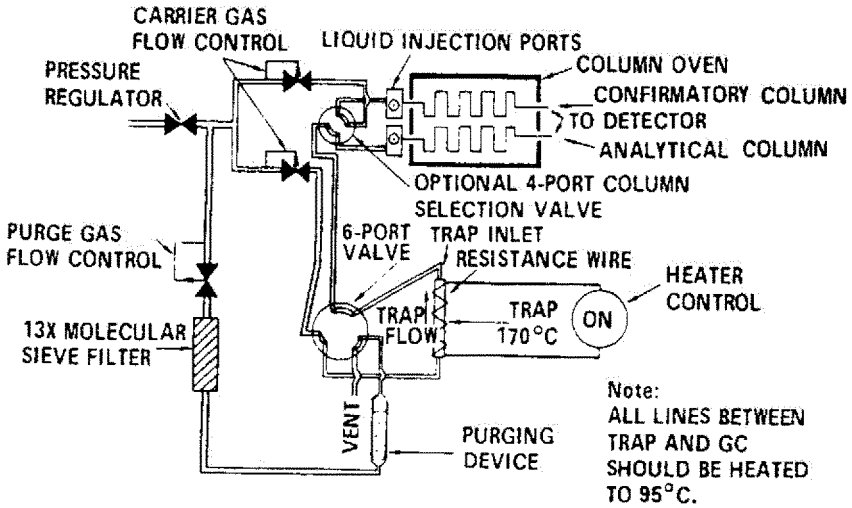

Figure 4. Purge and trap system - desorb mode.

20.1.1 Symbols

°C degrees Celsius
µg microgram
µL microliter
< less than
> greater than
% percent

20.1.2 Abbreviations (in alphabetical order)

cm centimeter
g gram
h hour
ID inside diameter
in. inch
L liter
M Molecular ion
m mass
mg milligram
min minute
mL milliliter
mm millimeter
ms millisecond
m/z mass-to-charge ratio
N normal; gram molecular weight of solute divided by hydrogen equivalent of solute, per liter of solution
ng nanogram
pg picogram
ppb part-per-billion
ppm part-per-million
ppt part-per-trillion
psig pounds-per-square inch gauge
v/v volume per unit volume
w/v weight per unit volume

20.2 Definitions and acronyms (in alphabetical order)

Analyte—A compound tested for by this method. The analytes are listed in Tables 1 and 2.

Analyte of interest—An analyte of interest is an analyte required to be

determined by a regulatory/control authority or in a permit, or by a client.

Analytical batch—The set of samples analyzed on a given instrument during a 12-hour period that begins and ends with analysis of a calibration verification/LCS. See Section 8.4.

Blank—An aliquot of reagent water that is treated exactly as a sample including exposure to all glassware, equipment, solvents, reagents, internal standards, and surrogates that are used with samples. The blank is used to determine if analytes or interferences are present in the laboratory environment, the reagents, or the apparatus. See Section 8.5.

Calibration—The process of determining the relationship between the output or response of a measuring instrument and the value of an input standard. Historically, EPA has referred to a multi-point calibration as the ''initial calibration,'' to differentiate it from a single-point calibration verification.

Calibration standard—A solution prepared from stock solutions and/or a secondary standards and containing the analytes of interest, surrogates, and internal standards. The calibration standard is used to calibrate the response of the GC/MS instrument against analyte concentration.

Calibration verification standard—The laboratory control sample (LCS) used to verify calibration. See Section 8.4.

Descriptor—In SIM, the beginning and ending retention times for the RT window, the m/z's sampled in the RT window, and the dwell time at each m/z.

Extracted ion current profile (EICP)—The line described by the signal at a given m/z.

Field duplicates—Two samples collected at the same time and place under identical conditions, and treated identically throughout field and laboratory procedures. Results of analyses of field duplicates provide an estimate of the precision associated with sample collection, preservation, and storage, as well as with laboratory procedures.

Field blank—An aliquot of reagent water or other reference matrix that is placed in a sample container in the field, and treated as a sample in all respects, including exposure to sampling site conditions, storage, preservation, and all analytical procedures. The purpose of the field blank is to determine if the field or sample transporting procedures and environments have contaminated the sample.

GC—Gas chromatograph or gas chromatography

Internal standard—A compound added to a sample in a known amount and used as a reference for quantitation of the analytes of interest and surrogates. Internal standards are listed in Table 5. Also see Internal standard quantitation.

Internal standard quantitation—A means of determining the concentration of an analyte of interest (Tables 1 and 2) by reference to a compound added to a sample and not expected to be found in the sample.

DOC—Initial demonstration of capability (DOC; Section 8.2); four aliquots of reagent water spiked with the analytes of interest and analyzed to establish the ability of the laboratory to generate acceptable precision and recovery. A DOC is performed prior to the first time this method is used and any time the method or instrumentation is modified.

Laboratory control sample (LCS; laboratory fortified blank (LFB); on-going precision and recovery sample; OPR)—An aliquot of reagent water spiked with known quantities of the analytes of interest and surrogates. The LCS is analyzed exactly like a sample. Its purpose is to assure that the results produced by the laboratory remain within the limits specified in this method for precision and recovery. In this method, the LCS is synonymous with a calibration verification sample (See Sections 7.4 and 8.4).

Laboratory fortified sample matrix—See Matrix spike.

Laboratory reagent blank—See Blank.

Matrix spike (MS) and matrix spike duplicate (MSD) (laboratory fortified sample matrix and duplicate)—Two aliquots of an environmental sample to which known quantities of the analytes of interest and surrogates are added in the laboratory. The MS/MSD are prepared and analyzed exactly like a field sample. Their purpose is to quantify any additional bias and imprecision caused by the sample matrix. The background concentrations of the analytes in the sample matrix must be determined in a separate aliquot and the measured values in the MS/MSD corrected for background concentrations.

May—This action, activity, or procedural step is neither required nor prohibited.

May not—This action, activity, or procedural step is prohibited.

Method blank (laboratory reagent blank)—See Blank.

Method detection limit (MDL)—A detection limit determined by the procedure at 40 CFR part 136, appendix B. The MDLs determined by EPA in the original version of the method are listed in Table 1. As noted in Sec. 1.4, use the MDLs in Table 1 in conjunction with current MDL data from the laboratory actually analyzing samples to assess the sensitivity of this procedure relative to project objectives and regulatory requirements (where applicable).

Minimum level (ML)—The term ''minimum level'' refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor of 3. For the purposes of NPDES compliance monitoring, EPA considers the following terms to be synonymous: ''quantitation limit,'' ''reporting limit,'' and ''minimum level.''

MS—Mass spectrometer or mass spectrometry.

Must—This action, activity, or procedural step is required.

m/z—The ratio of the mass of an ion (m) detected in the mass spectrometer to the charge (z) of that ion.

Quality control sample (QCS)—A sample containing analytes of interest at known concentrations. The QCS is obtained from a source external to the laboratory or is prepared from standards obtained from a different source than the calibration standards.

The purpose is to check laboratory performance using test materials that have been prepared independent of the normal preparation process.

Reagent water—Water demonstrated to be free from the analytes of interest and potentially interfering substances at the MDLs for the analytes in this method.

Regulatory compliance limit (or regulatory concentration limit)—A limit on the concentration or amount of a pollutant or contaminant specified in a nationwide standard, in a permit, or otherwise established by a regulatory/control authority.

Relative retention time (RRT)—The ratio of the retention time of an analyte to the retention time of its associated internal standard. RRT compensates for small changes in the GC temperature program that can affect the absolute retention times of the analyte and internal standard. RRT is a unitless quantity.

Relative standard deviation (RSD)—The standard deviation times 100

divided by the mean. Also termed ''coefficient of variation.''

RF—Response factor. See Section 7.3.3.

RSD—See relative standard deviation.

Safety Data Sheet (SDS)—Written information on a chemical's toxicity, health hazards, physical properties, fire, and reactivity, including storage, spill, and handling precautions that meet the requirements of OSHA, 29 CFR 1910.1200(g) and appendix D to § 1910.1200. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009.

Selected Ion Monitoring (SIM)—An MS technique in which a few m/z's are monitored. When used with gas chromatography, the m/z's monitored are usually changed periodically throughout the chromatographic run to correlate with the characteristic m/z's for the analytes, surrogates, and internal standards as they elute from the chromatographic column. The technique is often used to increase sensitivity and minimize interferences.

Signal-to-noise ratio (S/N)—The height of the signal as measured from the mean (average) of the noise to the peak maximum divided by the width of the noise.

SIM—See Selection Ion Monitoring.

Should—This action, activity, or procedural step is suggested but not required.

Stock solution—A solution containing an analyte that is prepared using a reference material traceable to EPA, the National Institute of Science and Technology (NIST), or a source that will attest to the purity and authenticity of the reference material.

Surrogate—A compound unlikely to be found in a sample, and which is spiked into sample in a known amount before purge-and-trap. The surrogate is quantitated with the same procedures used to quantitate the analytes of interest. The purpose of the surrogate is to monitor method performance with each sample.

* * * * *

Method 625.1—Base/Neutrals and Acids by GC/MS

1. Scope and Application

1.1 This method is for determination of semivolatile organic pollutants in industrial discharges and other environmental samples by gas chromatography combined with mass spectrometry (GC/MS), as provided under 40 CFR 136.1. This revision is based on a previous protocol (Reference 1), on the basic revision promulgated October 26, 1984 (49 FR 43234), and on an interlaboratory method validation study (Reference 2). Although this method was validated through an interlaboratory study conducted more than 29 years ago, the fundamental chemistry principles used in this method remain sound and continue to apply.

1.2 The analytes that may be qualitatively and quantitatively determined using this method and their CAS Registry numbers are listed in Tables 1 and 2. The method may be extended to determine the analytes listed in Table 3; however, extraction or gas chromatography of some of these analytes may make quantitative determination difficult. For examples, benzidine is subject to oxidative losses during solvent concentration. Under the alkaline conditions of the extraction, *alpha*-BHC, *gamma*-BHC, endosulfan I and II, and endrin are subject to decomposition. Hexachlorocyclopentadiene is subject to thermal decomposition in the inlet of the gas chromatograph, chemical reaction in acetone solution, and photochemical decomposition. N-nitrosodiphenylamine and other nitrosoamines may decompose in the gas chromatographic inlet. EPA has provided other methods (*e.g.,* Method 607—Nitrosamines) for determination of some of these analytes.

1.3 The large number of analytes in Tables 1–3 of this method makes testing difficult if all analytes are determined simultaneously. Therefore, it is necessary to determine and perform quality control (QC) tests for the ''analytes of interest'' only. Analytes of interest are those required to be determined by a regulatory/control authority or in a permit, or by a client. If a list of analytes is not specified, the analytes in Tables 1 and 2 must be determined, at a minimum, and QC testing must be performed for these analytes. The analytes in Tables 1 and 2, and some of the analytes in Table 3 have been identified as Toxic Pollutants (40 CFR 401.15), expanded to a list of Priority Pollutants (40 CFR part 423, appendix A).

1.4 In this revision to Method 625, the pesticides and polychlorinated biphenyls (PCBs) have been moved from Table 1 to Table 3 (Additional Analytes) to distinguish these analytes from the analytes required in quality control tests (Tables 1 and 2). QC acceptance criteria for pesticides and PCBs have been retained in Table 6 and may continue to be applied if desired, or if requested or required by a regulatory/control authority or in a permit. Method 608 should be used for determination of pesticides and PCBs. Method 1668C may be useful for determination of PCBs as individual chlorinated biphenyl congeners, and Method 1699 may be useful for determination of pesticides. At the time of writing of this revision, Methods 1668C and 1699 had not been approved for use at 40 CFR part 136. The screening procedure for 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (2,3,7,8–TCDD) contained in the version of Method 625 promulgated October 26, 1984 (49 FR 43234) has been replaced with procedures for selected ion monitoring (SIM), and 2,3,7,8–TCDD may be determined using the SIM procedures. However, EPA Method 613 or 1613B should be used for analyte-specific determination of 2,3,7,8–TCDD because of the focus of these methods on this compound. Methods 613 and 1613B are approved for use at 40 CFR part 136.

1.5 Method detection limits (MDLs; Reference 3) for the analytes in Tables 1, 2, and 3 are listed in those tables. These MDLs were determined in reagent water (Reference 4). Advances in analytical technology, particularly the use of capillary (open-tubular) columns, allowed laboratories to routinely achieve MDLs for the analytes in this method that are 2–10 times lower than those in the version promulgated in 1984 (40 FR 43234). The MDL for an analyte in a specific wastewater may differ from those listed, depending upon the nature of interferences in the sample matrix.

1.5.1 EPA has promulgated this method at 40 CFR part 136 for use in wastewater compliance monitoring under the National Pollutant Discharge Elimination System (NPDES). The data reporting practices described in Section 15.2 are focused on such monitoring needs and may not be relevant to other uses of the method.

1.5.2 This method includes ''reporting limits'' based on EPA's ''minimum level'' (ML) concept (see the glossary in Section 22). Tables 1, 2, and 3 contain MDL values and ML values for many of the analytes. The MDL for an analyte in a specific wastewater may differ from those listed in Tables 1, 2, and 3, depending upon the nature of interferences in the sample matrix.

1.6 This method is performance-based. It may be modified to improve performance (*e.g.,* to overcome interferences or improve the accuracy of results) provided all performance requirements are met.

1.6.1 Examples of allowed method modifications are described at 40 CFR 136.6. Other examples of allowed modifications specific to this method are described in Section 8.1.2.

1.6.2 Any modification beyond those expressly permitted at 40 CFR 136.6 or in Section 8.1.2 of this method shall be considered a major modification subject to application and approval of an alternate test procedure under 40 CFR 136.4 and 136.5.

1.6.3 For regulatory compliance, any modification must be demonstrated to produce results equivalent or superior to results produced by this method when applied to relevant wastewaters (Section 8.3).

1.7 This method is restricted to use by or under the supervision of analysts experienced in the use of a gas chromatograph/mass spectrometer and in the interpretation of mass spectra. Each laboratory that uses this method must demonstrate the ability to generate acceptable results using the procedure in Section 8.2.

1.8 Terms and units of measure used in this method are given in the glossary at the end of the method.

2. Summary of Method

2.1 A measured volume of sample, sufficient to meet an MDL or reporting limit, is serially extracted with methylene chloride at pH 11–13 and again at a pH less than 2 using a separatory funnel or continuous liquid/liquid extractor.

2.2 The extract is concentrated to a volume necessary to meet the required compliance or detection limit, and analyzed by GC/MS. Qualitative identification of an analyte in the extract is performed using the retention time and the relative abundance of two or more characteristic masses (m/z's). Quantitative analysis is performed using the internal standard technique with a single characteristic m/z.

3. Contamination and Interferences

3.1 Solvents, reagents, glassware, and other sample processing labware may yield artifacts, elevated baselines, or matrix interferences causing misinterpretation of chromatograms and mass spectra. All materials used in the analysis must be demonstrated to be free from contamination and interferences by analyzing blanks initially and with each extraction batch (samples started through the extraction process in a given 12-hour period, to a maximum of 20 samples—see Glossary for detailed definition), as described in Section 8.5. Specific selection of reagents and purification of solvents by distillation in all-glass systems may be required. Where possible, labware is cleaned by extraction or solvent rinse, or baking in a kiln or oven.

3.2 Glassware must be scrupulously cleaned (Reference 5). Clean all glassware as soon as possible after use by rinsing with the last solvent used in it. Solvent rinsing should be followed by detergent washing with hot water, and rinses with tap water and reagent water. The glassware should then be drained dry, and heated at 400 °C for 15–30 minutes. Some thermally stable materials, such as PCBs, may require higher temperatures and longer baking times for removal. Solvent rinses with pesticide quality acetone, hexane, or other solvents may be substituted for heating. Volumetric labware should not be heated above 90 °C. After drying and cooling, glassware should be sealed and stored in a clean environment to prevent any accumulation of dust or other contaminants. Store inverted or capped with solvent-rinsed or baked aluminum foil.

3.3 Matrix interferences may be caused by contaminants co-extracted from the sample. The extent of matrix interferences will vary considerably from source to source, depending upon the nature and diversity of the industrial complex or municipality being sampled. Interferences extracted from samples high in total organic carbon (TOC) may result in elevated baselines, or by enhancing or suppressing a signal at or near the retention time of an analyte of interest. Analyses of the matrix spike and duplicate (Section 8.3) may be useful in identifying matrix interferences, and gel permeation chromatography (GPC; Section 11.1) and sulfur removal (Section 11.2) may aid in eliminating these interferences. EPA has provided guidance that may aid in overcoming matrix interferences (Reference 6).

3.4 In samples that contain an inordinate number of interferences, the use of chemical ionization (CI) mass spectrometry may make identification easier. Tables 4 and 5 give characteristic CI m/z's for many of the analytes covered by this method. The use of CI mass spectrometry to support electron ionization (EI) mass spectrometry is encouraged, but not required.

4. Safety

4.1 Hazards associated with each reagent used in this method have not been precisely defined; however, each chemical compound should be treated as a potential health hazard. From this viewpoint, exposure to these chemicals must be reduced to the lowest possible level by whatever means available. The laboratory is responsible for maintaining a current awareness file of OSHA regulations regarding the safe handling of the chemicals specified in this method. A reference file of safety data sheets (SDSs, OSHA, 29 CFR 1910.1200(g)) should also be made available to all personnel involved in sample handling and chemical analysis. Additional references to laboratory safety are available and have been identified (References 7–9) for the information of the analyst.

4.2 The following analytes covered by this method have been tentatively classified as known or suspected human or mammalian carcinogens: benzo(a)anthracene, benzidine, 3,3'-dichlorobenzidine, benzo(a)pyrene, *alpha*-BHC, *beta*-BHC, *delta*-BHC, *gamma*-BHC, Dibenz(a,h)-anthracene, N-nitrosodimethylamine, 4,4'-DDT, and PCBs. Other compounds in Table 3 may also be toxic. Primary standards of toxic compounds should be prepared in a chemical fume hood, and a NIOSH/MESA approved toxic gas respirator should be worn when handling high concentrations of these compounds.

4.3 This method allows the use of hydrogen as a carrier gas in place of helium (Section 5.6.1.2). The laboratory should take the necessary precautions in dealing with hydrogen, and should limit hydrogen flow at the source to prevent buildup of an explosive mixture of hydrogen in air.

5. Apparatus and Materials

Note: Brand names, suppliers, and part numbers are for illustration purposes only. No endorsement is implied. Equivalent performance may be achieved using equipment and materials other than those specified here. Demonstrating that the equipment and supplies used in the laboratory achieves the required performance is the responsibility of the laboratory. Suppliers for equipment and materials in this method may be found through an on-line search. Please do not contact EPA for supplier information.

5.1 Sampling equipment, for discrete or composite sampling.

5.1.1 Grab sample bottle—amber glass bottle large enough to contain the necessary sample volume, fitted with a fluoropolymer-lined screw cap. Foil may be substituted for fluoropolymer if the sample is not corrosive. If amber bottles are not available, protect samples from light. Unless pre-cleaned, the bottle and cap liner must be washed, rinsed with acetone or methylene chloride, and dried before use to minimize contamination.

5.1.2 Automatic sampler (optional)—the sampler must incorporate a pre-cleaned glass sample container. Samples must be kept refrigerated at <6 °C and protected from light during compositing. If the sampler uses a peristaltic pump, a minimum length of compressible silicone rubber tubing may be used. Before use,

however, the compressible tubing should be thoroughly rinsed with methanol, followed by repeated rinsings with reagent water to minimize the potential for contamination of the sample. An integrating flow meter is required to collect flow-proportioned composites.

5.2 Glassware.

5.2.1 Separatory funnel—Size appropriate to hold sample volume and extraction solvent volume, and equipped with fluoropolymer stopcock.

5.2.2 Drying column—Chromatographic column, approximately 400 mm long by 19 mm ID, with coarse frit, or equivalent, sufficient to hold 15 g of anhydrous sodium sulfate.

5.2.3 Concentrator tube, Kuderna-Danish—10 mL, graduated (Kontes 570050–1025 or equivalent). Calibration must be checked at the volumes employed in the test. A ground glass stopper is used to prevent evaporation of extracts.

5.2.4 Evaporative flask, Kuderna-Danish—500 mL (Kontes 57001–0500 or equivalent). Attach to concentrator tube with springs.

Note: Use of a solvent recovery system with the K–D or other solvent evaporation apparatus is strongly recommended.

5.2.5 Snyder column, Kuderna-Danish—Three ball macro (Kontes 503000–0121 or equivalent).

5.2.6 Snyder column, Kuderna-Danish—Two-ball micro (Kontes 569001–0219 or equivalent).

5.2.7 Vials—10–15 mL, amber glass, with Teflon-lined screw cap.

5.2.8 Continuous liquid-liquid extractor—Equipped with fluoropolymer or glass connecting joints and stopcocks requiring no lubrication. (Hershberg-Wolf Extractor, Ace Glass Company, Vineland, N.J., P/N 6848–20, or equivalent.)

5.2.9 In addition to the glassware listed above, the laboratory should be equipped with all necessary pipets, volumetric flasks, beakers, and other glassware listed in this method and necessary to perform analyses successfully.

5.3 Boiling chips—Approximately 10/40 mesh, glass, silicon carbide, or equivalent. Heat to 400 °C for 30 minutes, or solvent rinse or Soxhlet extract with methylene chloride.

5.4 Water bath—Heated, with concentric ring cover, capable of temperature control (±2 °C). The bath should be used in a hood.

5.5 Balances.

5.5.1 Analytical, capable of accurately weighing 0.1 mg.

5.5.2 Top loading, capable of accurately weighing 10 mg.

5.6 GC/MS system.

5.6.1 Gas chromatograph (GC)—An analytical system complete with a temperature programmable gas chromatograph and all required accessories, including syringes and analytical columns.

5.6.1.1 Injection port—Can be split, splitless, temperature programmable split/splitless (PTV), solvent-purge, large-volume, on-column, backflushed, or other. An autosampler is highly recommended because it injects volumes more precisely than volumes injected manually.

5.6.1.2 Carrier gas—Helium or hydrogen. Data in the tables in this method were obtained using helium carrier gas. If hydrogen is used, analytical conditions may need to be adjusted for optimum performance, and calibration and all QC tests must be performed with hydrogen carrier gas. See Section 4.3 for precautions regarding the use of hydrogen as a carrier gas.

5.6.2 GC column—See the footnotes to Tables 4 and 5. Other columns or column systems may be used provided all requirements in this method are met.

5.6.3 Mass spectrometer—Capable of repetitively scanning from 35–450 Daltons (amu) every two seconds or less, utilizing a 70 eV (nominal) electron energy in the electron impact ionization mode, and producing a mass spectrum which meets all the criteria in Table 9A or 9B when 50 ng or less of decafluorotriphenyl phosphine (DFTPP; CAS 5074–71–5; bis(pentafluorophenyl) phenyl phosphine) is injected into the GC.

5.6.4 GC/MS interface—Any GC to MS interface that meets all performance requirements in this method may be used.

5.6.5 Data system—A computer system must be interfaced to the mass spectrometer that allows the continuous acquisition and storage of mass spectra acquired throughout the chromatographic program. The computer must have software that allows searching any GC/MS data file for specific m/z's (masses) and plotting m/z abundances versus time or scan number. This type of plot is defined as an extracted ion current profile (EICP). Software must also be available that allows integrating the abundance at any EICP between specified time or scan number limits.

5.7 Automated gel permeation chromatograph (GPC).

5.7.1 GPC column—150—700 mm long x 21–25 mm ID, packed with 70 g of SX–3 Biobeads; Bio-Rad Labs, or equivalent

5.7.2 Pump, injection valve, UV detector, and other apparatus necessary to meet the requirements in this method.

5.8 Nitrogen evaporation device—Equipped with a water bath than can be maintained at 30–45 °C; N-Evap, Organomation Associates, or equivalent.

6. Reagents

6.1 Reagent water—Reagent water is defined as water in which the analytes of interest and interfering compounds are not detected at the MDLs of the analytes of interest.

6.2 Sodium hydroxide solution (10 N)—Dissolve 40 g of NaOH (ACS) in reagent water and dilute to 100 mL.

6.3 Sodium thiosulfate—(ACS) granular.

6.4 Sulfuric acid (1+1)—Slowly add 50 mL of H_2SO_4 (ACS, sp. gr. 1.84) to 50 mL of reagent water.

6.5 Acetone, methanol, methylene chloride, 2-propanol—High purity pesticide quality, or equivalent, demonstrated to be free of the analytes of interest and interferences (Section 3). Purification of solvents by distillation in all-glass systems may be required.

6.6 Sodium sulfate—(ACS) granular, anhydrous, rinsed or Soxhlet extracted with methylene chloride (20 mL/g), baked at in a shallow tray at 450 °C for one hour minimum, cooled in a desiccator, and stored in a pre-cleaned glass bottle with screw cap that prevents moisture from entering.

6.7 Stock standard solutions (1.00 µg/µL)—Stock standard solutions may be prepared from pure materials, or purchased as certified solutions. Traceability must be to the National Institute of Standards and Technology (NIST) or other national standard, when available. Stock solution concentrations alternate to those below may be used. Because of the toxicity of some of the compounds, primary dilutions should be prepared in a hood, and a NIOSH/MESA approved toxic gas respirator should be worn when high concentrations of neat materials are handled. The following procedure may be used to prepare standards from neat materials.

6.7.1 Prepare stock standard solutions by accurately weighing about 0.0100 g of pure material. Dissolve the material in pesticide quality methanol or other suitable solvent and dilute to volume in a 10 mL volumetric flask. Larger volumes may be used at the convenience of the laboratory. When compound purity is assayed to be 96% or greater, the weight may be used without correction to calculate the concentration of the stock standard. Commercially prepared stock standards

may be used at any concentration if they are certified by the manufacturer or by an independent source.

6.7.2 Transfer the stock standard solutions to fluoropolymer-sealed screw-cap bottles. Store at <6 °C and protect from light. Stock standard solutions should be checked frequently for signs of degradation or evaporation, especially just prior to preparing calibration standards from them.

6.7.3 Replace purchased certified stock standard solutions per the expiration date. Replace stock standard solutions prepared by the laboratory or mixed with purchased solutions after one year, or sooner if comparison with QC check samples indicates a problem.

6.8 Surrogate standard spiking solution

6.8.1 Select a minimum of three surrogate compounds from Table 8 that most closely match the recovery of the analytes of interest. For example, if all analytes tested are considered acids, use surrogates that have similar chemical attributes. Other compounds may be used as surrogates so long as they do not interfere in the analysis. The deuterium and carbon-13 labeled compounds in Method 1625B are particularly useful because Method 1625B contains QC acceptance criteria for recovery of these compounds. If only one or two analytes are determined, one or two surrogates may be used.

6.8.2 Prepare a solution containing each selected surrogate such that the concentration in the sample would match the concentration in the mid-point calibration standard. For example, if the midpoint of the calibration is 100 µg/L, prepare the spiking solution at a concentration of 100 µg/mL in methanol. Addition of 1.00 mL of this solution to 1000 mL of sample will produce a concentration of 100 µg/L of the surrogate. Alternate volumes and concentrations appropriate to the response of the GC/MS instrument or for selective ion monitoring (SIM) may be used, if desired.

6.8.3 Store the spiking solution at ≤ 6°C in a fluoropolymer-sealed glass container. The solution should be checked frequently for stability. The solution must be replaced after one year, or sooner if comparison with quality control check standards indicates a problem.

6.9 Internal standard spiking solution

6.9.1 Select three or more internal standards similar in chromatographic behavior to the analytes of interest. Internal standards are listed in Table 8. Suggested internal standards are: 1,4-dichlorobenzene-d_4; naphthalene-d_8; acenaphthene-d_{10}; phenanthrene-d_{10}; chrysene-d_{12}; and perylene-d_{12}. The laboratory must demonstrate that measurement of the internal standards is not affected by method or matrix interferences (see also Section 7.3.4).

6.9.2 Prepare the internal standards at a concentration of 10 mg/mL in methylene chloride or other suitable solvent. When 10 µL of this solution is spiked into a 1-mL extract, the concentration of the internal standards will be 100 µg/mL. A lower concentration appropriate to the response of the GC/MS instrument or for SIM may be used, if desired.

6.9.3 To assure accurate analyte identification, particularly when SIM is used, it may be advantageous to include more internal standards than those suggested in Section 6.9.1. An analyte will be located most accurately if its retention time relative to an internal standard is in the range of 0.8 to 1.2.

6.10 DFTPP standard—Prepare a solution of DFTPP in methanol or other suitable solvent such that 50 ng or less will be injected (see Section 13.2). An alternate concentration may be used to compensate for specific injection volumes or to assure that the operating range of the instrument is not exceeded, so long as the total injected is 50 ng or less. Include benzidine and pentachlorophenol in this solution such that ≤100 ng of benzidine and ≤50 ng of pentachlorophenol will be injected.

6.11 Quality control check sample concentrate—See Section 8.2.1.

6.12 GPC calibration solution

6.12.1 Prepare a methylene chloride solution to contain corn oil, bis(2-ethylhexyl) phthalate (BEHP), perylene, and sulfur at the concentrations in Section 6.12.2, or at concentrations appropriate to the response of the detector.

Note: Sulfur does not readily dissolve in methylene chloride, but is soluble in warm corn oil. The following procedure is suggested for preparation of the solution:

6.12.2 Weigh 8 mg sulfur and 2.5 g corn oil into a 100-mL volumetric flask and warm to dissolve the sulfur. Separately weigh 100 mg BEHP and 2 mg perylene and add to flask. Bring to volume with methylene chloride and mix thoroughly.

6.12.3 Store the solution in an amber glass bottle with a fluoropolymer-lined screw cap at 0–6 °C. Protect from light. Refrigeration may cause the corn oil to precipitate. Before use, allow the solution to stand at room temperature until the corn oil dissolves, or warm slightly to aid in dissolution. Replace the solution every year, or more frequently if the response of a component changes.

6.13 Sulfur removal—Copper foil or powder (bright, non-oxidized), or tetrabutylammonium sulfite (TBA sulfite).

6.13.1 Copper foil, or powder—Fisher, Alfa Aesar 42455–18, 625 mesh, or equivalent. Cut copper foil into approximately 1-cm squares. Copper must be activated on each day it will be used, as follows:

6.13.1.1 Place the quantity of copper needed for sulfur removal (Section 11.2.1.3) in a ground-glass-stoppered Erlenmeyer flask or bottle. Cover the foil or powder with methanol.

6.13.1.2 Add HCl dropwise (0.5–1.0 mL) while swirling, until the copper brightens.

6.13.1.3 Pour off the methanol/HCl and rinse 3 times with reagent water to remove all traces of acid, then 3 times with acetone, then 3 times with hexane.

6.13.1.4 For copper foil, cover with hexane after the final rinse. Store in a stoppered flask under nitrogen until used. For the powder, dry on a rotary evaporator or under a stream of nitrogen. Store in a stoppered flask under nitrogen until used.

6.13.2 Tetrabutylammonium sodium sulfite (TBA sodium sulfite).

6.13.2.1 Tetrabutylammonium hydrogen sulfate, $[CH_3(CH_2)_3]_4NHSO_4$.

6.13.2.2 Sodium sulfite, Na_2SO_3.

6.13.2.3 Dissolve approximately 3 g tetrabutylammonium hydrogen sulfate in 100 mL of reagent water in an amber bottle with fluoropolymer-lined screw cap. Extract with three 20-mL portions of hexane and discard the hexane extracts.

6.13.2.4 Add 25 g sodium sulfite to produce a saturated solution. Store at room temperature. Replace after 1 month.

7. Calibration

7.1 Establish operating conditions equivalent to those in the footnote to Table 4 or 5 for the base/neutral or acid fraction, respectively. If a combined base/neutral/acid fraction will be analyzed, use the conditions in the footnote to Table 4. Alternative temperature program and flow rate conditions may be used. It is necessary to calibrate the GC/MS for the analytes of interest (Section 1.3) only.

7.2 Internal standard calibration

7.2.1 Prepare calibration standards for the analytes of interest and surrogates at a minimum of five concentration levels by adding appropriate volumes of one or more stock standards to volumetric flasks. One of the calibration standards should be at a concentration near the ML for the analyte in Table 1, 2, or 3. The ML value may be rounded to a whole number that

is more convenient for preparing the standard, but must not exceed the ML values listed in Table 1, 2, or 3 for those analytes which list ML values. Alternatively, the laboratory may establish the ML for each analyte based on the concentration of the lowest calibration standard in a series of standards obtained from a commercial vendor, again, provided that the ML values do not exceed the MLs in Tables 1, 2, or 3, and provided that the resulting calibration meets the acceptance criteria in Section 7.2.3, based on the RSD, RSE, or R^2.

The other concentrations should correspond to the expected range of concentrations found in real samples or should define the working range of the GC/MS system for full-scan and/or SIM operation, as appropriate. A minimum of six concentration levels is required for a second order, non-linear (*e.g.,* quadratic; $ax^2 + bx + c$) calibration. Calibrations higher than second order are not allowed. To each calibration standard or standard mixture, add a known constant volume of the internal standard solution (Section 6.9), and dilute to volume with methylene chloride.

Note: The large number of analytes in Tables 1 through 3 may not be soluble or stable in a single solution; multiple solutions may be required if a large number of analytes are to be determined simultaneously.

7.2.1.1 Prior to analysis of the calibration standards, inject the DFTPP standard (Section 6.10) and adjust the scan rate of the mass spectrometer to produce a minimum of 5 mass spectra across the DFTPP GC peak. Adjust instrument conditions until the DFTPP criteria in Table 9A or 9B are met. Calculate peak tailing factors for benzidine and pentachlorophenol. Calculation of the tailing factor is illustrated in Figure 1. The tailing factor for benzidine and pentachlorophenol must be <2; otherwise, adjust instrument conditions and either replace the column or break off a short section of the front end of the column, and repeat the test.

Note: The DFTPP spectrum may be evaluated by summing the intensities of the m/z's across the GC peak, subtracting the background at each m/z in a region of the chromatogram within 20 scans of but not including any part of, the DFTPP peak. The DFTPP spectrum may also be evaluated by fitting a Gaussian to each m/z and using the intensity at the maximum for each Gaussian or by integrating the area at each m/z and using the integrated areas. Other means may be used for evaluation of the DFTPP spectrum so long as the spectrum is not distorted to meet the criteria in Table 9A or 9B.

7.2.1.2 Analyze the mid-point combined base/neutral and acid calibration standard and enter or review the retention time, relative retention time, mass spectrum, and quantitation m/z in the data system for each analyte of interest, surrogate, and internal standard. If additional analytes (Table 3) are to be quantified, include these analytes in the standard. The mass spectrum for each analyte must be comprised of a minimum of 2 m/z's (Tables 4 and 5); 3 to 5 m/z's assure more reliable analyte identification. Suggested quantitation m/z's are shown in Tables 4 and 5 as the primary m/z. If an interference occurs at the primary m/z, use one of the secondary m/z's or an alternate m/z. A single m/z only is required for quantitation.

7.2.1.3 For SIM operation, determine the analytes in each descriptor, the quantitation and qualifier m/z's for each analyte (the m/z's can be the same as for full-scan operation; Section 7.2.1.2), the dwell time on each m/z for each analyte, and the beginning and ending retention time for each descriptor. Analyze the verification standard in scan mode to verify m/z's and establish the retention times for the analytes. There must be a minimum of two m/z's for each analyte to assure analyte identification. To maintain sensitivity and capture enough scans (≥5) across each chromatographic peak, there should be no more than 10 m/z's in a descriptor. For example, for a descriptor with 10 m/z's and a chromatographic peak width of 5 sec, a dwell time of 100 ms at each m/z would result in a scan time of 1 second and provide 5 scans across the GC peak. The quantitation m/z will usually be the most intense peak in the mass spectrum. The quantitation m/z and dwell time may be optimized for each analyte. However, if a GC peak spans two (or more) descriptors, the dwell time and cycle time (scans/sec) should be set to the same value in both segments in order to maintain equivalent response. The acquisition table used for SIM must take into account the mass defect (usually less than 0.2 Daltons) that can occur at each m/z being monitored.

7.2.1.4 For combined scan and SIM operation, set up the scan segments and descriptors to meet requirements in Sections 7.2.1.1–7.2.1.3.

7.2.2 Analyze each calibration standard according to Section 12 and tabulate the area at the quantitation m/z against concentration for each analyte of interest, surrogate, and internal standard. If an interference is encountered, use a secondary m/z (Table 4 or 5) for quantitation. Calculate a response factor (RF) for each analyte of interest at each concentration using Equation 1.

$$RF = \frac{(A_s x C_{is})}{(A_{is} x C_s)}$$

Equation 1

Where:

A_s = Area of the characteristic m/z for the analyte of interest or surrogate.

A_{is} = Area of the characteristic m/z for the internal standard.

C_{is} = Concentration of the internal standard (µg/mL).

C_s = Concentration of the analyte of interest or surrogate (µg/mL).

7.2.3 Calculate the mean (average) and relative standard deviation (RSD) of the responses factors. If the RSD is less than 35%, the RF can be assumed to be invariant and the average RF can be used for calculations. Alternatively, the results can be used to fit a linear or quadratic regression of response ratios, As/Ais, vs. concentration ratios Cs/Cis. If used, the regression must be weighted inversely proportional to concentration. The coefficient of determination (R^2; Reference 10) of the weighted regression must be greater than 0.920. Alternatively, the relative standard error (Reference 11) may be used as an acceptance criterion. As with the RSD, the RSE must be less than 35%. If an RSE less than 35% cannot be achieved for a quadratic regression, system performance is unacceptable and the system must be adjusted and re-calibrated.

Note: Using capillary columns and current instrumentation, it is quite likely that a laboratory can calibrate the target analytes in this method and achieve a linearity metric (either RSD or RSE) well below 35%. Therefore, laboratories are permitted to use more stringent acceptance criteria for calibration than described here, for example, to harmonize their application of this method with those from other sources.

7.3 Calibration verification—The RF or calibration curve must be verified immediately after calibration and at the beginning of each 12-hour shift, by analysis of a mid-point calibration standard (Section 7.2.1). The standard(s)

must be obtained from a second manufacturer or a manufacturer's batch prepared independently from the batch used for calibration. Traceability must be to a national standard, when available. The concentration of the standard should be near the mid-point of the calibration. Include the surrogates (Section 6.8) in this solution. It is necessary to verify calibration for the analytes of interest (Section 1.3) only.

Note: The 12-hour shift begins after the DFTPP (Section 13.1) and DDT/endrin tests (if DDT and endrin are to be determined), and after analysis of the calibration verification standard. The 12-hour shift ends 12 hours later. The DFTPP and DDT/endrin tests are outside of the 12-hour shift.

7.3.1 Analyze the calibration verification standard(s) beginning in Section 12. Calculate the percent recovery of each analyte. Compare the recoveries for the analytes of interest against the acceptance criteria for recovery (Q) in Table 6, and the recoveries for the surrogates against the acceptance criteria in Table 8. If recovery of the analytes of interest and surrogates meet acceptance criteria, system performance is acceptable and analysis of samples may continue. If any individual recovery is outside its limit, system performance is unacceptable for that analyte.

Note: The large number of analytes in Tables 6 and 8 present a substantial probability that one or more will fail acceptance criteria when all analytes are tested simultaneously.

7.3.2 When one or more analytes fail acceptance criteria, analyze a second aliquot of the calibration verification standard and compare only those analytes that failed the first test (Section 7.3.1) with their respective acceptance criteria. If these analytes now pass, system performance is acceptable and analysis of samples may continue. A repeat failure of any analyte that failed the first test, however, will confirm a general problem with the measurement system. If this occurs, repair the system (Section 7.2.1.1) and repeat the test (Section 7.3.1), or prepare a fresh calibration standard and repeat the test. If calibration cannot be verified after maintenance or injection of the fresh calibration standard, re-calibrate the instrument.

Note: If it is necessary to perform a repeat verification test frequently; *i.e.,* perform two tests in order to pass, it may be prudent to perform two injections in succession and review the results, rather than perform one injection, review the results, then perform the second injection if results from the first injection fail. To maintain the validity of the test and re-test, system maintenance and/or adjustment is not permitted between the injections.

7.3.3 Many of the analytes in Table 3 do not have QC acceptance criteria in Table 6, and some of the surrogates in Table 8 do not have acceptance criteria. If calibration is to be verified and other QC tests are to be performed for these analytes, acceptance criteria must be developed and applied. EPA has provided guidance for development of QC acceptance criteria (References 12 and 13).

7.3.4 Internal standard responses—Verify that detector sensitivity has not changed by comparing the response of each internal standard in the calibration verification standard (Section 7.3) to the response of the respective internal standard in the midpoint calibration standard (Section 7.2.1). The peak areas or heights of the internal standards in the calibration verification standard must be within 50% to 200% (½ to 2x) of their respective peak areas or heights in the mid-point calibration standard. If not, repeat the calibration verification test using a fresh calibration verification standard (7.3), or perform and document system repair. Subsequent to repair, repeat the calibration verification test (Section 7.3.1). If the responses are still not within 50% to 200%, re-calibrate the instrument (Section 7.2.2) and repeat the calibration verification test.

8. Quality Control

8.1 Each laboratory that uses this method is required to operate a formal quality assurance program. The minimum requirements of this program consist of an initial demonstration of laboratory capability and ongoing analysis of spiked samples and blanks to evaluate and document data quality (40 CFR 136.7). The laboratory must maintain records to document the quality of data generated. Results of ongoing performance tests are compared with established QC acceptance criteria to determine if the results of analyses meet performance requirements of this method. When results of spiked samples do not meet the QC acceptance criteria in this method, a quality control check sample (laboratory control sample; LCS) must be analyzed to confirm that the measurements were performed in an in-control mode of operation. A laboratory may develop its own performance criteria (as QC acceptance criteria), provided such criteria are as or more restrictive than the criteria in this method.

8.1.1 The laboratory must make an initial demonstration of capability (DOC) to generate acceptable precision and recovery with this method. This demonstration is detailed in Section 8.2.

8.1.2 In recognition of advances that are occurring in analytical technology, and to overcome matrix interferences, the laboratory is permitted certain options (Section 1.6 and 40 CFR 136.6(b)) to improve separations or lower the costs of measurements. These options may include alternate extraction, concentration, and cleanup procedures (*e.g.,* solid-phase extraction; rotary-evaporator concentration; column chromatography cleanup), changes in column and type of mass spectrometer (40 CFR 136.6(b)(4)(xvi)). Alternate determinative techniques, such as substitution of spectroscopic or immunoassay techniques, and changes that degrade method performance, are not allowed. If an analytical technique other than GC/MS is used, that technique must have a specificity equal to or greater than the specificity of GC/MS for the analytes of interest. The laboratory is also encouraged to participate in inter-comparison and performance evaluation studies (see Section 8.10).

8.1.2.1 Each time a modification is made to this method, the laboratory is required to repeat the procedure in Section 8.2. If the detection limit of the method will be affected by the change, the laboratory must demonstrate that the MDLs (40 CFR part 136, appendix B) are lower than one-third the regulatory compliance limit or the MDLs in this method, whichever are greater. If calibration will be affected by the change, the instrument must be recalibrated per Section 7. Once the modification is demonstrated to produce results equivalent or superior to results produced by this method, that modification may be used routinely thereafter, so long as the other requirements in this method are met (*e.g.,* matrix spike/matrix spike duplicate recovery and relative percent difference).

8.1.2.1.1 If SPE, or another allowed method modification, is to be applied to a specific discharge, the laboratory must prepare and analyze matrix spike/matrix spike duplicate (MS/MSD) samples (Section 8.3) and LCS samples (Section 8.4). The laboratory must include surrogates (Section 8.7) in each of the samples. The MS/MSD and LCS samples must be fortified with the analytes of interest (Section 1.3). If the modification is for nationwide use, MS/MSD samples must be prepared from a minimum of nine different discharges (See Section 8.1.2.1.2), and all QC acceptance criteria in this method must be met. This evaluation only needs to be performed once other than for the routine QC required by this method (for example it could be performed by the

vendor of the SPE materials) but any laboratory using that specific SPE material must have the results of the study available. This includes a full data package with the raw data that will allow an independent reviewer to verify each determination and calculation performed by the laboratory (see Section 8.1.2.2.5, items a–q).

8.1.2.1.2 Sample matrices on which MS/MSD tests must be performed for nationwide use of an allowed modification:

(a) Effluent from a POTW.

(b) ASTM D5905 Standard Specification for Substitute Wastewater.

(c) Sewage sludge, if sewage sludge will be in the permit.

(d) ASTM D1141 Standard Specification for Substitute Ocean Water, if ocean water will be in the permit.

(e) Untreated and treated wastewaters up to a total of nine matrix types (see *http://water.epa.gov/scitech/wastetech/guide/industry.cfm*) for a list of industrial categories with existing effluent guidelines).

At least one of the above wastewater matrix types must have at least one of the following characteristics:

(i) Total suspended solids greater than 40 mg/L.

(ii) Total dissolved solids greater than 100 mg/L.

(iii) Oil and grease greater than 20 mg/L.

(iv) NaCl greater than 120 mg/L.

(v) $CaCO_3$ greater than 140 mg/L.

The interim acceptance criteria for MS, MSD recoveries that do not have recovery limits specified in Table 6, and recoveries for surrogates that do not have recovery limits specified in Table 8, must be no wider than 60–140%, and the relative percent difference (RPD) of the concentrations in the MS and MSD that do not have RPD limits specified in Table 6 must be less than 30%. Alternatively, the laboratory may use the laboratory's in-house limits if they are tighter.

(f) A proficiency testing (PT) sample from a recognized provider, in addition to tests of the nine matrices (Section 8.1.2.1.1).

8.1.2.2 The laboratory is required to maintain records of modifications made to this method. These records include the following, at a minimum:

8.1.2.2.1 The names, titles, street addresses, telephone numbers, and email addresses of the analyst(s) that performed the analyses and modification, and of the quality control officer that witnessed and will verify the analyses and modifications.

8.1.2.2.2 A list of analytes, by name and CAS Registry Number.

8.1.2.2.3 A narrative stating reason(s) for the modifications.

8.1.2.2.4 Results from all quality control (QC) tests comparing the modified method to this method, including:

(a) Calibration (Section 7).

(b) Calibration verification (Section 7).

(c) Initial demonstration of capability (Section 8.2).

(d) Analysis of blanks (Section 8.5).

(e) Matrix spike/matrix spike duplicate analysis (Section 8.3).

(f) Laboratory control sample analysis (Section 8.4).

8.1.2.2.5 Data that will allow an independent reviewer to validate each determination by tracing the instrument output (peak height, area, or other signal) to the final result. These data are to include:

(a) Sample numbers and other identifiers.

(b) Extraction dates.

(c) Analysis dates and times.

(d) Analysis sequence/run chronology.

(e) Sample weight or volume (Section 10).

(f) Extract volume prior to each cleanup step (Sections 10 and 11).

(g) Extract volume after each cleanup step (Section 11).

(h) Final extract volume prior to injection (Sections 10 and 12).

(i) Injection volume (Section 12.2.3).

(j) Sample or extract dilution (Section 12.2.3.2).

(k) Instrument and operating conditions.

(l) Column (dimensions, material, etc).

(m) Operating conditions (temperature program, flow rate, etc).

(n) Detector (type, operating conditions, etc).

(o) Chromatograms, mass spectra, and other recordings of raw data.

(p) Quantitation reports, data system outputs, and other data to link the raw data to the results reported.

(q) A written Standard Operating Procedure (SOP).

8.1.2.2.6 Each individual laboratory wishing to use a given modification must perform the start-up tests in Section 8.1.2 (*e.g.,* DOC, MDL), with the modification as an integral part of this method prior to applying the modification to specific discharges. Results of the DOC must meet the QC acceptance criteria in Table 6 for the analytes of interest (Section 1.3), and the MDLs must be equal to or lower than the MDLs in Tables 4 and 5 for the analytes of interest.

8.1.3 Before analyzing samples, the laboratory must analyze a blank to demonstrate that interferences from the analytical system, labware, and reagents, are under control. Each time a batch of samples is extracted or reagents are changed, a blank must be extracted and analyzed as a safeguard against laboratory contamination. Requirements for the blank are given in Section 8.5.

8.1.4 The laboratory must, on an ongoing basis, spike and analyze a minimum of one sample, in duplicate, with the samples in an extraction batch (Section 3.1). The laboratory must also spike and analyze, in duplicate, a minimum of 5% of all samples from a given site or discharge to monitor and evaluate method and laboratory performance on the sample matrix. The batch and site/discharge samples may be the same. The procedure for spiking and analysis is given in Section 8.3.

8.1.5 The laboratory must, on an ongoing basis, demonstrate through analysis of a quality control check sample (laboratory control sample, LCS; on-going precision and recovery sample, OPR) that the measurement system is in control. This procedure is given in Section 8.4.

8.1.6 The laboratory should maintain performance records to document the quality of data that is generated. This procedure is given in Section 8.9.

8.1.7 The large number of analytes tested in performance tests in this method present a substantial probability that one or more will fail acceptance criteria when many analytes are tested simultaneously, and a re-test is allowed if this situation should occur. If, however, continued re-testing results in further repeated failures, the laboratory should document the failures (*e.g.,* as qualifiers on results) and either avoid reporting results for analytes that failed or report the problem and failures with the data. Failure to report does not relieve a discharger or permittee of reporting timely results.

8.2 Initial demonstration of capability (DOC)—To establish the ability to generate acceptable recovery and precision, the laboratory must perform the DOC in Sections 8.2.1 through 8.2.6 for the analytes of interest. The laboratory must also establish MDLs for the analytes of interest using the MDL procedure at 40 CFR part 136, appendix B. The laboratory's MDLs must be equal to or lower than those listed in Tables 1, 2, or 3 or lower than one third the regulatory compliance limit, whichever is greater. For MDLs not listed in Tables 4 and 5, the laboratory must determine the MDLs using the MDL procedure at 40 CFR 136, Appendix B under the same conditions used to determine the MDLs for the analytes listed in Tables 1, 2, and 3. All

procedures used in the analysis, including cleanup procedures, must be included in the DOC.

8.2.1 For the DOC, a QC check sample concentrate containing each analyte of interest (Section 1.3) is prepared in a water-miscible solvent. The QC check sample concentrate must be prepared independently from those used for calibration, but may be from the same source as the second-source standard used for calibration verification (Section 7.3). The concentrate should produce concentrations of the analytes of interest in water at the mid-point of the calibration range, and may be at the same concentration as the LCS (Section 8.4). Multiple solutions may be required.

Note: QC check sample concentrates are no longer available from EPA.

8.2.2 Using a pipet or micro-syringe, prepare four LCSs by adding an appropriate volume of the concentrate to each of four 1–L aliquots of reagent water, and mix well. The volume of reagent water must be the same as the volume that will be used for the sample, blank (Section 8.5), and MS/MSD (Section 8.3). A concentration of 100 µg/L was used to develop the QC acceptance criteria in Table 6. Also add an aliquot of the surrogate spiking solution (Section 6.8). Also add an aliquot of the surrogate spiking solution (Section 6.8) to the reagent-water aliquots.

8.2.3 Extract and analyze the four LCSs according to the method beginning in Section 10.

8.2.4 Calculate the average percent recovery ($\bar{x}$) and the standard deviation of the percent recovery(s) for each analyte using the four results.

8.2.5 For each analyte, compare s and ($\bar{x}$) with the corresponding acceptance criteria for precision and recovery in Table 6. For analytes in Table 3 not listed in Table 6, DOC QC acceptance criteria must be developed by the laboratory. EPA has provided guidance for development of QC acceptance criteria (References 12 and 13). If s and ($\bar{x}$) for all analytes of interest meet the acceptance criteria, system performance is acceptable and analysis of blanks and samples may begin. If any individual s exceeds the precision limit or any individual ($\bar{x}$) falls outside the range for recovery, system performance is unacceptable for that analyte.

Note: The large number of analytes in Tables 1–3 present a substantial probability that one or more will fail at least one of the acceptance criteria when many or all analytes are determined simultaneously. Therefore, the analyst is permitted to conduct a ''re-test'' as described in Sec. 8.2.6.

8.2.6 When one or more of the analytes tested fail at least one of the acceptance criteria, repeat the test for only the analytes that failed. If results for these analytes pass, system performance is acceptable and analysis of samples and blanks may proceed. If one or more of the analytes again fail, system performance is unacceptable for the analytes that failed the acceptance criteria. Correct the problem and repeat the test (Section 8.2). See Section 8.1.7 for disposition of repeated failures.

Note: To maintain the validity of the test and re-test, system maintenance and/or adjustment is not permitted between this pair of tests.

8.3 Matrix spike and matrix spike duplicate (MS/MSD)—The laboratory must, on an ongoing basis, spike at least 5% of the samples from each sample site being monitored in duplicate to assess accuracy (recovery and precision). The data user should identify the sample and the analytes of interest (Section 1.3) to be spiked. If direction cannot be obtained, the laboratory must spike at least one sample per extraction batch of up to 20 samples with the analytes in Tables 1 and 2. Spiked sample results should be reported only to the data user whose sample was spiked, or as requested or required by a regulatory/control authority.

8.3.1 If, as in compliance monitoring, the concentration of a specific analyte will be checked against a regulatory concentration limit, the concentration of the spike should be at that limit; otherwise, the concentration of the spike should be one to five times higher than the background concentration determined in Section 8.3.2, at or near the midpoint of the calibration range, or at the concentration in the LCS (Section 8.4) whichever concentration would be larger.

8.3.2 Analyze one sample aliquot to determine the background concentration (B) of the each analyte of interest. If necessary, prepare a new check sample concentrate (Section 8.2.1) appropriate for the background concentration. Spike and analyze two additional sample aliquots, and determine the concentration after spiking (A_1 and A_2) of each analyte. Calculate the percent recoveries (P_1 and P_2) as $100\ (A_1 - B)/T$ and $100\ (A_2 - B)/T$, where T is the known true value of the spike. Also calculate the relative percent difference (RPD) between the concentrations (A_1 and A_2) as $200|A_1 - A_2|/(A_1 + A_2)$. If necessary, adjust the concentrations used to calculate the RPD to account for differences in the volumes of the spiked aliquots.

8.3.3 Compare the percent recoveries (P_1 and P_2) and the RPD for each analyte in the MS/MSD aliquots with the corresponding QC acceptance criteria in Table 6. A laboratory may develop and apply QC acceptance criteria more restrictive than the criteria in Table 6, if desired.

8.3.3.1 If any individual P falls outside the designated range for recovery in either aliquot, or the RPD limit is exceeded, the result for the analyte in the unspiked sample is suspect and may not be reported or used for permitting or regulatory compliance purposes. See Section 8.1.7 for disposition of failures.

8.3.3.2 The acceptance criteria in Table 6 were calculated to include an allowance for error in measurement of both the background and spike concentrations, assuming a spike to background ratio of 5:1. This error will be accounted for to the extent that the spike to background ratio approaches 5:1 (Reference 14). If spiking is performed at a concentration lower than 100 µg/L, the laboratory must use either the QC acceptance criteria in Table 6, or optional QC acceptance criteria calculated for the specific spike concentration. To use the optional acceptance criteria: (1) Calculate recovery (X′) using the equation in Table 7, substituting the spike concentration (T) for C; (2) Calculate overall precision (S′) using the equation in Table 7, substituting X′ for $\bar{x}$; (3) Calculate the range for recovery at the spike concentration as $(100\ X'/T) \pm 2.44(100\ S'/T)\%$ (Reference 14). For analytes in Table 3 not listed in Table 6, QC acceptance criteria must be developed by the laboratory. EPA has provided guidance for development of QC acceptance criteria (References 12 and 13).

8.3.4 After analysis of a minimum of 20 MS/MSD samples for each target analyte and surrogate, the laboratory must calculate and apply in-house QC limits for recovery and RPD of future MS/MSD samples (Section 8.3). The QC limits for recovery are calculated as the mean observed recovery ± 3 standard deviations, and the upper QC limit for RPD is calculated as the mean RPD plus 3 standard deviations of the RPDs. The in-house QC limits must be updated at least every two years and re-established after any major change in the analytical instrumentation or process. At least 80% of the analytes tested in the MS/MSD must have in-house QC acceptance criteria that are tighter than those in Table 6. If an in-house QC limit for the RPD is greater than the limit in Table 6,

then the limit in Table 6 must be used. Similarly, if an in-house lower limit for recovery is below the lower limit in Table 6, then the lower limit in Table 6 must be used, and if an in-house upper limit for recovery is above the upper limit in Table 6, then the upper limit in Table 6 must be used. The laboratory must evaluate surrogate recovery data in each sample against its in-house surrogate recovery limits. The laboratory may use 60–140% as interim acceptance criteria for surrogate recoveries until in-house limits are developed.

8.4 Laboratory control sample (LCS)—A QC check sample (laboratory control sample, LCS; on-going precision and recovery sample, OPR) containing each analyte of interest (Section 1.3) and surrogate must be prepared and analyzed with each extraction batch of up to 20 samples to demonstrate acceptable recovery of the analytes of interest from a clean sample matrix.

8.4.1 Prepare the LCS by adding QC check sample concentrate (Section 8.2.1) to reagent water. Include all analytes of interest (Section 1.3) in the LCS. The LCS may be the same sample prepared for the DOC (Section 8.2.1). The volume of reagent water must be the same as the volume used for the sample, blank (Section 8.5), and MS/MSD (Section 8.3). Also add an aliquot of the surrogate spiking solution (Section 6.8). The concentration of the analytes in reagent water should be the same as the concentration in the DOC (Section 8.2.2).

8.4.2 Analyze the LCS prior to analysis of field samples in the extraction batch. Determine the concentration (A) of each analyte. Calculate the percent recovery (PS) as 100 (A/T)%, where T is the true value of the concentration in the LCS.

8.4.3 Compare the percent recovery (PS) for each analyte with its corresponding QC acceptance criterion in Table 6. For analytes of interest in Table 3 not listed in Table 6, use the QC acceptance criteria developed for the MS/MSD (Section 8.3.3.2). If the recoveries for all analytes of interest fall within their respective QC acceptance criteria, analysis of blanks and field samples may proceed. If any individual PS falls outside the range, proceed according to Section 8.4.4.

Note: The large number of analytes in Tables 1–3 present a substantial probability that one or more will fail the acceptance criteria when all analytes are tested simultaneously. Because a re-test is allowed in event of failure (Sections 8.1.7 and 8.4.3), it may be prudent to extract and analyze two LCSs together and evaluate results of the second analysis against the QC acceptance criteria only if an analyte fails the first test.

8.4.4 Repeat the test only for those analytes that failed to meet the acceptance criteria (PS). If these analytes now pass, system performance is acceptable and analysis of blanks and samples may proceed. Repeated failure, however, will confirm a general problem with the measurement system. If this occurs, repeat the test using a fresh LCS (Section 8.2.2) or an LCS prepared with a fresh QC check sample concentrate (Section 8.2.1), or perform and document system repair. Subsequent to repair, repeat the LCS test (Section 8.4). If failure of the LCS indicates a systemic problem with samples in the batch, re-extract and re-analyze the samples in the batch. See Section 8.1.7 for disposition of repeated failures.

Note: To maintain the validity of the test and re-test, system maintenance and/or adjustment is not permitted between the pair of tests.

8.4.5 After analysis of 20 LCS samples, the laboratory must calculate and apply in-house QC limits for recovery to future LCS samples (Section 8.4). Limits for recovery in the LCS are calculated as the mean recovery ±3 standard deviations. A minimum of 80% of the analytes tested for in the LCS must have QC acceptance criteria tighter than those in Table 6. Many of the analytes and surrogates may not contain recommended acceptance criteria. The laboratory should use 60–140% as interim acceptance criteria for recoveries of spiked analytes and surrogates that do not have recovery limits specified in Table 8, until in-house LCS and surrogate limits are developed. If an in-house lower limit for recovery is lower than the lower limit in Table 6, the lower limit in Table 6 must be used, and if an in-house upper limit for recovery is higher than the upper limit in Table 6, the upper limit in Table 6 must be used.

8.5 Blank—A blank must be extracted and analyzed with each extraction batch to demonstrate that the reagents and equipment used for preparation and analysis are free from contamination.

8.5.1 Spike the surrogates into the blank. Extract and concentrate the blank using the same procedures and reagents used for the samples, LCS, and MS/MSD in the batch. Analyze the blank immediately after analysis of the LCS (Section 8.4) and prior to analysis of the MS/MSD and samples to demonstrate freedom from contamination.

8.5.2 If any analyte of interest is found in the blank: 1) At a concentration greater than the MDL for the analyte, 2) at a concentration greater than one-third the regulatory compliance limit, or 3) at a concentration greater than one-tenth the concentration in a sample in the extraction batch, whichever is greater, analysis of samples must be halted and samples affected by the blank must be re-extracted and the extracts re-analyzed. Samples must be associated with an uncontaminated blank before they may be reported or used for permitting or regulatory compliance purposes.

8.6 Internal standards responses.

8.6.1 Calibration verification—The responses (GC peak heights or areas) of the internal standards in the calibration verification must be within 50% to 200% (½ to 2x) of their respective responses in the mid-point calibration standard. If they are not, repeat the calibration verification (Section 7.4) test or perform and document system repair. Subsequent to repair, repeat the calibration verification. If the responses are still not within 50% to 200%, re-calibrate the instrument (Section 7) and repeat the calibration verification/LCS test.

8.6.2 Samples, blanks, LCSs, and MS/MSDs—The responses (GC peak heights or areas) of the internal standards in each sample, blank, and MS/MSD must be within 50% to 200% (½ to 2x) of its respective response in the most recent LCS. If, as a group, all internal standards are not within this range, perform and document system repair, repeat the calibration verification/LCS test (Section 8.4), and re-analyze the affected samples. If a single internal standard is not within the 50% to 200% range, use an alternate internal standard for quantitation of the analyte referenced to the affected internal standard.

8.7 Surrogate recoveries—Spike the surrogates into all samples, blanks, LCSs, and MS/MSDs. Compare surrogate recoveries against the QC acceptance criteria in Table 8 and/or those developed in Section 7.3.3. If any recovery fails its criteria, attempt to find and correct the cause of the failure. Surrogate recoveries from the blank and LCS may be used as pass/fail criteria by the laboratory or as required by a regulatory authority, or may be used to diagnose problems with the analytical system.

8.8 DDT and endrin decomposition (breakdown)—If DDT and/or endrin are to be analyzed using this method, a DDT/endrin decomposition test must be performed to reliably quantify these two pesticides. The DDT/endrin decomposition test to be used is in EPA Method 608A or 1656.

8.9 As part of the QC program for the laboratory, control charts or statements of accuracy for wastewater samples must be assessed and records maintained (40 CFR 136.7(c)(1)(viii)). After analysis of five or more spiked wastewater samples as in Section 8.3, calculate the average percent recovery ($\bar{x}$) and the standard deviation of the percent recovery (sp). Express the accuracy assessment as a percent interval from $\bar{x} - 2sp$ to $\bar{x} + 2sp$. For example, if $\bar{x}$ = 90% and sp = 10%, the accuracy interval is expressed as 70–110%. Update the accuracy assessment for each analyte on a regular basis (*e.g.,* after each 5–10 new accuracy measurements).

8.10 It is recommended that the laboratory adopt additional quality assurance practices for use with this method. The specific practices that are most productive depend upon the needs of the laboratory and the nature of the samples. Field duplicates may be analyzed to assess the precision of environmental measurements. Whenever possible, the laboratory should analyze standard reference materials and participate in relevant performance evaluation studies.

9. Sample Collection, Preservation, and Handling

9.1 Collect samples as grab samples in glass bottles or in refrigerated bottles using automatic sampling equipment. Collect 1–L of ambient waters, effluents, and other aqueous samples. If the sensitivity of the analytical system is sufficient, a smaller volume (*e.g.,* 250 mL), but no less than 100 mL, may be used. Conventional sampling practices (Reference 15) should be followed, except that the bottle must not be pre-rinsed with sample before collection. Automatic sampling equipment must be as free as possible of polyvinyl chloride or other tubing or other potential sources of contamination. If needed, collect additional sample(s) for the MS/MSD (Section 8.3).

9.2 Ice or refrigerate samples at ≤6 °C from the time of collection until extraction, but do not freeze. If residual chlorine is present, add 80 mg of sodium thiosulfate per liter of sample and mix well. Any method suitable for field use may be employed to test for residual chlorine (Reference 16). Do not add excess sodium thiosulfate. If sodium thiosulfate interferes in the determination of the analytes, an alternate preservative (*e.g.,* ascorbic acid or sodium sulfite) may be used.

9.3 All samples must be extracted within 7 days of collection and sample extracts must be analyzed within 40 days of extraction.

10. Extraction

10.1 This section contains procedures for separatory funnel liquid-liquid extraction (SFLLE) and continuous liquid-liquid extraction (CLLE). SFLLE is faster, but may not be as effective as CLLE for recovery of polar analytes such as phenol. SFLLE is labor intensive and may result in formation of emulsions that are difficult to break. CLLE is less labor intensive, avoids emulsion formation, but requires more time (18–24 hours) and more hood space, and may require more solvent. The procedures assume base-neutral extraction followed by acid extraction. For some matrices and analytes of interest, improved results may be obtained by acid-neutral extraction followed by base extraction. A single acid or base extraction may also be performed. If an extraction scheme alternate to base-neutral followed by acid extraction is used, all QC tests must be performed and all QC acceptance criteria must be met with that extraction scheme as an integral part of this method.

10.2 Separatory funnel liquid-liquid extraction (SFLLE) and extract concentration

10.2.1 The SFLLE procedure below assumes a sample volume of 1 L. When a different sample volume is extracted, adjust the volume of methylene chloride accordingly.

10.2.2 Mark the water meniscus on the side of the sample bottle for later determination of sample volume. Pour the entire sample into the separatory funnel. Pipet the surrogate standard spiking solution (Section 6.8) into the separatory funnel. If the sample will be used for the LCS or MS or MSD, pipet the appropriate check sample concentrate (Section 8.2.1 or 8.3.2) into the separatory funnel. Mix well. Check the pH of the sample with wide-range pH paper and adjust to pH 11–13 with sodium hydroxide solution.

10.2.3 Add 60 mL of methylene chloride to the sample bottle, seal, and shake for approximately 30 seconds to rinse the inner surface. Transfer the solvent to the separatory funnel and extract the sample by shaking the funnel for two minutes with periodic venting to release excess pressure. Allow the organic layer to separate from the water phase for a minimum of 10 minutes. If the emulsion interface between layers is more than one-third the volume of the solvent layer, the analyst must employ mechanical techniques to complete the phase separation. The optimum technique depends upon the sample, but may include stirring, filtration of the emulsion through glass wool, centrifugation, or other physical methods. Collect the methylene chloride extract in a flask. If the emulsion cannot be broken (recovery of <80% of the methylene chloride), transfer the sample, solvent, and emulsion into a continuous extractor and proceed as described in Section 10.3.

10.2.4 Add a second 60-mL volume of methylene chloride to the sample bottle and repeat the extraction procedure a second time, combining the extracts in the Erlenmeyer flask. Perform a third extraction in the same manner.

10.2.5 Adjust the pH of the aqueous phase to less than 2 using sulfuric acid. Serially extract the acidified aqueous phase three times with 60 mL aliquots of methylene chloride. Collect and combine the extracts in a flask in the same manner as the base/neutral extracts.

Note: Base/neutral and acid extracts may be combined for concentration and analysis provided all QC tests are performed and all QC acceptance criteria met for the analytes of interest with the combined extract as an integral part of this method, and provided that the analytes of interest are as reliably identified and quantified as when the extracts are analyzed separately. If doubt exists as to whether identification and quantitation will be affected by use of a combined extract, the fractions must be analyzed separately.

10.2.6 For each fraction or the combined fractions, assemble a Kuderna-Danish (K–D) concentrator by attaching a 10-mL concentrator tube to a 500-mL evaporative flask. Other concentration devices or techniques may be used in place of the K–D concentrator so long as the requirements in Section 8.2 are met.

10.2.7 For each fraction or the combined fractions, pour the extract through a solvent-rinsed drying column containing about 10 cm of anhydrous sodium sulfate, and collect the extract in the K–D concentrator. Rinse the Erlenmeyer flask and column with 20–30 mL of methylene chloride to complete the quantitative transfer.

10.2.8 Add one or two clean boiling chips and attach a three-ball Snyder column to the evaporative flask for each fraction (Section 10.2.7). Pre-wet the Snyder column by adding about 1 mL of methylene chloride to the top. Place the K–D apparatus on a hot water bath (60–65 °C) so that the concentrator tube is partially immersed in the hot water, and the entire lower rounded surface of the flask is bathed with hot vapor. Adjust the vertical position of the apparatus and the water temperature as required to complete the concentration in 15–20 minutes. At the proper rate of

distillation, the balls of the column will actively chatter but the chambers will not flood with condensed solvent. When the apparent volume of liquid reaches 1 mL or other determined amount, remove the K–D apparatus from the water bath and allow to drain and cool for at least 10 minutes. Remove the Snyder column and rinse the flask and its lower joint into the concentrator tube with 1–2 mL of methylene chloride. A 5-mL syringe is recommended for this operation. If the sample will be cleaned up, reserve the K–D apparatus for concentration of the cleaned up extract. Adjust the volume to 5 mL with methylene chloride and proceed to Section 11 for cleanup; otherwise, further concentrate the extract for GC/MS analysis per Section 10.2.9 or 10.2.10.

10.2.9 Micro Kuderna-Danish concentration—add another one or two clean boiling chips to the concentrator tube for each fraction and attach a two-ball micro-Snyder column. Pre-wet the Snyder column by adding about 0.5 mL of methylene chloride to the top. Place the K–D apparatus on a hot water bath (60–65 °C) so that the concentrator tube is partially immersed in hot water. Adjust the vertical position of the apparatus and the water temperature as required to complete the concentration in 5–10 minutes. At the proper rate of distillation the balls of the column will actively chatter but the chambers will not flood with condensed solvent. When the apparent volume of liquid reaches about 1 mL or other determined amount, remove the K–D apparatus from the water bath and allow it to drain and cool for at least 10 minutes. Remove the Snyder column and rinse the flask and its lower joint into the concentrator tube with approximately 0.2 mL of or methylene chloride. Adjust the final volume to 1.0 mL or a volume appropriate to the sensitivity desired (*e.g.,* to meet lower MDLs or for selected ion monitoring). Record the volume, stopper the concentrator tube and store refrigerated if further processing will not be performed immediately. If the extracts will be stored longer than two days, they should be transferred to fluoropolymer-lined screw-cap vials and labeled base/neutral or acid fraction as appropriate. Mark the level of the extract on the vial so that solvent loss can be detected.

10.2.10 Nitrogen evaporation and solvent exchange—Extracts may be concentrated for analysis using nitrogen evaporation in place of micro K–D concentration (Section 10.2.9). Extracts that have been cleaned up using sulfur removal (Section 12.2) and are ready for analysis are exchanged into methylene chloride.

10.2.10.1 Transfer the vial containing the sample extract to the nitrogen evaporation (blowdown) device (Section 5.8). Lower the vial into the water bath and begin concentrating. If the more volatile analytes (Section 1.2) are to be concentrated, use room temperature for concentration; otherwise, a slightly elevated (*e.g.,* 30–45 °C) may be used. During the solvent evaporation process, keep the solvent level below the water level of the bath and do not allow the extract to become dry. Adjust the flow of nitrogen so that the surface of the solvent is just visibly disturbed. A large vortex in the solvent may cause analyte loss.

10.2.10.2 Extracts to be solvent exchanged—When the volume of the liquid is approximately 200 µL, add 2 to 3 mL of methylene chloride and continue concentrating to approximately 100 µL. Repeat the addition of solvent and concentrate once more. Adjust the final extract volume to be consistent with the volume extracted and the sensitivity desired.

10.2.10.3 For extracts that have been cleaned up by GPC and that are to be concentrated to a nominal volume of 1 mL, adjust the final volume to compensate the GPC loss. For a 50% GPC loss, concentrate the extract to 1/2000 of the volume extracted. For example, if the volume extracted is 950 mL, adjust the final volume to 0.48 mL. For extracts that have not been cleaned up by GPC and are to be concentrated to a nominal volume of 1.0 mL, adjust the final extract volume to 1/1000 of the volume extracted. For example, if the volume extracted is 950 mL, adjust the final extract volume to 0.95 mL.

Note: The difference in the volume fraction for an extract cleaned up by GPC accounts for the loss in GPC cleanup. Also, by preserving the ratio between the volume extracted and the final extract volume, the concentrations and detection limits do not need to be adjusted for differences in the volume extracted and the extract volume.

10.2.11 Transfer the concentrated extract to a vial with fluoropolymer-lined cap. Seal the vial and label with the sample number. Store in the dark at room temperature until ready for GC analysis. If GC analysis will not be performed on the same day, store the vial in the dark at ≤6 °C. Analyze the extract by GC/MS per the procedure in Section 12.

10.2.12 Determine the original sample volume by refilling the sample bottle to the mark and transferring the liquid to an appropriately sized graduated cylinder. For sample volumes on the order of 1000 mL, record the sample volume to the nearest 10 mL; for sample volumes on the order of 100 mL, record the volume to the nearest 1 mL. Sample volumes may also be determined by weighing the container before and after filling to the mark with water.

10.3 Continuous liquid/liquid extraction (CLLE).

Note: With CLLE, phenol, 2,4-dimethyl phenol, and some other analytes may be preferentially extracted into the base-neutral fraction. Determine an analyte in the fraction in which it is identified and quantified most reliably. Also, the short-chain phthalate esters (*e.g.,* dimethyl phthalate, diethyl phthalate) and some other compounds may hydrolyze during prolonged exposure to basic conditions required for continuous extraction, resulting in low recovery of these analytes. When these analytes are of interest, their recovery may be improved by performing the acid extraction first.

10.3.1 Use CLLE when experience with a sample from a given source indicates an emulsion problem, or when an emulsion is encountered during SFLLE. CLLE may be used for all samples, if desired.

10.3.2 Mark the water meniscus on the side of the sample bottle for later determination of sample volume. Check the pH of the sample with wide-range pH paper and adjust to pH 11–13 with sodium hydroxide solution. Transfer the sample to the continuous extractor. Pipet surrogate standard spiking solution (Section 6.8) into the sample. If the sample will be used for the LCS or MS or MSD, pipet the appropriate check sample concentrate (Section 8.2.1 or 8.3.2) into the extractor. Mix well. Add 60 mL of methylene chloride to the sample bottle, seal, and shake for 30 seconds to rinse the inner surface. Transfer the solvent to the extractor.

10.3.3 Repeat the sample bottle rinse with an additional 50–100 mL portion of methylene chloride and add the rinse to the extractor.

10.3.4 Add a suitable volume of methylene chloride to the distilling flask (generally 200–500 mL), add sufficient reagent water to ensure proper operation, and extract for 18–24 hours. A shorter or longer extraction time may be used if all QC acceptance criteria are met. Test and, if necessary, adjust the pH of the water during the second or third hour of the extraction. After extraction, allow the apparatus to cool, then detach the distilling flask. Dry, concentrate, and seal the extract per Sections 10.2.6 through 10.2.11. See the note at Section 10.2.5 regarding combining extracts of the base/neutral and acid fractions.

10.3.5 Charge the distilling flask with methylene chloride and attach it to the continuous extractor. Carefully,

while stirring, adjust the pH of the aqueous phase to less than 2 using sulfuric acid. Extract for 18–24 hours. A shorter or longer extraction time may be used if all QC acceptance criteria are met. Test and, if necessary, adjust the pH of the water during the second or third hour of the extraction. After extraction, allow the apparatus to cool, then detach the distilling flask. Dry, concentrate, and seal the extract per Sections 10.2.6 through 10.2.11. Determine the sample volume per Section 10.2.12.

11. Extract Cleanup

Note: Cleanup may not be necessary for relatively clean samples (*e.g.,* treated effluents, groundwater, drinking water). If particular circumstances require the use of a cleanup procedure, the laboratory may use any or all of the procedures below or any other appropriate procedure. Before using a cleanup procedure, the laboratory must demonstrate that the requirements of Section 8.1.2 can be met using the cleanup procedure as an integral part of this method.

11.1 Gel permeation chromatography (GPC).

11.1.1 Calibration.

11.1.1.1 Load the calibration solution (Section 6.12) into the sample loop.

11.1.1.2 Inject the calibration solution and record the signal from the detector. The elution pattern will be corn oil, bis(2-ethylhexyl) phthalate, pentachlorophenol, perylene, and sulfur.

11.1.1.3 Set the ''dump time'' to allow >85% removal of the corn oil and >85% collection of the phthalate.

11.1.1.4 Set the ''collect time'' to the peak minimum between perylene and sulfur.

11.1.1.5 Verify calibration with the calibration solution after every 20 or fewer extracts. Calibration is verified if the recovery of the pentachlorophenol is greater than 85%. If calibration is not verified, recalibrate using the calibration solution, and re-extract and clean up the preceding extracts using the calibrated GPC system.

11.1.2 Extract cleanup—GPC requires that the column not be overloaded. The column specified in this method is designed to handle a maximum of 0.5 g of high molecular weight material in a 5-mL extract. If the extract is known or expected to contain more than 0.5 g, the extract is split into fractions for GPC and the fractions are combined after elution from the column. The solids content of the extract may be obtained gravimetrically by evaporating the solvent from a 50-µL aliquot.

11.1.2.1 Filter the extract or load through the filter holder to remove particulates. Load the extract into the sample loop. The maximum capacity of the column is 0.5–1.0 g. If necessary, split the extract into multiple aliquots to prevent column overload.

11.1.2.2 Elute the extract using the calibration data determined in Section 11.1.1. Collect the eluate in the K–D apparatus reserved in Section 10.2.8.

11.1.3 Concentrate the cleaned up extract per Sections 10.2.8 and 10.2.9 or 10.2.10.

11.1.4 Rinse the sample loading tube thoroughly with methylene chloride between extracts to prepare for the next sample.

11.1.5 If a particularly dirty extract is encountered, run a methylene chloride blank through the system to check for carry-over.

11.2 Sulfur removal.

Note: Separate procedures using copper or TBA sulfite are provided in this section for sulfur removal. They may be used separately or in combination, if desired.

11.2.1 Removal with copper (Reference 17).

Note: If (1) an additional compound (Table 3) is to be determined; (2) sulfur is to be removed; (3) copper will be used for sulfur removal; and (4) a sulfur matrix is known or suspected to be present, the laboratory must demonstrate that the additional compound can be successfully extracted and treated with copper in the sulfur matrix. Some of the additional compounds (Table 3) are known not to be amenable to sulfur removal with copper (*e.g.* Atrazine and Diazinon).

11.2.1.1 Quantitatively transfer the extract from Section 10.2.8 to a 40- to 50-mL flask or bottle. If there is evidence of water in the concentrator tube after the transfer, rinse the tube with small portions of hexane:acetone (40:60) and add to the flask or bottle. Mark and set aside the concentrator tube for use in re-concentrating the extract.

11.2.1.2 Add 10–20 g of granular anhydrous sodium sulfate to the flask. Swirl to dry the extract.

11.2.1.3 Add activated copper (Section 6.13.1.4) and allow to stand for 30–60 minutes, swirling occasionally. If the copper does not remain bright, add more and swirl occasionally for another 30–60 minutes.

11.2.1.4 After drying and sulfur removal, quantitatively transfer the extract to a nitrogen-evaporation vial or tube and proceed to Section 10.2.10 for nitrogen evaporation and solvent exchange, taking care to leave the sodium sulfate and copper in the flask.

11.2.2 Removal with TBA sulfite.

11.2.2.1 Using small volumes of hexane, quantitatively transfer the extract to a 40- to 50-mL centrifuge tube with fluoropolymer-lined screw cap.

11.2.2.2 Add 1–2 mL of TBA sulfite reagent (Section 6.13.2.4), 2–3 mL of 2-propanol, and approximately 0.7 g of sodium sulfite (Section 6.13.2.2) crystals to the tube. Cap and shake for 1–2 minutes. If the sample is colorless or if the initial color is unchanged, and if clear crystals (precipitated sodium sulfite) are observed, sufficient sodium sulfite is present. If the precipitated sodium sulfite disappears, add more crystalline sodium sulfite in approximately 0.5 g portions until a solid residue remains after repeated shaking.

11.2.2.3 Add 5–10 mL of reagent water and shake for 1–2 minutes. Centrifuge to settle the solids.

11.2.2.4 Quantitatively transfer the hexane (top) layer through a small funnel containing a few grams of granular anhydrous sodium sulfate to a nitrogen-evaporation vial or tube and proceed to Section 10.2.10 for nitrogen evaporation and solvent exchange.

12. Gas Chromatography/Mass Spectrometry

12.1 Establish the operating conditions in Table 4 or 5 for analysis of a base/neutral or acid extract, respectively. For analysis of a combined extract (Section 10.2.5, note), use the operating conditions in Table 4. Included in these tables are retention times and MDLs that can be achieved under these conditions. Examples of the separations achieved are shown in Figure 2 for the combined extract. Alternative columns or chromatographic conditions may be used if the requirements of Section 8.2 are met. Verify system performance per Section 13.

12.2 Analysis of a standard or extract.

12.2.1 Bring the standard or concentrated extract (Section 10.2.9 or 10.2.11) to room temperature and verify that any precipitate has redissolved. Verify the level on the extract and bring to the mark with solvent if required.

12.2.2 Add the internal standard solution (Section 6.9) to the extract. Mix thoroughly.

12.2.3 Inject an appropriate volume of the sample extract or standard solution using split, splitless, solvent purge, large-volume, or on-column injection. If the sample is injected manually the solvent-flush technique should be used. The injection volume depends upon the technique used and the ability to meet MDLs or reporting limits for regulatory compliance. Injected volumes must be the same for standards and sample extracts. Record the volume injected to two significant figures.

12.2.3.1 Start the GC column oven program upon injection. Start MS data collection after the solvent peak elutes. Stop data collection after benzo(ghi)perylene elutes for the base/neutral or combined fractions, or after pentachlorophenol elutes for the acid fraction. Return the column to the initial temperature for analysis of the next standard solution or extract.

12.2.3.2 If the concentration of any analyte of interest exceeds the calibration range, either extract and analyze a smaller sample volume, or dilute and analyze the diluted extract after bringing the concentrations of the internal standards to the levels in the undiluted extract.

12.2.4 Perform all qualitative and quantitative measurements as described in Sections 14 and 15. When standards and extracts are not being used for analyses, store them refrigerated at ≤6 °C protected from light in screw-cap vials equipped with un-pierced fluoropolymer-lined septa.

13. Performance tests

13.1 At the beginning of each 12-hour shift during which standards or extracts will be analyzed, perform the tests in Sections 13.2–13.7 to verify system performance. If DDT and/or endrin are to be determined, perform the decomposition test in Section 13.8. If an extract is concentrated for greater sensitivity (*e.g.,* by SIM), all tests must be performed at levels consistent with the reduced extract volume.

13.2 DFTPP—Inject the DFTPP standard (Section 6.10) and verify that the criteria for DFTPP in Section 7.2.1.1 and Table 9A (Reference 18) for a quadrupole MS, or Table 9B (Reference 19) for a time-of-flight MS, are met. It is not necessary to meet DFTPP criteria for SIM operation.

13.3 GC resolution—There must be a valley between benzo(b)fluoranthene and benzo(k)fluoranthene at m/z 252, and the height of the valley must not exceed 25 percent of the shorter of the two peaks.

13.4 Calibration verification—Verify calibration per Sections 7.3 and Table 6.

13.5 Peak tailing—Verify the tailing factor specifications are met per Section 7.2.1.1.

13.6 Laboratory control sample and blank—Analyze the extracts of the LCS and blank at the beginning of analyses of samples in the extraction batch (Section 3.1). The LCS must meet the requirements in Section 8.4, and the blank must meet the requirements in Section 8.5 before sample extracts may be analyzed.

13.7 Matrix spike/matrix spike duplicate—Analyze the background sample for the MS/MSD and the MS and MSD after the blank (Section 8.3.2). Results for the MS/MSD must meet the requirements in Section 8.3 before a result for an analyte in any unspiked sample in the batch may be reported or used for permitting or regulatory compliance purposes.

13.8 DDT/endrin decomposition test—If DDT and/or endrin analytes of interest, the DDT/endrin test (Section 8.8) must be performed and the QC acceptance criteria must be met before analyzing samples for DDT and/or endrin.

14. Qualitative Identification

14.1 Identification is accomplished by comparison of data from analysis of a sample or blank with data stored in the GC/MS data system (Sections 5.6.5 and 7.2.1.2, and Tables 4 and 5). Identification of an analyte is confirmed per Sections 14.1.1 through 14.1.4.

14.1.1 The signals for all characteristic m/z's stored in the data system for each analyte of interest must be present and must maximize within the same two consecutive scans.

14.1.2 Based on the relative retention time (RRT), the RRT for the analyte must be within ±0.06 of the RRT of the analyte in the calibration verification run at the beginning of the shift (Section 7.3 or 13.4). Relative retention time is used to establish the identification window because it compensates for small changes in the GC temperature program whereas the absolute retention time does not (see Section 6.9.3).

Note: RRT is a unitless quantity (see Sec. 20.2), although some procedures refer to ''RRT units'' in providing the specification for the agreement between the RRT values in the sample and the calibration verification or other standard.

14.1.3 Either (1) the background corrected EICP areas, or (2) the corrected relative intensities of the mass spectral peaks at the GC peak maximum, must agree within 50% to 200% (½ to 2 times) for all m/z's in the reference mass spectrum stored in the data system (Section 7.2.1.2), or from a reference library. For example, if a peak has an intensity of 20% relative to the base peak, the analyte is identified if the intensity of the peak in the sample is in the range of 10% to 40% of the base peak.

14.1.4 The m/z's present in the acquired mass spectrum for the sample that are not present in the reference mass spectrum must be accounted for by contaminant or background m/z's. A reference library may be helpful to identify and account for background or contaminant m/z's. If the acquired mass spectrum is contaminated, or if identification is ambiguous, an experienced spectrometrist (Section 1.7) must determine the presence or absence of the compound.

14.2 Structural isomers that have very similar mass spectra can be identified only if the resolution between authentic isomers in a standard mix is acceptable. Acceptable resolution is achieved if the baseline to valley height between the isomers is less than 50% of the height of the shorter of the two peaks. Otherwise, structural isomers are identified as isomeric pairs.

15. Calculations

15.1 When an analyte has been identified, quantitation of that analyte is based on the integrated abundance from the EICP of the primary characteristic m/z in Table 4 or 5. Calculate the concentration in the extract using the response factor (RF) determined in Section 7.2.2 and Equation 2. If the concentration of an analyte exceeds the calibration range, dilute the extract by the minimum amount to bring the concentration into the calibration range, and re-analyze the extract. Determine a dilution factor (DF) from the amount of the dilution. For example, if the extract is diluted by a factor of 2, DF = 2.

$$C_{ex}\ (\mu g/mL) = \frac{A_s \times I_{is}}{A_{is} \times RF}$$

Equation 2

Where:

C_{ex} = Concentration of the analyte in the extract, in µg/mL, and the other terms are as defined in Equation 1.

Calculate the concentration of the analyte in the sample using the concentration in the extract, the extract volume, the sample volume, and the dilution factor, per Equation 3:

$$C_s\ (\mu g/L) = \frac{C_{ex} \times V_{ex} \times DF}{V_s}$$ Equation 3

Where:

C_s = Concentration of the analyte in the sample

C_{ex} = Concentration of the analyte in the extract, in µg/mL

V_{ex} = Volume of extract (mL)

V_s = Volume of sample (L)

DF = Dilution factor

15.2 Reporting of results

As noted in Section 1.4.1, EPA has promulgated this method at 40 CFR part 136 for use in wastewater compliance monitoring under the National Pollutant Discharge Elimination System (NPDES). The data reporting practices described here are focused on such monitoring needs and may not be relevant to other uses of the method.

15.2.1 Report results for wastewater samples in µg/L without correction for recovery. (Other units may be used if required by in a permit.) Report all QC data with the sample results.

15.2.2 Reporting level

Unless otherwise specified in by a regulatory authority or in a discharge permit, results for analytes that meet the identification criteria are reported down to the concentration of the ML established by the laboratory through calibration of the instrument (see Section 7.3.2 and the glossary for the derivation of the ML). EPA considers the terms ''reporting limit,'' ''quantitation limit,'' and ''minimum level'' to be synonymous.

15.2.2.1 Report a result for each analyte in each sample, blank, or standard at or above the ML to 3 significant figures. Report a result for each analyte found in each sample below the ML as ''ML,'' or as required by the regulatory authority or permit. Results are reported without blank subtraction unless requested or required by a regulatory authority or in a permit. In this case, both the sample result and the blank results must be reported together.

15.2.2.2 In addition to reporting results for samples and blanks separately, the concentration of each analyte in a blank associated with the sample may be subtracted from the result for that sample, but only if requested or required by a regulatory authority or in a permit. In this case, both the sample result and the blank results must be reported together.

15.2.2.3 Report a result for an analyte found in a sample or extract that has been diluted at the least dilute level at which the area at the quantitation m/z is within the calibration range (*i.e.,* above the ML for the analyte) and the MS/MSD recovery and RPD are within their respective QC acceptance criteria (Table 6). This may require reporting results for some analytes from different analyses.

15.2.3 Results from tests performed with an analytical system that is not in control (*i.e.,* that does not meet acceptance criteria for all of QC tests in this method) must not be reported or otherwise used for permitting or regulatory compliance purposes, but do not relieve a discharger or permittee of reporting timely results. If the holding time would be exceeded for a re-analysis of the sample, the regulatory/control authority should be consulted for disposition.

16. Method Performance

16.1 The basic version of this method was tested by 15 laboratories using reagent water, drinking water, surface water, and industrial wastewaters spiked at six concentrations over the range 5–1300 µg/L (Reference 2). Single operator precision, overall precision, and method accuracy were found to be directly related to the concentration of the analyte and essentially independent of the sample matrix. Linear equations to describe these relationships are presented in Table 7.

16.2 As noted in Sec. 1.1, this method was validated through an interlaboratory study conducted more than 29 years ago. However, the fundamental chemistry principles used in this method remain sound and continue to apply.

16.3 A chromatogram of the combined acid/base/neutral calibration standard is shown in Figure 2.

17. Pollution Prevention

17.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Many opportunities for pollution prevention exist in laboratory operations. EPA has established a preferred hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, the laboratory should use pollution prevention techniques to address waste generation. When wastes cannot be reduced at the source, the Agency recommends recycling as the next best option.

17.2 The analytes in this method are used in extremely small amounts and pose little threat to the environment when managed properly. Standards should be prepared in volumes consistent with laboratory use to minimize the disposal of excess volumes of expired standards. This method utilizes significant quantities of methylene chloride. Laboratories are encouraged to recover and recycle this and other solvents during extract concentration.

17.3 For information about pollution prevention that may be applied to laboratories and research institutions, consult Less is Better: Laboratory Chemical Management for Waste Reduction, available from the American Chemical Society's Department of Governmental Relations and Science Policy, 1155 16th Street NW., Washington, DC 20036, 202/872–4477.

18. Waste Management

18.1 The laboratory is responsible for complying with all Federal, State, and local regulations governing waste management, particularly the hazardous waste identification rules and land disposal restrictions, and to protect the air, water, and land by minimizing and controlling all releases from fume hoods and bench operations. Compliance is also required with any sewage discharge permits and regulations. An overview of requirements can be found in Environmental Management Guide for Small Laboratories (EPA 233–B–98–001).

18.2 Samples at pH <2, or pH >12 are hazardous and must be neutralized before being poured down a drain, or must be handled and disposed of as hazardous waste.

18.3 Many analytes in this method decompose above 500 °C. Low-level waste such as absorbent paper, tissues, and plastic gloves may be burned in an appropriate incinerator. Gross quantities of neat or highly concentrated solutions of toxic or hazardous chemicals should be packaged securely and disposed of through commercial or governmental channels that are capable of handling these types of wastes.

18.4 For further information on waste management, consult The Waste Management Manual for Laboratory Personnel and Less is Better-Laboratory Chemical Management for Waste Reduction, available from the American Chemical Society's Department of Government Relations and Science Policy, 1155 16th Street NW., Washington, DC 20036, 202/872–4477.

19. References

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20. Tables.

TABLE 1—NON PESTICIDE/PCB BASE/NEUTRAL EXTRACTABLES [1]

Analyte	CAS Registry	MDL [4]	ML [5]
Acenaphthene	83–32–9	1.9	5.7
Acenaphthylene	208–96–8	3.5	10.5
Anthracene	120–12–7	1.9	5.7
Benzidine [2]	92–87–5	44	132
Benzo(a)anthracene	56–55–3	7.8	23.4
Benzo(a)pyrene	50–32–8	2.5	7.5
Benzo(b)fluoranthene	205–99–2	4.8	14.4
Benzo(k)fluoranthene	207–08–9	2.5	7.5
Benzo(ghi)perylene	191–24–2	4.1	12.3
Benzyl butyl phthalate	85–68–7	2.5	7.5
bis(2-Chloroethoxy)methane	111–91–1	5.3	15.9
bis(2-Ethylhexyl)phthalate	117–81–7	2.5	7.5
bis(2-Chloroisopropyl) ether (2,2′-Oxybis(1-chloropropane))	108–60–1	5.7	17.1
4-Bromophenyl phenyl ether	101–55–3	1.9	5.7
2-Chloronaphthalene	91–58–7	1.9	5.7
4-Chlorophenyl phenyl ether	7005–72–3	4.2	12.6
Chrysene	218–01–9	2.5	7.5
Dibenz(a,h)anthracene	53–70–3	2.5	7.5
Di-*n*-butylphthalate	84–74–2	2.5	7.5
3,3′-Dichlorobenzidine	91–94–1	16.5	49.5
Diethyl phthalate	84–66–2	1.9	5.7
Dimethyl phthalate	131–11–3	1.6	4.8
2,4-Dinitrotoluene	121–14–2	5.7	17.1
2,6-Dinitrotoluene	606–20–2	1.9	5.7
Di-n-octylphthalate	117–84–0	2.5	7.5
Fluoranthene	206–44–0	2.2	6.6
Fluorene	86–73–7	1.9	5.7
Hexachlorobenzene	118–74–1	1.9	5.7
Hexachlorobutadiene	87–68–3	0.9	2.7
Hexachloroethane	67–72–1	1.6	4.8
Indeno(1,2,3-cd)pyrene	193–39–5	3.7	11.1
Isophorone	78–59–1	2.2	6.6
Naphthalene	91–20–3	1.6	4.8
Nitrobenzene	98–95–3	1.9	5.7
N-Nitrosodi-*n*-propylamine [3]	621–64–7	—	—
Phenanthrene	85–01–8	5.4	16.2
Pyrene	129–00–0	1.9	5.7
1,2,4-Trichlorobenzene	120–82–1	1.9	5.7

[1] All analytes in this table are Priority Pollutants (40 CFR part 423, appendix A).

[2] Included for tailing factor testing.
[3] See Section 1.2.
[4] MDL values from the 1984 promulgated version of Method 624.
[5] ML = Minimum Level—see Glossary for definition and derivation.

TABLE 2—ACID EXTRACTABLES [1]

Analyte	CAS Registry	MDL [3]	ML [4]
4-Chloro-3-methylphenol	59–50–7	3.0	9.0
2-Chlorophenol	95–57–8	3.3	9.9
2,4-Dichlorophenol	120–83–2	2.7	8.1
2,4-Dimethylphenol	105–67–9	2.7	8.1
2,4-Dinitrophenol	51–28–5	42	126
2-Methyl-4,6-dinitrophenol	534–52–1	24	72
2-Nitrophenol	88–75–5	3.6	10.8
4-Nitrophenol	100–02–7	2.4	7.2
Pentachlorophenol [2]	87–86–5	3.6	10.8
Phenol	108–95–2	1.5	4.5
2,4,6-Trichlorophenol	88–06–2	2.7	8.1

[1] All analytes in this table are Priority Pollutants (40 CFR part 423, appendix A).
[2] See Section 1.2; included for tailing factor testing.
[3] MDL values from the 1984 promulgated version of Method 624.
[4] ML = Minimum Level—see Glossary for definition and derivation.

TABLE 3—ADDITIONAL EXTRACTABLE ANALYTES [1 2]

Analyte	CAS Registry	MDL [6]	ML [7]
Acetophenone	98–86–2		
2-Acetylaminofluorene	53–96–3		
1-Acetyl-2-thiourea	591–08–2		
Alachlor	15972–60–8		
Aldrin [3]	309–00–2	1.9	5.7
Ametryn	834–12–8		
2-Aminoanthraquinone	117–79–3		
Aminoazobenzene	60–09–3		
4-Aminobiphenyl	92–67–1		
3-Amino-9-ethylcarbazole	132–32–1		
Anilazine	101–05–3		
Aniline	62–53–3		
o-Anisidine	90–04–0		
Aramite	140–57–8		
Atraton	1610–17–9		
Atrazine	1912–24–9		
Azinphos-methyl	86–50–0		
Barban	101–27–9		
Benzanthrone	82–05–3		
Benzenethiol	108–98–5		
Benzidine [3 4]	92–87–5	44	132
Benzoic acid	65–85–0		
2,3-Benzofluorene	243–17–4		
p-Benzoquinone	106–51–4		
Benzyl alcohol	100–51–6		
alpha-BHC [3 4]	319–84–6		
beta-BHC [3]	319–85–7	3.1	9.3
gamma-BHC (Lindane) [3 4]	58–89–8	4.2	12.6
delta-BHC [3]	319–86–8		
Biphenyl	92–52–4		
Bromacil	314–40–9		
2-Bromochlorobenzene	694–80–4		
3-Bromochlorobenzene	108–39–2		
Bromoxynil	1689–84–5		
Butachlor	2318–4669		
Butylate	2008–41–5		
n-C10 (*n*-decane)	124–18–5		
n-C12 (*n*-undecane)	112–40–2		
n-C14 (*n*-tetradecane)	629–59–4		
n-C16 (*n*-hexadecane)	544–76–3		
n-C18 (*n*-octadecane)	593–45–3		
n-C20 (*n*-eicosane)	112–95–8		
n-C22 (*n*-docosane)	629–97–0		
n-C24 (*n*-tetracosane)	646–31–1		
n-C26 (*n*-hexacosane)	630–01–3		
n-C28 (*n*-octacosane)	630–02–4		
n-C30 (*n*-triacontane)	638–68–6		

TABLE 3—ADDITIONAL EXTRACTABLE ANALYTES [1 2]—Continued

Analyte	CAS Registry	MDL [6]	ML [7]
Captafol	2425–06–1		
Captan	133–06–2		
Carbaryl	63–25–2		
Carbazole	86–74–8		
Carbofuran	1563–66–2		
Carboxin	5234–68–4		
Carbophenothion	786–19–6		
Chlordane[3 5]	57–74–9		
bis(2-Chloroethyl) ether [3 4]	111–44–4	5.7	17.1
Chloroneb	2675–77–6		
4-Chloroaniline	106–47–8		
Chlorobenzilate	510–15–6		
Chlorfenvinphos	470–90–6		
4-Chloro-2-methylaniline	95–69–2		
3-(Chloromethyl)pyridine hydrochloride	6959–48–4		
4-Chloro-2-nitroaniline	89–63–4		
Chlorpropham	101–21–3		
Chlorothalonil	1897–45–6		
1-Chloronaphthalene	90–13–1		
3-Chloronitribenzene	121–73–3		
4-Chloro-1,2-phenylenediamine	95–83–0		
4-Chloro-1,3-phenylenediamine	5131–60–2		
2-Chlorobiphenyl	2051–60–7		
Chlorpyrifos	2921–88–2		
Coumaphos	56–72–4		
m+p-Cresol	65794–96–9		
o-Cresol	95–48–7		
p-Cresidine	120–71–8		
Crotoxyphos	7700–17–6		
2-Cyclohexyl-4,6-dinitro-phenol	131–89–5		
Cyanazine	21725–46–2		
Cycloate	1134–23–2		
p-Cymene	99–87–6		
Dacthal (DCPA)	1861–32–1		
4,4′-DDD [3]	72–54–8	2.8	8.4
4,4′-DDE [3]	72–55–9	5.6	16.8
4,4′-DDT [3]	50–29–3	4.7	14.1
Demeton-O	298–03–3		
Demeton-S	126–75–0		
Diallate (*cis* or *trans*)	2303–16–4		
2,4-Diaminotoluene	95–80–7		
Diazinon	333–41–5		
Dibenz(a,j)acridine	224–42–0		
Dibenzofuran	132–64–9		
Dibenzo(a,e)pyrene	192–65–4		
Dibenzothiophene	132–65–0		
1,2-Dibromo-3-chloropropane	96–12–8		
3,5-Dibromo-4-hydroxybenzonitrile	1689–84–5		
2,6-Di-tert-butyl-p-benzoquinone	719–22–2		
Dichlone	117–80–6		
2,3-Dichloroaniline	608–27–5		
2,3-Dichlorobiphenyl	16605–91–7		
2,6-Dichloro-4-nitroaniline	99–30–9		
2,3-Dichloronitrobenzene	3209–22–1		
1,3-Dichloro-2-propanol	96–23–1		
2,6-Dichlorophenol	120–83–2		
Dichlorvos	62–73–7		
Dicrotophos	141–66–2		
Dieldrin [3]	60–57–1	2.5	7.5
1,2:3,4-Diepoxybutane	1464–53–5		
Di(2-ethylhexyl) adipate	103–23–1		
Diethylstilbestrol	56–53–1		
Diethyl sulfate	64–67–5		
Dilantin (5,5-Diphenylhydantoin)	57–41–0		
Dimethoate	60–51–5		
3,3′-Dimethoxybenzidine	119–90–4		
Dimethylaminoazobenzene	60–11–7		
7,12-Dimethylbenz(a)anthracene	57–97–6		
3,3′-Dimethylbenzidine	119–93–7		
N,N-Dimethylformamide	68–12–2		
3,6-Dimethylphenathrene	1576–67–6		
alpha, alpha-Dimethylphenethylamine	122–09–8		

TABLE 3—ADDITIONAL EXTRACTABLE ANALYTES [1 2]—Continued

Analyte	CAS Registry	MDL [6]	ML [7]
Dimethyl sulfone	67–71–0		
1,2-Dinitrobenzene	528–29–0		
1,3-Dinitrobenzene	99–65–0		
1,4-Dinitrobenzene	100–25–4		
Dinocap	39300–45–3		
Dinoseb	88–85–7		
Diphenylamine	122–39–4		
Diphenyl ether	101–84–8		
1,2-Diphenylhydrazine	122–66–7		
Diphenamid	957–51–7		
Diphenyldisulfide	882–33–7		
Disulfoton	298–04–4		
Disulfoton sulfoxide	2497–07–6		
Disulfoton sulfone	2497–06–5		
Endosulfan I [3 4]	959–98–8		
Endosulfan II [3 4]	33213–65–9		
Endosulfan sulfate [3]	1031–07–8	5.6	16.8
Endrin [3 4]	72–20–8		
Endrin aldehyde [3 4]	7421–93–4		
Endrin ketone [3 4]	53494–70–5		
EPN	2104–64–5		
EPTC	759–94–4		
Ethion	563–12–2		
Ethoprop	13194–48–4		
Ethyl carbamate	51–79–6		
Ethyl methanesulfonate	65–50–0		
Ethylenethiourea	96–45–7		
Etridiazole	2593–15–9		
Ethynylestradiol-3-methyl ether	72–33–3		
Famphur	52–85–7		
Fenamiphos	22224–92–6		
Fenarimol	60168–88–9		
Fensulfothion	115–90–2		
Fenthion	55–38–9		
Fluchloralin	33245–39–5		
Fluridone	59756–60–4		
Heptachlor [3]	76–44–8	1.9	5.7
Heptachlor epoxide [3]	1024–57–3	2.2	6.6
2,2′,3,3′,4,4′,6-Heptachlorobiphenyl	52663–71–5		
2,2′,4,4′,5′,6-Hexachlorobiphenyl	60145–22–4		
Hexachlorocyclopentadiene [3 4]	77–47–4		
Hexachlorophene	70–30–4		
Hexachloropropene	1888–71–7		
Hexamethylphosphoramide	680–31–9		
Hexanoic acid	142–62–1		
Hexazinone	51235–04–2		
Hydroquinone	123–31–9		
Isodrin	465–73–6		
2-Isopropylnapthalene	2027–17–0		
Isosafrole	120–58–1		
Kepone	143–50–0		
Leptophos	21609–90–5		
Longifolene	475–20–7		
Malachite green	569–64–2		
Malathion	121–75–5		
Maleic anhydride	108–31–6		
Merphos	150–50–5		
Mestranol	72–33–3		
Methapyrilene	91–80–5		
Methoxychlor	72–43–5		
2-Methylbenzothioazole	120–75–2		
3-Methylcholanthrene	56–49–5		
4,4′-Methylenebis(2-chloroaniline)	101–14–4		
4,4′-Methylenebis(N,N-dimethylaniline)	101–61–1		
4,5-Methylenephenanthrene	203–64–5		
1-Methylfluorene	1730–37–6		
Methyl methanesulfonate	66–27–3		
2-Methylnaphthalene	91–57–6		
Methylparaoxon	950–35–6		
Methyl parathion	298–00–0		
1-Methylphenanthrene	832–69–9		
2-(Methylthio)benzothiazole	615–22–5		

TABLE 3—ADDITIONAL EXTRACTABLE ANALYTES [1 2]—Continued

Analyte	CAS Registry	MDL [6]	ML [7]
Metolachlor	5218–45–2		
Metribuzin	21087–64–9		
Mevinphos	7786–34–7		
Mexacarbate	315–18–4		
MGK 264	113–48–4		
Mirex	2385–85–5		
Molinate	2212–67–1		
Monocrotophos	6923–22–4		
Naled	300–76–5		
Napropamide	15299–99–7		
1,4-Naphthoquinone	130–15–4		
1-Naphthylamine	134–32–7		
2-Naphthylamine	91–59–8		
1,5-Naphthalenediamine	2243–62–1		
Nicotine	54–11–5		
5-Nitroacenaphthene	602–87–9		
2-Nitroaniline	88–74–4		
3-Nitroaniline	99–09–2		
4-Nitroaniline	100–01–6		
5-Nitro-*o*-anisidine	99–59–2		
4-Nitrobiphenyl	92–93–3		
Nitrofen	1836–75–5		
5-Nitro-*o*-toluidine	99–55–8		
Nitroquinoline-1-oxide	56–57–5		
N-Nitrosodi-*n*-butylamine [4]	924–16–3		
N-Nitrosodiethylamine [4]	55–18–5		
N-Nitrosodimethylamine [3 4]	62–75–9		
N-Nitrosodiphenylamine [3 4]	86–30–6		
N-Nitrosomethylethylamine [4]	10595–95–6		
N-Nitrosomethylphenylamine [4]	614–00–6		
N-Nitrosomorpholine [4]	59–89–2		
N-Nitrosopiperidine [4]	100–75–5		
N-Nitrosopyrrolidine [4]	930–55–2		
trans-Nonachlor	39765–80–5		
Norflurazon	27314–13–2		
2,2′,3,3′,4,5′,6,6′-Octachlorobiphenyl	40186–71–8		
Octamethyl pyrophosphoramide	152–16–9		
4,4'-Oxydianiline	101–80–4		
Parathion	56–38–2		
PCB–1016 [3 5]	12674–11–2		
PCB–1221 [3 5]	11104–28–2	30	90
PCB–1232 [3 5]	11141–16–5		
PCB–1242 [3 5]	53469–21–9		
PCB–1248 [3 5]	12672–29–6		
PCB–1254 [3 5]	11097–69–1	36	108
PCB–1260 [3 5]	11098–82–5		
PCB–1268 [3 5]	11100–14–4		
Pebulate	1114–71–2		
Pentachlorobenzene	608–93–5		
Pentachloronitrobenzene	82–68–8		
2,2′,3,4′,6-Pentachlorobiphenyl	68194–05–8		
Pentachloroethane	76–01–7		
Pentamethylbenzene	700–12–9		
Perylene	198–55–0		
Phenacetin	62–44–2		
cis-Permethrin	61949–76–6		
trans-Permethrin	61949–77–7		
Phenobarbital	50–06–6		
Phenothiazene	92–84–2		
1,4-Phenylenediamine	624–18–0		
1-Phenylnaphthalene	605–02–7		
2-Phenylnaphthalene	612–94–2		
Phorate	298–02–2		
Phosalone	2310–18–0		
Phosmet	732–11–6		
Phosphamidon	13171–21–6		
Phthalic anhydride	85–44–9		
alpha-Picoline (2-Methylpyridine)	109–06–8		
Piperonyl sulfoxide	120–62–7		
Prometon	1610–18–0		
Prometryn	7287–19–6		
Pronamide	23950–58–5		

TABLE 3—ADDITIONAL EXTRACTABLE ANALYTES [1] [2]—Continued

Analyte	CAS Registry	MDL [6]	ML [7]
Propachlor	1918–16–7		
Propazine	139–40–2		
Propylthiouracil	51–52–5		
Pyridine	110–86–1		
Resorcinol (1,3-Benzenediol)	108–46–3		
Safrole	94–59–7		
Simazine	122–34–9		
Simetryn	1014–70–6		
Squalene	7683–64–9		
Stirofos	22248–79–9		
Strychnine	57–24–9		
Styrene	100–42–5		
Sulfallate	95–06–7		
Tebuthiuron	34014–18–1		
Terbacil	5902–51–2		
Terbufos	13071–79–9		
Terbutryn	886–50–0		
alpha-Terpineol	98–55–5		
1,2,4,5-Tetrachlorobenzene	95–94–3		
2,2′,4,4′-Tetrachlorobiphenyl	2437–79–8		
2,3,7,8-Tetrachlorodibenzo-*p*-dioxin	1746–01–6		
2,3,4,6-Tetrachlorophenol	58–90–2		
Tetrachlorvinphos	22248–79–9		
Tetraethyl dithiopyrophosphate	3689–24–5		
Tetraethyl pyrophosphate	107–49–3		
Thianaphthene (2,3-Benzothiophene)	95–15–8		
Thioacetamide	62–55–5		
Thionazin	297–97–2		
Thiophenol (Benzenethiol)	108–98–5		
Thioxanthone	492–22–8		
Toluene-1,3-diisocyanate	26471–62–5		
Toluene-2,4-diisocyanate	584–84–9		
o-Toluidine	95–53–4		
Toxaphene [3] [5]	8001–35–2		
Triadimefon	43121–43–3		
1,2,3-Trichlorobenzene	87–61–6		
2,4,5-Trichlorobiphenyl	15862–07–4		
2,3,6-Trichlorophenol	933–75–5		
2,4,5-Trichlorophenol	95–95–4		
Tricyclazole	41814–78–2		
Trifluralin	1582–09–8		
1,2,3-Trimethoxybenzene	634–36–6		
2,4,5-Trimethylaniline	137–17–7		
Trimethyl phosphate	512–56–1		
Triphenylene	217–59–4		
Tripropyleneglycolmethyl ether	20324–33–8		
1,3,5-Trinitrobenzene	99–35–4		
Tris(2,3-dibromopropyl) phosphate	126–72–7		
Tri-*p*-tolyl phosphate	78–32–0		
O,O,O-Triethyl phosphorothioate	126–68–1		
Trithiane	291–29–4		
Vernolate	1929–77–7		

[1] Compounds that have been demonstrated amenable to extraction and gas chromatography.
[2] Determine each analyte in the fraction that gives the most accurate result.
[3] Priority Pollutant (40 CFR part 423, appendix A).
[4] See Section 1.2.
[5] These compounds are mixtures of various isomers.
[6] MDL values from the 1984 promulgated version of Method 624.
[7] ML = Minimum Level—see Glossary for definition and derivation.

TABLE 4—CHROMATOGRAPHIC CONDITIONS AND CHARACTERISTIC M/Z'S FOR BASE/NEUTRAL EXTRACTABLES

Analyte	Retention time (sec) [1]	Characteristic m/z's					
		Electron impact ionization			Chemical ionization		
		Primary	Second	Second	Methane	Methane	Methane
N-Nitrosodimethylamine	385	42	74	44			
bis(2-Chloroethyl) ether	704	93	63	95	63	107	109
bis(2-Chloroisopropyl) ether	799	45	77	79	77	135	137
Hexachloroethane	823	117	201	199	199	201	203

TABLE 4—CHROMATOGRAPHIC CONDITIONS AND CHARACTERISTIC M/Z'S FOR BASE/NEUTRAL EXTRACTABLES—Continued

Analyte	Retention time (sec) [1]	Characteristic m/z's					
		Electron impact ionization			Chemical ionization		
		Primary	Second	Second	Methane	Methane	Methane
N-Nitrosodi-*n*-propylamine	830	130	42	101			
Nitrobenzene	849	77	123	65	124	152	164
Isophorone	889	82	95	138	139	167	178
bis(2-Chloroethoxy) methane	939	93	95	123	65	107	137
1,2,4-Trichlorobenzene	958	180	182	145	181	183	209
Naphthalene	967	128	129	127	129	157	169
Hexachlorobutadiene	1006	225	223	227	223	225	227
Hexachlorocyclopentadiene	1142	237	235	272	235	237	239
2-Chloronaphthalene	1200	162	164	127	163	191	203
Acenaphthylene	1247	152	151	153	152	153	181
Dimethyl phthalate	1273	163	194	164	151	163	164
2,6-Dinitrotoluene	1300	165	89	121	183	211	223
Acenaphthene	1304	154	153	152	154	155	183
2,4-Dinitrotoluene	1364	165	63	182	183	211	223
Fluorene	1401	166	165	167	166	167	195
4-Chlorophenyl phenyl ether	1409	204	206	141			
Diethyl phthalate	1414	149	177	150	177	223	251
N-Nitrosodiphenylamine	1464	169	168	167	169	170	198
4-Bromophenyl phenyl ether	1498	248	250	141	249	251	277
alpha-BHC	1514	183	181	109			
Hexachlorobenzene	1522	284	142	249	284	286	288
beta-BHC	1544	183	181	109			
gamma-BHC	1557	181	183	109			
Phenanthrene	1583	178	179	176	178	179	207
Anthracene	1592	178	179	176	178	179	207
delta-BHC	1599	183	109	181			
Heptachlor	1683	100	272	274			
Di-*n*-butyl phthalate	1723	149	150	104	149	205	279
Aldrin	1753	66	263	220			
Fluoranthene	1817	202	101	100	203	231	243
Heptachlor epoxide	1820	353	355	351			
gamma-Chlordane	1834	373	375	377			
Pyrene	1852	202	101	100	203	231	243
Benzidine [2]	1853	184	92	185	185	213	225
alpha-Chlordane	1854	373	375	377			
Endosulfan I	1855	237	339	341			
4,4′-DDE	1892	246	248	176			
Dieldrin	1907	79	263	279			
Endrin	1935	81	263	82			
Endosulfan II	2014	237	339	341			
4,4′-DDD	2019	235	237	165			
Endrin aldehyde	2031	67	345	250			
Butyl benzyl phthalate	2060	149	91	206	149	299	327
Endosulfan sulfate	2068	272	387	422			
4,4′-DDT	2073	235	237	165			
Chrysene	2083	228	226	229	228	229	257
3,3′-Dichlorobenzidine	2086	252	254	126			
Benzo(a)anthracene	2090	228	229	226	228	229	257
bis(2-Ethylhexyl) phthalate	2124	149	167	279	149		
Di-*n*-octyl phthalate	2240	149	43	57			
Benzo(b)fluoranthene	2286	252	253	125	252	253	281
Benzo(k)fluoranthene	2293	252	253	125	252	253	281
Benzo(a)pyrene	2350	252	253	125	252	253	281
Indeno(1,2,3-cd) pyrene	2650	276	138	277	276	277	305
Dibenz(a,h)anthracene	2660	278	139	279	278	279	307
Benzo(ghi)perylene	2750	276	138	277	276	277	305
Toxaphene		159	231	233			
PCB 1016		224	260	294			
PCB 1221		190	224	260			
PCB 1232		190	224	260			
PCB 1242		224	260	294			
PCB 1248		294	330	262			
PCB 1254		294	330	362			
PCB 1260		330	362	394			

[1] Column: 30 m × 0.25 mm ID; 94% methyl, 5% phenyl, 1% vinyl bonded phase fused silica capillary.
Conditions: 5 min at 30 °C; 30–280 at 8 °C per min; isothermal at 280 °C until benzo(ghi)perylene elutes.
Gas velocity: 30 cm/sec at 30 °C (at constant pressure).
[2] See Section 1.2; included for tailing factor testing.

TABLE 5—CHROMATOGRAPHIC CONDITIONS AND CHARACTERISTIC M/Z'S FOR ACID EXTRACTABLES

Analyte	Retention time (sec) [1]	Characteristic m/z's					
		Electron impact ionization			Chemical ionization		
		Primary	Second	Second	Methane	Methane	Methane
2-Chlorophenol	705	128	64	130	129	131	157
Phenol	700	94	65	66	95	123	135
2-Nitrophenol	900	139	65	109	140	168	122
2,4-Dimethylphenol	924	122	107	121	123	151	163
2,4-Dichlorophenol	947	162	164	98	163	165	167
4-Chloro-3-methylphenol	1091	142	107	144	143	171	183
2,4,6-Trichlorophenol	1165	196	198	200	197	199	201
2,4-Dinitrophenol	1325	184	63	154	185	213	225
4-Nitrophenol	1354	65	139	109	140	168	122
2-Methyl-4,6-dinitrophenol	1435	198	182	77	199	227	239
Pentachlorophenol	1561	266	264	268	267	265	269

Column: 30 m × 0.25 mm ID; 94% methyl, 5% phenyl, 1% vinyl bonded phase fused silica capillary.
Conditions: 5 min at 30 °C; 30–250 at 8 °C per min; isothermal at 280 °C until pentachlorophenol elutes.
Gas velocity: 30 cm/sec at 30 °C (at constant pressure).

TABLE 6—QC ACCEPTANCE CRITERIA—METHOD 625 [1]

Analyte	Range for Q (%) [2]	Limit for s (%) [3]	Range for $\bar{X}$ (%) [3]	Range for P, P_s (%) [3]	Limit for RPD (%)
Acenaphthene	70–130	29	60–132	47–145	48
Acenaphthylene	60–130	45	54–126	33–145	74
Aldrin	7–152	39	7–152	D–166	81
Anthracene	58–130	40	43–120	27–133	66
Benzo(a)anthracene	42–133	32	42–133	33–143	53
Benzo(b)fluoranthene	42–140	43	42–140	24–159	71
Benzo(k)fluoranthene	25–146	38	25–146	11–162	63
Benzo(a)pyrene	32–148	43	32–148	17–163	72
Benzo(ghi)perylene	13–195	61	D–195	D–219	97
Benzyl butyl phthalate	43–140	36	D–140	D–152	60
beta-BHC	42–131	37	42–131	24–149	61
delta-BHC	D–130	77	D–120	D–120	129
bis(2-Chloroethyl)ether	52–130	65	43–126	12–158	108
bis(2-Chloroethoxy)methane	52–164	32	49–165	33–184	54
bis(2-Chloroisopropyl) ether	63–139	46	63–139	36–166	76
bis(2-Ethylhexyl) phthalate	43–137	50	29–137	8–158	82
4-Bromophenyl phenyl ether	70–130	26	65–120	53–127	43
2-Chloronaphthalene	70–130	15	65–120	60–120	24
4-Chlorophenyl phenyl ether	57–145	36	38–145	25–158	61
Chrysene	44–140	53	44–140	17–168	87
4,4′-DDD	D–135	56	D–135	D–145	93
4,4′-DDE	19–130	46	19–120	4–136	77
4,4′-DDT	D–171	81	D–171	D–203	135
Dibenz(a,h)anthracene	13–200	75	D–200	D–227	126
Di-*n*-butyl phthalate	52–130	28	8–120	1–120	47
3,3′-Dichlorobenzidine	18–213	65	8–213	D–262	108
Dieldrin	70–130	38	44–119	29–136	62
Diethyl phthalate	47–130	60	D–120	D–120	100
Dimethyl phthalate	50–130	110	D–120	D–120	183
2,4-Dinitrotoluene	53–130	25	48–127	39–139	42
2,6-Dinitrotoluene	68–137	29	68–137	50–158	48
Di-*n*-octyl phthalate	21–132	42	19–132	4–146	69
Endosulfan sulfate	D–130	42	D–120	D–120	70
Endrin aldehyde	D–189	45	D–189	D–209	75
Fluoranthene	47–130	40	43–121	26–137	66
Fluorene	70–130	23	70–120	59–121	38
Heptachlor	D–172	44	D–172	D–192	74
Heptachlor epoxide	70–130	61	71–120	26–155	101
Hexachlorobenzene	38–142	33	8–142	D–152	55
Hexachlorobutadiene	68–130	38	38–120	24–120	62
Hexachloroethane	55–130	32	55–120	40–120	52
Indeno(1,2,3-cd)pyrene	13–151	60	D–151	D–171	99
Isophorone	52–180	56	47–180	21–196	93
Naphthalene	70–130	39	36–120	21–133	65
Nitrobenzene	54–158	37	54–158	35–180	62
N-Nitrosodi-*n*-propylamine	59–170	52	14–198	D–230	87
PCB–1260	19–130	77	19–130	D–164	128

TABLE 6—QC ACCEPTANCE CRITERIA—METHOD 625 [1]—Continued

Analyte	Range for Q (%) [2]	Limit for s (%) [3]	Range for $\bar{X}$ (%) [3]	Range for P, P_s (%) [3]	Limit for RPD (%)
Phenanthrene	67–130	24	65–120	54–120	39
Pyrene	70–130	30	70–120	52–120	49
1,2,4-Trichlorobenzene	61–130	30	57–130	44–142	50
4-Chloro-3-methylphenol	68–130	44	41–128	22–147	73
2-Chlorophenol	55–130	37	36–120	23–134	61
2,4-Dichlorophenol	64–130	30	53–122	39–135	50
2,4-Dimethylphenol	58–130	35	42–120	32–120	58
2,4-Dinitrophenol	39–173	79	D–173	D–191	132
2-Methyl-4,6-dinitrophenol	56–130	122	53–130	D–181	203
2-Nitrophenol	61–163	33	45–167	29–182	55
4-Nitrophenol	35–130	79	13–129	D–132	131
Pentachlorophenol	42–152	52	38–152	14–176	86
Phenol	48–130	39	17–120	5–120	64
2,4,6-Trichlorophenol	69–130	35	52–129	37–144	58

[1] Acceptance criteria are based upon method performance data in Table 7 and from EPA Method 1625. Where necessary, limits for recovery have been broadened to assure applicability to concentrations below those used to develop Table 7.
[2] Test concentration = 100 µg/mL.
[3] Test concentration = 100 µg/L.
Q = Calibration verification (Sections 7.3.1 and 13.4).
s = Standard deviation for four recovery measurements in the DOC test (Section 8.2.4).
$\bar{X}$ = Average recovery for four recovery measurements in the DOC test (Section 8.2.4).
P, Ps = MS/MSD recovery (Section 8.3.2, Section 8.4.2).
RPD = MS/MSD relative percent difference (RPD; Section 8.3.3).
D = Detected; result must be greater than zero.

TABLE 7—PRECISION AND RECOVERY AS FUNCTIONS OF CONCENTRATION—METHOD 625 [1]

Analyte	Recovery, X′ (µg/L)	Single analyst precision, s_r' (µg/L)	Overall precision, S′ (µg/L)
Acenaphthene	0.96C+0.19	0.15 $\bar{X}$ − 0.12	0.21 $\bar{X}$ − 0.67
Acenaphthylene	0.89C+0.74	0.24 $\bar{X}$ − 1.06	0.26 $\bar{X}$ − 0.54
Aldrin	0.78C+1.66	0.27 $\bar{X}$ − 1.28	0.43 $\bar{X}$ +1.13
Anthracene	0.80C+0.68	0.21 $\bar{X}$ − 0.32	0.27 $\bar{X}$ − 0.64
Benzo(a)anthracene	0.88C − 0.60	0.15 $\bar{X}$ +0.93	0.26 $\bar{X}$ − 0.28
Benzo(b)fluoranthene	0.93C − 1.80	0.22 $\bar{X}$ +0.43	0.29 $\bar{X}$ +0.96
Benzo(k)fluoranthene	0.87C − 1.56	0.19 $\bar{X}$ +1.03	0.35 $\bar{X}$ +0.40
Benzo(a)pyrene	0.90C − 0.13	0.22 $\bar{X}$ +0.48	0.32 $\bar{X}$ +1.35
Benzo(ghi)perylene	0.98C − 0.86	0.29 $\bar{X}$ +2.40	0.51 $\bar{X}$ − 0.44
Benzyl butyl phthalate	0.66C − 1.68	0.18 $\bar{X}$ +0.94	0.53 $\bar{X}$ +0.92
beta-BHC	0.87C − 0.94	0.20 $\bar{X}$ − 0.58	0.30 $\bar{X}$ − 1.94
delta-BHC	0.29C − 1.09	0.34 $\bar{X}$ +0.86	0.93 $\bar{X}$ − 0.17
bis(2-Chloroethyl)ether	0.86C − 1.54	0.35 $\bar{X}$ − 0.99	0.35 $\bar{X}$ +0.10
bis(2-Chloroethoxy)methane	1.12C − 5.04	0.16 $\bar{X}$ +1.34	0.26 $\bar{X}$ +2.01
bis(2-Chloroisopropyl)ether	1.03C − 2.31	0.24 $\bar{X}$ +0.28	0.25 $\bar{X}$ +1.04
bis(2-Ethylhexyl)phthalate	0.84C − 1.18	0.26 $\bar{X}$ +0.73	0.36 $\bar{X}$ +0.67
4-Bromophenyl phenyl ether	0.91C − 1.34	0.13 $\bar{X}$ +0.66	0.16 $\bar{X}$ +0.66
2-Chloronaphthalene	0.89C+0.01	0.07 $\bar{X}$ +0.52	0.13 $\bar{X}$ +0.34
4-Chlorophenyl phenyl ether	0.91C+0.53	0.20 $\bar{X}$ − 0.94	0.30 $\bar{X}$ − 0.46
Chrysene	0.93C − 1.00	0.28 $\bar{X}$ +0.13	0.33 $\bar{X}$ − 0.09
4,4′-DDD	0.56C − 0.40	0.29 $\bar{X}$ − 0.32	0.66 $\bar{X}$ − 0.96
4,4′-DDE	0.70C − 0.54	0.26 $\bar{X}$ − 1.17	0.39 $\bar{X}$ − 1.04
4,4′-DDT	0.79C − 3.28	0.42 $\bar{X}$ +0.19	0.65 $\bar{X}$ − 0.58
Dibenz(a,h)anthracene	0.88C+4.72	0.30 $\bar{X}$ +8.51	0.59 $\bar{X}$ +0.25
Di-*n*-butyl phthalate	0.59C+0.71	0.13 $\bar{X}$ +1.16	0.39 $\bar{X}$ +0.60
3,3′-Dichlorobenzidine	1.23C − 12.65	0.28 $\bar{X}$ +7.33	0.47 $\bar{X}$ +3.45
Dieldrin	0.82C − 0.16	0.20 $\bar{X}$ − 0.16	0.26 $\bar{X}$ − 0.07
Diethyl phthalate	0.43C+1.00	0.28 $\bar{X}$ +1.44	0.52 $\bar{X}$ +0.22
Dimethyl phthalate	0.20C+1.03	0.54 $\bar{X}$ +0.19	1.05 $\bar{X}$ − 0.92
2,4-Dinitrotoluene	0.92C − 4.81	0.12 $\bar{X}$ +1.06	0.21 $\bar{X}$ +1.50
2,6-Dinitrotoluene	1.06C − 3.60	0.14 $\bar{X}$ +1.26	0.19 $\bar{X}$ +0.35
Di-*n*-octyl phthalate	0.76C − 0.79	0.21 $\bar{X}$ +1.19	0.37 $\bar{X}$ +1.19
Endosulfan sulfate	0.39C+0.41	0.12 $\bar{X}$ +2.47	0.63 $\bar{X}$ − 1.03
Endrin aldehyde	0.76C − 3.86	0.18 $\bar{X}$ +3.91	0.73 $\bar{X}$ − 0.62
Fluoranthene	0.81C+1.10	0.22 $\bar{X}$ +0.73	0.28 $\bar{X}$ − 0.60
Fluorene	0.90C − 0.00	0.12 $\bar{X}$ +0.26	0.13 $\bar{X}$ +0.61
Heptachlor	0.87C − 2.97	0.24 $\bar{X}$ − 0.56	0.50 $\bar{X}$ − 0.23
Heptachlor epoxide	0.92C − 1.87	0.33 $\bar{X}$ − 0.46	0.28 $\bar{X}$ +0.64
Hexachlorobenzene	0.74C+0.66	0.18 $\bar{X}$ − 0.10	0.43 $\bar{X}$ − 0.52

TABLE 7—PRECISION AND RECOVERY AS FUNCTIONS OF CONCENTRATION—METHOD 625 [1]—Continued

Analyte	Recovery, X′ (μg/L)	Single analyst precision, s_r' (μg/L)	Overall precision, S′ (μg/L)
Hexachlorobutadiene	0.71C − 1.01	0.19 $\bar{x}$ +0.92	0.26 $\bar{x}$ +0.49
Hexachloroethane	0.73C − 0.83	0.17 $\bar{x}$ +0.67	0.17 $\bar{x}$ +0.80
Indeno(1,2,3-cd)pyrene	0.78C − 3.10	0.29 $\bar{x}$ +1.46	0.50 $\bar{x}$ +0.44
Isophorone	1.12C+1.41	0.27 $\bar{x}$ +0.77	0.33 $\bar{x}$ +0.26
Naphthalene	0.76C+1.58	0.21 $\bar{x}$ − 0.41	0.30 $\bar{x}$ − 0.68
Nitrobenzene	1.09C − 3.05	0.19 $\bar{x}$ +0.92	0.27 $\bar{x}$ +0.21
N-Nitrosodi-*n*-propylamine	1.12C − 6.22	0.27 $\bar{x}$ +0.68	0.44 $\bar{x}$ +0.47
PCB-1260	0.81C − 10.86	0.35 $\bar{x}$ +3.61	0.43 $\bar{x}$ +1.82
Phenanthrene	0.87C − 0.06	0.12 $\bar{x}$ +0.57	0.15 $\bar{x}$ +0.25
Pyrene	0.84C − 0.16	0.16 $\bar{x}$ +0.06	0.15 $\bar{x}$ +0.31
1,2,4-Trichlorobenzene	0.94C − 0.79	0.15 $\bar{x}$ +0.85	0.21 $\bar{x}$ +0.39
4-Chloro-3-methylphenol	0.84C+0.35	0.23 $\bar{x}$ +0.75	0.29 $\bar{x}$ +1.31
2-Chlorophenol	0.78C+0.29	0.18 $\bar{x}$ +1.46	0.28 $\bar{x}$ 0.97
2,4-Dichlorophenol	0.87C+0.13	0.15 $\bar{x}$ +1.25	0.21 $\bar{x}$ +1.28
2,4-Dimethylphenol	0.71C+4.41	0.16 $\bar{x}$ +1.21	0.22 $\bar{x}$ +1.31
2,4-Dinitrophenol	0.81C − 18.04	0.38 $\bar{x}$ +2.36	0.42 $\bar{x}$ +26.29
2-Methyl-4,6-Dinitrophenol	1.04C − 28.04	0.05 $\bar{x}$ +42.29	0.26 $\bar{x}$ +23.10
2-Nitrophenol	1.07C − 1.15	0.16 $\bar{x}$ +1.94	0.27 $\bar{x}$ +2.60
4-Nitrophenol	0.61C − 1.22	0.38 $\bar{x}$ +2.57	0.44 $\bar{x}$ +3.24
Pentachlorophenol	0.93C+1.99	0.24 $\bar{x}$ +3.03	0.30 $\bar{x}$ +4.33
Phenol	0.43C+1.26	0.26 $\bar{x}$ +0.73	0.35 $\bar{x}$ +0.58
2,4,6-Trichlorophenol	0.91C − 0.18	0.16 $\bar{x}$ +2.22	0.22 $\bar{x}$ +1.81

[1] Regressions based on data from Reference 2
X′ = Expected recovery for one or more measurements of a sample containing a concentration of C, in μg/L.
s_r' = Expected single analyst standard deviation of measurements at an average concentration found of $\bar{x}$, in μg/L.
S′ = Expected interlaboratory standard deviation of measurements at an average concentration found of $\bar{x}$, in μg/L.
C = True value for the concentration, in μg/L.
$\bar{x}$ = Average recovery found for measurements of samples containing a concentration of C, in μg/L.

TABLE 8—SUGGESTED INTERNAL AND SURROGATE STANDARDS

Base/neutral fraction	Range for surrogate recovery (%) [1]	
	Calibration verification	Recovery from samples
Acenaphthalene-d_8	66–152	33–168
Acenaphthene-d_{10}	71–141	30–180
Aniline-d_5.		
Anthracene-d_{10}	58–171	23–142
Benzo(a)anthracene-d_{12}	28–357	22–329
Benzo(a)pyrene-d_{12}	32–194	32–194
4-Chloroaniline-d_4	1–145	1–145
bis(2-Chloroethyl) ether-d_8	52–194	25–222
Chrysene-d_{12}	23–290	23–290
Decafluorobiphenyl.		
4,4′-Dibromobiphenyl.		
4,4′-Dibromooctafluorobiphenyl.		
1,4-Dichlorobenzene-d_4	65–153	11–245
2,2′-Difluorobiphenyl.		
Dimethyl phthalate-d_6	47–211	1–500
Fluoranthene-d_{10}	47–215	30–187
Fluorene-d_{10}	61–164	38–172
4-Fluoroaniline.		
1-Fluoronaphthalene.		
2-Fluoronaphthalene.		
2-Methylnaphthalene-d_{10}	50–150	50–150
Naphthalene-d_8	71–141	22–192
Nitrobenzene-d_5	46–219	15–314
2,3,4,5,6-Pentafluorobiphenyl.		
Perylene-d_{12}.		
Phenanthrene-d_{10}	67–149	34–168
Pyrene-d_{10}	48–210	28–196
Pyridine-d_5.		
Acid fraction		
2-Chlorophenol-d_4	55–180	33–180
2,4-Dichlorophenol-d_3	64–157	34–182
4,6-Dinitro-2-methylphenol-d_2	56–177	22–307

TABLE 8—SUGGESTED INTERNAL AND SURROGATE STANDARDS—Continued

Base/neutral fraction	Range for surrogate recovery (%) [1]	
	Calibration verification	Recovery from samples
2-Fluorophenol.		
4-Methylphenol-d_8	25–111	25–111
2-Nitrophenol-d_4	61–163	37–163
4-Nitrophenol-d_4	35–287	6–500
Pentafluorophenol.		
2-Perfluoromethylphenol.		
Phenol-d_5	48–208	8–424

[1] Recovery from samples is the wider of the criteria in the CLP SOW for organics or in Method 1625.

TABLE 9A—DFTPP KEY M/Z'S AND ABUNDANCE CRITERIA FOR QUADRUPOLE INSTRUMENTS [1]

m/z	Abundance criteria
51	30–60 percent of m/z 198.
68	Less than 2 percent of m/z 69.
70	Less than 2 percent of m/z 69.
127	40–60 percent of base peak m/z 198.
197	Less than 1 percent of m/z 198.
198	Base peak, 100 percent relative abundance.
199	5–9 percent of m/z 198.
275	10–30 percent of m/z 198.
365	Greater than 1 percent of m/z 198.
441	Present but less than m/z 443.
442	40–100 percent of m/z 198.
443	17–23 percent of m/z 442.

[1] Criteria in these tables are for quadrupole and time-of-flight instruments. Alternative tuning criteria may be used for other instruments, provided method performance is not adversely affected.

TABLE 9B—DFTPP KEY M/Z'S AND ABUNDANCE CRITERIA FOR TIME-OF-FLIGHT INSTRUMENTS [1]

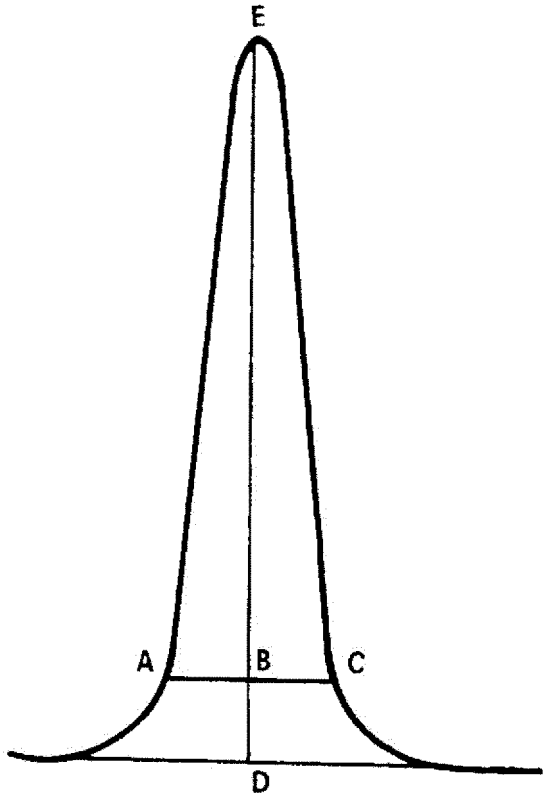
m/z	Abundance criteria
51	10–85 percent of the base peak.
68	Less than 2 percent of m/z 69.
70	Less than 2 percent of m/z 69.
127	10–80 percent of the base peak.
197	Less than 2 percent of Mass 198.
198	Base peak, or greater than 50% of m/z 442.
199	5–9 percent of m/z 198.
275	10–60 percent of the base peak.
365	Greater than 0.5 percent of m/z 198.
441	Less than 150 percent of m/z 443.
442	Base peak or greater than 30 percent of m/z 198.

TABLE 9B—DFTPP KEY M/Z'S AND ABUNDANCE CRITERIA FOR TIME-OF-FLIGHT INSTRUMENTS [1]—Continued

m/z	Abundance criteria
443	15–24 percent of m/z 442.

[1] Criteria in these tables are for quadrupole and time-of-flight instruments. Alternative tuning criteria may be used for other instruments, provided method performance is not adversely affected.

21. Figures



$$\text{TAILING FACTOR} = \frac{BC}{AB}$$

Example calculation: Peak Height = DE = 100 mm
10% Peak Height = BD = 10 mm
Peak Width at 10% Peak Height = AC = 23 mm
AB = 11 mm
BC = 12 mm

$$\text{Therefore: Tailing Factor} = \frac{12}{11} = 1.1$$

Figure 1 Tailing factor calculation

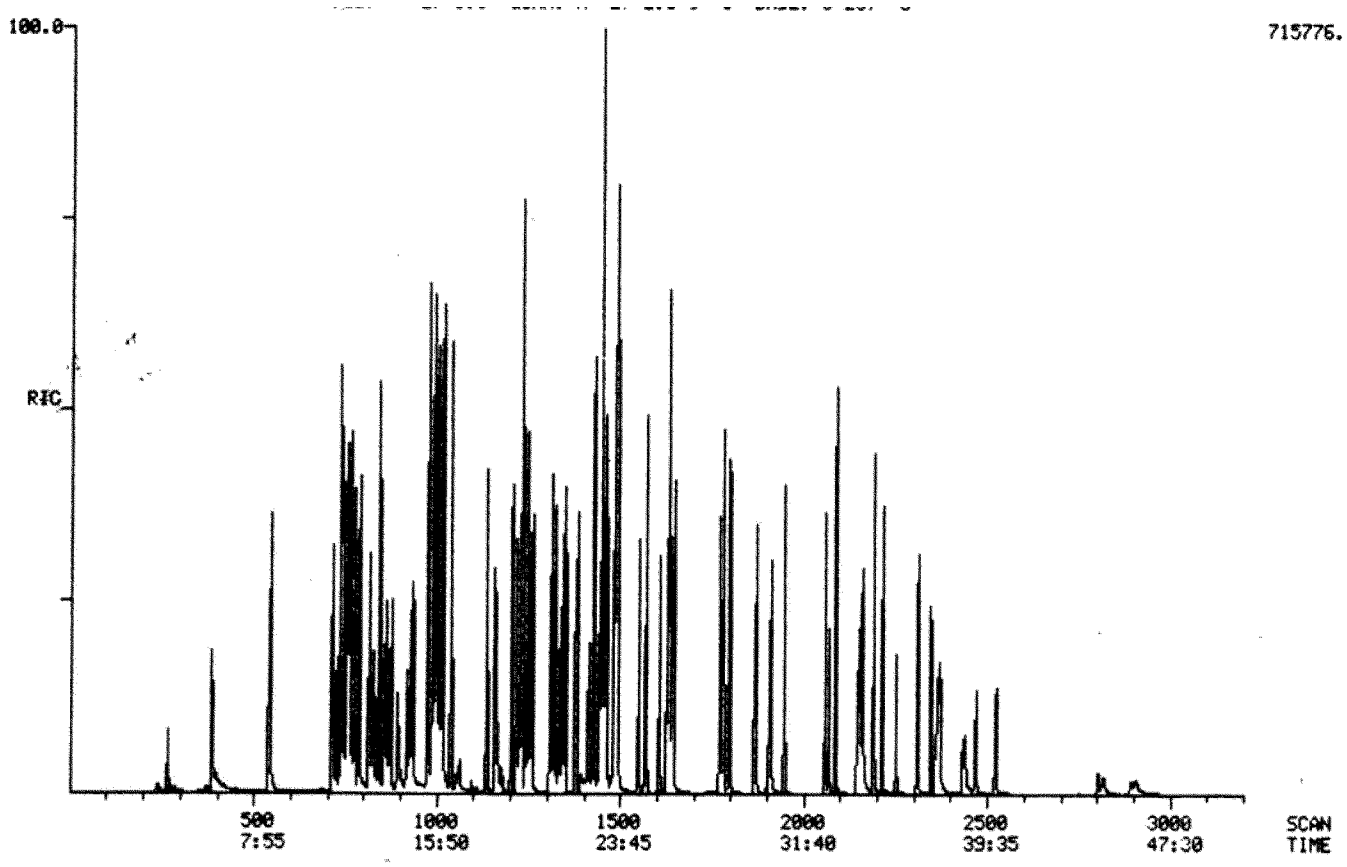


Figure 2 Chromatogram of combined acid/base/neutral standard

BILLING CODE 6560–50–C

22. Glossary

These definitions and purposes are specific to this method but have been conformed to common usage to the extent possible.

22.1 Units of weight and measure and their abbreviations

22.1.1 Symbols

°C degrees Celsius
µg microgram
µL microliter
< less than
> greater than
≤ less than or equal to
% percent

22.1.2 Abbreviations (in alphabetical order)

cm centimeter
g gram
h hour
ID inside diameter
in. inch
L liter
M Molecular ion
m mass or meter
mg milligram
min minute
mL milliliter
mm millimeter
ms millisecond
m/z mass-to-charge ratio
N normal; gram molecular weight of solute divided by hydrogen equivalent of solute, per liter of solution
ng nanogram
pg picogram
ppb part-per-billion
ppm part-per-million
ppt part-per-trillion
psig pounds-per-square inch gauge

22.2 Definitions and acronyms (in alphabetical order)

Analyte—A compound or mixture of compounds (*e.g.,* PCBs) tested for by this method. The analytes are listed in Tables 1–3.

Batch—See Extraction

Blank—An aliquot of reagent water that is treated exactly as a sample including exposure to all glassware, equipment, solvents, reagents, internal standards, and surrogates that are used with samples. The blank is used to determine if analytes or interferences are present in the laboratory environment, the reagents, or the apparatus.

Calibration—The process of determining the relationship between the output or response of a measuring instrument and the value of an input standard. Historically, EPA has referred to a multi-point calibration as the ''initial calibration,'' to differentiate it from a single-point calibration verification.

Calibration standard—A solution prepared from stock solutions and/or a secondary standards and containing the analytes of interest, surrogates, and internal standards. The calibration standard is used to calibrate the response of the GC/MS instrument against analyte concentration.

Calibration verification standard—The mid-point calibration standard used to verify calibration. See Sections 7.3 and 13.4.

Descriptor—In SIM, the beginning and ending retention times for the RT window, the m/z's sampled in the RT window, and the dwell time at each m/z.

Extracted ion current profile (EICP)—The line described by the signal at a given m/z.

Extraction Batch—A set of up to 20 field samples (not including QC samples) started through the extraction process on a given 12-hour shift (Section 3.1). Each extraction batch must be accompanied by a blank (Section 8.5), a laboratory control

sample (LCS, Section 8.4), and a matrix spike and duplicate (MS/MSD; Section 8.3), resulting in a minimum of five analyses (1 sample, 1 blank, 1 LCS, 1 MS, and 1 MSD) and a maximum of 24 analyses (20 field samples, 1 blank, 1 LCS, 1 MS, and 1 MSD) for the batch. If greater than 20 samples are to be extracted in a 12-hour shift, the samples must be separated into extraction batches of 20 or fewer samples.

Field Duplicates—Two samples collected at the same time and place under identical conditions, and treated identically throughout field and laboratory procedures. Results of analyses the field duplicates provide an estimate of the precision associated with sample collection, preservation, and storage, as well as with laboratory procedures.

Field blank—An aliquot of reagent water or other reference matrix that is placed in a sample container in the field, and treated as a sample in all respects, including exposure to sampling site conditions, storage, preservation, and all analytical procedures. The purpose of the field blank is to determine if the field or sample transporting procedures and environments have contaminated the sample.

GC—Gas chromatograph or gas chromatography

Internal standard—A compound added to an extract or standard solution in a known amount and used as a reference for quantitation of the analytes of interest and surrogates. In this method the internal standards are stable isotopically labeled analogs of selected method analytes (Table 8). Also see Internal standard quantitation.

Internal standard quantitation—A means of determining the concentration of an analyte of interest (Tables 1–3) by reference to a compound not expected to be found in a sample.

DOC—Initial demonstration of capability (Section 8.2); four aliquots of reagent water spiked with the analytes of interest and analyzed to establish the ability of the laboratory to generate acceptable precision and recovery. A DOC is performed prior to the first time this method is used and any time the method or instrumentation is modified.

Laboratory Control Sample (LCS; laboratory fortified blank; Section 8.4)—An aliquot of reagent water spiked with known quantities of the analytes of interest and surrogates. The LCS is analyzed exactly like a sample. Its purpose is to assure that the results produced by the laboratory remain within the limits specified in this method for precision and recovery.

Laboratory fortified sample matrix—See Matrix spike

Laboratory reagent blank—A blank run on laboratory reagents; *e.g.,* methylene chloride (Section 11.1.5).

Matrix spike (MS) and matrix spike duplicate (MSD) (laboratory fortified sample matrix and duplicate)—Two aliquots of an environmental sample to which known quantities of the analytes of interest and surrogates are added in the laboratory. The MS/MSD are prepared and analyzed exactly like a field sample. Their purpose is to quantify any additional bias and imprecision caused by the sample matrix. The background concentrations of the analytes in the sample matrix must be determined in a separate aliquot and the measured values in the MS/MSD corrected for background concentrations.

May—This action, activity, or procedural step is neither required nor prohibited.

May not—This action, activity, or procedural step is prohibited.

Method blank—See blank.

Method detection limit (MDL)—A detection limit determined by the procedure at 40 CFR 136, Appendix B. The MDLs determined by EPA in the original version of the method are listed in Tables 1, 2 and 3. As noted in Sec. 1.5, use the MDLs in Tables 1, 2, and 3 in conjunction with current MDL data from the laboratory actually analyzing samples to assess the sensitivity of this procedure relative to project objectives and regulatory requirements (where applicable).

Minimum level (ML)—The term ''minimum level'' refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor of 3. For the purposes of NPDES compliance monitoring, EPA considers the following terms to be synonymous: ''quantitation limit,'' ''reporting limit,'' and ''minimum level.''

MS—Mass spectrometer or mass spectrometry, or matrix spike (a QC sample type).

MSD—Matrix spike duplicate (a QC sample type).

Must—This action, activity, or procedural step is required.

m/z—The ratio of the mass of an ion (m) detected in the mass spectrometer to the charge (z) of that ion.

Preparation blank—See blank.

Quality control check sample (QCS)—See Laboratory Control Sample.

Reagent water—Water demonstrated to be free from the analytes of interest and potentially interfering substances at the MDLs for the analytes in this method.

Regulatory compliance limit (or regulatory concentration limit)—A limit on the concentration or amount of a pollutant or contaminant specified in a nationwide standard, in a permit, or otherwise established by a regulatory/control authority.

Relative retention time (RRT)—The ratio of the retention time of an analyte to the retention time of its associated internal standard. RRT compensates for small changes in the GC temperature program that can affect the absolute retention times of the analyte and internal standard. RRT is a unitless quantity.

Relative standard deviation (RSD)—The standard deviation times 100 divided by the mean. Also termed ''coefficient of variation.''

RF—Response factor. See Section 7.2.2.

RSD—See relative standard deviation.

Safety Data Sheet (SDS)—Written information on a chemical's toxicity, health hazards, physical properties, fire, and reactivity, including storage, spill, and handling precautions that meet the requirements of OSHA, 29 CFR 1910.1200(g) and appendix D to § 1910.1200. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009.

Selected Ion Monitoring (SIM)—An MS technique in which a few m/z's are monitored. When used with gas chromatography, the m/z's monitored are usually changed periodically throughout the chromatographic run, to correlate with the characteristic m/z's of the analytes, surrogates, and internal standards as they elute from the chromatographic column. The technique is often used to increase sensitivity and minimize interferences.

Signal-to-noise ratio (S/N)—The height of the signal as measured from the mean (average) of the noise to the peak maximum divided by the width of the noise.

Should—This action, activity, or procedural step is suggested but not required.

SPE—Solid-phase extraction; an extraction technique in which an analyte is extracted from an aqueous solution by passage over or through a material capable of reversibly adsorbing the analyte. Also termed liquid-solid extraction.

Stock solution—A solution containing an analyte that is prepared using a reference material traceable to EPA, the National Institute of Science and Technology (NIST), or a source that will attest to the purity, authenticity, and concentration of the standard.

Surrogate—A compound unlikely to be found in a sample, and which is spiked into sample in a known amount before extraction or other processing, and is quantitated with the same procedures used to quantify other sample components. The purpose of the surrogate is to monitor method performance with each sample.

* * * * *

■ 9. Revise Appendix B to part 136 to read as follows:

Appendix B to Part 136—Definition and Procedure for the Determination of the Method Detection Limit—Revision 2

Definition

The method detection limit (MDL) is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results.

Scope and Application

The MDL procedure is designed to be a straightforward technique for estimation of the detection limit for a broad variety of physical and chemical methods. The procedure requires a complete, specific, and well defined analytical method. It is essential that all sample processing steps used by the laboratory be included in the determination of the method detection limit.

Procedure

(1) Estimate the Initial MDL using one of the following:

(a) The mean plus three times the standard deviation of a set of method blanks.

(b) The concentration value that corresponds to an instrument signal/noise in the range of 3 to 5.

(c) The concentration equivalent of three times the standard deviation of replicate instrumental measurements of spiked blanks.

(d) That region of the standard curve where there is a significant change in sensitivity, *i.e.,* a break in the slope of the standard curve.

(e) Instrumental limitations.

(f) Previously determined MDL.

It is recognized that the experience of the analyst is important to this process. However, the analyst should include some or all of the above considerations in the initial estimate of the MDL.

(2) Determine the Initial MDL

(a) Select a spiking level, typically 2–10 times the estimated MDL in section 1. Spiking levels in excess of 10 times the estimated detection limit may be required for analytes with very poor recovery (*e.g.,* an analyte with 10% recovery, spiked at 100 micrograms/L, mean recovery, 10 micrograms/L; MDL may calculate at 3 micrograms/L. So, in this case the spiking level is 33×MDL, but spiking lower may result in no recovery at all).

(b) Process a minimum of 7 spiked blank samples and 7 method blank samples through all steps of the method, including any sample preservation. Both preparation and analysis of these samples must include at least three batches on three separate calendar dates. Existing data may be used if compliant with the requirements for at least 3 batches and generated within the last 2 years.

(i) If there are multiple instruments that will be assigned the same MDL, then the samples must be distributed across all of the instruments.

(ii) A minimum of two spiked samples and two method blank samples prepared and analyzed on different calendar dates is required for each instrument.

(c) Evaluate the spiking level: If any result for any individual analyte from the spiked blank samples does not meet the method qualitative identification criteria or does not provide a numerical result greater than zero then repeat the spikes at a higher concentration. Qualitative identification criteria are a set of rules or guidelines for establishing the identification or presence of an analyte using a measurement system. Qualitative identification does not ensure that quantitative results for the analyte can be obtained.

(d) Make all computations according to the defined method with final results in the method reporting units.

(i) Calculate the sample standard deviation (S) of the replicate spiked blank measurements and the sample standard deviation of the replicate method blank measurements from all instruments.

(ii) Compute the MDL_s (MDL based on spiked blanks) as follows:

$$MDL_S = t_{(n-1,\ 1-\propto=0.99)}\ S_S$$

Where:

MDL_s = the method detection limit based on spiked blanks

$t_{(n-1,\ 1-\alpha=0.99)}$ = the Student's t-value appropriate for a the single tailed 99th percentile t statistic and a standard deviation estimate with n-1 degrees of freedom. See Table 1.

S_s = sample standard deviation of the replicate spiked blank sample analyses.

(iii) Compute the MDL_b (MDL based on method blanks) as follows:

(A) If none of the method blanks give numerical results for an individual analyte, the MDL_b does not apply. A numerical result includes both positive and negative results, including results below the current MDL, but not results of ND (not detected) commonly observed when a peak is not present in chromatographic analysis.

(B) If some (but not all) of the method blanks for an individual analyte give numerical results, set the MDL_b equal to the highest method blank result. If more than 100 method blanks are available, set MDL_b to the level that is no less than the 99th percentile of the blank results. For ''n'' method blanks where n ≥ 100, sort the method blanks in rank order. The (n×0.99) ranked method blank result (round to the nearest whole number) is the MDL_b. For example, to find MDL_b from a set of 164 method blanks where the highest ranked method blank results are . . . 1.5, 1.7, 1.9, 5.0, and 10, then 164×0.99 = 162.36 which rounds to the 162nd method blank result. Therefore, MDL_b is 1.9 for n = 164 (10 is the 164th result, 5.0 is the 163rd result, and 1.9 is the 162nd result). Alternatively, you may use spreadsheet algorithms to calculate the 99th percentile to interpolate between the ranks more precisely.

(C) If all of the method blanks for an individual analyte give numerical results, calculate the MDL_b as:

$$MDL_b = \bar{X} + t_{(n-1,\ 1-\propto=0.99)}\ S_b$$

Where:

MDL_b = the MDL based on method blanks

$\bar{X}$ = mean of the method blank results

$t_{(n-1,\ 1-\alpha=0.99)}$ = the Student's t-value appropriate for the single tailed 99th percentile t statistic and a standard deviation estimate with n − 1 degrees of freedom. See Addendum Table 1.

S_b = sample standard deviation of the replicate blank sample analyses.

(e) Set the greater of MDL_s or MDL_b as the initial MDL.

(3) Ongoing Data Collection

(a) During any quarter in which samples are being analyzed, prepare and analyze a minimum of two spiked blanks on each instrument, in separate batches if available, using the same spiking concentration used in Section 2. If any analytes are repeatedly not detected in the quarterly spike sample analysis, this is an indication that the spiking level is not high enough and should be adjusted upward.

(b) Ensure that at least 7 spiked blanks and 7 method blanks are completed for the annual verification.

(c) At least once per year, re-evaluate the spiking level.

(i) If more than 5% of the spiked blanks do not return positive numerical results that meet all method qualitative identification criteria, then the spiking level must be increased and the initial MDL re-determined following the procedure in Section 2.

(d) If the method is altered in a way that can be reasonably expected to change the detection limit, then re-determine the initial MDL according to Section 2, and the ongoing data collection restarted.

(4) Ongoing Annual Verification

(a) At least once per year, re-calculate MDL_s and MDL_b from the collected spiked blank and method blank results using the equations in section 2.

(b) Include data generated within the last 2 years, but only data with the same spiking level.

(c) Include the initial MDL spiked blanks if within two years.

(d) Only use data associated with acceptable calibrations and batch QC. Include all routine data, with the exception of batches that are rejected and the associated samples reanalyzed. If the method has been altered in a way that can be reasonably expected to change the detection limit, use only data collected after the change.

(e) The verified MDL is the greater of the MDL_s or MDL_b. If the verified MDL is within a factor of 3 of the existing MDL, and fewer than 3% of the method blank results (for the individual analyte) have numerical results above the existing MDL, then the existing MDL may optionally be left unchanged. Otherwise, adjust the MDL to the new verification MDL.

Addendum: Determination of the MDL For a Specific Matrix

MDLs may be determined in specific sample matrices as well as in reagent water.

(1) Analyze the sample matrix to determine the native concentration of the analyte(s) of interest.

(2) If the native concentration is at a signal to noise ratio of approximately 5–20, determine the matrix specific MDL according to Section 2, ''Determine the initial MDL'' without spiking additional analyte.

(3) Calculate MDL_b using method blanks, not the sample matrix.

(4) If the signal to noise is less than 5, the analyte(s) should be spiked to obtain a concentration that will give results with a signal to noise of approximately 10–20.

(5) If the analytes(s) of interest have signal to noise greater than approximately 20, then the resulting MDL is likely to be biased high.

TABLE 1—SINGLE TAILED 99TH PERCENTILE T STATISTIC

Number of replicates	Degrees of freedom (n − 1)	$t_{(n-1,\ 0.99)}$
7	6	3.143
8	7	2.998
9	8	2.896
10	9	2.821
11	10	2.764
16	15	2.602
21	20	2.528
26	25	2.485
31	30	2.457
61	60	2.390
100	100	2.326

Documentation

The analytical method used must be specifically identified by number or title and the MDL for each analyte expressed in the appropriate method reporting units. Data and calculations used to establish the MDL must be able to be reconstructed upon request.

The sample matrix used to determine the MDL must also be identified with MDL value. Document the mean spiked and recovered analyte levels with the MDL.

[FR Doc. 2015–02841 Filed 2–18–15; 8:45 am]

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Part III

Environmental Protection Agency

40 CFR Parts 59, 80, 85, et al.
Amendments Related to: Tier 3 Motor Vehicle Emission and Fuel Standards, Nonroad Engine and Equipment Programs, and MARPOL Annex VI Implementation; Direct Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 59, 80, 85, 86, 600, 1037, 1043, 1051, 1054, 1060, 1065, and 1066

[EPA–HQ–OAR–2011–0135; FRL–9922–31–OAR]

RIN 2060–AS36

Amendments Related to: Tier 3 Motor Vehicle Emission and Fuel Standards, Nonroad Engine and Equipment Programs, and MARPOL Annex VI Implementation

AGENCY: Environmental Protection Agency.

ACTION: Direct final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking direct final action on several amendments involving technical clarifications for different mobile source regulations. First, we are making a variety of corrections to the Tier 3 motor vehicle emission and fuel standards. These changes generally correct or clarify various provisions from the Tier 3 rule without expanding the Tier 3 program or otherwise making substantive changes. Second, we are revising the test procedures and compliance provisions for nonroad spark-ignition engines at or below 19 kW (and for the corresponding nonroad equipment) to conform to current practices. The changes to evaporative emission test procedures also apply to some degree to other types of nonroad equipment powered by volatile liquid fuels. Third, we are addressing an ambiguity regarding permissible design approaches for portable fuel containers meeting evaporative emission standards. Fourth, we are revising the regulations to more carefully align with current requirements that apply to marine vessels with diesel engines as specified under MARPOL Annex VI. Fifth, we are correcting typographical errors in regulatory changes finalized in the Voluntary Quality Assurance Program rulemaking.

This rulemaking action is not expected to result in any significant changes in regulatory burdens or costs.

DATES: This final rule is effective on May 5, 2015, without further notice, unless EPA receives adverse comment by April 6, 2015. If EPA receives adverse comment on any provisions of the rule, we will publish a timely withdrawal in the **Federal Register** informing the public that those specific provisions will not take effect. The incorporation by reference of certain publications listed in this regulation is approved by the Director of the Federal Register as of May 5, 2015.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2011–0135, by one of the following methods:

- *www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *Email: A-and-R-Docket@epamail.epa.gov.*
- *Fax:* (202) 566–9744
- *Mail:* Air and Radiation Docket and Information Center, Environmental Protection Agency, Mailcode: 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460.
- *Hand Delivery:* EPA Docket Center, EPA WJC West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC 20460. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA–HQ–OAR–2011–0135. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or email. The *www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through *www.regulations.gov* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm.*

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FOR FURTHER INFORMATION CONTACT: Alan Stout, Office of Transportation and Air Quality, Assessment and Standards Division (ASD), Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor MI 48105; Telephone number: (734) 214–4805; *stout.alan@epa.gov.*

SUPPLEMENTARY INFORMATION:

Why is EPA using a Direct Final Rule?

EPA is publishing this rule without a prior proposed rule because we view this as a noncontroversial action and anticipate no adverse comment. This is also intended to expedite the regulatory process to allow the modifications to take effect as soon as possible. However, in the ''Proposed Rules'' section of today's **Federal Register**, we are publishing a separate document that will serve as the proposed rule to adopt these same amendments if adverse comments are received on this direct final rule. We will not institute a second comment period on this action. Any parties interested in commenting must do so at this time. For further information about commenting on this rule, see the **ADDRESSES** section of this document.

If EPA receives adverse comment on a distinct provision of this rulemaking, we will publish a timely withdrawal in the **Federal Register** indicating which provisions we are withdrawing. The provisions that are not withdrawn will become effective on the date set out above, notwithstanding adverse comment on any other provision. We would address all public comments in any subsequent final rule based on the proposed rule.

EPA is publishing this direct final rule to expedite corrections to the regulatory text and clarifications and adjustments that generally reduce the burden and/or confusion related to

compliance with regulatory requirements. If you comment on this rule, we request that you identify any portions of the action with which you agree and support as written, in addition to any comments regarding suggestions for improvement or provisions with which you disagree. In the case of a comment that is otherwise not clearly adverse, EPA would interpret relevant comments calling for more flexibility or less restrictions as supportive of the direct final action. In this way, EPA will be able to adopt those elements of this action that are supported and most needed without delay, while considering and addressing any constructive or adverse comments received on the proposed rule in the course of developing the final rule.

Does this action apply to me?

Entities potentially affected by this rule include gasoline refiners and importers, ethanol producers, ethanol denaturant producers, butane and pentane producers, gasoline additive manufacturers, transmix processors, terminals and fuel distributors, light-duty vehicle manufacturers, manufacturers of nonroad engines and equipment, manufacturers of marine compression-ignition engines, and owners and operators of ocean-going vessels and other commercial ships, and manufacturers of portable fuel containers.

Potentially regulated categories include:

Category	NAICS [a] Code	Examples of potentially affected entities
Industry	324110	Petroleum refineries (including importers).
Industry	325110	Butane and pentane manufacturers.
Industry	325193	Ethyl alcohol manufacturing.
Industry	324110, 211112	Ethanol denaturant manufacturers.
Industry	211112	Natural gas liquids extraction and fractionation.
Industry	325199	Other basic organic chemical manufacturing.
Industry	486910	Natural gas liquids pipelines, refined petroleum products pipelines.
Industry	424690	Chemical and allied products merchant wholesalers.
Industry	325199	Manufacturers of gasoline additives.
Industry	424710	Petroleum bulk stations and terminals.
Industry	493190	Other warehousing and storage-bulk petroleum storage.
Industry	336111, 336112	Light-duty vehicle and light-duty truck manufacturers.
Industry	335312, 336312, 336322, 336399, 811198.	Alternative fuel converters.
Industry	333618, 336120, 336211, 336312.	On-highway heavy-duty engine & vehicle (>8,500 lbs GVWR) manufacturers.
Industry	336611	Manufacturers of marine vessels.
Industry	336612	Manufacturers of marine vessels.
Industry	811310	Engine repair and maintenance.
Industry	483	Water transportation, freight and passenger.
Industry	424710, 424720	Petroleum Bulk Stations and Terminals; Petroleum and Petroleum Products Wholesalers.
Industry	483113	Coastal and Great Lakes Freight Transportation.
Industry	483114	Coastal and Great Lakes Passenger Transportation.
Industry	333618	Manufacturers of new engines.
Industry	333112	Manufacturers of lawn and garden tractors (home).
Industry	811112, 811198	Commercial importers of vehicles and vehicle components.
Industry	326199, 332431	Portable fuel container manufacturers.

[a] North American Industry Classification System (NAICS).

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your activities are regulated by this action, you should carefully examine the applicability criteria in the referenced regulations. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

What should I consider as I prepare my comments for EPA?

A. *Submitting CBI.* Do not submit this information to EPA through *www.regulations.gov* or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

B. *Tips for Preparing Your Comments.* When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- Follow directions—The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree, suggest alternatives, and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

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I. Introduction

In this action we are adopting several amendments that will make technical clarifications to different mobile source regulations. This section provides an overview of the organization of this preamble. Section II describes amendments to the Tier 3 motor vehicle emission standards. Section III describes amendments to the 40 CFR part 80 fuel standards: including the Tier 3 gasoline sulfur standards, other part 80 fuels regulations that were amended in the Tier 3 final rule, and amendments made in the Quality Assurance Program rulemaking. Section IV describes the changes to the testing and compliance provisions for nonroad spark-ignition engines, and Section V describes how we are changing the evaporative test procedures for nonroad equipment. Section VI describes amendments to the requirements that apply for portable fuel containers. Section VII summarizes the amendments related to our implementation of requirements for marine diesel engines and vessels under MARPOL Annex VI.

II. Tier 3 Motor Vehicle Emission Standards

On April 28, 2014, we published a final rule adopting new emission standards and fuel requirements for motor vehicles and for motor vehicle fuels (79 FR 23414). The final rule included Tier 3 emission standards to reduce exhaust and evaporative emissions from light-duty vehicles, light-duty trucks, and heavy-duty vehicles up to 14,000 pounds GVWR. In addition, the final rule specified corresponding changes to in-use fuel requirements.

The Tier 3 motor vehicle program included extensive changes to emission standards and the regulatory requirements related to certification. This included several provisions to harmonize requirements with a similar set of standards adopted by the California Air Resources Board (California ARB). It also included a wide range of alternative measures intended to facilitate each manufacturer's efforts to make an orderly transition to meeting the Tier 3 standards nationwide. The resulting Tier 3 regulations accordingly included several variations, alternatives, and ancillary provisions. We have learned since concluding the Tier 3 rulemaking that there are several instances where the regulatory text implementing the Tier 3 program requires correction or clarification to achieve the intended result. None of the amendments are intended to expand the Tier 3 program or otherwise make substantive changes. We are therefore making the following amendments to the Tier 3 vehicle program regulations:

Regulatory citation	Description
§ 85.2108	Remove section to reflect a recent change to Clean Air Act section 207.
§ 86.101, § 1066.301, and § 1066.305.	Adjust the procedures for determining road-load parameters to more carefully align with current practice, including the option for manufacturers to use alternate methodologies that are consistent with the reference procedure, subject to good engineering judgment and EPA confirmatory testing. We are also restoring provisions describing how to develop road-load parameters for cold testing; the provisions from § 86.229 were inadvertently replaced with a default instruction to use the same values for both FTP testing and cold testing. We are also changing terminology from "coastdown" to "road-load determination" for consistency.
§§ 86.095–35 and 1037.135.	Revise the labeling requirement for incomplete heavy-duty vehicles to require designation of maximum fuel tank capacity only in cases where the certifying manufacturer relies on a downstream manufacturer to design and install the vehicle's fuel tanks. If the certifying manufacturer designs or installs the fuel tank, there is no need for the emission control information label to identify the appropriate fuel tank capacity.
§§ 86.101 and 86.1844–01.	Clarify that reporting drive-cycle metrics to confirm driver accuracy continue to be optional until vehicles are subject to Tier 3 emission standards, and revise terminology for consistency with 40 CFR 1066.425.
§ 86.101	Clarify that manufacturers may continue to certify in 2022 and later model years based on carryover of emission data generated using the procedures from 40 CFR part 86, subpart B, even though we require new testing in that time frame to use the procedures in 40 CFR part 1066.
§ 86.113	Revise the format of the volatility specification to rely primarily on psi units and secondarily on kPa units. The kPa figures for non-evaporative testing also need to be corrected to align with the specified psi units. These changes align with the test fuel specifications that were in place before the Tier 3 rule. We are also revising the table format for octane specifications to clarify that the both ASTM D2699 and ASTM D2700 apply for determining octane values and octane sensitivity values.
§ 86.201	Clarify how the migration to testing under 40 CFR part 1066 works for cold temperature testing. This is analogous to the migration provisions for general testing in § 86.101.
§ 86.213	Revise the specified tolerance for olefin concentration in the test fuel from ±0.5 percent to ±5.0 percent. This reverses an inadvertent change made in the Tier 3 final rule. We are also revising the table format for octane specifications to clarify that both ASTM D2699 and ASTM D2700 apply for determining octane values and octane sensitivity values.
§ 86.513	Correct a typographical error for the 90% point in the distillation curve for gasoline test fuel. This was erroneously published as part of the Tier 3 rule with an extra "1" before the specified temperature of 148.9 °C. This change restores the temperature specification to what applied before we adopted the Tier 3 rule.
§ 86.513–2004	Remove obsolete section. Fuel specifications for motorcycles are now addressed in § 86.513 (with no model year designation), so the 2004 section is removed to avoid confusion.
§ 86.1801–12	Clarify how the requirements of subpart S relate to the engine and vehicle provisions in 40 CFR part 1036 and part 1037.
§ 86.1803–01	Revise the definition of "averaging set" to apply to all vehicles, not only heavy-duty vehicles.
§§ 86.1805–17 and 86.1811–17.	Address provisions for LDV above 6,000 pounds GVWR. A new paragraph describes how these vehicles are subject to the same transitional provisions that apply for LDV at or below 6,000 pounds GVWR. We are also clarifying useful life provisions for LDV above 6,000 pounds GVWR. We described the useful life provisions based on a simple cutpoint of 6,000 pounds GVWR, which doesn't address a small number of LDV models that have higher GVWR values. Instead of changing the useful life values adopted for cold temperature emission standards, we are using the terms LDV and LLDT to characterize the vehicles that are subject to a useful life of 10 years or 120,000 miles. We are also clarifying that MDPVs are the only HDVs subject to standards under § 86.1818.

Regulatory citation	Description
§ 86.1806–17	Correct the citation to California ARB's OBD regulations to refer to the entire range of relevant OBD standards.
§ 86.1810–01	Clarify that the provisions for determining NMOG from measured NMHC values also apply for Tier 2 vehicles, as specified in § 1066.635, except that manufacturers may continue to use a fixed adjustment factor of 1.04.
§ 86.1810–17	Clarify that the provisions for testing flexible fuel vehicles on more than just gasoline or diesel fuel do not apply for greenhouse gas standards.
§ 86.1811–17(b)(8)	Clarify how to calculate and use credits for manufacturers that certify some vehicles to a useful life of 120,000 miles and other vehicles to a useful life of 150,000 miles. The main point of clarification is that vehicles certified to the shorter useful life on an interim basis may exchange emission credits with vehicles certified to either useful life, but the fleet-average standard for a given set of vehicles must correspond to the averaging set. We are also listing the emission standards that correspond to a 120,000 mile useful life rather than describing how to calculate those standards.
§ 86.1811–17(b)(8)	Add a provision that Interim Tier 3 vehicles must continue to meet the 4000-mile SFTP standards for NMHC+NO_X and CO from Tier 2. This requirement was included in the preamble text for the proposed rule and the final rule, but was inadvertently omitted from the regulatory text.
§ 86.1811–17(b)(10)	Clarify provisions related to early credits: (1) Early credits may be used interchangeably (without adjustment) for vehicles certified to a useful life of either 120,000 miles or 150,000 miles. (2) Accumulated early credits should be used for demonstrating compliance with model year 2017 standards before doing the calculations to address proportionality relative to California emission credits. (3) Negative credits are subtracted from credit totals during the three-year period for calculating credit caps (rather than ignoring them). (4) The calculation for applying the cap/threshold relative to California credits must be corrected to use the proper baseline quantity.
§ 86.1811–17(b)(11)	Clarify provisions related to early certification to Tier 3 standards: (1) Bin 70 and cleaner vehicles are considered Tier 3 vehicles on a voluntary basis and are therefore subject to the 150,000 mile useful life. (2) The transitional aspects of the Tier 3 program apply equally to vehicles certified early to the Tier 3 standards.
§ 86.1811–17(g)	Revise the cold temperature testing specifications to clarify that CO and NMHC standards apply equally for certification and in-use testing, for low and high altitude, and for testing gasoline-only configurations of flexible-fuel vehicles.
§ 86.1813–17	Clarify that no separate fleet-average calculation is required for demonstrating compliance with high-altitude evaporative emission standards. These standards are determined as bin values relative to the standard that applies for testing at low-altitude conditions.
§ 86.1829–15	Adjust the refueling test waiver to state that it applies only for incomplete heavy-duty vehicles above 10,000 pounds GVWR, and for complete heavy-duty vehicles above 10,000 pounds GVWR with fuel tanks greater than 35 gallons, consistent with the preamble discussion in the final rule. These vehicles are the only ones that are newly subject to refueling emission standards. All smaller vehicles have already been subject to testing and certification requirements.
§ 86.1829–15	Add a paragraph to preserve the provisions related to measurement of N_2O emissions as originally adopted at § 86.1829–01(b)(2)(iii)(G).
§ 86.1829–15	Revise terminology to refer to ''durability groups'' rather than ''durability data groups'' for PM testing.
§ 86.1844–01	Specify that a manufacturer's application for certification must include a description of leak families in addition to evaporative/refueling families. Since leak families are defined broadly, many manufacturers may have only a single leak family even if they have multiple evaporative/refueling families.
§ 86.1845–01	Clarify that the PM measurement instructions are limited to vehicles subject to Tier 3 PM standards, as discussed in the final rule.
§ 86.1846–01	Adjust the exclusion of high-mileage vehicles to the terminology changes to § 86.1845–05. This change aligns with the current practice of not including the results from testing the designated high-mileage vehicle at low altitude for making an IUVP determination for the test group.
§ 86.1861–17	Clarify that the separate averaging set corresponding to 120,000 mile useful life applies only for NMOG+NO_X emission standards.
§§ 600.116–12 and 1066.501.	Clarify that certain portions of SAE J1711 apply separately for charge-depleting and charge-sustaining operation for hybrid-electric vehicles.
§ 600.117	Adjust the description to more clearly apply the interim allowance for using Tier 2 fuel to determine whether vehicles pass the ''litmus test'' for using derived 5-cycle testing for fuel economy, as described further below.
§ 600.117	Revise the description for test fuels to clarify that cold testing may be done with the higher-volatility fuel specified in § 86.213, and that the requirement for using a common test fuel related to 5-cycle testing refers to the ethanol content of the fuel, not the whole range of test fuel specifications.
§ 1037.103	Refer to § 86.1805 for useful life values as they apply for evaporative emission standards, rather than referring more broadly to useful life values in 40 CFR part 86 for ''criteria pollutants''.
§ 1037.104	Refer to the useful life values specified in § 86.1805 for model year 2014 vehicles for the HD GHG standards. This sets the useful life values for the HD GHG standards to a fixed value, rather than specifying a cross reference to a section of the regulations that describes changing useful life values.
§§ 1065.10 and 1066.10	Allow for a one-year lead time for upgrading to test procedure changes in 40 CFR part 86 where those changes would otherwise be required immediately with the effective date of the final rule. This is consistent with existing provisions for changes to 40 CFR part 1065 and part 1066. Note that this does not delay implementation of procedures corresponding to new emission standards.
§ 1065.610	Correct a sample calculation.
§ 1065.710	Correct the units for specifying hydrocarbon composition. These units were inadvertently changed in the Tier 3 rule from fractional to percent values. We are specifying these values in volume % to align with the associated ASTM procedure.
§ 1065.710	Revise the format of the volatility specification to include reference values in psi units.
§ 1066.125	Correct the description of calculating 1 Hz mean values.
§ 1066.125	Add a parenthetical reference to torque in pound-foot units corresponding to the primary value in Newtons.
§ 1066.420	Clarify that it is permissible to push the test vehicle onto the dynamometer to prepare for a hot-start or hot-stabilized test, as opposed to driving the vehicle onto the dynamometer.
§ 1066.605	Revise the sequence of calculations to determine a NO_X result. The proper sequence is to first correct for background concentration, then to correct for intake air humidity.

Regulatory citation	Description
§ 1066.615	Correct the equations to properly apply the NO_X humidity correction factor to account for humidity in the background measurement.
§ 1066.635	Clarify that the appropriate NMOG calculation for plug-in hybrid electric vehicles is based on operation over one full UDDS.
§ 1066.701	Correct a temperature that was inadvertently identified as 20 °C instead of 20 °F.
§ 1066.710	Clarify the instructions for heat settings during cold testing to more carefully differentiate between automatic systems that operate either in manual mode or in automatic mode. Automatic systems operating in manual mode should be set to a temperature of 72 °F ''or higher'' to align with current practice.
§ 1066.801	Correct an error in the testing flowchart so that the flowchart matches the procedure described in the regulations.
§ 1066.815	Reorganize the instructions for testing with and without bag 4 to improve the clarity of the test sequence.
§ 1066.831	Revise the description for testing heavy-duty vehicles at adjusted loaded vehicle weight to exclude MDPVs, which are tested like light-duty trucks.
§ 1066.835	Add a provision allowing for keeping the vehicle-cooling fan running while the vehicle is stopped if that is necessary for keeping ambient conditions within specified parameters.
§ 1066.845	Adjust the description of air conditioning settings during the AC17 test to describe how to account for systems with separate rear controls, and for systems that change default settings at key-off.
§ 1066.1005	Move the prefix ''n'' to be in the proper order.
Various	Change from ''LA–92'' to ''Hot-LA–92'' to allow us to specify that the referenced test procedure is only the first 1435 seconds of what is known as the LA–92 driving schedule. The full cycle is 1735 seconds. This change is necessary to accomplish the intended alignment with the California ARB standards.

We are also making various corrections for typographical errors and regulatory cross references. Note that one of these corrections is in the regulations for recreational vehicles at 40 CFR 1051.501 to maintain a proper cross reference to the driving schedules in Appendix I of 40 CFR part 86. We are also correcting a typographical error from § 86.529–98 that was published several years ago. The specified range of loaded vehicle masses corresponding to certain road-load force coefficients and inertia weights has an entry that should be listed as applying from 656 to 665 kg; the published entry mistakenly identifies the range as 565 to 665 kg.

One additional issue relates to test fuel for fuel economy testing. In the Tier 3 final rule, EPA changed the certification test fuel for the Tier 3 exhaust emission standards from a 9 psi RVP fuel with no ethanol (E0) (commonly referred to as Tier 2 fuel) to a 9 psi RVP fuel with 10 percent ethanol (E10). As an interim provision, EPA permitted vehicles certifying at levels above Bin 70 to use E0 fuel for Tier 3 certification through model year 2019. The rule also permits early certification to Tier 3 requirements using 7 psi RVP E10 test fuel, commonly referred to as LEV III fuel since the California LEV III program phase-in begins with model year 2015. The rule also provides manufacturers the option to use EPA 9RVP E0 fuel or 9RVP E10 fuel for certification for cold temperature testing since California does not specify a test fuel for that testing.

Under the fuel economy regulations, manufacturers use the results of their exhaust emission tests as the basis for calculating litmus test evaluations (see 40 CFR 600.115–11). However, in the Tier 3 rule EPA did not change the fuel economy test fuel specifications from E0 to E10 as was done for Tier 3 exhaust emissions. The preamble to the final rule recognized that the difference in the emission and fuel economy test fuels has the potential to require extra emission testing for the fuel economy evaluations. To minimize this burden, EPA included several provisions in the regulations to minimize this potential burden (see 40 CFR 600.117) and indicated a commitment to make any appropriate adjustments to the fuel economy regulations to accommodate the change to an E10 test fuel when the needed emission data become available.

As is discussed in the final rule (79 FR 23531–23533, April 28, 2014), central to the litmus test evaluation is the requirement that data be available for all five emission test cycles and that the data be generated using the same test fuel on each cycle. Some confusion has arisen as to what cold FTP test fuel should be used in the litmus evaluations for early Tier 3 certifications using LEV III test fuel and for Tier 3 certification above Bin 70 before model year 2020. This occurs because California ARB does not specify a cold FTP test fuel and, as a transitional measure, EPA permits certification to Tier 3 Bin 125 and Bin 160 using Tier 2 fuel. This amendment clarifies that the fuel economy test fuel requirements govern for the litmus test evaluations. As indicated in the preamble to the final rule at 79 FR 23533, manufacturers may use LEV III fuel (California Phase 3) in lieu of Tier 3 fuel, but any cold FTP testing must be done using the Tier 3 cold FTP fuel. Thus, for purposes of the litmus test cold temperature testing, manufacturers must use the same test fuel (E10) as used for the other four cycles. For early Tier 3 certifications using LEV III test fuel, the cold FTP test data must be generated using Tier 3 cold FTP test fuel and in the case of the higher bins in the Tier 3 program as discussed above, the cold FTP must be based on the same fuel as used for the other four test cycles. The flexibility afforded for exhaust emission certification does not carry over to the litmus test evaluations.

III. 40 CFR Part 80 Fuel Standards

After promulgation of the Tier 3 final rulemaking (79 FR 23414, April 28, 2014), we discovered some typographical errors and other areas in the part 80 regulations that we believe would benefit from some additional clarity. The following sections discuss the amendments to remedy these concerns.

A. Performance-Based Measurement Systems (PBMS)

Section	Description
80.8(e)(1)(iii)	Amended to update IBR to most recent ASTM standard practice D5842–14 (Standard Practice for Sampling and Handling for Fuels for Volatility Measurement, approved January 15, 2014).
80.46(d)	Amended to clarify that distillation precision criterion is based on the reproducibility of Table 10 Groups 2, 3 and 4 (Automated Method) contained in ASTM D86–07—clarifying note added to state that precision estimates in ASTM D86–12 do not apply.

Section	Description
80.46(b)(1), (c)(2), (d), (e), (f)(1), and (g)(1).	Amended to clarify beginning January 1, 2016 a test method approved under 40 CFR 80.47 ''must'' be used, rather than ''may'' be used, by the regulated community for demonstrating compliance measurements to EPA fuels standards.
80.47(a)(7)	Amended to correct typographical error (''referee'' to ''reference'').
80.47(b)(1), (c)(1), (d)(1), (e)(1), (f)(1), (g)(1), (h)(1), (i)(1), (j)(1).	Amended to correct typographical error (''emissions'' to ''omissions''); and to add the statement ''tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days''.
80.47(c)(1), (c)(2)(i), (c)(2)(ii)	Amended to correct the examples listed for precision and accuracy demonstration for sulfur in butane to be consistent with the sulfur in gasoline 10 ppm average.
80.47(h)(1)	Amended to: correct typographical errors; clarify that distillation precision criterion is based on the reproducibility of Table 10 Groups 2, 3 and 4 (Automated Method) contained in ASTM D86–07 (clarifying note added stating that precision estimates in D86–12 do not apply); and revise IBR of D86 to the 2007 version.
80.47(i)(1)	Revised benzene precision criteria to 0.15 times R, rather than 0.3 times R to be consistent with preamble discussion.
80.47(l)	Amended to revise section heading and add paragraphs (l)(1)(ii) and (l)(2)(ii) to allow for Non-Voluntary Consensus Standard Based (non-VCSB) absolute fuel parameter of sulfur in gasoline and butane. Also clarifying that either a ''test facility or VCSB'' must meet the requirements of § 80.47(l).
80.47(m)(6)	Amended to correct reference for the use of the term ''cross-method reproducibility'' in ASTM D6708 from ''as required'' to ''as recommended'' and replaced the term ''cross-method reproducibility'' with ''between methods reproducibility'' to be consistent with D6708–13.
80.47(n)(2)(i), (o)(2)(i), (p)(3)(i).	Amended to correct references to D6299–13 with regards to use of a quality control material (paragraph 3.2.3 changed to 3.2.8), I Chart (section 7 changed to section 8) and MR charts (section A1.5.2 changed to A1.5.4).
80.47(n)(2)(ii), (o)(2)(ii), (p)(3)(ii).	Amended to correct references to D6299–13 with regards to use of an I Chart (changed section 7 to section 8.7).
80.47(n)(2)(iv), (o)(2)(iv), (p)(2)(iv); and (n)(1)(ii), (o)(1)(ii), (p)(1)(ii).	Amended to move the phrase ''The expanded uncertainty of the accepted reference value of consensus named fuels shall have the following accuracy qualification criterion: Accuracy qualification criterion = square root [(0.75R)^2+(0.75R)^2/L], where L = the number of single results obtained from different labs used to calculate the consensus ARV.'' from paragraphs (n)(2)(iv), (o)(2)(iv), (p)(2)(iv) to paragraphs (n)(1)(ii), (o)(1)(ii), (p)(1)(ii), respectively.
80.47(o)(1)	Amended to clarify value of ARV when not provided in an Inter Laboratory Crosscheck Program, by adding the following: ''Facilities using a VCSB alternative method defined test method must use the Accepted Reference Value of the check standard as determined in a VCSB Inter Laboratory Crosscheck Program (ILCP) or a commercially available ILCP following the guidelines of ASTM D6299. If the Accepted Reference Value is not provided in the ILCP, accuracy must be assessed based upon the respective EPA designated test method using appropriate production samples.''
80.47(o)(1)	Amended to clarify that ILCPs are acceptable, by adding the following: ''(Examples of ILCP: ASTM Reformulated Gasoline ILCP or ASTM motor gasoline ILCP)''.
80.47(p)(1)	Amended to clarify value of ARV when not provided in ILCP, by adding the following: ''Facilities using a Non-VCSB alternative method defined test method must use the Accepted Reference Value of the check standard as determined in either a VCSB Inter Laboratory Crosscheck Program (ILCP) or a commercially available ILCP following the guidelines of ASTM D6299. If the Accepted Reference Value is not provided in the ILCP, accuracy must be assessed based upon the respective EPA designated test method using appropriate production samples.''
80.47(p)(1)	Amended to address concern that reproducibility is not established with Non-VCSB test methods, by adding the following: ''The facility must construct ''MR'' and ''I'' charts with control lines as described in section 8.4 and appropriate Annex sections of this standard practice. In circumstances where the absolute difference between the mean of multiple back-to-back tests of the standard reference material and the accepted reference value of the standard reference material is greater than 0.75 times the published reproducibility of the fuel parameter's respective designated test method must be investigated by the facility.''
80.47(r)(1)(i)	Amended to revise IBR of ASTM D86 to the 2007 version.
80.330(b)(1)(i), (b)(1)(ii), (b)(2).	Amended to update IBR to most recent ASTM standard practice D5842–14 (Standard Practice for Sampling and Handling for Fuels for Volatility Measurement, approved January 15, 2014), and for consistency with IBR language throughout subpart O.
80.584(a)(1) through (a)(3)	Amended to correct inconsistencies with PBMS in § 80.47 regarding requirements for PBMS for sulfur in diesel fuel and ECA Marine Fuel at § 80.584 with regards to frequency of testing for the precision demonstration and VCSB self-qualification starting January 1, 2016.
80.584(a)(1) through (a)(3)	Amended to insert phrase ''(tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days)'' in applicable areas for diesel and ECA marine fuel to be consistent with frequency of testing for precision demonstration at § 80.47.
80.585(a)	Amended to revise diesel and ECA marine fuel sulfur qualification regulations to be consistent with PBMS (i.e., starting January 1, 2016), VCSB test methods self-qualify and need not be reported to the Agency for approval.
80.585(a), (e)(1), (e)(4), (f)	Amended to correct inconsistencies with PBMS in § 80.47 regarding requirements for PBMS for sulfur in diesel fuel and ECA marine fuel at § 80.584 with regards to frequency of testing for the precision demonstration and VCSB self-qualification starting January 1, 2016; and to add a new paragraph (f) for IBR.
80.585(e)(1), (e)(2), (e)(4), (f).	Amended to update IBR and reference for use on ASTM D6299–13 in applicable diesel and ECA marine fuel sulfur regulations to be consistent with reference of use of ASTM D6299–13 in PBMS regulations at § 80.47, and to make minor formatting changes for IBR consistency throughout part 80.

B. Quality Assurance Program Amendments

This action also makes minor technical amendments to regulatory changes finalized in the Voluntary Quality Assurance Program Rulemaking (''QAP Rule'', 79 FR 42078, July 18, 2014). We are changing § 80.1471(d)(1) to reflect a change that industry widely requested and the public supported. In the final rulemaking we agreed to extend the notification period by an auditor for potentially invalid RINs from ''within the next business day'' to ''within five business days.'' We inadvertently neglected to change this reference in § 80.1471(d)(1) to the new ''within five business days'' language.

In the Notice of Proposed Rulemaking for the QAP Rule, we proposed a new section at § 80.1433 that would have changed the way parties that redesignated renewable fuels for non-qualifying uses would have to retire RINs, and we proposed new product transfer document (PTD) language at § 80.1453(a)(12) to help convey the requirement to separate and/or retire RINs for parties that wished to redesignate renewable fuel for a non-qualifying use. After careful consideration of the public comments received, we chose not to finalize the proposed § 80.1433 requirements. This action is removing the extraneous reference to § 80.1433 in § 80.1453.

Additionally, we are amending the PTD requirements at § 80.1453(a) to make the scope of these requirements consistent with similar requirements in other fuels programs. When we altered the scope of the PTD requirements at § 80.1453 to include both neat and blended renewable fuels, we did not intend to expand the scope of these PTD requirements to convey the information at § 80.1453 to the consumer of such fuels, in most cases. In the preamble to the final QAP Rule, we noted that these requirements were meant to apply to regulated parties (79 FR 42105, July 18, 2014).

Historically, EPA has required applicable information on PTDs accompanying fuels to be conveyed through to retail stations and wholesale purchaser-consumers. The EPA has, in most cases, included language that exempts parties that are transferring title or custody of fuel to the ultimate consumer (*e.g.,* the PTD requirements for detergents at § 80.158 and for E15 at § 80.1503) or dispensing the fuel from a retail station or wholesale purchaser-consumer's tank to a motor vehicle or nonroad engine (*e.g.,* the PTD requirements for diesel and gasoline sulfur at §§ 80.590 and 80.1651, respectively). Requiring PTD language to convey information all the way down to consumers fueling at a retail station or homes receiving heating oil has little benefit to the effectiveness of EPA's fuels programs and could be quite costly for retail stations and home heating oil distributors. Therefore, we are clarifying the scope of § 80.1453 by adding an exemption to the PTD requirements for renewable fuels dispensed into motor vehicles and nonroad vehicles, engines, and equipment (to include jet engines and home heating units).

Section	Description
80.1426(c)(7)	Amended to correct typographical error (''§ 80.1451(b)(1)(ii)(T)(3)'' to ''§ 80.1451(b)(1)(ii)(T)(2)'').
80.1453(a) introductory text	Amended for clarity in scope of requirements.
80.1453(a)(12) introductory text.	Amended to remove extraneous reference to 80.1433.
80.1471(d)	Amended to add to ''within five business days'', consistent with the intent stated in the QAP rule preamble.

C. Tier 3 Rulemaking Provisions Minor Technical Amendments

As mentioned above, this rule corrects minor typographical errors that were discovered following the promulgation of the Tier 3 final rule (both within 40 CFR part 80, subpart O, as well as additional 40 CFR part 80 provisions that were finalized as part of our regulatory streamlining efforts in the Tier 3 rulemaking). The following table contains a list of these amendments and a description of the change:

Section	Description
80.2(cccc)	Removed new definition of natural gas, as this definition already exists at § 80.2(tt).
80.75(a)(2)(xi)(G)	Amended to correct reference from ''§ 80.82(c) or (d)'' to ''§ 80.86(a)(3) or (a)(4)''.
80.82(e)(1)	Amended to clarify that the provisions of an EPA-approved State Implementation Plan (SIP) apply to butane blenders.
80.85(a)	Amended introductory text to correct typographical errors (''refinery'' to ''refiner'').
80.85(i)	Amended to correct typographical errors (''they'' to ''it'', ''comply'' to complies'').
80.86(b)(2)(iv) and (b)(3)(iii)	Amended to correct typographical errors (''complaint'' to ''compliant'').
80.86(c)	Amended to clarify that the PTD for pentane used by pentane blenders must contain the pentane producer or importer company name and facility registration number issued by EPA and the name and address of the transferor and transferee consistent with other part 80 PTD requirements.
80.315(b)(1)(iii), 80.1295(b)(1)(ii).	The Tier 3 rulemaking changed the due date for annual reports and credits from the end of February to March 31 for all 40 CFR part 80 fuels programs; these paragraphs are being amended because the February date was inadvertently left in §§ 80.315(b)(1)(iii) and 80.1295(b)(1)(ii).
80.330(c)(1), (d)(2)	Amended to correct year (''December 31, 20'' to ''December 31, 2015'').
80.597(d)(3)	Amended to correct reference from paragraph (d) to paragraph (d)(3).
80.1270(b)(2)	Amended to clarify that butane blenders using the provisions of § 80.82 and pentane blenders using the provisions of § 80.85 may not generate benzene credits.
80.1609(a)	Amended to correct typographical error and to correct a regulatory cite.
80.1611(a)(1),	Amended to improve the clarity in cases where producers of certified ethanol denaturants produce product to a lower sulfur maximum than the required 300 ppm maximum.
80.1611(c) introductory text, (c)(1), and (c)(2).	Amended for improved clarity and to correct typographical errors.
80.1611(d)	Amended to correct typographical error (''denaturant'' instead of ''oxygenate'').
80.1613(a)	Amended to correct typographical error (''less than 1.0'' replaces ''1.0 or less'').
80.1613(b)(3)	Added to clarify that it is a violation to exceed an additive manufacturer's recommended treatment level when doing so would contribute more than 3 ppm to the sulfur content of the resulting finished gasoline.

Section	Description
80.1615(d)(1), (d)(2)	Revised for clarity by moving the phrase ''From January 1, 2017 through December 31, 2019'' to the beginning of each paragraph.
80.1616(a)(4)	Amended to add a ''Reserved'' paragraph (a)(4) to fix numbering error.
80.1616(b)(2)	Amended language to clarify that credits expire on December 31 and are reported the following March 31.
80.1620(d)	Revised to correct year to 2012.
80.1620(e)(1), (e)(2), (f)(1)	Revised to correct dates to 2013.
80.1621(c), (d)	Reserved paragraph (c); added paragraph (d), which was inadvertently deleted from the regulations, but is referred to in the preamble and in § 80.1622(e).
80.1640(a)(2)	Amended to correct reference from paragraph (a)(5) to paragraph (a)(1).
80.1642(c)(3)	Amended paragraph to correct typographical errors.
80.1650	Amended to remove phrase ''whichever is earlier'' from paragraphs specifying the dates by which reports must be submitted, as this would contradict the ability of parties to register after the initial date that parties involved in a given activity must be registered.
80.1652(c)	Amended to correct word error (''producer'' instead of ''refiner'').
80.1667(c)(1)	Removed paragraph (c)(1) to match the intentions of § 80.1615(a) that refiners—including gasoline blenders (excluding those specified in § 80.1615(a)(3))—may generate Tier 3 credits beginning in 2014.

IV. Small SI Test Fuel and Bonding Provisions

On June 17, 2013, EPA modified the test procedures for measuring exhaust emissions from land-based nonroad small spark-ignition engines (small SI engines) to allow for exhaust emission certification testing with a test fuel that has 10 percent ethanol as specified by California ARB (78 FR 36370). We adopted that provision on an interim basis, through model year 2019, with the expectation that we would further evaluate the appropriate test fuel for onroad and nonroad applications. The Tier 3 motor vehicle emission standards include a new certification test fuel specification that is much like California ARB's Phase 3 test fuel in that it includes 10 percent ethanol (E10).

Small SI manufacturers have requested that we address the test fuel questions in a way that does not leave them uncertain about certification test fuel options starting in model year 2020. While the effort to adopt the new EPA nonroad test fuel specification lies ahead, we agree with the manufacturers that the new ethanol-based test fuel associated with the Tier 3 motor vehicle emission standards allows us to take the step of removing the expiration of the provision allowing for the use of the similar California ARB Phase 3 test fuel for small SI engines. In the future, we expect to go through a rulemaking to incorporate EPA's Tier 3 test fuel into the emission programs for small spark-ignition engines, including an assessment of how the changing test fuel relates to the stringency of the emission standards.

When we adopted Phase 3 exhaust emission standards for Small SI engines in 2008, we included a new set of requirements for manufacturers to post a bond as a means of ensuring compliance with regulatory requirements (73 FR 59034, October 8, 2008). Manufacturers have been complying with the bond requirements since 2010. The bond provisions are generally working as expected, but we have found several items that should be adjusted or clarified to help with ongoing implementation, as follows:

- Clarify that bonds are intended to cover any improperly funded compliance obligations relative only to engines that must comply with 40 CFR part 1054. The bond provisions are not intended to extend to engines that a manufacturer certifies under other EPA programs.
- Specify that small-volume engine manufacturers and small-volume equipment manufacturers (collectively small-volume manufacturers, as defined in 40 CFR 1054.801) are subject to an alternate minimum bond value of $25,000, rather than the $500,000 minimum that applies for other manufacturers. This arrangement has been the working policy under the broader allowance specified in § 1054.635(d). Codifying these terms allows us to streamline the process and remove uncertainty for small-volume manufacturers.
- Adopt a cap on the bond value that corresponds to the applicable bond-waiver threshold. Since U.S.-based assets are roughly analogous to bond values as a measure of our ability to compel compliance (or remedy deficiencies) for the different kinds of companies, this approach provides a measure of parity or fairness between those that must post bond and those that qualify for a bond waiver based on their assets in the United States. This is consistent with the approach we took on an interim basis to specify a maximum bond value of $10 million. The new provision replaces the $10 million cap in § 1054.145(o).
- Clarify how bond values may change within a given year, and in future years: (1) Bond values may be adjusted for a given year any time before the first importation or sale for that year; (2) once a bond value is fixed for a given year, that value may not be decreased during the year, even if sales volumes are less than anticipated; and (3) bond values may be reset with each new year, but these values must reflect actual sales volumes for the preceding three years. This arrangement allows a manufacturer to take a deliberate approach to resetting bond values if sales volumes change substantially over time.
- Change the protocol for adjusting thresholds and bond values for inflation. Small, annual changes create confusion and an implementation burden, with very small incremental benefit. To streamline that process and still account for the cumulative effects of inflation, we are specifying that we will adjust the thresholds and bond values in 2020, and every ten years after that, using a less precise rounding protocol. These changes will not require rulemaking to take effect, but we will likely modify the regulation to reflect these periodic adjustments.

V. Evaporative Test Procedures for Nonroad Equipment

We specify evaporative emission standards, test procedures, and certification requirements in 40 CFR part 1060. This includes measurement procedures for fuel permeation through fuel lines and fuel tanks, and for diurnal emissions from fuel tanks. We are making the following changes to these regulations:

- Clarify that boat builders and other equipment manufacturers that install uncertified components are required to certify those fuel-system components as if they were component manufacturers. The original regulatory language described a requirement for equipment manufacturers to certify as equipment manufacturers if they were installing uncertified components, but we have

found that the certification process is most straightforward if we treat them as component manufacturers.

• The test procedures originally allowed for manufacturers to use good engineering judgment to address technical concerns related to measuring emissions from narrow-diameter fuel lines. In 2013, SAE published a voluntary consensus standard (SAE J2996) specifying measurement procedures for these narrow-diameter fuel lines. We agree that the SAE standard reflects good engineering judgment in the effort to measure emissions and are therefore incorporating this standard by reference in § 1060.515. This alternative SAE standard was designed for Small SI products, but it may be used in other applications as well; note, however, that U.S. Coast Guard requires measurements based on SAE J1527 in some cases. We are including the following clarifications and adjustments related to the specified SAE standards for all fuel-line permeation testing: (1) The test requires emission sampling over a 14-day period; (2) Two days of non-testing per week are allowed to accommodate weekend work schedules; (3) To remove any ambiguity from the published SAE standards, we are stating in our regulations that testing must occur at 23±2 °C; and (4) The final test result is based on a simple arithmetic average of measured emission values over the 14-day sampling period. These changes allow for internal consistency, and generally align with the procedures adopted by California ARB. To the extent that there are remaining differences, manufacturers may ask for approval to use different procedures under § 1060.505(c)(2) or (c)(3).

• Correct a typographical error in the kPa pressure value for preconditioning fuel tanks for a permeation measurement. The psi value in the regulation is correct.

• Correct the sample calculation for determining an emission result from a diurnal emission test.

• Adjust the procedure to account for buoyancy effects in tank permeation measurements by replacing the requirement to use two identical tanks with a requirement to use a second tank that has a total volume that is within 5 percent of the test tank's total volume. This will allow manufacturers and test labs to rely on a smaller number of stock fuel tanks to make the necessary but minor corrections that result from fluctuating atmospheric pressure.

• Adjust and clarify diurnal test procedures: (1) Add a specification for in-tank thermocouples for tracking fuel temperature for testing marine fuel tanks; (2) Replace the hourly profile of fuel temperatures with clearer specification about tracking test fuel temperature from a specified starting point to a specified (calculated) endpoint. The vapor generation should be nearly constant between test runs as long as fuel temperature continues to increase from the low temperature to the high temperature; (3) Standardize the procedure for purging the evaporative canister to prepare for testing based on a simulation of the in-use experience; this is based on engine purge for land-based applications, and on passive (ambient) purge for marine applications. This canister preconditioning is a necessary step to establish a known starting point for designing a system that meets the diurnal emission standard; and (4) Include temperature tolerance bands for the diurnal temperature cycle. Note that we are not proposing or requesting comment on changing the test procedure for marine fuel tanks to base the temperature profile on ambient temperatures instead of fuel temperatures.

• Establish a gravimetric test method for determining mass of emissions for tanks with a diurnal emission standard of at least 2.0 grams of hydrocarbon. Emission test procedures involving an emission standard of less than 2.0 grams of hydrocarbon need the more accurate measurements available from using a flame ionization detector (FID) within a sealed enclosure.

VI. Portable Fuel Containers

On February 26, 2007, EPA adopted a set of requirements to reduce emissions from portable fuel containers (PFC) at 40 CFR part 59, subpart F (72 FR 8533). EPA review of PFC designs and discussions with PFC manufacturers suggest that the manufacturers may have read the provisions of 40 CFR part 59, subpart F, too narrowly and that their interpretations may have unnecessarily constrained some design approaches that may have otherwise allowed for improved in-use performance and consumer satisfaction. EPA did not intend to impact manufacturer design approaches beyond those deemed by the manufacturer as necessary to meet the emission control requirements as otherwise specified in 40 CFR part 59, and is including language in this rule to clarify regulatory requirements that apply to PFCs. Specifically, the revised regulation states that it is allowable for manufacturers to design PFCs with vents to relieve pressure, provided that the venting device is in place during emission testing, and provided that the venting device closes automatically when not in use.

The modifications to 40 CFR part 59, subpart F, do not change the regulatory requirements with regard to emission standards and test procedures, but better define some elements of design and clarify how various approaches would be considered in testing. Upon seeing these modifications to the regulations, PFC manufacturers may elect to pursue design approaches they deem appropriate, which they may have thought were not available to them previously.

VII. MARPOL Annex VI Implementation

The Act to Prevent Pollution from Ships (APPS) implements the provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI for the United States (33 U.S.C. 1901–1912). EPA adopted regulations in 2010 to summarize these requirements and to describe engine certification procedures and other relevant provisions as specified in APPS (75 FR 22896, April 30, 2010). MARPOL Annex VI has been amended since issuance of that **Federal Register** notice to include designation of the North American ECA and the U.S. Caribbean Sea ECA and various other changes. We are amending 40 CFR part 1043 in this rulemaking to align the regulations with the amendments of MARPOL Annex VI to facilitate stakeholder compliance, and to correct certain technical errors.

First, the most fundamental step in updating 40 CFR part 1043 is to cite the 2013 publication of MARPOL Annex VI and the further amendments concluded at MEPC 66 in April 2014 (see 40 CFR 1043.100). Likewise, MARPOL Annex VI was recently amended to waive the fuel-sulfur requirements for certain steamships until January 1, 2020. Part 1043 already includes such a waiver for steamships operating in the Great Lakes. We are codifying the additional temporary steamship exemption in § 1043.97. Note that covered steamships will be required to comply with the relevant sulfur limits when the exemption expires on January 1, 2020.

Second, we inadvertently adopted regulatory language in 40 CFR part 1043 that differs from the language of Annex VI. For example, we originally adopted the provisions in 40 CFR part 1043 with an erroneous date, stating that the 0.10% fuel-sulfur standard applies starting January 1, 2016, which should be January 1, 2015. The Annex VI specification is enforceable with or without this correction in 40 CFR part 1043, but we want to make the change to avoid any possible confusion. We also identified the NO_X standards based

on an engine's model year; this should identify the applicability of NO_X standards based on the build date of new vessels, or on the date of major modifications in other circumstances. We are correcting these errors in part 1043.

Third, we are adding clarifying language relating to public vessels. MARPOL Annex VI exempts public vessels from engine standards and fuel requirements. Public vessels are defined as ''warships, naval auxiliary vessels, and other vessels owned or operated by a sovereign country when engaged in noncommercial service.'' We want to clarify that any vessel that has a national security exemption (for engines or fuel) is automatically considered a public vessel.

Fourth, we are clarifying regulatory provisions to address whether or how emission credits apply for EPA certificates and EIAPP certificates. Engine manufacturers are interested in getting an EPA certificate under 40 CFR part 1042 and an EIAPP certificate under 40 CFR part 1043 for the same engine. This would allow them maximum flexibility in selling engines to boat builders for installation in vessels used in domestic or international service. Certification to EPA standards under 40 CFR part 1042 allows manufacturers to use emission credits to make some engines with emission levels that are above the specified standard. MARPOL Annex VI and 40 CFR part 1043 do not have such an allowance. We are modifying the regulation to clarify that an engine may not be covered by both an EPA certificate and an EIAPP certificate if its certification under 40 CFR part 1042 depends on using emission credits to allow for an emission level above the specified standard. If an engine has emission levels below the specified standard and it is used to generate emission credits under 40 CFR part 1042, this would not disqualify an engine from also getting an EIAPP certificate under 40 CFR part 1043.

Lastly, we are making clarifying edits to the fuels regulations under 40 CFR part 80 for MARPOL Annex VI implementation; the table below lists these edits. While some of these edits are purely corrections to typographical errors, we are also making edits to clarify the treatment of fuels under MARPOL Annex VI, Regulation 3 and Regulation 4. Regulation 3 authorizes trial programs that involve a permit allowing a ship operator to use fuel that exceeds the fuel-sulfur standards that would otherwise apply. Regulation 4 allows for flag states to approve the use of high-sulfur fuel for vessels that are equipped with technology that allows for an equivalent level of control. Specifically, we are amending the definition of ''ECA marine fuel'' at 40 CFR 80.2(ttt) to clarify that vessels with Regulation 3 permits or Regulation 4 equivalencies can in fact use fuel that exceeds the ECA marine fuel sulfur standard. Further, to provide producers, distributors, and marketers of fuel for use under a Regulation 3 permit or a Regulation 4 equivalency the ability to denote such fuel on their PTDs, we are amending 40 CFR 80.590 to provide these parties with express PTD statements that may be used in lieu of the statements that are currently in the regulations.

MARPOL Annex VI-Related Amendments to 40 CFR Part 80, Subpart I

Section	Description of change
80.2(ttt)	Amended the definition of ECA marine fuel to clarify that fuel allowed by MARPOL Annex VI Regulation 3 permits or Regulation 4 equivalencies under 40 CFR part 1043 is not required to meet the ECA marine fuel requirements.
80.510 section heading	Amending to clarify that this section applies to refiners and importers.
80.510(k) and 80.511(b)(9)	Amending to clarify that fuel allowed by Regulation 3 permits or Regulation 4 equivalencies is not required to meet the ECA marine fuel requirements.
80.574(b)	Amended to update the address for submitting ECA marine fuel alternative label requests.
80.590(b)	Amended to allow for PTD statements for use with fuel permitted for use under MARPOL Annex VI Regulation 3, Regulation 4, or both.
80.607 (a), (c), (d), (f)	Amended to remove references to ECA marine fuel, as research and development permits are separate from Regulation 3 permits under 40 CFR part 1043.
80.608(d)	Amended to correct minor typographical errors.

VIII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *http://www2.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act

This action does not impose any new information collection burden under the PRA, since it merely clarifies and corrects existing regulatory language. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control numbers as noted in the table below.

Regulatory citation	Item	OMB Control No.
40 CFR part 86	Light-duty vehicle standards	2060–0104
40 CFR part 86	Heavy-duty vehicle standards	2060–0287
40 CFR part 86	In-use verification program	2060–0086
40 CFR part 80	In-use fuel standards	2060–0437
40 CFR part 1043	MARPOL Annex VI	2060–0641
40 CFR part 1054	Small SI exhaust emission standards	2060–0338
40 CFR part 1060	Nonroad SI evaporative emission standards	2060–0321, 2060–0338

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden or otherwise has a positive economic effect on the small entities subject to the rule. This rule merely clarifies and corrects existing regulatory language. We therefore anticipate no costs and therefore no regulatory burden associated with this rule. We have therefore concluded that this action will have no net regulatory burden for all directly regulated small entities.

D. Unfunded Mandates Reform Act

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments. Requirements for the private sector do not exceed $100 million in any one year.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. This rule merely corrects and clarifies regulatory provisions. Tribal governments would be affected only to the extent they purchase and use regulated vehicles or engines. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer Advancement Act

This action involves technical standards. EPA has decided to use the following voluntary consensus standards:

Organization	Standard	Available from
SAE International	SAE J2996, Small Diameter Fuel Line Permeation Test Procedure, Issued January 2013	*www.sae.org.*
ASTM International	ASTM D86–07, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, approved January 15, 2007.	*www.astm.org.*
ASTM International	ASTM standard practice D4057–12, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, approved December 1, 2012.	*www.astm.org.*
ASTM International	ASTM standard practice D4177–95 (Reapproved 2010), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, approved May 1, 2010.	*www.astm.org.*
ASTM International	ASTM standard practice D5842–14, Standard Practice for Sampling and Handling for Fuels for Volatility Measurement, approved January 15, 2014.	*www.astm.org.*
ASTM International	ASTM standard practice D6299–13, Standard Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance, approved October 1, 2013.	*www.astm.org.*

This action also involves technical standards for marine diesel engines. There are no voluntary consensus documents that address these technical standards. EPA has therefore decided to use the following standards from the International Maritime Organization:

Organization	Standard	Available from
International Maritime Organization.	MARPOL Annex VI, Regulations for the Prevention of Pollution from Ships, Third Edition, 2013.	*www.imo.org.*
International Maritime Organization.	NO_X Technical Code 2008, 2013 Edition	*www.imo.org.*
International Maritime Organization.	Annex 12, Resolution MEPC.251(66) from the Report of the Marine Environment Protection Committee on its Sixty-Sixth Session, April 25, 2014.	*www.imo.org.*

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

This action is not expected to have any adverse human health or environmental impacts; as a result, the human health or environmental risk addressed by this action will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations.

K. Congressional Review Act

This action is subject to the CRA, and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

IX. Statutory Provisions and Legal Authority

Statutory authority for this action comes from 42 U.S.C. 7401–7671q and 33 U.S.C. 1901–1912.

List of Subjects

40 CFR Part 59

Environmental protection, Air pollution control, Confidential business information, Labeling, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

40 CFR Part 80

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential Business Information, Diesel fuel, Fuel additives, Gasoline, Imports, Incorporation by reference, Labeling, Motor vehicle pollution, Penalties, Petroleum, Reporting and recordkeeping requirements.

40 CFR Part 85

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential Business Information, Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Research, Warranties.

40 CFR Part 86

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential Business Information, Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 600

Environmental protection, Administrative practice and procedure, Electric power, Fuel economy, Labeling, Reporting and recordkeeping requirements.

40 CFR Part 1037

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1043

Environmental protection, Administrative practice and procedure, Air pollution control, Imports, Incorporation by reference, Vessels, Reporting and recordkeeping requirements.

40 CFR Parts 1051 and 1054

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1060

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Incorporation by reference, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Parts 1065 and 1066

Environmental protection, Administrative practice and procedure, Reporting and recordkeeping requirements, Research.

Dated: February 2, 2015.

Gina McCarthy,

Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as set forth below.

PART 59—NATIONAL VOLATILE ORGANIC COMPOUND EMISSION STANDARDS FOR CONSUMER AND COMMERCIAL PRODUCTS

■ 1. The authority citation for part 59 continues to read as follows:

Authority: 42 U.S.C. 7414 and 7511b(e).

Subpart F—[Amended]

■ 2. Section 59.611 is amended by revising paragraph (c)(1)(ii) to read as follows:

§ 59.611 What evaporative emission requirements apply under this subpart?

* * * * *

(c) * * *

(1) * * *

(ii) For anyone to design, manufacture, or install emission control systems with features that disable, deactivate, reduce effectiveness, or bypass the emission controls, either actively or passively. However, you may include a vent that the operator can open to bypass emission controls if that vent closes automatically (*i.e.,* without operator involvement). You may include such design features if they operate during emission tests described in subpart F of this part. For example, you may include an integrated or external manually activated device in the portable fuel container's design to temporarily relieve pressure, provided that the device is in place during emission testing and closes automatically when not in use.

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■ 3. Section 59.623 is amended by revising paragraph (a) to read as follows:

§ 59.623 What must I include in my application?

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(a) Describe the emission family's specifications and other basic parameters of the emission controls. List each distinguishable configuration in the emission family. Include descriptions and part numbers for all detachable components such as spouts and caps and describe any devices designed for venting pressure, if applicable.

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■ 4. Section 59.625 is amended by adding paragraph (b)(6) to read as follows:

§ 59.625 How do I select emission families?

* * * * *

(b) * * *

(6) Strategy for venting pressure.

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PART 80—REGULATION OF FUELS AND FUEL ADDITIVES

■ 5. The authority citation for part 80 continues to read as follows:

Authority: 42 U.S.C. 7414, 7521, 7542, 7545, and 7601(a).

Subpart A—General Provisions

■ 6. Section 80.2 is amended by:

■ a. Revising paragraph (ttt).

■ b. Removing and reserving paragraph (cccc).

The revisions read as follows:

§ 80.2 Definitions.

* * * * *

(ttt) *ECA marine fuel* is diesel, distillate, or residual fuel that meets the criteria of paragraph (ttt)(1) of this section, but not the criteria of paragraph (ttt)(2) of this section.

(1) All diesel, distillate, or residual fuel used, intended for use, or made available for use in Category 3 marine vessels while the vessels are operating within an Emission Control Area (ECA), or an ECA associated area, is ECA marine fuel, unless it meets the criteria of paragraph (ttt)(2) of this section.

(2) ECA marine fuel does not include any of the following fuel:

(i) Fuel used by exempted or excluded vessels (such as exempted steamships), or fuel used by vessels allowed by the U.S. government pursuant to MARPOL Annex VI Regulation 3 or Regulation 4

to exceed the fuel sulfur limits while operating in an ECA or an ECA associated area (see 33 U.S.C. 1903).

(ii) Fuel that conforms fully to the requirements of this part for NRLM diesel fuel (including being designated as NRLM).

(iii) Fuel used, or made available for use, in any diesel engines not installed on a Category 3 marine vessel.

* * * * *

(cccc) [Reserved]

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■ 7. Section 80.8 is amended by revising paragraph (e)(1) to read as follows:

§ 80.8 Sampling methods for gasoline, diesel fuel, fuel additives, and renewable fuels.

* * * * *

(e) * * *

(1) *ASTM International material.* The following standards are available from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428–2959, (877) 909–ASTM, or *http://www.astm.org:*

(i) ASTM D4057–12, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, approved December 1, 2012 (''ASTM D4057'').

(ii) ASTM D4177–95 (Reapproved 2010), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, approved May 1, 2010 (''ASTM D4177'').

(iii) ASTM D5842–14, Standard Practice for Sampling and Handling of Fuels for Volatility Measurement, approved January 15, 2014 (''ASTM D5842'').

(iv) ASTM D5854–96 (Reapproved 2010), Standard Practice for Mixing and Handling of Liquid Samples of Petroleum and Petroleum Products, approved May 1, 2010 (''ASTM D5854'').

* * * * *

Subpart D—Reformulated Gasoline

■ 8. Section 80.46 is amended by:
■ a. Revising paragraph (b)(1);
■ b. Revising paragraph (c)(2) introductory text;
■ c. Revising paragraph (d);
■ d. Revising paragraph (e);
■ e. Revising paragraph (f)(1);
■ f. Revising paragraph (g)(1); and
■ g. Revising paragraph (h)(1).

The revisions read as follows:

§ 80.46 Measurement of reformulated gasoline and conventional gasoline fuel parameters.

* * * * *

(b) * * *

(1) Through December 31, 2015, olefin content must be determined using ASTM D1319. Beginning January 1, 2016, the olefin content of gasoline must be determined by a test method approved under § 80.47.

* * * * *

(c) * * *

(2) Beginning January 1, 2016, RVP must be determined by a test method approved under § 80.47, except as provided in paragraph (c)(2)(i) of this section.

* * * * *

(d) *Distillation.* Through December 31, 2015, distillation parameters must be determined using ASTM D86. Beginning January 1, 2016, the distillation parameters must be determined by a test method approved under § 80.47. (Note: The precision estimates for reproducibility in ASTM D86–12 do not apply; see § 80.47(h).)

(e) *Benzene.* Through December 31, 2015, benzene content must be determined using ASTM D3606, except that instrument parameters shall be adjusted to ensure complete resolution of the benzene, ethanol and methanol peaks because ethanol and methanol may cause interference with ASTM D3606 when present. Beginning January 1, 2016, the benzene content must be determined by a test method approved under § 80.47.

(f)(1) Through December 31, 2015, aromatic content must be determined using ASTM D5769, except the sample chilling requirements in section 8 of this standard method are optional. Beginning January 1, 2016, the aromatic content must be determined by a test method approved under § 80.47.

* * * * *

(g) * * * (1) Through December 31, 2015, oxygen and oxygenate content must be determined using ASTM D5599. Beginning January 1, 2016, oxygen and oxygenate content must be determined by a test method approved under § 80.47.

* * * * *

(h) * * *

(1) *ASTM International material.* The following standards are available from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428–2959, (877) 909–ASTM, or *http://www.astm.org:*

(i) ASTM D86–12, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, approved December 1, 2012 (''ASTM D86'').

(ii) ASTM D1319–13, Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption, approved May 1, 2013 (''ASTM D1319'').

(iii) ASTM D2622–10, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry, approved February 15, 2010 (''ASTM D2622'').

(iv) ASTM D3120–08, Standard Test Method for Trace Quantities of Sulfur in Light Liquid Petroleum Hydrocarbons by Oxidative Microcoulometry, approved December 15, 2008 (''ASTM D3120'').

(v) ASTM D3246–11, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, approved June 1, 2011 (''ASTM D3246'').

(vi) ASTM D3606–10, Standard Test Method for Determination of Benzene and Toluene in Finished Motor and Aviation Gasoline by Gas Chromatography, approved October 1, 2010 (''ASTM D3606'').

(vii) ASTM D4468–85 (Reapproved 2011), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry, approved November 1, 2011 (''ASTM D4468'').

(viii) ASTM D4815–13, Standard Test Method for Determination of MTBE, ETBE, TAME, DIPE, tertiary-Amyl Alcohol and C1 to C4 Alcohols in Gasoline by Gas Chromatography, approved October 1, 2013 (''ASTM D4815'').

(ix) ASTM D5191–13, Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method), approved December 1, 2013 (''ASTM D5191'').

(x) ASTM D5453–12, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil by Ultraviolet Fluorescence, approved November 1, 2012 (''ASTM D5453'').

(xi) ASTM D5599–00 (Reapproved 2010), Standard Test Method for Determination of Oxygenates in Gasoline by Gas Chromatography and Oxygen Selective Flame Ionization Detection, approved October 1, 2010 (''ASTM D5599'').

(xii) ASTM D5769–10, Standard Test Method for Determination of Benzene, Toluene, and Total Aromatics in Finished Gasolines by Gas Chromatography/Mass Spectrometry, approved May 1, 2010 (''ASTM D5769'').

(xiii) ASTM D6550–10, Standard Test Method for Determination of Olefin Content of Gasolines by Supercritical-Fluid Chromatography, approved October 1, 2010 (''ASTM D6550'').

(xiv) ASTM D6667–10, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum

Gases by Ultraviolet Fluorescence, approved October 1, 2010 (''ASTM D6667'').

(xv) ASTM D6920–13, Standard Test Method for Total Sulfur in Naphthas, Distillates, Reformulated Gasolines, Diesels, Biodiesels, and Motor Fuels by Oxidative Combustion and Electrochemical Detection, approved September 15, 2013 (''ASTM D6920'').

(xvi) ASTM D7039–13, Standard Test Method for Sulfur in Gasoline, Diesel Fuel, Jet Fuel, Kerosine, Biodiesel, Biodiesel Blends, and Gasoline-Ethanol Blends by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry, approved September 15, 2013 (''ASTM D7039'').

* * * * *

■ 9. Section 80.47 is amended by:
■ a. Revising paragraph (a)(7);
■ b. Revising paragraphs (b)(1), (b)(2)(i), and (b)(2)(ii);
■ c. Revising paragraphs (c)(1), (c)(2)(i), and (c)(2)(ii);
■ d. Revising paragraph (d)(1);
■ e. Revising paragraph (e)(1);
■ f. Revising paragraph (f)(1);
■ g. Revising paragraph (g)(1);
■ h. Revising paragraph (h)(1);
■ i. Revising paragraph (i)(1);
■ j. Revising paragraph (j)(1);
■ k. Revising paragraph (l);
■ l. Revising paragraph (m)(6);
■ m. Revising paragraphs (n)(1), (n)(2)(i), and (n)(2)(ii), and removing and reserving paragraph (n)(2)(iv);
■ n. Revising paragraphs (o)(1), (o)(2)(i), (o)(2)(ii), and removing and reserving paragraph (o)(2)(iv);
■ o. Revising paragraphs (p)(1), (p)(3)(i), and (p)(3)(ii), and removing and reserving paragraph (p)(3)(iv); and
■ p. Revising paragraph (r)(1).

The revisions read as follows:

§ 80.47 Performance-based Analytical Test Method Approach.

* * * * *

(a) * * *

(7) *Locally-named reference materials* are gasoline or diesel fuels that are usually from the regular production of the facility where they are used in laboratory quality control efforts and have been analyzed using the designated method (either by the facility's lab or by a reference lab) to obtain an estimate of their concentration.

* * * * *

(b) * * * (1) *Precision.* Beginning January 1, 2016, for motor vehicle gasoline, gasoline blendstock, and gasoline fuel additives subject to the gasoline sulfur standard at §§ 80.195 and 80.1603, the maximum allowable standard deviation computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples using good laboratory practices taken from a single homogeneous commercially available gasoline must be less than or equal to 1.5 times the repeatability ''r'' divided by 2.77, where ''r'' equals the ASTM repeatability of ASTM D7039 (Example: A 10ppm sulfur gasoline sample: Maximum allowable standard deviation of 20 tests≤1.5*(1.73ppm/2.77)=0.94 ppm). The 20 results must be a series of tests with a sequential record of analysis and no omissions. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

(2) * * *

(i) The arithmetic average of a continuous series of at least 10 tests performed using good laboratory practices on a commercially available gravimetric sulfur standard in the range of 1–10 ppm, say 10 ppm, shall not differ from the accepted reference value (ARV) of the standard by more than 0.70 ppm sulfur;

(ii) The arithmetic average of a continuous series of at least 10 tests performed using good laboratory practices on a commercially available gravimetric sulfur standard in the range of 10–20 ppm, say 20 ppm, shall not differ from the ARV of the standard by more than 1.02 ppm sulfur; and

* * * * *

(c) * * * (1) *Precision.* Beginning January 1, 2016, for butane subject to the butane sulfur standard at §§ 80.82, 80.195, 80.340(b) and 80.1603, the maximum allowable standard deviation computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples using good laboratory practices taken from a single homogeneous commercially available butane must be less than or equal to 1.5 times the repeatability (r) divided by 2.77, where ''r'' equals the ASTM repeatability of ASTM D6667 (Example: A 10 ppm sulfur butane sample: Maximum allowable standard deviation of 20 tests≤1.5*(1.15ppm/2.77) = 0.62 ppm). The 20 results must be a series of tests with a sequential record of analysis and no omissions. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

(2) * * *

(i) The arithmetic average of a continuous series of at least 10 tests performed using good laboratory practices on a commercially available gravimetric sulfur standard in the range of 1–10 ppm, say 10 ppm, shall not differ from the accepted reference value (ARV) of the standard by more than 0.47 ppm sulfur;

(ii) The arithmetic average of a continuous series of at least 10 tests performed using good laboratory practices on a commercially available gravimetric sulfur standard in the range of 10–20 ppm, say 20 ppm, shall not differ from the accepted reference value (ARV) of the standard by more than 0.94 ppm sulfur; and

* * * * *

(d) * * *

(1) *Precision.* Beginning January 1, 2016, for motor vehicle gasoline, gasoline blendstock, and gasoline fuel additives subject to the gasoline standards of this part, the maximum allowable standard deviation computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples using good laboratory practices taken from a single homogeneous commercially available gasoline must be less than or equal to 0.3 times the reproducibility (R), where ''R'' equals the ASTM reproducibility of ASTM D1319 (Example: A gasoline containing 9 Vol% olefins: Maximum allowable standard deviation of 20 tests ≤0.3*(3.06 Vol%) = 0.92 Vol%). The 20 results must be a series of tests with a sequential record of analysis and no omissions. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

* * * * *

(e) * * *

(1) *Precision.* Beginning January 1, 2016, for motor vehicle gasoline, gasoline blendstock, and gasoline fuel additives subject to the gasoline standards of this part, the maximum allowable standard deviation computed from the results of a minimum of 20 tests made over 20 days (tests may be

arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples using good laboratory practices taken from a single homogeneous commercially available gasoline must be less than or equal to 0.3 times the reproducibility (R), where ''R'' equals the ASTM reproducibility of ASTM D1319 (Example: A gasoline containing 32Vol% aromatics: Maximum allowable standard deviation of 20 tests ≤0.3*(3.7 Vol%) = 1.11Vol%). The 20 results must be a series of tests with a sequential record of analysis and no omissions. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

* * * * *

(f) * * *

(1) *Precision.* Beginning January 1, 2016, for motor vehicle gasoline, gasoline blendstock, and gasoline fuel additives subject to the gasoline standards of this part, the maximum allowable standard deviation computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples using good laboratory practices taken from a single homogeneous commercially available gasoline must be less than or equal to 0.3 times the reproducibility (R), where ''R'' equals the ASTM reproducibility of ASTM D5599 (Example: A gasoline containing 3Mass% total oxygen: Maximum allowable standard deviation of 20 tests ≤0.3*(0.32 Mass%) = 0.10 Mass%). The 20 results must be a series of tests with a sequential record of analysis and no omissions. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

* * * * *

(g) * * *

(1) *Precision.* Beginning January 1, 2016, for motor vehicle gasoline, gasoline blendstock, and gasoline fuel additives subject to the gasoline standards of this part and volatility standards at § 80.27, the maximum allowable standard deviation computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples using good laboratory practices taken from a single homogeneous commercially available gasoline must be less than or equal to 0.3 times the reproducibility (R), where ''R'' equals the ASTM reproducibility of ASTM D5191 (Example: A gasoline having a RVP of 6.8psi: Maximum allowable standard deviation of 20 tests withdrawn from a 250 milliliter container ≤0.3*(0.40psi) = 0.12 psi). The 20 results must be a series of tests with a sequential record of analysis and no omissions. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

* * * * *

(h) * * *

(1) *Precision.* Beginning January 1, 2016, for motor vehicle gasoline, gasoline blendstock, and gasoline fuel additives subject to the gasoline standards of this part, the maximum allowable standard deviation computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples using good laboratory practices taken from a single homogeneous commercially available gasoline must be less than or equal to 0.3 times the reproducibility (R), where ''R'' equals the ASTM reproducibility in Table 10, Groups 2, 3 and 4 (Automated) of ASTM D86–07 for the initial boiling point, E10, E50, E90 and final boiling point. (Example: A gasoline having an initial boiling point of 26 °C and a final boiling point of 215 °C: Maximum allowable standard deviation of 20 tests for initial boiling point ≤0.3*(8.5 °C) = 2.55 °C, maximum allowable standard deviation of 20 tests for E10 ≤0.3*(3.0+2.64*Sc)°C, maximum allowable standard deviation of 20 tests for E50 ≤0.3*(2.9+3.97*Sc)°C, maximum allowable standard deviation of 20 tests for E90 ≤0.3*(2.0+2.53*Sc) °C, and maximum allowable standard deviation of 20 tests for final boiling point ≤0.3*(10.5 °C) = 3.15 °C), where Sc is the average slope (or rate of change) of the gasoline distillation curve as calculated in accordance with section 13.2 of ASTM D86–07. The 20 results must be a series of tests with a sequential record of analysis and no omissions. Note that the precision criteria described in this paragraph (h)(1) differ from what is specified in ASTM D86–12. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

* * * * *

(i) * * *

(1) *Precision.* Beginning January 1, 2016, for motor vehicle gasoline, gasoline blendstock, and gasoline fuel additives subject to the gasoline standards of this part and MSAT2 standards at §§ 80.41, 80.101, 80.1230, the maximum allowable standard deviation computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples using good laboratory practices taken from a single homogeneous commercially available gasoline must be less than or equal to 0.15 times the reproducibility (R), where ''R'' equals the ASTM reproducibility of ASTM D3606 (Example: A gasoline having a 1Vol% benzene: Maximum allowable standard deviation of 20 tests ≤0.15*(0.18 Vol%) = 0.027Vol%). The 20 results must be a series of tests with a sequential record of analysis and no omissions. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

* * * * *

(j) * * *

(1) *Precision.* Beginning January 1, 2016, for motor vehicle diesel fuel subject to the motor vehicle diesel standards at § 80.520, the maximum allowable standard deviation computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples using good laboratory practices taken from a single homogeneous commercially available diesel fuel must be less than or equal to 0.3 times the reproducibility (R), where ''R'' equals the ASTM reproducibility of ASTM D1319 (Example: A diesel fuel containing 35 Vol% aromatics: maximum allowable standard deviation of 20 tests ≤0.3*(3.3 Vol%) = 0.99Vol%). The 20 results must be a series of tests with a sequential record of analysis and no omissions. A laboratory facility may exclude a given sample or test result only if the

exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

* * * * *

(l) *Qualification criteria for Voluntary Consensus Standard Based (VCSB) Method-Defined Parameter Test Methods and Non-voluntary Consensus Standard Based (non-VCSB) Absolute Fuel Parameter of Sulfur in Gasoline and Butane.* (1)(i) Beginning January 1, 2016, the test facility or VCSB include full test method documentation by the Voluntary Consensus Standard Based (VCSB) organization, including a description of the technology and/or instrumentation that makes the method functional.

(ii) For the Non-voluntary Consensus Standard Based (non-VCSB) Absolute Fuel Parameter of Sulfur in Gasoline and Butane, the test facility include full test method documentation, including a description of the technology and/or instrumentation that makes the method functional.

(2)(i) The test facility or VCSB include information reported in the test method that demonstrates the test method meets the applicable precision information for the method-defined fuel parameter as described in this section.

(ii) For the Non-VCSB absolute fuel parameter of sulfur in gasoline and butane, the test facility include information reported in the test method that demonstrates the applicable accuracy criteria as described in § 80.47(b)(2) for gasoline and § 80.47(c)(2) for butane.

(3) The test facility or VCSB include information reported in the test method that demonstrates the test method has been evaluated using ASTM D6708 and whether the comparison is a ''null'' result or whether a correlation equation needs to be applied that predicts designated test method results from the applicable method-defined alternative test method.

(4) The test methods specified at §§ 80.2(w) and 80.46(a)(1), (a)(2), (b)(1), (c)(1), (d)(1), (e)(1), (f)(1), and (g)(1) and in use by a test facility prior to October 28, 2013 are exempt from the requirements of paragraphs (l)(1) through (3) of this section.

(m) * * *

(6) The candidate method-defined non-VCSB test method precision qualification must be conducted in the form of ''between methods reproducibility'' (Rcm) of the candidate method and applicable designated test method as recommended in ASTM D6708, where the Rcm must be equal to or less than 70 percent of the published reproducibility of the applicable designated test method using good laboratory practices.

* * * * *

(n) * * *

(1)(i) *Accuracy SQC.* Every facility shall conduct tests on every instrument with a commercially available gravimetric reference material, or check standard as defined in ASTM D6299 at least three times a year using good laboratory practices. The facility must pre-treat and assess results from the check standard testing after at least 15 testing occasions as described in section 8.2 of this standard practice. The facility must construct ''MR'' and ''I'' charts with control lines as described in section 8.4 and appropriate Annex sections of this standard practice. In circumstances where the absolute difference between the mean of multiple back-to-back tests of the standard reference material and the accepted reference value of the standard reference material is greater than 0.75 times the published reproducibility of the test method, the cause of such difference must be investigated by the facility. Records of the standard reference materials measurements as well as any investigations into any exceedance of these criteria must be kept for a period of five years.

(ii) The expanded uncertainty of the accepted reference value of consensus named fuels shall have the following accuracy qualification criterion: Accuracy qualification criterion = square root [(0.75R)^2+(0.75R)^2/L], where L = the number of single results obtained from different labs used to calculate the consensus ARV.

(2)(i) *Precision SQC.* Every facility shall conduct tests on every instrument with a quality control material as defined in paragraph 3.2.8 in ASTM D6299 either once per week or once per every 20 production tests, whichever is more frequent. The facility must construct and maintain an ''I'' chart as described in section 8 and section A1.5.1 and a ''MR'' chart as described in section A1.5.4. Any violations of control limit(s) should be investigated by personnel of the facility and records kept for a period of five years.

(ii) *Validation of New QC Material.* When a test facility is making a transition from one batch of QC material to the next batch of QC material, the facility will either construct an ''I'' chart as described in section 8.7 and section A1.5.1 of ASTM D6299, or follow the ''Q-Procedure'' in Annex 1.9 of ASTM D6299. In following the Q-Procedure, if the plot of results from the ''old'' and ''new'' QC materials on its respective chart shows no special-cause signals, then the result of the ''new'' QC material will be considered valid.

* * * * *

(iv) [Reserved]

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(o) * * *

(1)(i) *Accuracy SQC.* Every facility shall conduct tests of every instrument with a commercially available check standard as defined in ASTM D6299 at least three times a year using good laboratory practices. The check standard must be an ordinary fuel with levels of the fuel parameter of interest close to either the applicable regulatory standard or the average level of use for the facility. For facilities using a VCSB designated method defined test method, the Accepted Reference Value of the check standard must be determined by the respective designated test method for the fuel parameter following the guidelines of ASTM D6299. Facilities using a VCSB alternative method defined test method must use the Accepted Reference Value of the check standard as determined in a VCSB Inter Laboratory Crosscheck Program (ILCP) or a commercially available ILCP following the guidelines of ASTM D6299. If the Accepted Reference Value is not provided in the ILCP, accuracy must be assessed based upon the respective EPA-designated test method using appropriate production samples. The facility must pre-treat and assess results from the check standard testing after at least 15 testing occasions as described in section 8.2 of this standard practice. The facility must construct ''MR'' and ''I'' charts with control lines as described in section 8.4 and appropriate Annex sections of this standard practice. In circumstances where the absolute difference between the mean of multiple back-to-back tests of the standard reference material and the accepted reference value of the standard reference material is greater than 0.75 times the published reproducibility of the test method, the cause of such difference must be investigated by the facility. Participation in a VCSB ILCP at least three times a year satisfies this Accuracy SQC requirement (Examples of ILCP: ASTM Reformulated Gasoline ILCP or ASTM motor gasoline ILCP). Records of the standard reference materials measurements as well as any investigations into any exceedance of these criteria must be kept for a period of five years.

(ii) The expanded uncertainty of the accepted reference value of consensus

named fuels shall have the following accuracy qualification criterion: Accuracy qualification criterion = square root [(0.75R)^2+(0.75R)^2/L], where L = the number of single results obtained from different labs used to calculate the consensus ARV.

(2)(i) *Precision SQC.* Every facility shall conduct tests of every instrument with a quality control material as defined in paragraph 3.2.8 in ASTM D6299 either once per week or once per every 20 production tests, whichever is more frequent. The facility must construct and maintain an ''I'' chart as described in section 8 and section A1.5.1 and a ''MR'' chart as described in section A1.5.4. Any violations of control limit(s) should be investigated by personnel of the facility and records kept for a period of five years.

(ii) *Validation of New QC Material.* When a test facility is making a transition from one batch of QC material to the next batch of QC material, the facility will either construct an ''I'' chart as described in section 8.7 and section A1.5.1 of ASTM D6299, or follow the ''Q-Procedure'' in Annex 1.9 of ASTM D6299. In following the Q-Procedure if the plot of results from the ''old'' and ''new'' QC materials on its respective chart shows no special-cause signals, then the result of the ''new'' QC material will be considered valid.

* * * * *

(iv) [Reserved]

* * * * *

(p) * * *

(1)(i) *Accuracy SQC for Non-VCSB Method-Defined test methods with minimal matrix effects.* Every facility shall conduct tests on every instrument with a commercially available check standard as defined in the ASTM D6299 at least three times a year using good laboratory practices. The check standard must be an ordinary fuel with levels of the fuel parameter of interest close to either the applicable regulatory standard or the average level of use for the facility. Facilities using a Non-VCSB alternative method defined test method must use the Accepted Reference Value of the check standard as determined in either a VCSB Inter Laboratory Crosscheck Program (ILCP) or a commercially available ILCP following the guidelines of ASTM D6299. If the Accepted Reference Value is not provided in the ILCP, accuracy must be assessed based upon the respective EPA designated test method using appropriate production samples. The facility must pre-treat and assess results from the check standard testing after at least 15 testing occasions as described in section 8.2 of this standard practice. The facility must construct ''MR'' and ''I'' charts with control lines as described in section 8.4 and appropriate Annex sections of this standard practice. In circumstances where the absolute difference between the mean of multiple back-to-back tests of the standard reference material and the accepted reference value of the standard reference material is greater than 0.75 times the published reproducibility of the fuel parameter's respective designated test method, the cause of such difference must be investigated by the facility. Records of the standard reference materials measurements as well as any investigations into any exceedance of these criteria must be kept for a period of five years.

(ii) The expanded uncertainty of the accepted reference value of consensus named fuels shall have the following accuracy qualification criterion: Accuracy qualification criterion = square root [(0.75R)^2+(0.75R)^2/L], where L = the number of single results obtained from different labs used to calculate the consensus ARV.

* * * * *

(3)(i) *Precision SQC.* Every facility shall conduct tests on every instrument with a quality control material as defined in paragraph 3.2.8 in ASTM D6299 either once per week or once per every 20 production tests, whichever is more frequent. The facility must construct and maintain an ''I'' chart as described in section 8 and section A1.5.1 and a ''MR'' chart as described in section A1.5.4. Any violations of control limit(s) should be investigated by personnel of the facility and records kept for a period of five years.

(ii) *Validation of New QC Material.* When a test facility is making a transition from one batch of QC material to the next batch of QC material, the facility will either construct an ''I'' chart as described in section 8.7 and section A1.5.1 of ASTM D6299, or follow the ''Q-Procedure'' in Annex 1.9 of ASTM D6299. In following the Q-Procedure, if the plot of results from the ''old'' and ''new'' QC materials on its respective chart shows no special-cause signals, then the result of the ''new'' QC material will be considered valid.

* * * * *

(iv) [Reserved]

* * * * *

(r) * * *

(1) *ASTM International material.* The following standards are available from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428–2959, (877) 909–ASTM, or *http://www.astm.org:*

(i) ASTM D86–07, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, approved January 15, 2007 (''ASTM D86'').

(ii) ASTM D1319–13, Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption, approved May 1, 2013 (''ASTM D1319'').

(iii) ASTM D3606–10, Standard Test Method for Determination of Benzene and Toluene in Finished Motor and Aviation Gasoline by Gas Chromatography, approved October 1, 2010 (''ASTM D3606'').

(iv) ASTM D5191–13, Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method), approved December 1, 2013 (''ASTM D5191'').

(v) ASTM D5599–00 (Reapproved 2010), Standard Test Method for Determination of Oxygenates in Gasoline by Gas Chromatography and Oxygen Selective Flame Ionization Detection, approved October 1, 2010 (''ASTM D5599'').

(vi) ASTM D6299–13, Standard Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance, approved October 1, 2013 (''ASTM D6299'').

(vii) ASTM D6667–10, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, approved October 1, 2010 (''ASTM D6667'').

(viii) ASTM D6708–13, Standard Practice for Statistical Assessment and Improvement of Expected Agreement Between Two Test Methods that Purport to Measure the Same Property of a Material, approved May 1, 2013 (''ASTM D6708'').

(ix) ASTM D6792–13, Standard Practice for Quality System in Petroleum Products and Lubricants Testing Laboratories, approved May 15, 2013 (''ASTM D6792'').

(x) ASTM D7039–13, Standard Test Method for Sulfur in Gasoline, Diesel Fuel, Jet Fuel, Kerosine, Biodiesel, Biodiesel Blends, and Gasoline-Ethanol Blends by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry, approved September 15, 2013, (''ASTM D7039'').

* * * * *

■ 10. Section 80.75 is amended by revising paragraph (a)(2)(xi)(G) to read as follows:

§ 80.75 Reporting requirements.

* * * * *

(a) * * *

(2) * * *

(xi) * * *

(G) The properties of the pentane batch specified by the pentane supplier, or the properties specified in § 80.86(a)(3) or (a)(4), as appropriate along with the test method used to measure these properties.

* * * * *

■ 11. Section 80.82 is amended by revising paragraph (e)(1) to read as follows:

§ 80.82 Butane blending.

* * * * *

(e)(1) When butane is blended with conventional gasoline under this section during the period May 1 through September 15, the refiner shall demonstrate through sampling and testing, using the test method for Reid vapor pressure in § 80.46 or § 80.47, as applicable, that each batch of conventional gasoline blended with butane meets the volatility standards specified in § 80.27 and in any EPA approved SIP.

* * * * *

■ 12. Section 80.85 is amended by revising paragraphs (a) introductory text, (b) introductory text, (g), and (i) to read as follows:

§ 80.85 Pentane blending.

* * * * *

(a) Any refiner that blends pentane for which the refiner has product transfer documents from a registered pentane supplier which demonstrate that the pentane is blender-commercial grade, as defined in § 80.86(a)(3), may demonstrate compliance with the standards in this part based on the properties specified in § 80.86(a)(3), or the properties specified by the pentane supplier, provided that the refiner does all the following:

* * * * *

(b) Any refiner that blends pentane for which the refiner has product transfer documents from a registered pentane supplier which demonstrate that the pentane is blender-non-commercial grade, as defined in § 80.86(a)(4), may demonstrate compliance with the standards in this part based on the properties specified in § 80.86(a)(4), or the properties specified by the pentane supplier, provided that the refiner does all the following:

* * * * *

(g) All pentane blended into gasoline during the annual averaging period must be included in annual average compliance calculations by a refiner for each of its refineries.

* * * * *

(i) If a refiner does not fully implement the requirements of this section, it may not rely on test results from the pentane producer, and may only blend pentane with gasoline if it fully complies with all applicable requirements of this part 80, including the sampling and testing requirements applicable to refiners who produce gasoline by adding blendstocks to PCG.

■ 13. Section 80.86 is amended by revising paragraphs (b)(2)(iv), (b)(3)(iii), and (c) to read as follows:

§ 80.86 Requirements for producers and importers of pentane used by pentane blenders.

* * * * *

(b) * * *

(2) * * *

(iv) A description of the production facility which demonstrates that the facility is capable of producing pentane that is compliant with the requirements of this section without significant modifications to the existing facility.

* * * * *

(3) * * *

(iii) A description of the importer's operating facility which demonstrates that the importer is capable of providing pentane that is compliant with the requirements of this section without significant modifications to the existing facility.

* * * * *

(c) *PTDs.* The producer or importer of pentane for use by pentane blenders must initiate a PTD for each batch that it ships from its facility which contains the information specified in paragraphs (c)(1) and (c)(2) of this section and the statement in paragraph (c)(3) or (c)(4) of this section, as applicable.

(1) The pentane producer or importer company name and facility registration number issued by EPA pursuant to paragraph (b) of this section.

(2) The name and address of the transferor and transferee.

(3) ''Blender commercial grade pentane for use by pentane blenders''.

(4) ''Blender non-commercial grade pentane for use by pentane blenders''.

(5) PTDs that are compliant with the requirements in paragraph (c) of this section must be transferred from each party transferring pentane for use by pentane blenders to each party that receives pentane for use by pentane blenders through to the pentane blender.

(6) Alternative PTD language to that specified in paragraphs (c)(3) and (c)(4) of this section may be used as approved by EPA.

* * * * *

Subpart H—Gasoline Sulfur

■ 14. Section 80.315 is amended by revising paragraph (b)(1)(iii) to read as follows:

§ 80.315 How are credits used and what are the limitations on credit use?

* * * * *

(b) * * *

(1) * * *

(iii) Any credit transfer takes place no later than March 31 following the calendar year averaging period when the credits are used.

* * * * *

■ 15. Section 80.330 is amended by:

■ a. Revising paragraphs (b)(1)(i), (b)(1)(ii), and (b)(2);

■ b. Revising paragraph (c)(1);

■ c. Revising paragraph (d)(2); and

■ d. Revising paragraph (e).

The revisions read as follows:

§ 80.330 What are the sampling and testing requirements for refiners and importers?

* * * * *

(b) * * *

(1) * * *

(i) ASTM D4057.

(ii) Samples collected under the applicable procedures in ASTM D5842 may be used for measuring sulfur content if there is no contamination present that could affect the sulfur test result.

(2) Automatic sampling of petroleum products in pipelines shall be performed according to the applicable procedures specified in ASTM D4177.

(c) * * *

(1) For purposes of paragraph (a) of this section, refiners and importers shall use the method provided in § 80.46(a)(1) or one of the alternative test methods listed in § 80.46(a)(3) to measure the sulfur content of gasoline they produce or import through December 31, 2015. Beginning January 1, 2016, for purposes of paragraph (a) of this section, refiners and importers shall use an approved method in § 80.47.

* * * * *

(d) * * *

(2) Except as provided in paragraph (d)(1) of this section, any ASTM sulfur test method for gaseous fuels may be used for quality assurance testing under §§ 80.340(b)(4) and 80.400, if the protocols of the ASTM method are followed and the alternative test method is correlated to the method provided in § 80.46(a)(2) through December 31, 2015, or in § 80.47 beginning January 1, 2016.

(e) *Materials incorporated by reference.* The published materials identified in this section are incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, a document must be published in the **Federal Register** and the material must be available to the public. All approved materials are available for inspection at the Air and Radiation Docket and Information Center (Air Docket) in the EPA Docket Center (EPA/DC) at Rm. 3334, EPA West Bldg., 1301 Constitution Ave. NW., Washington, DC. The EPA/DC Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number of the EPA/DC Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742. These approved materials are also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741–6030 or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.* In addition, these materials are available from the sources listed below.

(1) ASTM International material. The following standards are available from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428–2959, (877) 909–ASTM, or *http://www.astm.org:*

(i) ASTM D4057–12, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, approved December 1, 2012 (''ASTM D4057'').

(ii) ASTM D4177–95 (Reapproved 2010), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, approved May 1, 2010 (''ASTM D4177'').

(iii) ASTM D5842–14, Standard Practice for Sampling and Handling of Fuels for Volatility Measurement, approved January 15, 2014 (''ASTM D5842'').

(2) [Reserved]

Subpart I— Motor Vehicle Diesel Fuel; Nonroad, Locomotive, and Marine Diesel Fuel; and ECA Marine Fuel

■ 16. Section 80.510 is amended by revising the section heading and paragraph (k) to read as follows:

§ 80.510 What are the standards and marker requirements for refiners and importers for NRLM diesel fuel and ECA marine fuel?

* * * * *

(k) Beginning June 1, 2014, all ECA marine fuel is subject to a maximum per-gallon sulfur content of 1,000 ppm. Note that ECA marine fuel does not include fuel used in exempted steamships (or other exempted or excluded vessels) or fuel that exceeds the fuel sulfur limits while operating in an ECA or an ECA associated area as allowed by the U.S. government consistent with MARPOL Annex VI Regulation 3 or Regulation 4 (see § 80.2(ttt)).

■ 17. Section 80.511 is amended by revising paragraph (b)(9) to read as follows:

§ 80.511 What are the per-gallon and marker requirements that apply to NRLM diesel fuel, ECA marine fuel, and heating oil downstream of the refiner or importer?

* * * * *

(b) * * *

(9) The per-gallon sulfur standard of § 80.510(k) shall apply to all ECA marine fuel beginning August 1, 2014, for all downstream locations other than retail outlets or wholesale purchaser-consumer facilities, shall apply to all ECA marine fuel beginning October 1, 2014, for retail outlets and wholesale purchaser-consumer facilities, and shall apply to all ECA marine fuel beginning December 1, 2014, for all locations. Note that ECA marine fuel does not include fuel used in exempted steamships (or other exempted or excluded vessels) or fuel that exceeds the fuel sulfur limits while operating in an ECA or an ECA associated area as allowed by the U.S. government consistent with MARPOL Annex VI Regulation 3 or Regulation 4 (see § 80.2(ttt)).

* * * * *

■ 18. Section 80.574 is amended by revising paragraph (b) to read as follows:

§ 80.574 What labeling requirements apply to retailers and wholesale purchaser-consumers of ECA marine fuel beginning June 1, 2014?

* * * * *

(b) Alternative labels to those specified in paragraph (a) of this section may be used as approved by EPA. Send requests to—

(1) *For U.S. Mail:* U.S. EPA, Attn: ECA Marine Fuel Alternative Label Request, 6406J, 1200 Pennsylvania Avenue NW, Washington, DC 20460.

(2) *[Reserved]*

■ 19. Section 80.584 is amended by revising paragraph (a) to read as follows:

§ 80.584 What are the precision and accuracy criteria for approval of test methods for determining the sulfur content of motor vehicle diesel fuel, NRLM diesel fuel, and ECA marine fuel?

(a) *Precision.* (1) For motor vehicle diesel fuel and diesel fuel additives subject to the 15 ppm sulfur standard of § 80.520(a)(1) and NRLM diesel fuel and diesel fuel additives subject to the 15 ppm sulfur standard of § 80.510(b) and (c), a standard deviation less than 0.72 ppm, computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples taken from a single homogeneous commercially available diesel fuel with a sulfur content in the range of 5–15 ppm. The 20 results must be a series of tests with a sequential record of the analyses and no omissions. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

(2) For motor vehicle diesel fuel subject to the 500 ppm sulfur standard of § 80.520(c), and for NRLM diesel fuel subject to the 500 ppm sulfur standard of § 80.510(a), of a standard deviation less than 9.68 ppm, computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples taken from a single homogeneous commercially available diesel fuel with a sulfur content in the range of 200–500 ppm. The 20 results must be a series of tests with a sequential record of the analyses and no omissions. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

(3) For ECA marine fuel subject to the 1,000 ppm sulfur standard of § 80.510(k), of a standard deviation less than 18.07 ppm, computed from the results of a minimum of 20 tests made over 20 days (tests may be arranged into no fewer than five batches of four or fewer tests each, with only one such batch allowed per day over the minimum of 20 days) on samples taken from a single homogeneous commercially available diesel fuel with a sulfur content in the range of 700–1,000 ppm. The 20 results must be a

series of tests with a sequential record of the analyses and no omissions. A laboratory facility may exclude a given sample or test result only if the exclusion is for a valid reason under good laboratory practices and it maintains records regarding the sample and test results and the reason for excluding them.

* * * * *

■ 20. Section 80.585 is amended by:

■ a. Revising paragraph (a);

■ b. Revising paragraphs (e)(1), (e)(2), and (e)(4); and

■ c. Adding a new paragraph (f).

The revisions and addition read as follows:

§ 80.585 What is the process for approval of a test method for determining the sulfur content of diesel or ECA marine fuel?

(a)(1) *Approval of test methods approved by voluntary consensus-based standards bodies.* Through December 31, 2015, for such a method to be approved, the following information must be submitted to the Administrator by each test facility for each test method that it wishes to have approved: Any test method approved by a voluntary consensus-based standards body, such as ASTM International or the International Organization for Standardization (ISO), shall be approved as a test method for determining the sulfur content of diesel fuel if it meets the applicable accuracy and precision criteria under § 80.584. The approval of a test method is limited to the single test facility that performed the testing for accuracy and precision. The individual facility must submit the accuracy and precision results for each method, including information on the date and time of each test measurement used to demonstrate precision, following procedures established by the Administrator.

(2) *Approval of test methods approved by voluntary consensus-based standards bodies.* Beginning January 1, 2016, any test method approved by a voluntary consensus-based standards body, such as the ASTM International or the International Organization for Standardization (ISO), shall be approved as a test method for determining the sulfur content of diesel fuel if it meets the applicable accuracy and precision criteria under § 80.584. These records must be kept by the facility for a period of five years.

* * * * *

(e) * * *

(1) Follow all mandatory provisions of ASTM D6299 and construct control charts from the mandatory quality control testing prescribed in paragraph 7.1 of the reference method, following guidelines under A 1.5.1 for individual observation charts and A 1.5.4 for moving range charts.

(2) Follow paragraph 7.3.1 of ASTM D6299 to check standards using a reference material at least monthly or following any major change to the laboratory equipment or test procedure. Any deviation from the accepted reference value of a check standard greater than 1.44 ppm (for diesel fuel subject to the 15 ppm sulfur standard), 19.36 ppm (for diesel fuel subject to the 500 ppm sulfur standard), or 36.14 ppm (for ECA marine fuel subject to the 1,000 ppm sulfur standard must be investigated.

* * * * *

(4) Upon discovery of any quality control testing violation of paragraph A 1.5.1.3 for individual observation charts or A1.5.4.1 and A1.5.4.2 for moving range charts of ASTM D6299, or any check standard deviation greater than 1.44 ppm (for diesel fuel subject to the 15 ppm sulfur standard), 19.36 ppm (for diesel fuel subject to the 500 ppm sulfur standard), or 36.14 ppm (for ECA marine fuel subject to the 1,000 ppm sulfur standard), conduct an investigation into the cause of such violation or deviation and, after restoring method performance to statistical control, retest retained samples from batches originally tested since the last satisfactory quality control material or check standard testing occasion.

(f) *Materials incorporated by reference.* The published materials identified in this section are incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, a document must be published in the **Federal Register** and the material must be available to the public. All approved materials are available for inspection at the Air and Radiation Docket and Information Center (Air Docket) in the EPA Docket Center (EPA/DC) at Rm. 3334, EPA West Bldg., 1301 Constitution Ave. NW., Washington, DC. The EPA/DC Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number of the EPA/DC Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742. These approved materials are also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741–6030 or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.* In addition, these materials are available from the sources listed below.

(1) *ASTM International material.* The following standards are available from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428–2959, (877) 909–ASTM, or *http://www.astm.org:*

(i) ASTM D6299–13, Standard Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance, approved October 1, 2013 (''ASTM D6299'').

(ii) [Reserved]

(2) [Reserved]

■ 21. Section 80.590 is amended by revising paragraphs (a)(7)(vii) and (b) to read as follows:

§ 80.590 What are the product transfer document requirements for motor vehicle diesel fuel, NRLM diesel fuel, heating oil, ECA marine fuel, and other distillates?

(a) * * *

(7) * * *

(vii) *ECA marine fuel.* For ECA marine fuel produced or imported beginning June 1, 2014, ''1,000 ppm sulfur (maximum) ECA marine fuel. For use in Category 3 marine vessels only. Not for use in engines not installed on C3 marine vessels.''

(b) Any of the following may be substituted for the descriptions in paragraph (a) of this section, as appropriate:

(1) ''This is high sulfur diesel fuel for use only in Guam, American Samoa, or the Northern Mariana Islands.''

(2) ''This diesel fuel is for export use only.''

(3) ''This diesel fuel is for research, development, or testing purposes only.''

(4) ''This diesel fuel is for use in diesel highway vehicles or nonroad equipment under an EPA-approved national security exemption only.''

(5) ''High sulfur fuel. For use only in ships with an approved permit as allowed by MARPOL Annex VI, Regulation 3.''

(6) ''High sulfur fuel. For use only in ships as allowed by MARPOL Annex VI, Regulation 4.''

(7) ''High sulfur fuel. For use only in ships as allowed by MARPOL Annex VI, Regulation 3 or Regulation 4.''

* * * * *

■ 22. Section 80.597 is amended by revising paragraph (d)(3) introductory text to read as follows:

§ 80.597 What are the registration requirements?

* * * * *

(d) * * *

(3) Except as prescribed in paragraph (d)(6) of this section, each entity as defined in § 80.502 that intends to deliver or receive custody of any of the following fuels beginning June 1, 2014, must register with EPA by December 31, 2012, or prior to commencement of producing, importing, or distributing any distillate or residual fuel listed in this paragraph (d)(3):

* * * * *

■ 23. Section 80.607 is amended by:
■ a. Revising the section heading;
■ b. Revising paragraph (a);
■ c. Revising paragraphs (c)(3)(iv) and (c)(4)(iv);
■ d. Revising paragraphs (d)(1) and (d)(3); and
■ e. Revising paragraph (f).

The revisions and addition read as follows:

§ 80.607 What are the requirements for obtaining an exemption for diesel fuel used for research, development or testing purposes?

(a) *Written request for a research and development exemption.* Any person may receive an exemption from the provisions of this subpart for MVNRLM diesel fuel used for research, development, or testing purposes by submitting the information listed in paragraph (c) of this section to: U.S. EPA—Attn: Research and Development Exemption Request, 6406J, 1200 Pennsylvania Avenue NW., Washington, DC 20460.

* * * * *

(c) * * *

(3) * * *

(iv) The quantity of fuel which does not comply with the requirements of §§ 80.520 and 80.521 for motor vehicle diesel fuel, or § 80.510 for NRLM diesel fuel.

(4) * * *

(iv) The manner in which the party will ensure that the research and development fuel will be segregated from motor vehicle diesel fuel or NRLM diesel fuel, as applicable, and how fuel pumps will be labeled to ensure proper use of the research and development fuel.

* * * * *

(d) *Additional requirements.* (1) The product transfer documents associated with research and development diesel fuel must comply with the product transfer document requirements of § 80.590(b)(3).

* * * * *

(3) The research and development fuel must be kept segregated from non-exempt MVNRLM diesel fuel at all points in the distribution system.

* * * * *

(f) *Effects of exemption.* Motor vehicle diesel fuel or NRLM diesel fuel that is subject to a research and development exemption under this section is exempt from other provisions of this subpart provided that the fuel is used in a manner that complies with the purpose of the program under paragraph (c) of this section and the requirements of this section.

* * * * *

■ 24. Section 80.608 is amended by revising paragraph (d) to read as follows:

§ 80.608 What requirements apply to diesel fuel and ECA marine fuel for use in the Territories?

* * * * *

(d) Segregated from non-exempt MVNRLM diesel fuel and/or non-exempt ECA marine fuel at all points in the distribution system from the point the fuel is designated as exempt fuel only for use in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands, while the exempt fuel is in the United States (including an Emission Control Area, or an ECA associated area per 40 CFR 1043.20) but outside these Territories.

Subpart L—Gasoline Benzene

■ 25. Section 80.1270 is amended by revising paragraph (b)(2) to read as follows:

§ 80.1270 Who may generate benzene credits under the ABT program?

* * * * *

(b) * * *

(2) Oxygenate blenders, butane blenders using the provisions of § 80.82, pentane blenders using the provisions of § 80.85, and transmix producers may not generate standard credits.

* * * * *

■ 26. Section 80.1295 is amended by revising paragraph (b)(1)(ii) to read as follows:

§ 80.1295 How are gasoline benzene credits used?

* * * * *

(b) * * *

(1) * * *

(ii) Any credit transfer takes place no later than March 31 following the calendar year averaging period when the credits are used.

* * * * *

Subpart M—Renewable Fuel Standard

■ 27. Section 80.1426 is amended by revising paragraph (c)(7) to read as follows:

§ 80.1426 How are RINs generated and assigned to batches of renewable fuel by renewable fuel producers or importers?

* * * * *

(c) * * *

(7) For renewable fuel oil that is heating oil as defined in paragraph (2) of the definition of heating oil in § 80.1401, renewable fuel producers and importers shall not generate RINs unless they have received affidavits from the final end user or users of the fuel oil as specified in § 80.1451(b)(1)(ii)(T)(*2*).

* * * * *

■ 28. Section 80.1453 is amended by revising paragraphs (a) introductory text and (a)(12) introductory text to read as follows:

§ 80.1453 What are the product transfer document (PTD) requirements for the RFS program?

(a) On each occasion when any party transfers custody or ownership of neat and/or blended renewable fuels, except when such fuel is dispensed into motor vehicles or nonroad vehicles, engines, or equipment, or separated RINs subject to this subpart, the transferor must provide to the transferee documents that include all of the following information, as applicable:

* * * * *

(12) For the transfer of renewable fuel for which RINs were generated, an accurate and clear statement on the product transfer document of the fuel type from Table 1 to § 80.1426, and designation of the fuel use(s) intended by the transferor, as follows:

* * * * *

■ 29. Section 80.1471 is amended by revising paragraph (d)(1) to read as follows:

§ 80.1471 Requirements for QAP auditors.

* * * * *

(d)(1) In the event that an independent third-party auditor identifies a RIN that may have been invalidly generated, the independent third-party auditor shall, within five business days, send notification of the potentially invalidly generated RIN to the EPA and the renewable fuel producer that generated the RIN.

* * * * *

Subpart O—Gasoline Sulfur

■ 30. Section 80.1609 is amended by revising paragraph (a) to read as follows:

§ 80.1609 Oxygenate blender requirements.

(a) Oxygenate blenders who blend only oxygenate that complies with the requirements of paragraph (b) of this section into gasoline downstream of the refinery that produced the gasoline or the import facility where the gasoline was imported are not subject to the refiner or importer requirements of this subpart for such gasoline, but are subject to the requirements and prohibitions applicable to downstream parties in this subpart. Such oxygenate blenders are subject to the requirements of paragraph (b) of this section, the requirements and prohibitions applicable to downstream parties, the requirements of § 80.1603(d)(2), and the prohibition specified in § 80.1660(e).

* * * * *

■ 31. Section 80.1611 is amended by:
■ a. Revising paragraph (a)(1);
■ b. Revising paragraphs (c) introductory text, (c)(1), and (c)(2); and
■ c. Revising paragraph (d).
■ The revisions read as follows:

§ 80.1611 Standards and requirements for certified ethanol denaturant.

* * * * *

(a) *Standards.* (1) The sulfur content must not be greater than 330 ppm as determined in accordance with the test requirements of § 80.1630. If the denaturant manufacturer represents a batch of denaturant as having a maximum sulfur content lower than 330 ppm in the PTD (for example, no greater than 120 ppm), then the actual sulfur content must be no greater than the stated value as determined in accordance with the requirements of § 80.1644.

* * * * *

(c) *PTDs.* In addition to any other product transfer document requirements under this part 80, on each occasion when any person transfers custody or title to any certified ethanol denaturant upstream of a DFE production or import facility, the transferor shall provide to the transferee product transfer documents which include all the following information.

(1) The following statement: ''Certified Ethanol Denaturant suitable for use in the manufacture of denatured fuel ethanol meeting EPA standards.''

(2) The PTD must state the sulfur content is 330 ppm or less, or if the certified ethanol denaturant manufacturer represents a batch of denaturant as having a maximum sulfur content lower than 330 ppm the PTD must state that lower sulfur maximum (*e.g.,* has a sulfur content of 120 ppm or less).

* * * * *

(d) *Batch numbers.* Every batch of certified ethanol denaturant produced or imported at a denaturant production or import facility shall be assigned a number (the ''batch number''), consisting of the EPA-assigned ethanol denaturant producer or importer registration number, the EPA facility registration number, the last two digits of the year in which the batch was produced, and a unique number for the batch, beginning with the number one for the first batch produced or imported each calendar year and each subsequent batch during the calendar year being assigned the next sequential number (*e.g.,* 4321–54321–95–000001, 4321–54321–95–000002, etc.).

■ 32. Section 80.1613 is amended by revising paragraph (a) introductory text and adding paragraph (b)(3) to read as follows:

§ 80.1613 Standards and other requirements for gasoline additive manufacturers and blenders.

* * * * *

(a) Gasoline additive manufacturers, as defined in 40 CFR 79.2(f), who manufacture additives with a maximum allowed treatment rate of less than 1.0 volume percent must meet all the following requirements:

* * * * *

(b) * * *

(3) The person does not add the additive at a concentration that contributes more than 3 ppm on a per gallon basis to the sulfur content of gasoline.

■ 33. Section 80.1615 is amended by revising paragraphs (d) introductory text, (d)(1), and (d)(2) to read as follows:

§ 80.1615 Credit generation.

* * * * *

(d) For approved small refiners and small volume refineries only, the number of credits generated from January 1, 2017 through December 31, 2019 shall be calculated annually for each applicable averaging period as follows:

(1) From January 1, 2017 through December 31, 2019, if a small refiner or small volume refinery has an annual average sulfur level (S_a) less than 30.00 ppm but greater than 10.00 ppm, the refiner may generate credits using the equation specified in paragraph (b) of this section for use in complying with the annual average standards of subpart H of this part.

(2) From January 1, 2017 through December 31, 2019, if a small refiner or small volume refinery has an annual average sulfur level (S_a) less than 10.00 ppm, the refiner may generate credits using the equation specified in paragraph (c) of this section for use in complying with the annual average standards of § 80.1603(c)(1) and the following equation for complying with the annual average standards of subpart H of this part:

$$CR_{T2} = V_a \times (20.00)$$

Where:

CR_{T2} = Credits generated for the averaging period for use in complying with the annual average standards of subpart H of this part only.

V_a = Total annual volume of gasoline produced at a refinery or imported during the averaging period.

(For example: A small refiner with an annual average sulfur level of 8 ppm in 2018 may generate CR_a = 2 ppm-volume credits (10–8) for compliance with the annual average standards of § 80.1603(c)(1) plus CR_{T2} = 20 ppm-volume credits (30–10) for compliance with the annual average sulfur standards of subpart H of this part.)

* * * * *

■ 34. Section 80.1616 is amended by adding and reserving paragraph (a)(4) and revising paragraph (b)(2) to read as follows:

§ 80.1616 Credit use and transfer.

(a) * * *

(4) [Reserved]

* * * * *

(b) * * *

(2) Credits generated under § 80.1615(b) through (d) are valid for use for five years after the year in which they are generated, except that any CR_a credits generated in 2015 and 2016 and any remaining CR_{T2} credits will expire and become invalid after December 31, 2019, (with the 2019 annual compliance report, due March 31, 2020).

* * * * *

■ 35. Section 80.1620 is amended by revising paragraphs (d), (e)(1), (e)(2), and (f)(1) to read as follows:

§ 80.1620 Small refiner definition.

* * * * *

(d) Notwithstanding the provisions of paragraphs (a) and (e)(1) of this section, a refiner that acquires or reactivates a refinery that was shut down or non-operational during calendar year 2012, may apply for small refiner status under this subpart O.

(e) * * *

(1) Refiners with refineries built or started up on or after January 1, 2013.

(2) Persons who exceed the employee or crude oil capacity criteria under this section on January 1, 2013, but who meet these criteria after that date, regardless of whether the reduction in employees or crude oil capacity is due

to operational changes at the refinery or a company sale or reorganization.

* * * * *

(f)(1) A refiner approved as a small refiner under § 80.1622 who subsequently ceases production of gasoline from processing crude oil through refinery processing units, employs more than 1,500 people, or exceeds the 155,000 bpcd crude oil capacity limit after January 1, 2013 as a result of merger with or acquisition of or by another entity, is disqualified as a small refiner, except as provided for under paragraph (f)(4) of this section. If such disqualification occurs, the refiner shall notify EPA in writing no later than 20 days following the disqualifying event.

* * * * *

■ 36. Section 80.1621 is amended by adding and reserving paragraph (c) and adding paragraph (d) to read as follows:

§ 80.1621 Small volume refinery definition.

* * * * *

(c) [Reserved]

(d)(1) A refinery approved as a small refinery under § 80.1622 that subsequently ceases production of gasoline from processing crude oil through refinery processing units or exceeds the 75,000 barrel average aggregate daily crude oil throughput limit is disqualified as a small refinery. If such disqualification occurs, the refinery shall notify EPA in writing no later than 20 days following the disqualifying event.

(2) Any refinery whose status changes under this paragraph (d) shall meet the applicable standards of § 80.1603 within a period of up to 30 months from the disqualifying event.

■ 37. Section 80.1640 is amended by revising paragraph (a)(2) to read as follows:

§ 80.1640 Standards and requirements that apply to refiners producing gasoline by blending blendstocks into previously certified gasoline (PCG).

(a) * * *

(2) To accomplish the exclusion required in paragraph (a)(1) of this section, the refiner must determine the volume and sulfur content of the PCG used at the refinery and the volume and sulfur content of the gasoline produced at the refinery, and use the compliance calculation procedures in paragraphs (a)(3) and (4) of this section.

* * * * *

■ 38. Section 80.1642 is amended by revising paragraphs (c)(1) and (c)(3) to read as follows:

§ 80.1642 Sampling and testing requirements for producers and importers of denatured fuel ethanol and other oxygenates for use by oxygenate blenders.

* * * * *

(c) * * *

(1) The sulfur content of the batch of DFE shall be calculated by volume weighting the sulfur contribution from the denaturant, and the neat ethanol used.

* * * * *

(3) The sulfur content of the certified denaturant used in the calculation in paragraph (c)(1) of this section must be consistent with the PTD obtained from a registered certified ethanol denaturant producer or importer in accordance with the requirements of § 80.1611. If the PTD from the certified ethanol denaturant states that the sulfur content is 330 ppm, then the sulfur content of the sulfur content of the ethanol denaturant must be assumed to be 330 ppm.

* * * * *

■ 39. Section 80.1645 is amended by revising the section heading and the introductory text to read as follows:

§ 80.1645 Sample retention requirements for producers and importers of certified ethanol denaturant.

Beginning January 1, 2017, or on the first day that any producer or importer of ethanol denaturant designates a batch of certified ethanol denaturant, whichever is earlier, the ethanol denaturant producer or importer shall do all the following:

* * * * *

■ 40. Section 80.1650 is amended by revising paragraphs (a)(4), (b), and (g)(3) to read as follows:

§ 80.1650 Registration.

* * * * *

(a) * * *

(4) Producer or importer of certified ethanol denaturant subject to the standards under § 80.1611.

(b) *Registration dates.* (1) Any gasoline refiner or importer required to register shall do so by December 1, 2016, or at least 30 days in advance of the first date that such person will produce or import reformulated gasoline, conventional gasoline, RBOB, or CBOB. If a previously unregistered refiner or importer intends to generate credits prior to January 1, 2017 (pursuant to § 80.1615), registration must occur at least 90 days prior to submitting an annual compliance report demonstrating credit generation.

(2) Any oxygenate producer or importer required to register shall do so by November 1, 2016, or at least 60 days in advance of the first date that such person will produce or import oxygenate.

(3) Any oxygenate blender required to register shall do so by November 1, 2016, or at least 90 days in advance of the first date that such person will blend oxygenate into RBOB.

(4) Any ethanol denaturant producer or importer required to register shall do so by November 1, 2016, or at least 60 days in advance of the first date that such person will produce or import ethanol denaturant.

* * * * *

(g) * * *

(3) Any oxygenate blender shall submit updated registration information to the Administrator within thirty days of any occasion when the registration information previously supplied becomes incomplete or inaccurate.

* * * * *

■ 41. Section 80.1652 is amended by revising paragraph (c) introductory text to read as follows:

§ 80.1652 Reporting requirements for gasoline refiners, gasoline importers, oxygenate producers, and oxygenate importers.

* * * * *

(c) *Oxygenate producer and importer annual reports.* Any oxygenate producer, for each of its production facilities, and any importer for the oxygenate it imports, shall submit a report for each calendar year period that includes all the following information:

* * * * *

§ 80.1667 [Amended]

■ 42. Section 80.1667 is amended by removing and reserving paragraph (c)(1).

PART 85—CONTROL OF AIR POLLUTION FROM MOBILE SOURCES

■ 43. The authority citation for part 85 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart V—[Amended]

§ 85.2108 [Removed]

■ 44. Remove § 85.2108.

PART 86—CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES

■ 45. The authority citation for part 86 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 46. Section 86.1 is amended by revising paragraph (b) to read as follows:

§ 86.1 Incorporation by reference.

* * * * *

(b) *ASTM International material.* The following standards are available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA, 19428–2959, (610) 832–9585, or *http://www.astm.org/:*

(1) ASTM C1549–09, Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer, approved August 1, 2009 (''ASTM C1549''), IBR approved for § 86.1869–12(b).

(2) ASTM D86–12, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, approved December 1, 2012 (''ASTM D86''), IBR approved for §§ 86.113–04(a), 86.113–94(b), 86.213(a), and 86.513(a).

(3) ASTM D93–13, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, approved July 15, 2013 (''ASTM D93''), IBR approved for § 86.113–94(b).

(4) ASTM D445–12, Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity), approved April 15, 2012 (''ASTM D445''), IBR approved for § 86.113–94(b).

(5) ASTM D613–13, Standard Test Method for Cetane Number of Diesel Fuel Oil, approved December 1, 2013 (''ASTM D613''), IBR approved for § 86.113–94(b).

(6) ASTM D975–13a, Standard Specification for Diesel Fuel Oils, approved December 1, 2013 (''ASTM D975''), IBR approved for § 86.1910(c).

(7) ASTM D976–06 (Reapproved 2011), Standard Test Method for Calculated Cetane Index of Distillate Fuels, approved October 1, 2011 (''ASTM D976''), IBR approved for § 86.113–94(b).

(8) ASTM D1319–13, Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption, approved May 1, 2013 (''ASTM D1319''), IBR approved for §§ 86.113–04(a), 86.213(a), and 86.513(a).

(9) ASTM D1945–03 (reapproved 2010), Standard Test Method for Analysis of Natural Gas by Gas Chromatography, approved January 1, 2010 (''ASTM D1945''), IBR approved for §§ 86.113–94(e) and 86.513(d).

(10) ASTM D2163–07, Standard Test Method for Determination of Hydrocarbons in Liquefied Petroleum (LP) Gases and Propane/Propene Mixtures by Gas Chromatography, approved December 1, 2007 (''ASTM D2163''), IBR approved for §§ 86.113–94(f).

(11) ASTM D2622–10, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry, approved February 15, 2010 (''ASTM D2622''), IBR approved for §§ 86.113–04(a), 86.113–94(b), 86.213(a), and 86.513(a).

(12) ASTM D2699–13b, Standard Test Method for Research Octane Number of Spark-Ignition Engine Fuel, approved October 1, 2013 (''ASTM D2699''), IBR approved for §§ 86.113–04(a) and 86.213(a).

(13) ASTM D2700–13b, Standard Test Method for Motor Octane Number of Spark-Ignition Engine Fuel, approved October 1, 2013 (''ASTM D2700''), IBR approved for §§ 86.113–04(a) and 86.213(a).

(14) ASTM D3231–13, Standard Test Method for Phosphorus in Gasoline, approved June 15, 2013 (''ASTM D3231''), IBR approved for §§ 86.113–04(a), 86.213(a), and 86.513(a).

(15) ASTM D3237–12, Standard Test Method for Lead in Gasoline by Atomic Absorption Spectroscopy, approved June 1, 2012 (''ASTM D3237''), IBR approved for §§ 86.113–04(a), 86.213(a), and 86.513(a).

(16) ASTM D4052–11, Standard Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter, approved October 15, 2011 (''ASTM D4052''), IBR approved for § 86.113–94(b).

(17) ASTM D5186–03 (Reapproved 2009), Standard Test Method for Determination of the Aromatic Content and Polynuclear Aromatic Content of Diesel Fuels and Aviation Turbine Fuels by Supercritical Fluid Chromatography, approved April 15, 2009 (''ASTM D5186''), IBR approved for § 86.113–94(b).

(18) ASTM D5191–13, Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method), approved December 1, 2013 (''ASTM D5191''), IBR approved for §§ 86.113–04(a), 86.213(a), and 86.513(a).

(19) ASTM E29–93a, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications, approved March 15, 1993 (''ASTM E29''), IBR approved for §§ 86.004–15(c), 86.007–11(a), 86.007–15(m), 86.1803–01, 86.1823–01(a), 86.1824–01(c), 86.1825–01(c).

(20) ASTM E903–96, Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres, approved April 10, 1996 (''ASTM E903''), IBR approved for § 86.1869–12(b).

(21) ASTM E1918–06, Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field, approved August 15, 2006 (''ASTM E1918''), IBR approved for § 86.1869–12(b).

* * * * *

Subpart A—General Provisions for Emission Regulations for 1977 and Later Model Year New Light-Duty Vehicles, Light-Duty Trucks and Heavy-Duty Engines, and for 1985 and Later Model Year New Gasoline Fueled, Natural Gas-Fueled, Liquefied Petroleum Gas-Fueled and Methanol-Fueled Heavy-Duty Vehicles

■ 47. Section 86.007–35 is revised to read as follows:

§ 86.007–35 Labeling.

Section 86.007–35 includes text that specifies requirements that differ from § 86.095–35. Where a paragraph in § 86.095–35 is identical and applicable to § 86.007–35, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.095–35.''.

(a) The manufacturer of any motor vehicle (or motor vehicle engine) subject to the applicable emission standards (and family emission limits, as appropriate) of this subpart, shall, at the time of manufacture, affix a permanent legible label, of the type and in the manner described below, containing the information hereinafter provided, to all production models of such vehicles (or engines) available for sale to the public and covered by a Certificate of Conformity under § 86.007–30(a).

(a)(1)–(2) [Reserved]

(a)(3) heading through (b) [Reserved]. For guidance see § 86.095–35.

(c) Vehicles powered by model year 2007 through 2013 diesel-fueled engines must include permanent, readily visible labels on the dashboard (or instrument panel) and near all fuel inlets that state ''Use Ultra Low Sulfur Diesel Fuel Only''; or ''Ultra Low Sulfur Diesel Fuel Only''.

(d) through (g) [Reserved]

(h) [Reserved]. For guidance see § 86.095–35.

(i) [Reserved]

(j) The Administrator may approve in advance other label content and formats provided the alternative label contains information consistent with this section.

■ 48. Section 86.095–35 is amended by revising paragraph (a)(4) and removing and reserving paragraph (g) to read as follows:

§ 86.095–35 Labeling.

(a) * * *

(4) *Heavy-duty vehicles employing a fuel or fuels covered by evaporative*

emission standards. This paragraph (a)(4) applies for vehicles subject to evaporative emission standards under this subpart, as described in § 86.016–1(a)(4). See 40 CFR part 1037 for provisions that apply in later model years.

(i) A permanent, legible label shall be affixed in a readily visible position in the engine compartment. If such vehicles do not have an engine compartment, the label required in this paragraph (a)(4) shall be affixed in a readily available position on the operator's enclosure or on the engine.

(ii) The label shall be affixed by the vehicle manufacturer who has been issued the Certificate of Conformity for such vehicle, in such a manner that it cannot be removed without destroying or defacing the label. The label shall not be affixed to any equipment which is easily detached from such vehicle.

(iii) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label:

(A) The label heading: Vehicle Emission Control Information;

(B) Full corporate name and trademark of manufacturer;

(C) Evaporative family identification;

(D) The maximum nominal fuel tank capacity (in gallons), as specified in 40 CFR 1037.135; and

(E) An unconditional statement of compliance with the appropriate model year U.S. Environmental Protection Agency regulations which apply to XXX-fueled heavy-duty vehicles.

(F) Vehicles granted final admission under § 85.1505 of this chapter must comply with the labeling requirements contained in § 85.1510 of this chapter.

* * * * *

(g) [Reserved]

* * * * *

Subpart B—Emission Regulations for 1977 and Later Model Year New Light-Duty Vehicles and New Light-Duty Trucks and New Otto-Cycle Complete Heavy-Duty Vehicles; Test Procedures

■ 49. Section 86.101 is amended by revising paragraphs (b)(1), (b)(2)(i), and (b)(3) to read as follows:

§ 86.101 General applicability.

* * * * *

(b) * * *

(1) Through model year 2021, manufacturers may use the test procedures specified in paragraph (c) or (d) of this section or, using good engineering judgement, elements of both. For any EPA testing before model year 2022, EPA will use the manufacturer's selected procedures for applying acceptable speed-tolerance criteria (either § 86.115–78 or 40 CFR 1066.425(c)). For any other parameters, EPA may conduct testing using either of the specified procedures. As allowed under this part, manufacturers may use carryover data from previous model years to demonstrate compliance with emission standards, without regard to the provisions of this section.

(2) * * *

(i) For vehicles certified to any of the Tier 3 emission standards specified in subpart S of this part, determine overall driver accuracy based on drive-cycle metrics as described in 40 CFR 1066.425(j).

* * * * *

(3) For model years 2022 and later, manufacturers must use the test procedures specified in paragraph (d) of this section. Manufacturers may continue to use data based on the test procedures specified in paragraph (c) of this section for an engine family in 2022 and later model years, as long as the engine family is eligible for certification with carryover emission data.

* * * * *

■ 50. Section 86.113–04 is amended by revising paragraph (a)(1) to read as follows:

§ 86.113–04 Fuel specifications.

* * * * *

(a) *Gasoline fuel.* (1) Gasoline meeting the following specifications, or substantially equivalent specifications approved by the Administrator, must be used for exhaust and evaporative emission testing:

TABLE 1 OF § 86.113–04—TEST FUEL SPECIFICATIONS FOR GASOLINE WITHOUT ETHANOL

Item	Regular	Reference procedure [1]
Research octane, Minimum [2]	93	ASTM D2699; ASTM D2700
Octane sensitivity [2]	7.5	ASTM D2699; ASTM D2700
Distillation Range (°F):		
Evaporated initial boiling point [3]	75–95	ASTM D86
10% evaporated	120–135.	
50% evaporated	200–230.	
90% evaporated	300–325.	
Evaporated final boiling point	415 Maximum.	
Hydrocarbon composition (vol %):		
Olefins	10% Maximum	ASTM D1319
Aromatics	35% Maximum.	
Saturates	Remainder.	
Lead, g/gallon (g/liter), Maximum	0.050 (0.013)	ASTM D3237
Phosphorous, g/gallon (g/liter), Maximum	0.005 (0.0013)	ASTM D3231
Total sulfur, wt. % [4]	0.0015–0.008	ASTM D2622
Dry Vapor Pressure Equivalent (*DVPE*), psi (kPa) [5]	8.7–9.2 (60.0–63.4)	ASTM D5191

[1] ASTM procedures are incorporated by reference in § 86.1.

[2] Octane specifications are optional for manufacturer testing.

[3] For testing at altitudes above 1,219 m (4000 feet), the specified range is 75–105 °F.

[4] Sulfur concentration will not exceed 0.0045 weight percent for EPA testing.

[5] For testing unrelated to evaporative emission control, the specified range is 8.0–9.2 psi (55.2–63.4 kPa). For testing at altitudes above 1,219 m (4000 feet), the specified range is 7.6–8.0 psi (52.4–55.2 kPa). Calculate dry vapor pressure equivalent, *DVPE,* based on the measured total vapor pressure, p_T, using the following equation: *DVPE* (psi) = $0.956 \cdot p_T - 0.347$ (or *DVPE* (kPa) = $0.956 \cdot p_T - 2.39$). *DVPE* is intended to be equivalent to Reid Vapor Pressure using a different test method.

* * * * *

Subpart C—Emission Regulations for 1994 and Later Model Year Gasoline-Fueled New Light-Duty Vehicles, New Light-Duty Trucks and New Medium-Duty Passenger Vehicles; Cold Temperature Test Procedures

■ 51. Section 86.201 is revised to read as follows:

§ 86.201 General applicability.

(a) Vehicles are subject to cold temperature testing requirements as described in subpart S of this part and 40 CFR part 600.

(b) *Migration to 40 CFR parts 1065 and 1066.* This subpart transitions to rely on the test procedure specifications in 40 CFR parts 1065 and 1066 as follows:

(1) Through model year 2021, manufacturers may use the test procedures specified in paragraph (c) or (d) of this section or, using good engineering judgement, elements of both. For any EPA testing before model year 2022, EPA will use the manufacturer's selected procedures for applying acceptable speed-tolerance criteria. For any other parameters, EPA may conduct testing using either of the specified procedures. As allowed under this part, manufacturers may use carryover data from previous model years to demonstrate compliance with emission standards, without regard to the provisions of this section.

(2) For vehicles certified before model year 2022 to any of the Tier 3 emission standards specified in subpart S of this part, manufacturers must determine overall driver accuracy based on driven cycle energy as described in 40 CFR 1066.425(j).

(c) *Interim procedures.* Through model year 2021, manufacturers may certify vehicles based on data collected according to previously published cold temperature and intermediate temperature testing procedures.

(d) *Long-term procedures.* Starting in model year 2022, perform testing to measure CO and NMHC emissions and determine fuel economy as described in 40 CFR part 1066; see especially 40 CFR 1066.710. We may approve the use of previously published cold temperature and intermediate temperature testing procedures for later model years as an alternative procedure under 40 CFR 1066.10(c). Perform intermediate temperature testing as follows:

(1) For testing during ambient temperatures of less than 50 °F (10 °C), perform testing as described in 40 CFR part 1066, subpart H.

(2) For testing at temperatures of 50 °F (10 °C) or higher, perform FTP testing as described in 40 CFR part 1066.

(e) Section 86.213 describes special provisions related to test fuel specifications.

■ 52. Section 86.213 is amended by revising Table 1 in paragraph (a)(2) to read as follows:

§ 86.213 Fuel specifications.

(a) * * *

(2) * * *

TABLE 1 OF § 86.213—COLD TEMPERATURE TEST FUEL SPECIFICATIONS FOR GASOLINE WITHOUT ETHANOL

Item	Regular	Premium	Reference procedure [1]
(RON+MON)/2 [2]	87.8±0.3	92.3±0.5	ASTM D2699; ASTM D2700
Sensitivity [3]	7.5	7.5	ASTM D2699; ASTM D2700
Distillation Range (°F):			
Evaporated initial boiling point	76–96	76–96	ASTM D86
10% evaporated	98–118	105–125.	
50% evaporated	179–214	195–225.	
90% evaporated	316–346	316–346.	
Evaporated final boiling point	413 Maximum	413 Maximum.	
Hydrocarbon composition (vol %):			
Olefins	12.5±5.0	10.5±5.0	ASTM D1319
Aromatics	26.4±4.0	32.0±4.0.	
Saturates	Remainder	Remainder.	
Lead, g/gallon	0.01, Maximum	0.01, Maximum	ASTM D3237
Phosphorous, g/gallon	0.005, Maximum	0.005, Maximum	ASTM D3231
Total sulfur, wt. % [3]	0.0015–0.008	0.0015–0.008	ASTM D2622
RVP, psi	11.5±0.3	11.5±0.3	ASTM D5191

[1] ASTM procedures are incorporated by reference in § 86.1.
[2] Octane specifications are optional for manufacturer testing. The premium fuel specifications apply for vehicles designed to use high-octane premium fuel.
[3] Sulfur concentration will not exceed 0.0045 weight percent for EPA testing.

* * * * *

Subpart F—Emission Regulations for 1978 and Later New Motorcycles; Test Procedures

■ 53. Section 86.513 is amended by revising paragraph (a)(1) to read as follows:

§ 86.513 Fuel and engine lubricant specifications.

(a) * * *

(1) Gasoline meeting the following specifications, or substantially equivalent specifications approved by the Administrator, must be used for exhaust and evaporative emission testing:

TABLE 1 OF § 86.513—GASOLINE TEST FUEL SPECIFICATIONS

Item	Value	Procedure [1]
Distillation Range:		
1. Initial boiling point, °C	23.9–35.0 [2]	ASTM D86

TABLE 1 OF § 86.513—GASOLINE TEST FUEL SPECIFICATIONS—Continued

Item	Value	Procedure [1]
2. 10% point, °C	48.9–57.2.	
3. 50% point, °C	93.3–110.0.	
4. 90% point, °C	148.9–162.8.	
5. End point, °C	212.8 maximum.	
Hydrocarbon composition:		
1. Olefins, volume %	10 maximum	ASTM D1319
2. Aromatics, volume %	35 maximum.	
3. Saturates	Remainder.	
Lead (organic), g/liter	0.013 maximum	ASTM D3237
Phosphorous, g/liter	0.0013 maximum	ASTM D3231
Sulfur, weight %	0.008 maximum	ASTM D2622
Dry Vapor Pressure Equivalent (*DVPE*), kPa	55.2 to 63.4 [3]	ASTM D5191

[1] ASTM procedures are incorporated by reference in § 86.1.
[2] For testing at altitudes above 1,219 m, the specified initial boiling point range is (23.9 to 40.6) °C.
[3] For testing at altitudes above 1,219 m, the specified volatility range is 52 to 55 kPa. Calculate dry vapor pressure equivalent, *DVPE,* based on the measured total vapor pressure, p_T, using the following equation: *DVPE* (kPa) = $0.956 \cdot p_T - 2.39$ (or *DVPE* (psi) = $0.956 \cdot p_T - 0.347$). *DVPE* is intended to be equivalent to Reid Vapor Pressure using a different test method.

* * * * *

§ 86.513–2004 [Removed]

■ 54. Remove § 86.513–2004.

§ 86.529–98 [Amended]

■ 55. Section 86.529–98 paragraph (b) is amended in Figure F98–9, under the first column titled ''Loaded vehicle mass (kg)'' by removing ''565–665'' and adding ''656–665'' in its place.

Subpart S—General Compliance Provisions for Control of Air Pollution From New and In-Use Light-Duty Vehicles, Light-Duty Trucks, and Heavy-Duty Vehicles

■ 56. The heading for subpart S is revised as set forth above.

■ 57. Section 86.1801–12 is amended by:

■ a. Revising paragraph (a)(2)(ii);

■ b. Adding paragraph (a)(2)(iii);

■ c. Revising paragraph (a)(3) introductory text;

■ d. Removing paragraph (a)(4); and

■ e. Redesignating paragraph (a)(5) as paragraph (a)(4).

The revisions and addition read as follows:

§ 86.1801–12 Applicability.

(a) * * *

(2) * * *

(ii) Greenhouse gas emission standards apply as specified in 40 CFR part 1037 instead of the standards specified in this subpart.

(iii) The provisions of this subpart are optional for diesel-fueled Class 3 heavy-duty vehicles in a given model year if those vehicles are equipped with engines certified to the appropriate standards in § 86.007–11 for which less than half of the engine family's sales for the model year in the United States are for complete Class 3 heavy-duty vehicles. This includes engines sold to all vehicle manufacturers. If you are the original manufacturer of the engine and the vehicle, base this showing on your sales information. If you manufacture the vehicle but are not the original manufacturer of the engine, you must use your best estimate of the original manufacturer's sales information.

(3) The provisions of this subpart generally do not apply to incomplete heavy-duty vehicles or to complete vehicles above 14,000 pounds GVWR (see subpart A of this part and 40 CFR parts 1036 and 1037). However, this subpart applies to such vehicles in the following cases:

* * * * *

■ 58. Section 86.1803–01 is amended by revising the definition of ''Averaging set'' to read as follows:

§ 86.1803–01 Definitions.

* * * * *

Averaging set means a category or subcategory of vehicles within which test groups can average and trade emission credits with one another.

* * * * *

■ 59. Section 86.1805–17 is amended by revising paragraphs (a), (b), and (c) to read as follows:

§ 86.1805–17 Useful life.

(a) *General provisions.* The useful life values specified in this section apply for all exhaust, evaporative, refueling, and OBD emission requirements described in this subpart, except for standards that are specified to apply only at certification. These useful life requirements also apply to all air conditioning leakage credits, air conditioning efficiency credits, and other credit programs used by the manufacturer to comply with the fleet-average CO_2 emission standards in § 86.1818. Useful life values are specified as a given number of calendar years or miles of driving, whichever comes first.

(b) *Greenhouse gas pollutants.* The emission standards in § 86.1818 apply for a useful life of 10 years or 120,000 miles for LDV and LLDT and 11 years or 120,000 miles for HLDT and MDPV. Manufacturers may alternatively certify based on a longer useful life as specified in paragraph (d) of this section.

(c) *Cold temperature emission standards.* The cold temperature NMHC emission standards in § 86.1811 apply for a useful life of 10 years or 120,000 miles for LDV and LLDT, and 11 years or 120,000 miles for HLDT and HDV. The cold temperature CO emission standards in § 86.1811 apply for a useful life of 5 years or 50,000 miles.

* * * * *

■ 60. Section 86.1806–17 is amended by revising paragraph (a)(8) to read as follows:

§ 86.1806–17 Onboard diagnostics.

* * * * *

(a) * * *

(8) Apply thresholds for exhaust emission malfunctions from Tier 3 vehicles based on the thresholds calculated for the corresponding bin standards in the California LEV II program as prescribed for the latest model year in 13 CCR 1968.2(e) and (f). For example, for Tier 3 Bin 160 standards, apply the threshold that applies for the LEV standards. For cases involving Tier 3 standards that have no corresponding bin standards from the California LEV II program, use the next highest LEV II bin. For example, for Tier 3 Bin 50 standards, apply the threshold that applies for the ULEV standards. You may apply thresholds that are more

stringent than we require under this paragraph (a)(8).

* * * * *

■ 61. Section 86.1810–01 is amended by revising paragraph (o) and removing paragraph (p) to read as follows:

§ 86.1810–01 General standards; increase in emissions; unsafe condition; waivers.

* * * * *

(o) *NMOG determination procedures.* Measure NMOG emissions or determine NMOG emissions based on NMHC measurements using the procedures described in 40 CFR 1066.635. For Tier 2 and interim non-Tier 2 vehicles fueled by gasoline, manufacturers may instead measure NMHC and multiply the result by an adjustment factor of 1.04 before comparing with the NMOG standard to determine compliance with that standard.

■ 62. Section 86.1810–17 is amended by revising paragraph (h)(1) to read as follows:

§ 86.1810–17 General requirements.

* * * * *

(h) * * *

(1) For criteria exhaust emissions, we may identify the worst-case fuel blend for testing in addition to what is required for gasoline-fueled vehicles. The worst-case fuel blend may be the fuel specified in 40 CFR 1065.725, or it may consist of a combination of the fuels specified in 40 CFR 1065.710(b) and 1065.725. We may waive testing with the worst-case blended fuel for US06 and/or SC03 duty cycles; if we waive only SC03 testing, substitute the SC03 emission result using the standard test fuel for gasoline-fueled vehicles to calculate composite SFTP emissions.

* * * * *

■ 63. Section 86.1811–04 is amended by revising paragraph (j) to read as follows:

§ 86.1811–04 Emission standards for light-duty vehicles, light-duty trucks and medium-duty passenger vehicles.

* * * * *

(j) *Highway NO_X exhaust emission standard.* The NO_X emissions measured on the federal Highway Fuel Economy Test in 40 CFR 1066.840 must not be greater than 1.33 times the applicable FTP NO_X standard to which the manufacturer certifies the test group. Both the measured emissions and the product of the NO_X standard and 1.33 must be rounded to the nearest 0.01 g/mi before being compared.

* * * * *

■ 64. Section 86.1811–17 is amended by:

■ a. Revising paragraph (a);

■ b. Revising paragraphs (b)(2), (b)(8), (b)(9) introductory text, (b)(10), and (b)(11);

■ c. Adding paragraph (b)(14); and

■ d. Revising paragraphs (c) and (g).

The revisions and addition read as follows:

§ 86.1811–17 Exhaust emission standards for light-duty vehicles, light-duty trucks and medium-duty passenger vehicles.

(a) *Applicability and general provisions.* This section describes exhaust emission standards that apply for model year 2017 and later light-duty vehicles, light-duty trucks, and medium-duty passenger vehicles. MDPVs are subject to all the same emission standards and certification provisions that apply to LDT4. Some of the provisions of this section also apply to heavy-duty vehicles as specified in § 86.1816. See § 86.1818 for greenhouse gas emission standards. See § 86.1813 for evaporative and refueling emission standards. This section may apply to vehicles from model years earlier than 2017 as specified in paragraph (b)(11) of this section.

(b) * * *

(2) Table 1 of this section describes fully phased-in Tier 3 standards that apply as specified in this paragraph (b) for the identified driving schedules. The FTP standards for NMOG+NO_X apply on a fleet-average basis using discrete bin standards as described in paragraph (b)(4) of this section. The bin standards include additional emission standards for high-altitude testing and for CO emissions when testing over the FTP driving schedule. The SFTP standards for NMOG+NO_X apply on a fleet-average basis as described in paragraph (b)(5) of this section. Table 1 follows:

TABLE 1 OF § 86.1811–17—FULLY PHASED-IN TIER 3 EXHAUST EMISSION STANDARDS (g/mile)

NMOG+NO_X		PM		CO	Formaldehyde
FTP [1]	SFTP	FTP	US06	SFTP	FTP
0.030	0.050	0.003	0.006	4.2	0.004

[1] The fleet-average FTP emission standard for NMOG+NO_X is 0.026 g/mile for LDV and LDT1 test groups certified to standards based on a useful life of 120,000 miles or 10 years in a given model year.

* * * * *

(8) The following provisions describe the primary approach for phasing in the Tier 3 standards other than PM in 2025 and earlier model years:

(i) *FTP phase-in.* The fleet-average FTP emission standard for NMOG+NO_X phases in over several years as described in this paragraph (b)(8)(i). You must identify FELs as described in paragraph (b)(4) of this section and calculate a fleet-average emission level to show that you meet the FTP emission standard for NMOG+NO_X that applies for each model year. For model year 2017, do not include vehicles above 6,000 pounds GVWR. Through model year 2019, you may also certify to transitional Bin 85 or Bin 110 standards, which consist of all-altitude FTP emission standards for NMOG+NO_X of 0.085 or 0.110 g/mile, respectively; additional FTP standards for PM, CO, and formaldehyde apply as specified in this section for vehicles certified to Bin 125 standards. Fleet-average FTP emission standards decrease through the phase-in period as shown in the following table:

TABLE 3 OF § 86.1811–17—DECLINING FLEET-AVERAGE TIER 3 FTP EMISSION STANDARDS FOR NMOG+NO_X (g/mile)

Model year	LDV, LDT1—150,000 mile useful life [1]	LDV, LDT1—120,000 mile useful life [1]	LDT2, HLDT
2017 [2]	0.086	0.073	0.101
2018	0.079	0.067	0.092
2019	0.072	0.061	0.083

TABLE 3 OF § 86.1811–17—DECLINING FLEET-AVERAGE TIER 3 FTP EMISSION STANDARDS FOR NMOG+NO_X (g/mile)—Continued

Model year	LDV, LDT1—150,000 mile useful life [1]	LDV, LDT1—120,000 mile useful life [1]	LDT2, HLDT
2020	0.065	0.055	0.074
2021	0.058	0.049	0.065
2022	0.051	0.043	0.056
2023	0.044	0.037	0.047
2024	0.037	0.031	0.038
2025	0.030	0.026	0.030

[1] Vehicles certified to standards based on a useful life of 120,000 miles may comply based on the fleet-average standard specified for 150,000 mile useful life in certain circumstances as specified in paragraph (b)(8)(iii)(A) of this section.
[2] HLDT and MDPV must meet the Tier 3 standards starting with model year 2018.

(ii) *SFTP phase-in.* The fleet-average SFTP emission standard for NMOG+NO_X phases in over several years as described in this paragraph (b)(8)(ii). You must identify FELs as described in paragraph (b)(5) of this section and calculate a fleet-average emission level to show that you meet the SFTP emission standard for NMOG+NO_X that applies for each model year.

(A) Calculate the fleet-average emission level together for all your light-duty vehicles and light-duty trucks, except for those certified using the provisions of paragraph (b)(8)(ii)(C) of this section. For model year 2017, do not include vehicles above 6,000 pounds GVWR (in the numerator or denominator).

(B) Fleet-average SFTP emission standards decrease through the phase-in period as shown in the following table:

TABLE 4 OF § 86.1811–17—DECLINING FLEET-AVERAGE TIER 3 SFTP EMISSION STANDARDS

Model year	NMOG+NO_X (g/mile)
2017 [1]	0.103
2018	0.097
2019	0.090
2020	0.083
2021	0.077
2022	0.070
2023	0.063
2024	0.057
2025	0.050

[1] HLDT and MDPV must meet the Tier 3 standards starting with model year 2018.

(C) You may use the SFTP stand-alone option specified in 13 CCR 1961.2 (a)(7)(A)1 of the LEV III program to demonstrate compliance with EPA's SFTP standards. Do not include any such test groups when demonstrating compliance with the phased-in fleet-average SFTP standards specified in this paragraph (b)(8)(ii). Note that this option is not available for vehicles certified to the transitional bins described in paragraph (b)(8)(i) of this section.

(iii) *Interim provisions.* (A) For vehicles certified to bins higher than Bin 70 under this section through model year 2019, the Tier 2 useful life period applies as specified in § 86.1805–12 for all criteria pollutants other than PM. However, LDV and LDT1 test groups certified to bin standards above Bin 70 through model year 2019 may be included in the same averaging set with vehicles meeting standards over a 150,000 mile useful life, notwithstanding the provisions of § 86.1861–17(b)(1)(iii). Any such vehicles you include in the averaging set for 150,000 mile useful life are also subject to the fleet-average NMOG+NO_X standard specified for 150,000 mile useful life; similarly, any such vehicles you include in the averaging set for 120,000 mile useful life are also subject to the fleet-average NMOG+NO_X standard specified for 120,000 mile useful life.

(B) You may use the E0 test fuel specified in § 86.113 through model year 2019 for gasoline-fueled vehicles certified to bins higher than Bin 70. You may not certify these vehicles using carryover data after model year 2019.

(C) Vehicles must continue to comply with the Tier 2 SFTP emission standards for NMHC+NO_X and CO for 4,000-mile testing as specified in § 86.1811–04(f)(1) if they are certified to transitional Bin 85 or Bin 110 standards, or if they are certified based on a fuel without ethanol, or if they are not certified to the Tier 3 p.m. standard.

(iv) You may use the alternative phase-in provisions described in paragraph (b)(9) of this section to transition to the Tier 3 exhaust emission standards on a different schedule.

(9) This paragraph (b)(9) describes an alternative approach to phasing in the Tier 3 emission standards for vehicles above 6,000 pounds GVWR. If you choose this approach, you must phase in the Tier 3 standards for all your vehicles above 6,000 pounds GVWR that are subject to this section according to this schedule. Under this alternative phase-in, you must meet the fully phased-in standards specified in this paragraph (b) with 40, 70, and 100 percent of your projected nationwide sales of all vehicles above 6,000 pounds GVWR that are subject to this section in model years 2019 through 2021, respectively. Any vehicles not subject to Tier 3 standards during the phase-in period must continue to comply with the Tier 2 standards in § 86.1811–04(c) and (f), including the Tier 2 SFTP emission standards for NMHC+NO_X and CO for 4,000-mile testing as specified in § 86.1811–04(f)(1). Vehicles subject to Tier 2 standards under this paragraph (b)(9) are subject to the useful life provisions in § 86.1805–12 relative to exhaust emission standards. Each vehicle counting toward the phase-in percentage under this paragraph (b)(9) must meet all the standards that apply throughout the useful life as specified in § 86.1805–17, and must use the Tier 3 test fuel specified in § 86.113–15. The following exceptions and special provisions apply under this paragraph (b)(9):

* * * * *

(10) You may not use credits generated from Tier 2 vehicles for demonstrating compliance with the Tier 3 standards except as specified in this paragraph (b)(10). You may generate early credits with U.S. sales of Tier 2 vehicles in the two model years before the Tier 3 standards start to apply for a given vehicle model. Vehicles certified to the Tier 2 standards must meet all the Tier 2 requirements in § 86.1811–10, including the fleet-average Tier 2 standards. Calculate early Tier 3 emission credits as described in § 86.1861 by subtracting the appropriate Tier 2 fleet-average value for FTP

emissions of NMOG+NO_X from 0.160 g/mile. Calculate your fleet-average value for the model year based on vehicles at or below 6,000 pounds GVWR in 2015, on all sizes of vehicles in 2016, and on vehicles above 6,000 pounds GVWR in 2017. You may use these early credits as described in § 86.1861 for demonstrating compliance with the FTP emission standard for NMOG+NO_X starting in model year 2017. You may use these early credits interchangeably for vehicles certified based on a useful life of either 120,000 or 150,000 miles. For model years 2018 and later, you may use any remaining early credits for banking or trading subject to a limitation based on credits generated in California, as follows:

(i) For the applicable model years in which you generate emission credits relative to California's LEV III fleet-average NMOG+NO_X standard, determine the actual California sales of light-duty vehicles and light-duty trucks and the actual nationwide sales of those same vehicles. (Note: If you have a credit deficit in a given model year for your LEV III vehicles, apply the provisions of this paragraph (b)(10)(i) based on the appropriate negative credit quantity.) In 2015, count sales only from vehicle models at or below 6,000 pounds GVWR. For each model year, multiply the credits generated under the California program by the ratio of nationwide vehicle sales to LEV III vehicle sales to calculate an effective nationwide quantity. Sum these results for model years 2015 through 2017. Note that this calculation results in a maximum credit quantity based on vehicle sales in all states, even though the initial credit calculation does not include vehicle sales in California or the section 177 states. If you comply with the LEV III standards based on pooled emission credits for California and the section 177 states, use those pooled emission credits and corresponding sales for calculating the maximum credit quantity under this paragraph (b)(10)(i).

(ii) You may not use more early credits generated under this paragraph (b)(10) for banking or trading to demonstrate compliance with Tier 3 emission standards than the calculated value of the effective nationwide credit quantity summed in paragraph (b)(10)(i) of this section. If your generated credits are greater than this threshold, determine the ratio by which your generated early credits exceed the threshold. Calculate an adjusted quantity of early credits generated under this paragraph (b)(10) by dividing the generated credit quantity from each model year by this ratio of generated credits relative to the applicable threshold. This adjusted quantity of credits may be used for banking or trading relative to the Tier 3 standards, subject to the five-year credit life described in § 86.1861.

(11) You may certify vehicles to the Tier 3 standards starting in model year 2015. To do this, you may either sell all your LEV III vehicle models nationwide, or you may certify a subset of your fleet to alternate fleet-average emission standards as follows:

(i) The alternate fleet-average FTP emission standards for NMOG+NO_X are 0.100 g/mile in 2015 and 0.093 g/mile in 2016 for LDV and LDT1.

(ii) The alternate fleet-average FTP emission standards for NMOG+NO_X are 0.119 g/mile in 2015, 0.110 g/mile in 2016, and 0.101 g/mile in 2017 for LDT2 and HLDT.

(iii) The alternate fleet-average SFTP emission standards for NMOG+NO_X are 0.140 in 2015 for all vehicles, 0.110 in 2016 for all vehicles, and 0.103 in 2017 for LDT2 and HLDT.

(iv) The vehicles must meet FTP and SFTP standards for PM as specified in § 86.1811–04. The PM testing provisions of § 86.1829–01(b)(1)(iii)(B) apply for these vehicles.

(v) Vehicles not certified to the Tier 3 standards in a given model year must meet all the requirements that apply for Tier 2 vehicles in that model year.

(vi) For cold temperature testing and for high-altitude testing, you may use the E0 fuel specified in § 86.113–04(a) or § 86.213 instead of the E10 test fuel specified in § 86.113–15.

(vii) Vehicles certified under this paragraph (b)(11) to a bin standard at or below Bin 70 must be certified to a useful life of 150,000 miles.

(viii) The interim provisions described in paragraph (b)(8)(iii) of this section apply for vehicles certified under this paragraph (b)(11), except that credits generated under this paragraph (b)(11) may be used interchangeably for vehicles certified based on a useful life of either 120,000 or 150,000 miles.

(ix) For vehicles certified under this paragraph (b)(11), you may generate emission credits and use those credits for demonstrating compliance with Tier 3 standards as described in paragraph (b)(10) of this section or as described in § 86.1861.

* * * * *

(14) This subpart describes several ways that the transition to Final Tier 3 standards applies differently for vehicles above and below 6,000 pounds GVWR. All these distinctions apply only for LDT. LDV as a category is defined independent of GVWR, so any LDV above 6,000 pounds GVWR are subject to the same provisions that apply for LDV at or below 6,000 pounds GVWR. Where this section refers to ''vehicles above 6,000 pounds GVWR,'' this should be understood to include LDT above 6,000 pounds GVWR and MDPV (or HLDT and MDPV), and to exclude all LDV.

(c) *Highway NMOG+NO_X exhaust emission standard.* NMOG+NO_X emissions measured on the federal Highway Fuel Economy Test in 40 CFR 1066.840 may not exceed the applicable FTP bin standard for NMOG+NO_X. Demonstrate compliance with this standard for low-mileage vehicles by applying the appropriate deterioration factor. For vehicles not certified to any Tier 3 emission standards specified in paragraph (b) of this section, the provisions of § 86.1811–04(j) apply instead of this paragraph (c).

* * * * *

(g) *Cold temperature exhaust emission standards.* The standards in this paragraph (g) apply for certification and in-use vehicles tested over the test procedures specified in subpart C of this part, for testing at both low-altitude conditions and high-altitude conditions. These standards apply only to gasoline-fueled vehicles. Multi-fuel, bi-fuel or dual-fuel vehicles must comply with requirements using gasoline only. Testing with other fuels such as a high-level ethanol-gasoline blend, or testing on diesel vehicles, is not required.

(1) Cold temperature CO standards. Cold temperature CO exhaust emission standards apply as follows:

(i) For LDV and LDT1, the standard is 10.0 g/mile CO.

(ii) For LDT2, LDT3 and LDT4, the standard is 12.5 grams per mile CO.

(2) Cold temperature NMHC standards. The following fleet average cold temperature NMHC standards apply as follows:

* * * * *

■ 65. Section 86.1813–17 is amended by revising paragraphs (a)(1)(iv) and (a)(2)(i) to read as follows:

§ 86.1813–17 Evaporative and refueling emission standards.

* * * * *

(a) * * *

(1) * * *

(iv) Emissions are generally measured with a flame ionization detector (FID). In the case of rig, diurnal, hot soak, and running loss testing with E10 test fuel, multiply measured (unspeciated) FID values by 1.08 to account for the FID's reduced response to ethanol. However, you may instead determine total hydrocarbon equivalent for E10 testing

based on speciated measurements as described in § 86.143–96(c). You may use different methods (with or without speciation) for different test elements for a given test vehicle; however, you must always use the same method for diurnal and hot soak testing. In addition, any later testing with vehicles from that evaporative/refueling family must use the same method that was used for the original testing. Similarly, any evaporative/refueling families certified in later model years using carryover data must use the same method that was used for the original testing. We may do testing with or without speciation, but we will apply the 1.08 correction factor to unspeciated measurements for any of these four categories of evaporative emissions only if you also use it to determine your final test results.

(2) * * *

(i) The emission standard for the sum of diurnal and hot soak measurements from the two-diurnal test sequence and the three-diurnal test sequence is based on a fleet average in a given model year. You must specify a family emission limit (FEL) for each evaporative family. The FEL serves as the emission standard for the evaporative family with respect to all required diurnal and hot soak testing. Calculate your fleet-average emission level as described in § 86.1860 based on the FEL that applies for low-altitude testing to show that you meet the specified standard. For multi-fueled vehicles, calculate fleet-average emission levels based only on emission levels for testing with gasoline. You may generate emission credits for banking and trading and you may use banked or traded credits for demonstrating compliance with the diurnal plus hot soak emission standard for vehicles required to meet the Tier 3 standards, other than electric vehicles and gaseous-fueled vehicles, as described in § 86.1861 starting in model year 2017. You comply with the emission standard for a given model year if you have enough credits to show that your fleet-average emission level is at or below the applicable standard. You may exchange credits between or among evaporative families within an averaging set as described in § 86.1861. Separate diurnal plus hot soak emission standards apply for each evaporative/refueling emission family as shown for high-altitude conditions. The sum of diurnal and hot soak measurements may not exceed the following Tier 3 standards:

TABLE 1 OF § 86.1813–17—TIER 3 DIURNAL PLUS HOT SOAK EMISSION STANDARDS

[grams per test]

Vehicle category	Low-altitude conditions—fleet-average	High-altitude conditions
LDV, LDT1	0.300	0.65
LDT2	0.400	0.85
HLDT	0.500	[1] 1.15
HDV	0.600	1.75

[1] 1.25 g/test for MDPVs.

* * * * *

■ 66. Section 86.1816–18 is amended by revising paragraphs (b)(1)(ii)(C), (b)(8) introductory text, (b)(12)(iii), and (c) to read as follows:

§ 86.1816–18 Emission standards for heavy-duty vehicles.

* * * * *

(b) * * *

(1) * * *

(ii) * * *

(C) For Class 3 vehicles, the Hot LA–92 driving schedule as specified in paragraph (c) of Appendix I of this part.

* * * * *

(8) This paragraph (b)(8) describes an alternative approach to phasing in the Tier 3 emission standards. If you choose this approach, you must phase in the Tier 3 standards for all your vehicles subject to this section according to this schedule. Under this alternative phase in, you must meet all the standards specified in paragraph (b)(2) of this section according to the phase-in schedule specified in Table 6 of this section based on the indicated percentage of your projected nationwide sales in each model year. These vehicles must meet the applicable FTP emission standard for CO and the HD–SFTP emission standards for NMOG+NO_X and CO that apply for Class 2b Bin 170 and Class 3 Bin 230 as described in paragraph (b)(4) of this section. Any vehicles not subject to Tier 3 standards during the phase-in period must continue to comply with the gaseous exhaust emission standards in § 86.1816–08. Each vehicle counting toward the PM phase-in percentage under this paragraph (b)(8) in model years 2019 and 2020 must also be included in the portion of the fleet meeting the Tier 3 standards for pollutants other than PM. Each vehicle counting toward the phase-in percentage for any pollutant must use the Tier 3 test fuel specified in § 86.113–15. The following exceptions and special provisions apply under this paragraph (b)(8):

* * * * *

(12) * * *

(iii) Alternate in-use FTP and HD–SFTP standards for NMOG+NO_X apply as specified in the following table:

TABLE 7 OF § 86.1816–18—ALTERNATE IN-USE NMOG+NO_X STANDARDS

[g/mile]

Class	FEL name	FTP	HD–SFTP [1]
2b	Bin 250 ..	0.370	1.120
Bin 200 ..	0.300	1.120	.....
Bin 170 ..	0.250	0.630	.....
Bin 150 ..	0.220	0.630	.....
3	Bin 400 ..	0.600	0.770
Bin 270 ..	0.400	0.770	.....
Bin 230 ..	0.340	0.490	.....
Bin 200 ..	0.300	0.490	.....

[1] For Class 2b vehicles with a power-to-weight ratio at or below 0.024 hp/pound that are certified to optional standards under paragraphs (b)(2) and (4) of this section, the following alternate in-use HD–SFTP standards for NMOG+NO_X apply instead of those identified in the table: 0.490 g/mile for Bin 150 and Bin 170; and 0.770 g/mile for Bin 200 and Bin 250. Note that vehicles certified to transitional Tier 3 FTP bins are not subject to HD–SFTP standards.

* * * * *

(c) *Highway NMOG+NO_X exhaust emission standard.* For vehicles certified to any of the Tier 3 standards specified in paragraph (b) of this section, NMOG+NO_X emissions measured on the highway test cycle in 40 CFR 1066.840 may not exceed the applicable NMOG+NO_X bin standard for FTP testing. Demonstrate compliance with this standard for low-mileage vehicles by applying the appropriate deterioration factor.

* * * * *

■ 67. Section 86.1829–15 is amended by:

■ a. Revising paragraphs (b)(2) and (d)(1);

■ b. Adding paragraph (d)(6); and

■ c. Revising paragraph (e)(9).

The revisions and addition read as follows:

§ 86.1829–15 Durability and emission testing requirements; waivers.

* * * * *

(b) * * *

(2) Test one EDV in each test group using the FTP, SFTP, and HFET test procedures in 40 CFR part 1066 to

demonstrate compliance with other exhaust emission standards.

* * * * *

(d) * * *

(1) For vehicles subject to the Tier 3 PM standards in § 86.1811, a manufacturer may provide a statement in the application for certification that vehicles comply with applicable PM standards instead of submitting PM test data for a certain number of vehicles. However, each manufacturer must test vehicles from a minimum number of durability groups as follows:

(i) Manufacturers with a single durability group subject to the Tier 3 PM standards in § 86.1811 must submit PM test data for that group.

(ii) Manufacturers with two to eight durability groups subject to the Tier 3 PM standards in § 86.1811 must submit PM test data for at least two durability groups each model year. EPA will work with the manufacturer to select durability groups for testing, with the general expectation that testing will rotate to cover a manufacturer's whole product line over time. If a durability group has been certified in an earlier model year based on submitted PM data, and that durability group is eligible for certification using carryover test data, that carryover data may count toward meeting the requirements of this paragraph (d)(1), subject to the selection of durability groups.

(iii) Manufacturers with nine or more durability groups subject to the Tier 3 PM standards in § 86.1811 must submit PM test data for at least 25 percent of those durability groups each model year. We will work with the manufacturer to select durability groups for testing as described in paragraph (d)(1)(ii) of this section.

* * * * *

(6) For model years 2012 through 2016, a manufacturer may provide a statement in its application for certification that vehicles comply with the applicable standards instead of measuring N_2O emissions. Such a statement may also be used for model year 2017 and 2018 vehicles only if the application for certification for those vehicles is based upon data carried over from a prior model year, as allowed under this subpart. No model year 2019 and later vehicles may be waived from testing for N_2O emissions. Vehicles certified to N_2O standards using a compliance statement instead of submitting test data are not required to collect and submit N_2O emission data under the in-use testing requirements of § 86.1845.

(e) * * *

(9) For complete vehicles above 10,000 pounds GVWR with fuel tanks exceeding 35 gallons nominal fuel tank capacity, and for any incomplete vehicles above 10,000 pounds GVWR, a manufacturer may provide a statement in the application for certification that vehicles comply with refueling emission standards instead of submitting test data, consistent with 40 CFR 1037.103(c).

* * * * *

■ 68. Section 86.1844–01 is amended by revising paragraphs (d)(3) and (d)(7)(i) to read as follows:

§ 86.1844–01 Information requirements: Application for certification and submittal of information upon request.

* * * * *

(d) * * *

(3) A description of applicable evaporative/refueling families and leak families in accordance with the criteria listed in § 86.1821–01, or as otherwise used to group a product line.

* * * * *

(7) * * *

(i) For vehicles certified to any Tier 3 emission standards, include a comparison of drive-cycle metrics as specified in 40 CFR 1066.425(j) for each drive cycle or test phase, as appropriate.

* * * * *

■ 69. Section 86.1845–04 is amended by revising paragraphs (b)(5), (c)(5), and (f)(2) to read as follows:

§ 86.1845–04 Manufacturer in-use verification testing requirements.

* * * * *

(b) * * *

(5) *Testing.* (i) Each test vehicle of a test group shall be tested in accordance with the FTP and the US06 portion of the SFTP as described in subpart B of this part, when such test vehicle is tested for compliance with applicable exhaust emission standards under this subpart. Test vehicles subject to applicable exhaust CO_2 emission standards under this subpart shall also be tested in accordance with the HFET as described in 40 CFR 1066.840.

(ii) For vehicles subject to Tier 3 p.m. standards, manufacturers must measure PM emissions over the FTP and US06 driving schedules for at least 50 percent of the vehicles tested under paragraph (b)(5)(i) of this section.

(iii) Starting with model year 2018 vehicles, manufacturers must demonstrate compliance with the Tier 3 leak standard specified in § 86.1813, if applicable, as described in this paragraph (b)(5)(iii). Manufacturers must evaluate each vehicle tested under paragraph (b)(5)(i) of this section, except that leak testing is not required for vehicles tested under paragraph (b)(5)(iv) of this section for diurnal emissions. In addition, manufacturers must evaluate at least one vehicle from each leak family for a given model year. Manufacturers may rely on OBD monitoring instead of testing as follows:

(A) A vehicle is considered to pass the leak test if the OBD system completed a leak check within the previous 750 miles of driving without showing a leak fault code.

(B) Whether or not a vehicle's OBD system has completed a leak check within the previous 750 miles of driving, the manufacturer may operate the vehicle as needed to force the OBD system to perform a leak check. If the OBD leak check does not show a leak fault, the vehicle is considered to pass the leak test.

(C) If the most recent OBD leak check from paragraph (b)(5)(iii)(A) or (B) of this section shows a leak-related fault code as specified in § 86.1806–17(b), the vehicle is presumed to have failed the leak test. Manufacturers may perform the leak measurement procedure described in 40 CFR 1066.985 for an official result to replace the finding from the OBD leak check.

(D) Manufacturers may not perform repeat OBD checks or leak measurements to over-ride a failure under paragraph (b)(5)(iii)(C) of this section.

(iv) For nongaseous-fueled vehicles, one test vehicle of each evaporative/refueling family shall be tested in accordance with the supplemental 2-diurnal-plus-hot-soak evaporative emission and refueling emission procedures described in subpart B of this part, when such test vehicle is tested for compliance with applicable evaporative emission and refueling standards under this subpart. For gaseous-fueled vehicles, one test vehicle of each evaporative/refueling family shall be tested in accordance with the 3-diurnal-plus-hot-soak evaporative emission and refueling emission procedures described in subpart B of this part, when such test vehicle is tested for compliance with applicable evaporative emission and refueling standards under this subpart. The test vehicles tested to fulfill the evaporative/refueling testing requirement of this paragraph (b)(5)(iv) will be counted when determining compliance with the minimum number of vehicles as specified in Table S04–06 and Table S04–07 in paragraph (b)(3) of this section for testing under paragraph (b)(5)(i) of this section only if the vehicle is also tested for exhaust emissions under the requirements of paragraph (b)(5)(i) of this section.

* * * * *

(c) * * *

(5) *Testing.* (i) Each test vehicle shall be tested in accordance with the FTP and the US06 portion of the SFTP as described in subpart B of this part when such test vehicle is tested for compliance with applicable exhaust emission standards under this subpart. Test vehicles subject to applicable exhaust CO_2 emission standards under this subpart shall also be tested in accordance with the HFET as described in 40 CFR 1066.840. One test vehicle from each test group shall be tested over the FTP at high altitude. The test vehicle tested at high altitude is not required to be one of the same test vehicles tested at low altitude. The test vehicle tested at high altitude is counted when determining the compliance with the requirements shown in Table S04–06 and Table S04–07 in paragraph (b)(3) of this section or the expanded sample size as provided for in this paragraph (c).

(ii) For vehicles subject to Tier 3 p.m. standards, manufacturers must measure PM emissions over the FTP and US06 driving schedules for at least 50 percent of the vehicles tested under paragraph (c)(5)(i) of this section.

(iii) Starting with model year 2018 vehicles, manufacturers must evaluate each vehicle tested under paragraph (c)(5)(i) of this section to demonstrate compliance with the Tier 3 leak standard specified in § 86.1813, except that leak testing is not required for vehicles tested under paragraph (c)(5)(iv) of this section for diurnal emissions. In addition, manufacturers must evaluate at least one vehicle from each leak family for a given model year. Manufacturers may rely on OBD monitoring instead of testing as described in paragraph (b)(5)(iii) of this section.

(iv) For nongaseous-fueled vehicles, one test vehicle of each evaporative/refueling family shall be tested in accordance with the supplemental 2-diurnal-plus-hot-soak evaporative emission procedures described in subpart B of this part, when such test vehicle is tested for compliance with applicable evaporative emission and refueling standards under this subpart. For gaseous-fueled vehicles, one test vehicle of each evaporative/refueling family shall be tested in accordance with the 3-diurnal-plus-hot-soak evaporative emission procedures described in subpart B of this part, when such test vehicle is tested for compliance with applicable evaporative emission and refueling standards under this subpart. The vehicles tested to fulfill the evaporative/refueling testing requirement of this paragraph (c)(5)(iv) will be counted when determining compliance with the minimum number of vehicles as specified in Table S04–06 and table S04–07 in paragraph (b)(3) of this section for testing under paragraph (c)(5)(i) of this section only if the vehicle is also tested for exhaust emissions under the requirements of paragraph (c)(5)(i) of this section.

* * * * *

(f) * * *

(2) For flexible-fueled vehicles certified to NMOG (or NMOG+NO_X) standards, the manufacturer may ask for EPA approval to demonstrate compliance using an equivalent NMOG emission result calculated from a ratio of ethanol NMOG exhaust emissions to gasoline NMHC exhaust emissions. Ethanol NMOG exhaust emissions are measured values from testing with the ethanol test fuel, expressed as NMOG. Gasoline NMHC exhaust emissions are measured values from testing with the gasoline test fuel, expressed as NMHC. This ratio must be established during certification for each emission-data vehicle for the applicable test group. Use good engineering judgment to establish a different ratio for each duty cycle or test interval as appropriate. Identify the ratio values you develop under this paragraph (f)(2) and describe the duty cycle or test interval to which they apply in the Part II application for certification. Calculate the equivalent NMOG emission result by multiplying the measured gasoline NMHC exhaust emissions for a given duty cycle or test interval by the appropriate ratio.

* * * * *

■ 70. Section 86.1846–01 is amended by revising paragraphs (b)(1)(i) and (ii) to read as follows:

§ 86.1846–01 Manufacturer in-use confirmatory testing requirements.

* * * * *

(b) * * *

(1) * * *

(i) Additional testing is not required under this paragraph (b)(1) based on Supplemental FTP testing or evaporative/refueling testing. Testing conducted at high altitude under the requirements of § 86.1845–04(c) will be included in determining if a test group meets the criteria triggering the testing required under this section.

(ii) The vehicle designated for testing under the requirements of § 86.1845–04(c)(2) with a minimum odometer reading of 105,000 miles or 75% of useful life, whichever is less, will not be included in determining if a test group meets the triggering criteria.

* * * * *

■ 71. Section 86.1861–17 is amended by revising paragraphs (a) and (b)(1) to read as follows:

§ 86.1861–17 How do the NMOG+NO_X and evaporative emission credit programs work?

* * * * *

(a) Calculate emission credits as described in this paragraph (a) instead of using the provisions of 40 CFR 1037.705. Calculate positive or negative emission credits relative to the applicable fleet-average standard. Calculate positive emission credits if your fleet-average level is below the standard. Calculate negative emission credits if your fleet-average value is above the standard. Calculate credits separately for each type of standard and for each averaging set. Calculate emission credits using the following equation, rounded to the nearest whole number:

$$\textit{Emission credit} = \textit{Volume} \cdot [\textit{Fleet average standard} - \textit{Fleet average value}]$$

Where:

Emission credit = The positive or negative credit for each discrete fleet-average standard, in units of vehicle-grams per mile for NMOG+NO_X and vehicle-grams per test for evaporative emissions.

Volume = Sales volume in a given model year from the collection of test groups or evaporative families covered by the fleet-average value, as described in § 86.1860.

(b) * * *

(1) Except as specified in paragraph (b)(2) of this section, emission credits may be exchanged only within an averaging set, as follows:

(i) HDV represent a separate averaging set with respect to all emission standards.

(ii) Except as specified in paragraph (b)(1)(iii) of this section, LDV and LDT represent a single averaging set with respect to all emission standards. Note that FTP and SFTP credits are not interchangeable.

(iii) LDV and LDT1 certified to standards based on a useful life of 120,000 miles and 10 years together represent a single averaging set with respect to NMOG+NO_X emission standards. Note that FTP and SFTP credits are not interchangeable.

(iv) The following separate averaging sets apply for evaporative emission standards:

(A) LDV and LDT1 together represent a single averaging set.

(B) LDT2 represents a single averaging set.

(C) HLDT represents a single averaging set.

(D) HDV represents a single averaging set.

* * * * *

■ 72. Appendix I to part 86 is amended by revising paragraph (c) introductory text to read as follows:

Appendix I to Part 86—Dynamometer Schedules

* * * * *

(c) *EPA driving schedule for class 3 heavy-duty vehicles.* This driving schedule is also known as the LA–92 cycle. The first 1,435 seconds are the Hot LA–92 driving schedule.

* * * * *

PART 600—FUEL ECONOMY AND GREENHOUSE GAS EXHAUST EMISSIONS OF MOTOR VEHICLES

■ 73. The authority citation for part 600 continues to read as follows:

Authority: 49 U.S.C. 32901–23919q, Pub. L. 109–58.

Subpart B—[Amended]

■ 74. Section 600.116–12 is amended by revising paragraph (c)(5) to read as follows:

§ 600.116–12 Special procedures related to electric vehicles and hybrid electric vehicles.

* * * * *

(c) * * *

(5) The End-of-Test criterion is based on a 1 percent Net Energy Change as specified in Section 3.8 of SAE J1711. We may approve alternate Net Energy Change tolerances as specified in Section 3.9.1 of SAE J1711 for charge-depleting tests or Appendix C of SAE J1711 for charge-sustaining tests if the 1 percent threshold is insufficient or inappropriate. For charge-sustaining tests, we may approve the use of alternate Net Energy Change tolerances as specified in Appendix C of SAE J1711 to correct final fuel economy values, CO_2 emissions, and carbon-related exhaust emissions. For charge-sustaining tests, do not use alternate Net Energy Change tolerances to correct emissions of criteria pollutants. Additionally, if we approve an alternate End-of-Test criterion or Net Energy Change tolerances for a specific vehicle, we may use the alternate criterion or tolerances for any testing we conduct on that vehicle.

* * * * *

■ 75. Section 600.117 is amended by revising paragraphs (a), (b), (c), and (d) to read as follows:

§ 600.117 Interim provisions.

* * * * *

(a) Except as specified in paragraph (e) of this section, manufacturers must demonstrate compliance with greenhouse gas emission standards and determine fuel economy values using E0 gasoline test fuel as specified in 40 CFR 86.113–04(a)(1), regardless of any testing with Tier 3 test fuel under paragraph (b) of this section.

(b) Manufacturers may demonstrate that vehicles comply with Tier 3 emission standards as specified in 40 CFR part 86, subpart S, during fuel economy measurements using the E0 gasoline test fuel specified in 40 CFR 86.113–04(a)(1), as long as this test fuel is used in fuel economy testing for all applicable duty cycles specified in 40 CFR part 86, subpart S. If a vehicle fails to meet a Tier 3 emission standard using the E0 gasoline test fuel specified in 40 CFR 86.113–04(a)(1), the manufacturer must retest the vehicle using the Tier 3 test fuel specified in 40 CFR 1065.710(b) (or the equivalent LEV III test fuel for California) to demonstrate compliance with all applicable emission standards over that test cycle.

(c) If a manufacturer demonstrates compliance with emission standards for criteria pollutants over all five test cycles using the Tier 3 test fuel specified in 40 CFR 1065.710(b) (or the equivalent LEV III test fuel for California), the manufacturer may use test data with the same test fuel to determine whether a test group meets the criteria described in § 600.115 for derived 5-cycle testing for fuel economy labeling. Such vehicles may be tested over the FTP and HFET cycles with the E0 gasoline test fuel specified in 40 CFR 86.113–04(a)(1) under this paragraph (c); the vehicles must meet the Tier 3 emission standards over those test cycles as described in paragraph (b) of this section.

(d) Manufacturers may perform testing with the appropriate gasoline test fuels specified in 40 CFR 86.113–04(a)(1), 40 CFR 86.213(a)(2), and in 40 CFR 1065.710(b) to evaluate whether their vehicles meet the criteria for derived 5-cycle testing under 40 CFR 600.115. All five tests must use test fuel with the same nominal ethanol concentration.

* * * * *

PART 1037—CONTROL OF EMISSIONS FROM NEW HEAVY-DUTY MOTOR VEHICLES

■ 76. The authority citation for part 1037 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart B—Emission Standards and Related Requirements

■ 77. Section 1037.103 is amended by revising paragraphs (b)(6) and (f) to read as follows:

§ 1037.103 Evaporative and refueling emission standards.

* * * * *

(b) * * *

(6) Vehicles not yet subject to the Tier 3 standards in 40 CFR 86.1813 must meet evaporative emission standards as specified in §§ 86.008–10(b)(1) and (2) for Otto-cycle applications and 86.007–11(b)(3)(ii) and (b)(4)(ii) for diesel-cycle applications.

* * * * *

(f) *Useful life.* Your vehicles must meet the evaporative emission standards of this section throughout their useful life, expressed in service miles or calendar years, whichever comes first. The useful life values for the standards of this section are described in 40 CFR 86.1805.

* * * * *

■ 78. Section 1037.104 is amended by revising paragraph (e) to read as follows:

§ 1037.104 Exhaust emission standards for CO_2, CH_4, and N_2O for heavy-duty vehicles at or below 14,000 pounds GVWR.

* * * * *

(e) *Useful life.* Your vehicles must meet the exhaust emission standards of this section throughout their full useful life, expressed in service miles or calendar years, whichever comes first. The useful life values for the standards of this section are those that apply to model year 2014 vehicles for criteria pollutants under 40 CFR part 86.1805–12.

* * * * *

■ 79. Section 1037.135 is amended by revising paragraph (c)(9) to read as follows:

§ 1037.135 Labeling.

* * * * *

(c) * * *

(9) If you rely on another company to design and install fuel tanks in incomplete vehicles that use an evaporative canister for controlling diurnal emissions, include the following statement: ''THIS VEHICLE IS DESIGNED TO COMPLY WITH EVAPORATIVE EMISSION STANDARDS WITH UP TO x GALLONS OF FUEL TANK CAPACITY.'' Complete this statement by identifying the maximum specified fuel tank capacity associated with your certification.

* * * * *

PART 1043—CONTROL OF NO_X, SO_X, AND PM EMISSIONS FROM MARINE ENGINES AND VESSELS SUBJECT TO THE MARPOL PROTOCOL

■ 80. The authority citation for part 1043 is revised to read as follows:

Authority: 33 U.S.C. 1901–1912.

§ 1043.5 [Amended]

■ 81. Section 1043.5 is amended by removing and reserving paragraph (b).

■ 82. Section 1043.10 is amended by revising paragraphs (a)(2) introductory text, (a)(2)(iii), and (b)(2) to read as follows:

§ 1043.10 Applicability.

(a) * * *

(2) Vessels that operate only domestically and conform to the requirements of this paragraph (a)(2) are excluded from Regulation 13 of Annex VI and the NO_X-related requirements of this part (including the requirement to obtain an EIAPP certificate and to keep a Technical File and an Engine Book of Record Parameters). For the purpose of this exclusion, the phrase ''operate only domestically'' means the vessels do not enter waters subject to the jurisdiction or control of any foreign country, except for Canadian portions of the Great Lakes. (See §§ 1043.60 and 1043.70 for provisions related to fuel use by such vessels). To be excluded, the vessel must conform to each of the following provisions:

* * * * *

(iii) Any engine installed in the vessel that is not covered by an EIAPP certificate must be labeled as specified in 40 CFR 1042.135 with respect to whether it meets the requirements of Regulation 13 of Annex VI.

(b) * * *

(2) For non-public vessels flagged by a country that is not a party to Annex VI, the requirements of this part apply in the same manner as apply for Party vessels, except as otherwise provided in this part. For example, see § 1043.30(c)(4) for provisions related to showing compliance with this requirement without an EIAPP certificate. See § 1043.60 for specific operating requirements.

* * * * *

■ 83. Section 1043.20 is amended by revising the definitions for ''2008 Annex VI'', ''Emission control area (ECA)'', and ''Public vessels'' to read as follows:

§ 1043.20 Definitions.

* * * * *

2008 Annex VI means Annex VI to the MARPOL Protocol, including the amendments from Annex 12, adopted through April 2014 (incorporated by reference in § 1043.100). This version of Annex VI does not include any amendments that may be adopted in the future. This 2008 version applies for certain provisions of this part such as those applicable for internal waters and for non-Party vessels.

* * * * *

Emission control area (ECA) means an area designated pursuant to Annex VI as an Emission Control Area that is in force.

* * * * *

Public vessels means warships, naval auxiliary vessels, and other vessels owned or operated by a sovereign country when engaged in noncommercial service. Vessels with a national security exemption under 40 CFR 80.606 or 1042.635 are deemed to be public vessels.

* * * * *

■ 84. Section 1043.40 is amended by redesignating paragraphs (d) through (f) as paragraphs (e) through (g), adding a new paragraph (d), and revising the newly redesignated paragraph (g) to read as follows:

§ 1043.40 EIAPP certificates.

* * * * *

(d) EPA may issue both an EPA certificate and an EIAPP certificate for the same engine, as long as the manufacturer and the engine meet all applicable requirements. EPA may not issue an EIAPP certificate if the engine is certified with an FEL under 40 CFR part 1042 that is higher than the applicable NO_X emission standard under Annex VI.

* * * * *

(g) This paragraph (g) applies for engines that were originally excluded from this part because they were intended for domestic use and were introduced into U.S. commerce without an EIAPP certificate. Note that such engines must be labeled as specified under 40 CFR 1042.135 to indicate that they are intended for domestic use. Such engines may be installed on vessels not intended only for domestic operation provided the engine manufacturer, vessel manufacturer, or vessel owner obtains an EIAPP certificate. Similarly, vessels originally intended only for domestic operation may be used internationally provided the engine manufacturer, vessel manufacturer, or vessel owner obtains an EIAPP certificate. The limitations for engine manufacturers described in paragraphs (a) and (d) of this section also apply for all EIAPP certificates issued under this paragraph (g). In either case, the Technical File must specify that the engine was originally certified for domestic use only, prior to being covered by an EIAPP certificate. Engine manufacturers may provide a supplemental label to clarify that the engine is no longer limited to domestic service. An engine manufacturer, vessel manufacturer, or vessel owner may also ask to apply the provisions of this paragraph (g) to engines originally certified for public vessels.

■ 85. Section 1043.60 is amended by revising paragraphs (a) and (b) to read as follows:

§ 1043.60 Operating requirements for engines and vessels subject to this part.

* * * * *

(a) Except as specified otherwise in this part, NO_X emission limits apply to all vessels subject to this part as specified in the following table:

TABLE 1 TO § 1043.60 ANNEX VI NO_X EMISSION STANDARDS (g/kW-hr)

Tier	Area of applicability	Implementation date [a]	Maximum in-use engine speed		
			Less than 130 RPM	130–2000 RPM [b]	Over 2000 RPM
Tier I	All U.S. navigable waters and EEZ	January 1, 2004–December 31, 2010.	17.0	$45.0 \cdot n^{(-0.20)}$	9.8
Tier II	All U.S. navigable waters and EEZ	January 1, 2011–December 31, 2015.	14.4	$44.0 \cdot n^{(-0.23)}$	7.7
Tier II	All U.S. navigable waters and EEZ, exluding ECA and ECA associated areas.	January 1, 2016 and later	14.4	$44.0 \cdot n^{(-0.23)}$	7.7
Tier III	ECA and ECA associated areas	January 1, 2016 and later [c]	3.4	$9.0 \cdot n^{(-0.20)}$	2.0

[a] Standards apply for engines installed on vessels with a build date in the specified time frame, or for engines that undergo a major conversion in the specified time frame.

[b] Applicable standards are calculated from *n* (maximum in-use engine speed, in RPM, as specified in § 1042.140). Round the standards to one decimal place.

[c] In the case of recreational vessels of less than 500 gross tonnage with length at or above 24 meters, the Tier III standards start to apply January 1, 2021.

(b) Except as specified otherwise in this part, fuel sulfur limits apply to all vessels subject to this part as specified in the following table:

TABLE 2 TO § 1043.60 ANNEX VI FUEL SULFUR LIMITS (wt %) [a]

Calendar years	Sulfur limit in all U.S. navigable waters and EEZ (percent)	Sulfur limit in ECA and ECA associated areas (percent)
2010–2011	4.50	1.00
2012–2014	3.50	1.00
2015–2019	3.50	0.10
2020 and later	0.50	0.10

[a] Note that Regulation 3 and Regulation 4 of Annex VI allow for the use of noncompliant fuel in certain circumstances.

* * * * *

■ 86. Section 1043.70 is amended by revising paragraph (a) to read as follows:

§ 1043.70 General recordkeeping and reporting requirements.

(a) Under APPS, owners and operators of Party vessels must keep records related to NO_X standards and in-use fuel specifications such as the Technical File, the Engine Book of Record Parameters, and bunker delivery notes. Owners and operators of non-Party vessels must keep these records as specified in the NO_X Technical Code and Regulations 13, 14, and 18 of 2008 Annex VI (incorporated by reference in § 1043.100). We may inspect these records as allowed by APPS. As part of our inspection, we may require that the owner submit copies of these records to us.

* * * * *

■ 87. Section 1043.80 is amended by revising paragraph (b)(9) to read as follows:

§ 1043.80 Recordkeeping and reporting requirements for fuel suppliers.

* * * * *

(b) * * *

(9) A signed statement by an authorized representative of the fuel supplier certifying that the fuel supplied conforms to Regulations 14 and 18 of Annex VI consistent with its designation, intended use, and the date on which it is to be used. For example, with respect to conformity to Regulation 14 of Annex VI, a fuel designated and intended for use in an ECA any time on or after January 1, 2015 may not have a sulfur content above 0.10 weight percent. This statement is not required if the vessel is not subject to fuel standards of Regulation 14 of Annex VI. The statement described in this paragraph (b)(9) is deemed to be a submission to EPA.

* * * * *

■ 88. Section 1043.95 is amended by revising the section heading, the introductory text, and paragraph (b)(1)(ii) to read as follows:

§ 1043.95 Great Lakes provisions.

The provisions of this section apply for vessels operating exclusively in the Great Lakes.

* * * * *

(b) * * *

(1) * * *

(ii) We may approve the use of an engine meeting less stringent standards if the owner can demonstrate that it took possession of the engine before October 30, 2009, and that engine is a new engine that has not been installed in a non-marine application. Such an engine must at a minimum be certified to the Annex VI NO_X emission standard referenced in § 1043.60 that applies based on its build date.

* * * * *

■ 89. Add § 1043.97 to read as follows:

§ 1043.97 Interim provisions.

(a) The fuel-related requirements under APPS for operation in the North American ECA, the United States Caribbean Sea ECA, and ECA-associated areas do not apply until January 1, 2020 for steamships built on or before August 1, 2011 if they are powered by propulsion boilers that were not originally designed for continued operation on marine distillate fuel or natural gas.

(b) [Reserved]

■ 90. Section 1043.100 is amended by revising paragraph (a) to read as follows:

§ 1043.100 Reference materials.

* * * * *

(a) *IMO material.* This paragraph (a) lists material from the International Maritime Organization that we have incorporated by reference. Anyone may purchase copies of these materials from the International Maritime Organization, 4 Albert Embankment, London SE1 7SR, United Kingdom, or *www.imo.org, or 44-(0)20–7735–7611.*

(1) MARPOL Annex VI, Regulations for the Prevention of Air Pollution from Ships, Third Edition, 2013, and NO_X Technical Code 2008.

(i) Revised MARPOL Annex VI, Regulations for the Prevention of Pollution from Ships, Third Edition, 2013 (''2008 Annex VI''); IBR approved for § 1043.1 introductory text, 1043.20, 1043.30(f), 1043.60(c), and 1043.70(a).

(ii) NO_X Technical Code 2008, Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines, 2013 Edition, (''NO_X Technical Code''); IBR approved for §§ 1043.20, 1043.41(b) and (h), and 1043.70(a).

(iii) Annex 12, Resolution MEPC.251(66) from the Report of the Marine Environment Protection Committee on its Sixty-Sixth Sesson, April 25, 2014. This document describes new and revised provisions that are considered to be part of Annex VI and NO_X Technical Code 2008 as referenced in paragraphs (a)(1)(i) and (ii) of this section. IBR approved for § 1043.1 introductory text, 1043.20, 1043.30(f), 1043.41(b) and (h), 1043.60(c), and 1043.70(a).

(2) [Reserved]

* * * * *

PART 1051—CONTROL OF EMISSIONS FROM RECREATIONAL ENGINES AND VEHICLES

■ 91. The authority citation for part 1051 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart F—Test Procedures

■ 92. Section 1051.501 is amended by revising paragraph (b) to read as follows:

§ 1051.501 What procedures must I use to test my vehicles or engines?

* * * * *

(b) *Motorcycles and ATVs.* For motorcycles and ATVs, use the equipment, procedures, and duty cycle in 40 CFR part 86, subpart F, to determine whether your vehicles meet the exhaust emission standards in § 1051.105 or § 1051.107. Measure the emissions of all the pollutants we regulate in § 1051.105 or § 1051.107. Measure CO_2, N_2O, and CH_4 as described in § 1051.235. If we allow you to certify ATVs based on engine testing, use the equipment, procedures, and duty cycle described or referenced in the section that allows engine testing. For motorcycles with engine displacement at or below 169 cc and all ATVs, use the driving schedule in paragraph (b) of appendix I to 40 CFR part 86. For all other motorcycles, use the driving schedule in paragraph (a) of Appendix I to part 86. With respect to vehicle-speed governors, test motorcycles and ATVs in their ungoverned configuration, unless we approve in advance testing in a governed configuration. We will only approve testing in a governed configuration if you can show that the governor is permanently installed on all production vehicles and is unlikely to be removed in use. With respect to engine-speed governors, test motorcycles and ATVs in their governed configuration. Run the test engine, with all emission-control systems operating, long enough to stabilize emission levels; you may consider emission levels stable without measurement if you accumulate 12 hours of operation.

* * * * *

PART 1054—CONTROL OF EMISSIONS FROM NEW, SMALL NONROAD SPARK-IGNITION ENGINES AND EQUIPMENT

■ 93. The authority citation for part 1054 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart B—Emission Standards and Related Requirements

■ 94. Section 1054.135 is amended by revising paragraph (c)(8) to read as follows:

§ 1054.135 How must I label and identify the engines I produce?

* * * * *

(c) * * *

(8) Include one of the following statements:

(i) If you are an integrated equipment manufacturer certifying engines with respect to exhaust emissions and meeting all applicable evaporative emission requirements under 40 CFR part 1060, state—

''THIS ENGINE MEETS U.S. EPA EXH/EVP REGS FOR [MODEL YEAR].''

(ii) In all other cases, state—

''THIS ENGINE MEETS U.S. EPA EXH REGS FOR [MODEL YEAR].''

* * * * *

■ 95. Section 1054.145 is amended by revising paragraph (n) introductory text and removing paragraph (o) to read as follows:

§ 1054.145 Are there interim provisions that apply only for a limited time?

* * * * *

(n) *California test fuel.* You may perform testing with a fuel meeting the requirements for certifying the engine in California instead of the fuel specified in § 1054.501(b)(2), as follows:

* * * * *

Subpart F—Test Procedures

■ 96. Section 1054.501 is amended by revising paragraph (b)(2) to read as follows:

§ 1054.501 How do I run a valid emission test?

* * * * *

(b) * * *

(2) Use the appropriate fuels and lubricants specified in 40 CFR part 1065, subpart H, for all the testing we require in this part. Except as specified in paragraph (d) of this section, use gasoline specified for general testing. For service accumulation, use the test fuel or any commercially available fuel that is representative of the fuel that in-use engines will use. Note that § 1054.145(n) allows for testing with gasoline test fuels specified by the California Air Resources Board for any individual engine family.

* * * * *

Subpart G—Special Compliance Provisions

■ 97. Section 1054.690 is amended by adding the introductory text and revising paragraphs (a) through (f) to read as follows:

§ 1054.690 What bond requirements apply for certified engines?

This section generally applies for certifying engine manufacturers. It also applies to importers that do not certify engines as described in paragraph (j) of this section.

(a) Before introducing certified engines into U.S. commerce, you must post a bond to cover any potential compliance or enforcement actions under the Clean Air Act with respect to engines certified under this part unless you demonstrate to us in your application for certification that you are able to meet any potential compliance- or enforcement-related obligations, as described in this section. Note that you might also need to post bond under this section to meet your obligations under § 1054.120(f).

(b) The bonding requirements apply if you do not have long-term assets in the United States meeting any of the following thresholds:

(1) A threshold of $3 million applies if you have been a certificate holder in each of the preceding ten years without failing a test conducted by EPA officials or having been found by EPA to be noncompliant under applicable regulations.

(2) A threshold of $6 million applies if you are a secondary engine manufacturer.

(3) A threshold of $10 million applies if you do not qualify for the smaller bond thresholds in paragraph (b)(1) or (2) of this section.

(c) For the purpose of establishing your level of long-term assets under paragraph (b) of this section, include the values from your most recent balance sheet for buildings, land, and fixed equipment, but subtract depreciation and related long-term liabilities (such as a mortgage). If you have sufficient long-term assets to avoid bond payments under this section, you must identify the location of these assets in your application for certification.

(d) Determine the value of the bond as follows:

(1) Calculate a value based on the per-engine bond values shown in Table 1 to this section and on the projected U.S.-directed production volume from each displacement grouping for the model year. For example, if you have projected U.S.-directed production volumes of 10,000 engines with 180 cc displacement and 10,000 engines with 400 cc displacement in 2013, the calculated bond amount is $750,000. If the calculated value is less than $500,000, the appropriate bond amount is $500,000. If the calculated value exceeds the applicable threshold value specified in paragraph (b) of this section, use the applicable threshold value as the appropriate value of the bond. These values may be adjusted as described in paragraphs (d)(2) through (4) of this section. You may generally change your projected U.S.-directed production volume under § 1054.225

during the model year; however, you may not decrease your bond based on new projected U.S.-directed production volumes once you have imported or otherwise introduced into U.S. commerce your first engine from that model year.

TABLE 1 TO § 1054.690—PER-ENGINE BOND VALUES

For engines with displacement falling in the following ranges . . .	The per-engine bond value is . . .
Disp. < 225 cc	$25
225 ≤ Disp. < 740 cc	50
740 ≤ Disp. ≤ 1,000 cc	100
Disp. > 1,000 cc	200

(2) If your estimated or actual U.S.-directed production volume increases beyond the level appropriate for your current bond payment, you must post additional bond to reflect the increased volume within 90 days after you change your estimate or determine the actual production volume. You may not decrease your bond in a given year, but you may calculate a lower bond value in a later year based on the highest actual U.S.-directed production volumes from the preceding three years.

(3) If you sell engines without aftertreatment components under the provisions of § 1054.610, you must increase the per-engine bond values for the current year by 20 percent.

(4) The minimum bond value is $25,000 instead of $500,000 if you are a small-volume engine manufacturer or a small-volume equipment manufacturer that has been a certificate holder in each of the preceding five years without failing a test conducted by EPA officials or having been found by EPA to be noncompliant under applicable regulations.

(e) The threshold identified in paragraph (b) of this section and the bond values identified in paragraph (d) of this section are in 2008 dollars. We will adjust these values for 2020 and later, and every 10 years after that, by considering the current Consumer Price Index values published by the Bureau of Labor Statistics relative to 2008. We will generally round values for thresholds and total bond obligations as follows:

(1) Round calculated values at or below $125,000 to the nearest $5,000.

(2) Round calculated values above $125,000 and at or below $2.25 million to the nearest $50,000.

(3) Round calculated values above $2.25 million to the nearest $500,000.

(f) If you are required to post a bond under this section, you must get the bond from a third-party surety that is cited in the U.S. Department of Treasury Circular 570, ''Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies'' (*http://www.fms.treas.gov/c570/c570.html#certified*). You must maintain this bond for every year in which you sell certified engines. The surety agent remains responsible for obligations under the bond for two years after the bond is cancelled or expires without being replaced.

* * * * *

PART 1060—CONTROL OF EVAPORATIVE EMISSIONS FROM NEW AND IN-USE NONROAD AND STATIONARY EQUIPMENT

■ 98. The authority citation for part 1060 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart A—Overview and Applicability

■ 99. Section 1060.5 is amended by revising paragraphs (b)(2), (e), and (f), including Tables 1 through 3, to read as follows:

§ 1060.5 Do the requirements of this part apply to me?

* * * * *

(b) * * *

(2) Vessel manufacturers are subject to all the requirements of this part 1060 that apply to Marine SI engines and fuel systems. However, they must certify to the emission standards specified in §§ 1060.102 through 1060.105 only if one or more of the following conditions apply:

(i) Vessel manufacturers must certify fuel system components they install in their vessels if the components are not certified to meet all applicable evaporative emission standards, including both permeation and diurnal standards. This would include vessel manufacturers that make their own fuel tanks. Vessel manufacturers would need to act as component manufacturers to certify under this part 1060.

(ii) Vessel manufacturers must certify their vessels only if they intend to generate or use evaporative emission credits. Vessel manufacturers would certify under part 40 CFR part 1045 using the emission-credit provisions in subpart H of that part to demonstrate compliance with the emission standard.

* * * * *

(e) *Small SI.* Certify engines, equipment, and fuel-system components as follows:

(1) Component manufacturers must certify their fuel lines and fuel tanks intended for Small SI engines and equipment under this part 1060, except as allowed by § 1060.601(f).

(2) Equipment manufacturers must certify fuel system components they install in their equipment if the components are not certified to meet applicable evaporative emission standards. Equipment manufacturers would need to act as component manufacturers to certify fuel-system components under this part 1060.

(3) Engine manufacturers must meet all the requirements of this part 1060 that apply to equipment manufacturers for all fuel-system components they install on their engines. Engine manufacturers that produce Small SI engines with complete fuel systems are considered the equipment manufacturers for those engines under this part 1060.

(4) Equipment manufacturers must certify their equipment and are subject to all the requirements of this part 1060; however, this does not apply for equipment using portable nonroad fuel tanks.

(f) *Summary of certification responsibilities.* Tables 1 through 3 of this section summarize the certification responsibilities for different kinds of manufacturers as described in paragraphs (b) through (e) of this section. The term ''No'' as used in the tables means that a manufacturer is not required to obtain a certificate of conformity under paragraphs (b) through (e) of this section. In situations where multiple manufacturers are subject to the standards and other requirements of this part, such a manufacturer must nevertheless certify if the manufacturer who is required to certify under paragraphs (b) through (e) of this section fails to obtain a certificate of conformity.

TABLE 1 TO § 1060.5—SUMMARY OF ENGINE MANUFACTURER EVAPORATIVE CERTIFICATION RESPONSIBILITIES

Equipment type	Is the engine manufacturer required to certify for evaporative emission standards? [a]	Code of Federal Regulations Cite for Certification
Marine SI	No.	
Large SI	Yes	40 CFR part 1048.
Recreational vehicles	No.	
Small SI	No, unless engines are sold with complete fuel systems	40 CFR part 1060.

[a] Fuel lines and fuel tanks that are attached to or sold with engines must be covered by a certificate of conformity.

TABLE 2 TO § 1060.5—SUMMARY OF EQUIPMENT MANUFACTURER EVAPORATIVE CERTIFICATION RESPONSIBILITIES

Equipment type	Is the equipment manufacturer required to certify for evaporative emission standards?	Code of Federal Regulations Cite for Certification
Marine SI	Yes, but only if vessel manufacturers install uncertified fuel lines or fuel tanks, or they intend to generate or use evaporative emission credits.	40 CFR part 1060.[a]
Large SI	Allowed but not required	40 CFR part 1060.
Recreational vehicles	Yes, even if vehicle manufacturers install certified components	40 CFR part 1051.
Small SI	Yes, unless the equipment uses portable nonroad fuel tanks	40 CFR part 1060.[a]

[a] See the exhaust standard-setting part for provisions related to generating or using evaporative emission credits.

TABLE 3 OF § 1060.5—SUMMARY OF COMPONENT MANUFACTURER CERTIFICATION RESPONSIBILITIES

Equipment type	Is the component manufacturer required to certify fuel lines and fuel tanks?	Code of Federal Regulations Cite for Certification
Marine SI	Yes, including portable marine fuel tanks and associated fuel lines [a]	40 CFR part 1060.
Large SI	Allowed but not required	40 CFR part 1060.
Recreational vehicles	Allowed but not required	40 CFR part 1060.
Small SI	Yes [a]	40 CFR part 1060.

[a] See § 1060.601 for an allowance to make contractual arrangements with engine or equipment manufacturers instead of certifying.

Subpart F—Test Procedures

■ 100. Section 1060.515 is amended by revising paragraphs (c) and (d) and adding paragraph (e) to read as follows:

§ 1060.515 How do I test EPA Nonroad Fuel Lines and EPA Cold-Weather Fuel Lines for permeation emissions?

* * * * *

(c) Except as specified in paragraph (d) of this section, measure fuel line permeation emissions using the equipment and procedures for weight-loss testing specified in SAE J30 or SAE J1527 (incorporated by reference in § 1060.810). Start the measurement procedure within 8 hours after draining and refilling the fuel line. Perform the emission test over a sampling period of 14 days. You may omit up to two daily measurements in any seven day period. Determine your final emission result based on the average of measured values over the 14-day period. Maintain an ambient temperature of 23±2 °C throughout the sampling period.

(d) For fuel lines with a nominal inner diameter below 5.0 mm, you may alternatively measure fuel line permeation emissions using the equipment and procedures for weight-loss testing specified in SAE J2996 (incorporated by reference in § 1060.810). Determine your final emission result based on the average of measured values over the 14-day sampling period. Maintain an ambient temperature of 23±2 °C throughout the sampling period.

(e) Use good engineering judgment to test short fuel line segments. For example, you may need to join individual fuel line segments using proper connection fittings to achieve enough length and surface area for a proper measurement. Size the fuel reservoir appropriately for the tested fuel line.

■ 101. Section 1060.520 is amended by revising paragraphs (a)(1), (c)(1), and (d)(9) to read as follows:

§ 1060.520 How do I test fuel tanks for permeation emissions?

* * * * *

(a) * * *

(1) *Pressure cycling.* Perform a pressure test by sealing the tank and cycling it between +13.8 and −3.4 kPa (+2.0 and −0.5 psig) for 10,000 cycles at a rate of 60 seconds per cycle. The purpose of this test is to represent environmental wall stresses caused by pressure changes and other factors (such as vibration or thermal expansion). If your tank cannot be tested using the pressure cycles specified by this paragraph (a)(1), you may ask to use special test procedures under § 1060.505.

* * * * *

(c) * * *

(1) Obtain a second tank whose total volume is within 5 percent of the test tank's volume. You may not use a tank that has previously contained fuel or any other contents that might affect its mass stability.

* * * * *

(d) * * *

(9) Record the difference in mass between the reference tank and the test tank for each measurement. This value is M_i, where i is a counter representing the number of days elapsed. Subtract M_i from M_o and divide the difference by the internal surface area of the fuel tank. Divide this g/m² value by the number of test days (using at least two decimal places) to calculate the emission rate in g/m²/day. Example: If a tank with an internal surface area of 0.720 m² weighed 1.31 grams less than the reference tank at the beginning of the test and weighed 9.86 grams less than

the reference tank after soaking for 10.03 days, the emission rate would be—

$((-1.31\ g)-(-9.86\ g))/0.720\ m^2/10.03\ days = 1.1839\ g/m^2/day$

* * * * *

■ 102. Section 1060.525 is revised to read as follows:

§ 1060.525 How do I test fuel systems for diurnal emissions?

Use the procedures of this section to determine whether your fuel tanks meet diurnal emission standards as specified in § 1060.105.

(a) Use the following procedure to measure diurnal emissions:

(1) Diurnal measurements are based on representative temperature cycles, as follows:

(i) Diurnal fuel temperatures for marine fuel tanks that will be installed in nontrailerable boats must undergo repeat temperature swings of 2.6 °C between nominal values of 27.6 and 30.2 °C.

(ii) Diurnal fuel temperatures for other installed marine fuel tanks must undergo repeat temperature swings of 6.6 °C between nominal values of 25.6 and 32.2 °C.

(iii) For fuel tanks installed in equipment other than marine vessels, the following table specifies a profile of ambient temperatures:

TABLE 1 TO § 1060.525—DIURNAL TEMPERATURE PROFILES FOR NONMARINE FUEL TANKS

Time (hours)	Ambient temperature profile (°C)
0	22.2
1	22.5
2	24.2
3	26.8
4	29.6
5	31.9
6	33.9
7	35.1
8	35.4
9	35.6
10	35.3
11	34.5
12	33.2
13	31.4
14	29.7
15	28.2
16	27.2
17	26.1
18	25.1
19	24.3
20	23.7
21	23.3
22	22.9
23	22.6
24	22.2

(2) Fill the fuel tank to 40 percent of nominal capacity with the gasoline specified in 40 CFR 1065.710 for general testing.

(3) Install a vapor line from any vent ports that would not be sealed in the final in-use configuration. Use a length of vapor line representing the largest inside diameter and shortest length that would be expected with the range of in-use installations for the emission family.

(4) If the fuel tank is equipped with a carbon canister, load the canister with butane or gasoline vapors to its canister working capacity as specified in § 1060.240(e)(2)(i) and attach it to the fuel tank in a way that represents a typical in-use configuration. Purge the canister as follows to prepare for emission measurement:

(i) For marine fuel tanks, perform a single heating and cooling cycle as specified in paragraph (a)(7) of this section without measuring emissions.

(ii) For nonmarine fuel tanks, establish a characteristic purge volume by running an engine with the fuel tank installed to represent an in-use configuration. Measure the volume of air flowing through the canister while the engine operates for 30 minutes over repeat cycles of the appropriate duty cycle used for certifying the engine for exhaust emissions. Set up the loaded canister for testing by purging it with the characteristic purge volume from the engine simulation run.

(5) Stabilize the fuel tank to be within 2.0 °C of the nominal starting temperature specified in paragraph (a)(1) of this section. In the case of marine fuel tanks, install a thermocouple meeting the requirements of 40 CFR 86.107–96(e) in the approximate mid-volume of fuel and record the temperature at the end of the stabilization period to the nearest 0.1 °C. For sealed fuel systems, replace the fuel cap once the fuel reaches equilibrium at the appropriate starting temperature.

(6) Prepare the tank for mass measurement using one of the following procedures:

(i) Place the stabilized fuel tank in a SHED meeting the specifications of 40 CFR 86.107–96(a)(1) that is equipped with a FID analyzer meeting the specifications of 40 CFR 1065.260. Take the following steps in sequence:

(A) Purge the SHED.

(B) Close and seal the SHED.

(C) Zero and span the FID analyzer.

(D) Within ten minutes of sealing the SHED, measure the initial hydrocarbon concentration. This is the start of the sampling period.

(ii) If your testing configuration involves mass emissions at the standard of 2.0 grams or more, you may alternatively place the stabilized fuel tank in any temperature-controlled environment and establish mass emissions as a weight loss relative to a reference fuel tank using the procedure specified in § 1060.520(d) instead of calculating it from changing hydrocarbon concentrations in the SHED.

(7) Control temperatures as follows:

(i) For marine fuel tanks, supply heat to the fuel tank for continuously increasing temperatures such that the fuel reaches the maximum temperature in 8 hours. Set the target temperature by adding the temperature swing specified in paragraph (a)(1) of this section to the recorded starting temperature. Hold the tank for approximately 60 minutes at a temperature no less than 0.1 °C below the target temperature. For example, if the recorded starting fuel temperature for a fuel tank that will be installed in a nontrailerable vessel is 27.1 °C, the target temperature is 29.7 °C and the fuel must be stabilized for 60 minutes with fuel temperatures not falling below 29.6 °C. For EPA testing, fuel temperatures may not go 1.0 °C above the target temperature at any point during the heating or stabilization sequence. Measure the hydrocarbon concentration in the SHED at the end of the high-temperature stabilization period. Calculate the diurnal emissions for this heating period based on the change in hydrocarbon concentration over this sampling period. Allow the fuel temperature to cool sufficiently to stabilize again at the starting temperature without emission sampling. Repeat the heating and measurement sequence for three consecutive days, starting each heating cycle no more than 26 hours after the previous start.

(ii) For nonmarine fuel tanks, follow the air temperature trace from paragraph (a)(1)(iii) of this section for three consecutive 24-hour periods. Measured temperatures must follow the profile with a maximum deviation of 1.7 °C for any hourly measurement and an average temperature deviation not to exceed 1.0 °C, where the average deviation is calculated using the absolute value of each measured deviation. Start measuring emissions when you start the temperature profile. The end of the first, second, and third emission sampling periods must occur 1440±6, 2880±6, and 4320±6 minutes, respectively, after starting the measurement procedure.

(8) Use the highest of the three emission levels to determine whether your fuel tank meets the diurnal emission standard.

(9) For emission control technologies that rely on a sealed fuel system, you may omit the preconditioning steps in paragraph (a)(4) of this section and the last two 24-hour periods of emission

measurements in paragraph (a)(7) of this section. For purposes of this paragraph (a), sealed fuel systems include those that rely on pressure-relief valves, limiting flow orifices, bladder fuel tanks, and volume-compensating air bags.

(b) You may subtract your fuel tank's permeation emissions from the measured diurnal emissions if the fuel tank is preconditioned with diurnal test fuel as described in § 1060.520(b) or if you use good engineering judgment to otherwise establish that the fuel tank has stabilized permeation emissions. Measure permeation emissions for subtraction as specified in § 1060.520(c) and (d) before measuring diurnal emissions, except that the permeation measurement must be done with diurnal test fuel at 28±2 °C. Use appropriate units and corrections to subtract the permeation emissions from the fuel tank during the diurnal emission test. You may not subtract a greater mass of emissions under this paragraph (b) than the fuel tank would emit based on meeting the applicable emission standard for permeation.

■ 103. Section 1060.810 is revised to read as follows:

§ 1060.810 What materials does this part reference?

(a) *Materials incorporated by reference.* Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, a document must be published in the **Federal Register** and the material must be available to the public. All approved material is available for inspection at U.S. EPA, Air and Radiation Docket and Information Center, 1301 Constitution Ave. NW., Room B102, EPA West Building, Washington, DC 20460, (202) 202–1744, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

(b) *ASTM International material.* The following standards are available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA, 19428–2959, (610) 832–9585, or *http://www.astm.org/:*

(1) ASTM D471–06, Standard Test Method for Rubber Property—Effect of Liquids, approved October 1, 2006 (''ASTM D471''), IBR approved for § 1060.515(a).

(2) ASTM D2862–97 (Reapproved 2004), Standard Test Method for Particle Size Distribution of Granular Activated Carbon, approved April 1, 2004 (''ASTM D2862''), IBR approved for § 1060.240(e).

(3) ASTM D3802–79 (Reapproved 2005), Standard Test Method for Ball-Pan Hardness of Activated Carbon, approved October 1, 2005 (''ASTM D3802''), IBR approved for § 1060.240(e).

(4) ASTM D4806–07, Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel, approved July 15, 2007 (''ASTM D4806''), IBR approved for § 1060.501(c).

(5) ASTM D5228–92 (Reapproved 2005), Standard Test Method for Determination of Butane Working Capacity of Activated Carbon, approved October 1, 2005 (''ASTM D5228''), IBR approved for § 1060.801.

(c) *SAE International material.* The following standards are available from SAE International, 400 Commonwealth Dr., Warrendale, PA 15096–0001, (877) 606–7323 (U.S. and Canada) or (724) 776–4970 (outside the U.S. and Canada), or *http://www.sae.org:*

(1) SAE J30, Fuel and Oil Hoses, Revised June 1998, IBR approved for § 1060.515(c).

(2) SAE J1527, Marine Fuel Hoses, Revised February 1993, IBR approved for § 1060.515(c).

(3) SAE J2260, Nonmetallic Fuel System Tubing with One or More Layers, Revised November 2004, IBR approved for § 1060.510.

(4) SAE J2659, Test Method to Measure Fluid Permeation of Polymeric Materials by Speciation, Issued December 2003, IBR approved for § 1060.801.

(5) SAE J2996, Surface Vehicle Recommended Practice, Small Diameter Fuel Line Permeation Test Procedure, Issued January 2013, IBR approved for § 1060.515(d).

(d) *California Air Resources Board.* The following documents are available from the California Air Resources Board, 1001 I Street, Sacramento, CA, 95812, (916) 322–2884, or *http://www.arb.ca.gov:*

(1) Final Regulation Order, Article 1, Chapter 15, Division 3, Title 13, California Code of Regulations, July 26, 2004, IBR approved for § 1060.105(e), and 1060.240(e).

(2) [Reserved]

(e) *American Boat and Yacht Council Material.* The following documents are available from the American Boat and Yacht Council, 613 Third Street, Suite 10, Annapolis, MD 21403 or (410) 990–4460 or *http://www.abycinc.org/:*

(1) ABYC H–25, Portable Marine Gasoline Fuel Systems, July 2010, IBR approved for § 1060.105(f).

(2) [Reserved]

PART 1065—ENGINE-TESTING PROCEDURES

■ 104. The authority citation for part 1065 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart A—Applicability and General Provisions

■ 105. Section 1065.10 is amended by revising paragraph (c)(6) to read as follows:

§ 1065.10 Other procedures.

* * * * *

(c) * * *

(6) During the 12 months following the effective date of any change in the provisions of this part 1065 (and 40 CFR part 1066 for vehicle testing), you may use data collected using procedures specified in the previously applicable version of this part 1065 (and 40 CFR part 1066 for vehicle testing). This also applies for changes to test procedures specified in the standard-setting part to the extent that these changes do not correspond to new emission standards. This paragraph (c)(6) does not restrict the use of carryover certification data otherwise allowed by the standard-setting part.

* * * * *

Subpart E—Engine Selection, Preparation, and Maintenance

§ 1065.410 [Amended]

■ 106. Section 1065.410 is amended by removing paragraph (e).

Subpart G—Calculations and Data Requirements

■ 107. Section 1065.610 is amended by republishing paragraph (a)(1)(vi), adding paragraph (a)(1)(vii), and removing paragraph (a)(1)(viii) to read as follows:

§ 1065.610 Duty cycle generation.

* * * * *

(a) * * *

(1) * * *

(vi) Determine the lowest and highest engine speeds corresponding to the value calculated in paragraph (a)(1)(v) of this section, using linear interpolation as appropriate. Calculate f_{ntest} as the average of these two speed values.

(vii) The following example illustrates a calculation of f_{ntest}:

$P_{max} = 230.0$

($f_{n1} = 2360$, $P_1 = 222.5$, $f_{nnorm1} = 1.002$, $P_{norm1} = 0.9675$)

($f_{n2} = 2364$, $P_2 = 226.8$, $f_{nnorm2} = 1.004$, $P_{norm2} = 0.9859$)

($f_{n3} = 2369$, $P_3 = 228.6$, $f_{nnorm3} = 1.006$, $P_{norm3} = 0.9940$)

($f_{n4} = 2374$, $P_4 = 218.7$, $f_{nnorm4} = 1.008$, $P_{norm4} = 0.9508$)

Sum of squares = $(1.002^2 + 0.9675^2) = 1.94$

Sum of squares = $(1.004^2 + 0.9859^2) = 1.98$

Sum of squares = $(1.006^2 + 0.9940^2) = 2.00$

Sum of squares = $(1.008^2 + 0.9508^2) = 1.92$

$$f_{ntest} = \frac{\left(\left(2360 + (2364 - 2360) \cdot \frac{0.98 \cdot 2.0 - 1.94}{1.98 - 1.94}\right) + \left(2369 + (2374 - 2369) \cdot \frac{0.98 \cdot 2.0 - 2.0}{1.92 - 2.0}\right)\right)}{2}$$

$$= \frac{2362.0 + 2371.5}{2} = 2366.8 \text{ r/min}$$

$$f_{npmax} = \frac{\left(\left(2360 + (2364 - 2360) \cdot \frac{0.98 \cdot 230.0 - 222.5}{226.8 - 222.5}\right) + \left(2369 + (2374 - 2369) \cdot \frac{0.98 \cdot 230.0 - 228.6}{218.7 - 228.6}\right)\right)}{2}$$

$$= \frac{2362.7 + 2370.6}{2} = 2366.7 \text{ r/min}$$

* * * * *

■ 108. Section 1065.650 is amended by revising paragraph (c)(1)(i) to read as follows:

§ 1065.650 Emission calculations.

* * * * *

(c) * * *

(1) * * *

(i) Correct all gaseous emission analyzer concentration readings, including continuous readings, sample bag readings, and dilution air background readings, for drift as described in § 1065.672. Note that you must omit this step where brake-specific emissions are calculated without the drift correction for performing the drift validation according to § 1065.550(b). When applying the initial THC and CH_4 contamination readings according to § 1065.520(f), use the same values for both sets of calculations. You may also use as-measured values in the initial set of calculations and corrected values in the drift-corrected set of calculations as described in § 1065.520(f)(7).

* * * * *

Subpart H—Engine Fluids, Test Fuels, Analytical Gases and Other Calibration Standards

■ 109. Section 1065.710 is amended by revising paragraph (c), including Table 2 to read as follows:

§ 1065.710 Gasoline.

* * * * *

(c) The specifications of this paragraph (c) apply for testing with neat gasoline. This is sometimes called indolene or E0 test fuel. Gasoline for testing must have octane values that represent commercially available fuels for the appropriate application. Test fuel specifications apply as follows:

TABLE 2 OF § 1065.710—TEST FUEL SPECIFICATIONS FOR NEAT (E0) GASOLINE

Property	Unit	Specification		Reference procedure [1]
		General testing	Low-temperature testing	
Distillation Range:				
Evaporated initial boiling point	°C	24–35[2]	24–36	ASTM D86
10% evaporated		49–57	37–48.	
50% evaporated		93–110	82–101.	
90% evaporated		149–163	158–174.	
Evaporated final boiling point		Maximum, 213	Maximum, 212.	
Hydrocarbon composition:				
Olefins	volume %	Maximum, 10	Maximum, 17.5	ASTM D1319
Aromatics		Maximum, 35	Maximum, 30.4.	
Saturates		Remainder	Remainder.	
Lead	g/liter	Maximum, 0.013	Maximum, 0.013	ASTM D3237
Phosphorous	g/liter	Maximum, 0.0013	Maximum, 0.005	ASTM D3231
Total sulfur	mg/kg	Maximum, 80	Maximum, 80	ASTM D2622
Dry vapor pressure equivalent [3]	kPa (psi)	60.0–63.4 [2,4] (8.7–9.2)	77.2–81.4 (11.2–11.8)	ASTM D5191

[1] ASTM procedures are incorporated by reference in § 1065.1010. See § 1065.701(d) for other allowed procedures.

[2] For testing at altitudes above 1219 m, the specified initial boiling point range is (23.9 to 40.6) °C and the specified volatility range is (52.0 to 55.2) kPa ((7.5 to 8.0) psi).

[3] Calculate dry vapor pressure equivalent, *DVPE,* based on the measured total vapor pressure, p_T, in kPa using the following equation: *DVPE* (kPa) = $0.956 \cdot p_T - 2.39$ or *DVPE* (psi) = $0.956 \cdot p_T - 0.347$. *DVPE* is intended to be equivalent to Reid Vapor Pressure using a different test method.

[4] For testing unrelated to evaporative emissions, the specified range is (55.2 to 63.4) kPa ((8.0 to 9.2) psi).

* * * * *

PART 1066—VEHICLE–TESTING PROCEDURES

■ 110. The authority citation for part 1066 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart A—Applicability and General Provisions

■ 111. Section 1066.10 is amended by revising paragraph (c) to read as follows:

§ 1066.10 Other procedures.

* * * * *

(c) *Exceptions.* You may use procedures other than those specified in this part as described in 40 CFR 1065.10(c). All the test procedures noted as exceptions to the specified procedures are considered generically as ''other procedures.'' Note that the terms ''special procedures'' and ''alternate procedures'' have specific meanings; ''special procedures'' are those allowed by 40 CFR 1065.10(c)(2) and ''alternate procedures'' are those allowed by 40 CFR 1065.10(c)(7). If we require you to request approval to use other procedures under this paragraph (c), you may not use them until we approve your request.

Subpart B—Equipment, Measurement Instruments, Fuel, and Analytical Gas Specifications

■ 112. Section 1066.125 is amended by revising paragraph (a)(1) to read as follows:

§ 1066.125 Data updating, recording, and control.

* * * * *

(a) * * *

(1) This paragraph (a)(1) applies where we specify a minimum command and control frequency that is greater than the minimum recording frequency, such as for sample flow rates from a CVS that does not have a heat exchanger. For these measurements, the rate at which you read and interpret the signal must be at least as frequent as the minimum command and control frequency. You may record values at the same frequency, or you may record them as mean values, as long as the frequency of the mean values meets the minimum recording frequency. You must use all read values, either by recording them or using them to calculate mean values. For example, if your system reads and controls the sample flow rate at 10 Hz, you may record these values at 10 Hz, record them at 5 Hz by averaging pairs of consecutive points together, or record them at 1 Hz by averaging ten consecutive points together.

* * * * *

Subpart C—Dynamometer Specifications

■ 113. Section 1066.235 is amended by revising paragraph (c)(1)(i) to read as follows:

§ 1066.235 Speed verification procedure.

* * * * *

(c) * * *

(1) * * *

(i) Set the dynamometer to speed-control mode. Set the dynamometer speed to a value of approximately 4.5 m/s (10 mph); record the output of the frequency counter after 10 seconds. Determine the roll speed, v_{act}, using the following equation:

$$v_{act} = \frac{f \cdot d_{roll} \cdot \pi}{n} \qquad \text{Eq. 1066.235-1}$$

Where:

f = frequency of the dynamometer speed sensing device, accurate to at least four significant figures.

d_{roll} = nominal roll diameter, accurate to the nearest 1.0 mm, consistent with § 1066.225(d).

n = the number of pulses per revolution from the dynamometer roll speed sensor.

Example:

f = 2.9231 Hz = 2.9231 s^{-1}

d_{roll} = 904.40 mm = 0.90440 m

n = 1 pulse/rev

$$v_{act} = \frac{2.9231 \cdot 0.90440 \cdot \pi}{1}$$

v_{act} = 8.3053 m/s

* * * * *

■ 114. Section 1066.255 is amended by revising paragraph (d) to read as follows:

§ 1066.255 Parasitic loss verification.

* * * * *

(d) *Performance evaluation.* Some dynamometers automatically update the parasitic loss curve for further testing. If this is not the case, compare the new parasitic loss curve to the original parasitic loss curve from the dynamometer manufacturer or the most recent parasitic loss curve you programmed into the dynamometer. You may reprogram the dynamometer to accept the new curve in all cases, and you must reprogram the dynamometer if any point on the new curve departs from the earlier curve by more than ±9.0 N (±2.0 lbf) for dynamometers capable of testing vehicles at or below 20,000 pounds GVWR, or ±36.0 N (±8.0 lbf) for dynamometers not capable of testing vehicles at or below 20,000 pounds GVWR.

■ 115. Section 1066.270 is amended by revising paragraph (c)(4) to read as follows:

§ 1066. 270 Unloaded coastdown verification.

* * * * *

(c) * * *

(4) Determine the average coastdown force, F, for each speed and inertia setting for each of the coastdowns performed using the following equation:

$$F = \frac{I \cdot \left(v_{init} - v_{final}\right)}{t} \qquad \text{Eq. 1066.270-1}$$

Where:

F = the average force measured during the coastdown for each speed interval and inertia setting, expressed in lbf · s^2/ft and rounded to four significant figures.

I = the dynamometer's inertia setting, in lbf · s^2/ft.

v_{init} = the speed at the start of the coastdown interval, expressed in ft/s to at least four significant figures.

v_{final} = the speed at the end of the coastdown interval, expressed in ft/s to at least four significant figures.
t = coastdown time for each speed interval and inertia setting, accurate to at least 0.01 s.

Example:
I = 2000 lbm = 62.16 lbf · s²/ft
v_{init} = 25 mph = 36.66 ft/s
v_{final} = 15 mph = 22.0 ft/s
t = 5.00 s

$$F = \frac{62.16 \cdot (36.66 - 22.0)}{5.00}$$

F = 182.2 lbf

* * * * *

Subpart D—Coastdown

■ 116. Section 1066.301 is revised to read as follows:

§ 1066.301 Overview of road-load determination procedures.

(a) The procedures described in this subpart are used to determine the road-load target coefficients (A, B, and C) for the simulated road-load equation in § 1066.210(d)(3).

(b) The general procedure for determining road-load force is performing coastdown tests and calculating road-load coefficients. This procedure is described in SAE J1263 and SAE J2263 (incorporated by reference in § 1066.1010). This subpart specifies certain deviations from those procedures for certain applications.

(c) Use good engineering judgment for all aspects of road-load determination. For example, minimize the effects of grade by performing coastdown testing on reasonably level surfaces and determining coefficients based on average values from vehicle operation in opposite directions over the course.

■ 117. Section 1066.305 is revised to read as follows:

§ 1066.305 Procedures for specifying road-load forces for motor vehicles at or below 14,000 pounds GVWR.

(a) For motor vehicles at or below 14,000 pounds GVWR, develop representative road-load coefficients to characterize each vehicle covered by a certificate of conformity. Calculate road-load target coefficients by performing coastdown tests using the provisions of SAE J2263 (incorporated by reference in § 1066.1010). This protocol establishes a procedure for determination of vehicle road load force for speeds between 115 and 15 km/h (71.5 and 9.3 mi/h); the final result is a model of road-load force (as a function of speed) during operation on a dry, level road under reference conditions of 20 °C, 98.21 kPa, no wind, no precipitation, and the transmission in neutral. You may use other methods that are equivalent to SAE J2263, such as equivalent test procedures or analytical modeling, to characterize road load using good engineering judgment. Determine dynamometer settings to simulate the road-load profile represented by these road-load target coefficients as described in § 1066.315. Supply representative road-load forces for each vehicle at speeds above 15 km/hr (9.3 mph), and up to 115 km/hr (71.5 mph), or the highest speed from the range of applicable duty cycles.

(b) For cold temperature testing described in subpart H of this part, determine road-load target coefficients using one of the following methods:

(1) You may perform coastdown tests or use other methods to characterize road load as described in paragraph (a) of this section based on vehicle operation at a nominal ambient temperature of −7 °C (20 °F).

(2) You may multiply each of the road-load target coefficients determined using the procedures described in paragraph (a) of this section by 1.1 to approximate a 10 percent decrease in coastdown time for the test vehicle.

Subpart E—Preparing Vehicles and Running an Exhaust Emission Test

■ 118. Section 1066.410 is amended by revising paragraph (b) introductory text to read as follows:

§ 1066.410 Dynamometer test procedure.

* * * * *

(b) Place the vehicle onto the dynamometer without starting the engine (for any test cycles) or drive the vehicle onto the dynamometer (for hot-start and hot-running cycles only) and position a fan that directs cooling air to the vehicle during dynamometer operation as described in this paragraph (b). This generally requires squarely positioning the fan in front of the vehicle and directing the airflow to the vehicle's radiator. Use good engineering judgment to design and configure fans to cool the test vehicle in a way that properly simulates in-use operation, consistent with the specifications of § 1066.105. Except for the following special cases, use a road-speed modulated fan meeting the requirements of § 1066.105(c)(2) that is placed within 90 cm of the front of the vehicle and ensure that the engine compartment cover (*i.e.,* hood) is closed:

* * * * *

■ 119. Section 1066.420 is amended by revising paragraph (b) to read as follows:

§ 1066.420 Test preparation.

* * * * *

(b) For vehicles above 14,000 pounds GVWR with compression-ignition engines, verify the amount of nonmethane hydrocarbon contamination as described in 40 CFR 1065.520(f).

* * * * *

Subpart F—Electric Vehicles and Hybrid Electric Vehicles

■ 120. Section 1066.501 is amended by revising paragraphs (a)(2)(ii) and (iii) to read as follows:

§ 1066.501 Overview.

* * * * *

(a) * * *

(2) * * *

(ii) We may approve the use of the alternate End-of-Test criterion in Section 3.9.1 of SAE J1711 for charge-depleting tests and the Net Energy Change correction in Appendix C of SAE J1711 for charge-sustaining tests if the specified criterion and correction are insufficient or inappropriate.

(iii) For charge-sustaining tests Appendix C of SAE J1711 may be used to correct final fuel economy values, CO_2 emissions, and carbon-related exhaust emissions, but may not be used to correct measured values for criteria pollutant emissions.

* * * * *

Subpart G—Calculations

■ 121. Section 1066.605 is amended by revising paragraphs (c)(5) and (c)(6) to read as follows:

§ 1066.605 Mass-based and molar-based exhaust emission calculations.

* * * * *

(c) * * *

(5) Correct all gaseous concentrations for dilution air background as described in § 1066.610.

(6) Correct NO_X emission values for intake-air humidity as described in § 1066.615.

* * * * *

■ 122. Section 1066.615 is revised to read as follows:

§ 1066.615 NO_X intake-air humidity correction.

You may correct NO_X emissions for intake-air humidity as described in this section if the standard-setting part allows it. See § 1066.605(c) for the proper sequence for applying the NO_X intake-air humidity correction.

(a) For vehicles at or below 14,000 pounds GVWR, apply a correction for vehicles with reciprocating engines operating over specific test cycles as follows:

(1) Calculate a humidity correction using a time-weighted mean value for ambient humidity over the test interval. Calculate absolute ambient humidity, *H,* using the following equation:

$$H = \frac{1000 \cdot M_{\mathrm{H2O}} \cdot p_{\mathrm{d}} \cdot RH\%}{M_{\mathrm{air}} \cdot \left(p_{\mathrm{atmos}} - p_{\mathrm{d}} \cdot RH\%\right)} \qquad \text{Eq. 1066.615-1}$$

Where:

M_{H2O} = molar mass of H_2O.

p_{d} = saturated vapor pressure at the ambient dry bulb temperature.

RH = relative humidity of ambient air

M_{air} = molar mass of air.

p_{atmos} = atmospheric pressure.

Example:

M_{H2O} = 18.01528 g/mol

p_{d} = 2.93 kPa

RH = 37.5%

M_{air} = 28.96559 g/mol

p_{atmos} = 96.71 kPa

$$H = \frac{1000 \cdot 18.01528 \cdot 2.93 \cdot 37.5 \cdot 0.01}{28.96559 \cdot \left(96.71 - 2.93 \cdot 37.5 \cdot 0.01\right)} = 7.14741 \text{ g } H_2O \text{ vapor/kg dry air}$$

(2) Use the following equation to correct measured concentrations to a reference condition of 10.71 grams H_2O vapor per kilogram of dry air for the FTP, US06, LA–92, SC03, and HFET test cycles:

$$x_{\mathrm{NOxcor}} = x_{\mathrm{NOx}} \cdot \frac{H_{\mathrm{s}}}{1 - 0.0329 \cdot \left(H - 10.71\right)} \qquad \text{Eq. 1066.615-2}$$

Where:

χ_{NOx} = measured NO_X emission concentration in the sample, after dry-to-wet and background corrections.

H_{s} = humidity scale. Set = 1 for FTP, US06, LA–92, and HFET test cycles. Set = 0.8825 for the SC03 test cycle.

H = ambient humidity, as determined in paragraph (a)(1) of this section.

Example:

H = 7.14741 g H_2O vapor/kg dry air time weighted over the FTP test cycle

χ_{NOx} = 1.21 ppm

$$x_{\mathrm{NOxcor}} = 1.21 \cdot \frac{1}{1 - 0.0329 \cdot \left(7.14741 - 10.71\right)} = 1.08305 \text{ ppm}$$

(b) For vehicles above 14,000 pounds GVWR, apply correction factors as described in 40 CFR 1065.670.

■ 123. Section 1066.635 is amended by adding paragraph (c)(6) to read as follows:

§ 1066.635 NMOG determination.

* * * * *

(c) * * *

(6) For PHEVs, you may determine NMOG based on testing over one full UDDS using Eq. 1066.635–3.

* * * * *

Subpart H—Cold Temperature Test Procedures

■ 124. Section 1066.701 is amended by revising paragraph (a) to read as follows:

§ 1066.701 Applicability and general provisions.

(a) The procedures of this part 1066 may be used for testing at any ambient temperature. Section 1066.710 describes the provisions that apply for testing vehicles at a nominal temperature of −7 °C (20 °F); these procedures apply for motor vehicles as described in 40 CFR part 86, subpart S, and 40 CFR part 600. For other vehicles, see the standard-setting part to determine if your vehicle is required to meet emission standards outside the normal (20 to 30) °C ((68 to 86) °F) temperature range.

* * * * *

■ 125. Section 1066.710 is amended by revising paragraph (c) to read as follows:

§ 1066.710 Cold temperature testing procedures for measuring CO and NMHC emissions and determining fuel economy.

* * * * *

(c) *Heater and defroster.* During the test, operate the vehicle's interior climate control system with the heat on and set to primarily defrost the front window. Turn air conditioning off. You may not use any supplemental auxiliary heat during this testing. You may set the heater to any temperature and fan setting during vehicle preconditioning.

(1) *Manual control.* Unless you rely on automatic control as specified in paragraph (c)(2) of this section, take the following steps to control heater settings:

(i) Set the climate control system as follows before the first acceleration (t=20 s), or before starting the vehicle if the climate control system allows it:

(A) *Temperature.* Set controls to maximum heat. For automatic control systems running in manual mode, set the heater control to 72 °F or higher.

(B) *Fan speed.* Set the fan speed to full off or the lowest available speed if a full off position is not available.

(C) *Airflow direction.* Direct airflow to the front window (window defrost mode).

(D) *Air source.* If independently controllable, set the system to draw in outside air.

(ii) At the second idle of the test cycle, which occurs 125 seconds after the start of the test, set the fan speed to maximum. Complete by 130 seconds after the start of the test. Leave temperature and air source settings unchanged.

(iii) At the sixth idle of the test interval, which occurs at the deceleration to zero miles per hour 505

seconds after the start of the test, set the fan speed to the lowest setting that maintains air flow. Complete these changes by 510 seconds after the start of the test. You may use different vent and fan speed settings for the remainder of the test. Leave the temperature and air source settings unchanged.

(2) *Automatic control.* For vehicles with automatic control systems running in automatic mode, set the temperature to 72 °F and the air flow control to the front window defrost mode for the whole test.

(3) *Multiple-zone systems.* For vehicles that have separate driver and passenger controls or separate front and rear controls, you must set all temperature and fan controls as described in paragraphs (c)(1) and (2) of this section, except that rear controls need not be set to defrost the front window.

(4) *Alternative test procedures.* We may approve the use of other settings under 40 CFR 86.1840 if a vehicle's climate control system is not compatible with the provisions of this section.

* * * * *

Subpart I—Exhaust Emission Test Procedures for Motor Vehicles

■ 126. Section 1066.801 is amended by revising paragraph (c)(2) and Figure 1 in paragraph (e) to read as follows:

§ 1066.801 Applicability and general provisions.

* * * * *

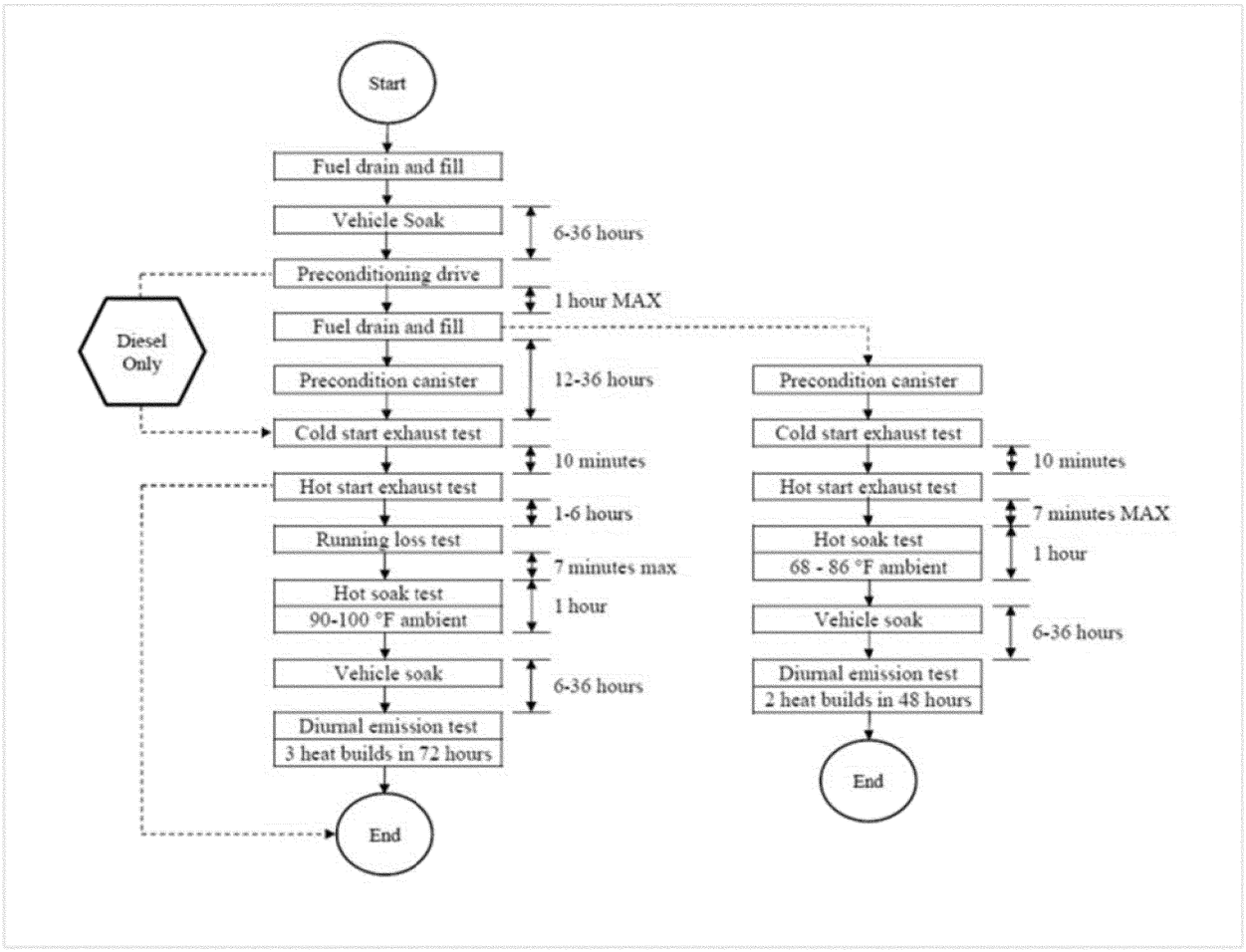
(c) * * *

(2) The Supplemental Federal Test Procedure (SFTP) measures the emission effects from aggressive driving and operation with the vehicle's air conditioner. The SFTP is based on a composite of three different test elements. In addition to the FTP, vehicles generally operate over the US06 and SC03 driving schedules as specified in paragraphs (g) and (h) of Appendix I of 40 CFR part 86, respectively. In the case of heavy-duty vehicles above 10,000 pounds GVWR and at or below 14,000 pounds GVWR, SFTP testing involves additional driving over the Hot LA–92 driving schedule as specified in paragraph (c) of 40 CFR part 86, Appendix I, instead of the US06 driving schedule. Note that the US06 driving schedule represents about 8.0 miles of relatively aggressive driving; the SC03 driving schedule represents about 3.6 miles of urban driving with the air conditioner operating; and the hot portion of the LA–92 driving schedule represents about 9.8 miles of relatively aggressive driving for commercial trucks. See § § 1066.815 and 1066.820.

* * * * *

(e) * * *

Figure 1 of §1066.801 —FTP test sequence



■ 127. Section 1066.815 is amended by revising paragraphs (d)(2)(ii) and (iii) to read as follows:

§ 1066.815 Exhaust emission test procedures for FTP testing.

* * * * *

(d) * * *

(2) * * *

(ii) Repeat the steps in paragraph (d)(1)(ii) of this section. Operate the vehicle over the first 505 seconds of the UDDS. For tests that do not include bag 4 operation, turn off the engine and simultaneously stop all hot-start sampling and recording, including background sampling, and any integrating devices at the end of the deceleration scheduled to occur 505 seconds into the hot-start UDDS.

(iii) To include bag 4 measurement, operate the vehicles over the remainder of the UDDS and conclude the testing as described in paragraphs (d)(1)(iii) and (iv) of this section.

* * * * *

■ 128. Section 1066.831 is amended as follows:

■ a. By revising paragraph (b)(3)(ii)(D).

■ b. By adding paragraph (b)(3)(ii)(G).

■ c. By revising paragraphs (e)(2)(i) and (iii).

§ 1066.831 Exhaust emission test procedures for aggressive driving.

* * * * *

(b) * * *

(3) * * *

(ii) * * *

(D) US06 driving schedule or, for heavy-duty vehicles at or below 10,000 pounds GVWR with a power-to-weight ratio at or below 0.024 hp/lbm, just the highway portion of the US06 driving schedule.

* * * * *

(G) The Hot LA–92 driving schedule.

* * * * *

(e) * * *

(2) * * *

(i) For heavy-duty vehicles above 10,000 pounds GVWR, operate the vehicle over the Hot LA–92 driving schedule.

* * * * *

(iii) Non-MDPV heavy-duty vehicles shall be tested at their adjusted loaded vehicle weight as described in 40 CFR 86.1816.

* * * * *

■ 129. Section 1066.835 is amended by revising paragraph (e)(2) to read as follows:

§ 1066.835 Exhaust emission test procedure for SC03 emissions.

* * * * *

(e) * * *

(2) *Vehicle frontal air flow.* Verify that the fan configuration meets the requirements of § 1066.105(c)(5).

* * * * *

■ 130. Section 1066.845 is amended by revising paragraphs (b) and (e)(2) and adding paragraph (e)(3) to read as follows:

§ 1066.845 AC17 air conditioning efficiency test procedure.

* * * * *

(b) *Test cell.* Operate the vehicle in a test cell meeting the specifications described in § 1066.835(e). You may add airflow up to a maximum of 4 miles per hour during engine idling and when the engine is off if that is needed to meet ambient temperature or humidity requirements.

* * * * *

(e) * * *

(2) For manual systems, select A/C mode, set the temperature to full cold and ''maximum'', set airflow to ''recirculate'' (if so equipped), and select the highest fan setting. During the first idle period of the SC03 driving schedule (between 186 and 204 seconds), reduce the fan speed setting to nominally 50% of maximum fan speed, set airflow to ''fresh air'' (if so equipped), and adjust the temperature setting to target a temperature of 55 °F (13 °C) at the dashboard air outlet. Maintain these settings for the remainder of the test. You may rely on prior temperature measurements to determine the temperature setting; however, if the system is unable to meet the 55 °F (13 °C) target, you may instead set airflow to ''fresh air'' and temperature to full cold. If the vehicle is equipped with technology that defaults to recirculated air at ambient temperatures above 75 °F (22 °C), that technology should remain enabled throughout the test; this may mean not setting the airflow to ''recirculate'' at the start and not setting the airflow to ''fresh air'' during the first idle period of the SC03 driving schedule. Except as specified in paragraph (e)(3) of this section, use good engineering judgment to apply the settings described in this paragraph (e)(2) equally throughout the vehicle if there are separate controls for different zones (such as rear air conditioning).

(3) If the air conditioning system is designed with parameters that switch back to a default setting at key-off, perform testing in that default condition. If the air conditioning system includes any optional equipment or user controls not addressed in this paragraph (e), the manufacturer should ask us for preliminary approval to determine the appropriate settings for testing.

* * * * *

Subpart J—Evaporative Emission Test Procedures

■ 131. Section 1066.985 is amended by revising paragraph (d)(9) to read as follows:

§ 1066.985 Fuel storage system leak test procedure.

* * * * *

(d) * * *

(9) Repeat the test described in this paragraph (d) for each access point described in the application for certification. Use each test result (without averaging) to determine whether the vehicle passes the leak standard.

* * * * *

Subpart K—Definitions and Other Reference Material

■ 132. Section 1066.1001 is amended by adding a definition for ''Hot LA–92'' in alphabetical order to read as follows:

§ 1066.1001 Definitions.

* * * * *

Hot LA–92 means the first 1435 seconds of the LA–92 driving schedule.

* * * * *

■ 133. Section 1066.1005 is amended by revising paragraph (h) to read as follows:

§ 1066.1005 Symbols, abbreviations, acronyms, and units of measure.

* * * * *

(h) *Prefixes.* This part uses the following prefixes to define a quantity:

Symbol	Quantity	Value
n	nano	10^{-9}
μ	micro	10^{-6}
m	milli	10^{-3}
c	centi	10^{-2}
k	kilo	10^{3}
M	mega	10^{6}

■ 134. Section 1066.1010 is amended by revising paragraph (b)(1) to read as follows:

§ 1066.1010 Incorporation by reference.

* * * * *

(b) * * *

(1) SAE J1263, Road Load Measurement and Dynamometer Simulation Using Coastdown Techniques, revised March 2010, IBR approved for §§ 1066.301(b) and 1066.310(b).

* * * * *

[FR Doc. 2015–02846 Filed 2–18–15; 8:45 am]

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Part IV

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Removing the Oregon Chub From the Federal List of Endangered and Threatened Wildlife; Final Rule

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R1–ES–2014–0002; FXES11130900000C6–156–FF09E42000]

RIN 1018–BA28

Endangered and Threatened Wildlife and Plants; Removing the Oregon Chub From the Federal List of Endangered and Threatened Wildlife

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), are removing the Oregon chub (*Oregonichthys crameri*) from the Federal List of Endangered and Threatened Wildlife. This determination is based on a thorough review of the best available scientific and commercial information, which indicates that the Oregon chub has recovered and no longer meets the definition of an endangered species or a threatened species under the Endangered Species Act of 1973, as amended (Act). Our review of the status of this species shows that the threats to this species have been eliminated or reduced and populations are stable so that the species is not currently, and is not likely to again become, a threatened species within the foreseeable future in all or a significant portion of its range. This rule also removes the currently designated critical habitat for the Oregon chub throughout its range.

DATES: This rule is effective on March 23, 2015.

ADDRESSES: This final rule and the post-delisting monitoring plan are available on the Internet at *http://www.regulations.gov* at Docket Number FWS–R1–ES–2014–0002. Comments and materials received, as well as supporting documentation used in the preparation of this rule, will be available for public inspection, by appointment, during normal business hours, at the Service's Oregon Fish and Wildlife Office, 2600 SE 98th Avenue, Portland, OR 97266.

FOR FURTHER INFORMATION CONTACT: Paul Henson, State Supervisor, Oregon Fish and Wildlife Office (see **ADDRESSES**); telephone 503–231–6179; or facsimile (fax) 503–231–6195. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Services (FIRS) at 800–877–8339 for assistance.

SUPPLEMENTARY INFORMATION:

Executive Summary

This document contains: (1) A final rule to remove the Oregon chub from the Federal List of Endangered and Threatened Wildlife, and (2) a notice of availability of a final post-delisting monitoring plan.

Species addressed—The Oregon chub (*Oregonichthys crameri*) is endemic to the Willamette River drainage of western Oregon. Extensive human activities in the Willamette River Basin (*e.g.,* dams, levees, and other human development within the floodplain) have substantially reduced the amount and suitability of habitat for this species. Improved floodplain management and floodplain restoration by multiple conservation partners has reduced and mitigated adverse human-related impacts and resulted in significant improvements to habitat quality and quantity. As a result, threats to the Oregon chub have been largely ameliorated.

The status of the species has improved dramatically due to the discovery of many new populations and successful reintroductions within the species' historical range. At the time of listing in 1993 (58 FR 53800, October 18, 1993), only nine known populations of Oregon chub existed, and few estimates existed of the number of individuals within each population. The locations of these populations represented a small fraction (estimated as 2 percent based on stream miles) of the species' formerly extensive distribution within the Willamette River drainage. In 2013, 77 populations were known to exist throughout the Willamette River drainage. The risk of extinction is substantially reduced as threats have been ameliorated and new populations have been discovered or established.

Purpose of the Regulatory Action—Under the Endangered Species Act of 1973, we may be petitioned to list, delist, or reclassify a species. In 2010, we reclassified the Oregon chub from endangered to threatened (75 FR 21179, April 23, 2010), based on defined criteria in the species recovery plan. In 2014, we proposed to remove the Oregon chub from the Federal List of Endangered and Threatened Wildlife (79 FR 7136, February 6, 2014), based on delisting criteria in the recovery plan and a five factor threats analysis. Threats to this species have been largely ameliorated, with the exception of the effects of climate change, and we do not consider such effects to be a substantial threat to the species at this time. Therefore, we have determined that the Oregon chub no longer meets the definition of an endangered or threatened species under the Act. This final rule removes the Oregon chub from the Federal List of Endangered and Threatened Wildlife. This rule also removes the currently designated critical habitat for the Oregon chub throughout its range.

Basis for the Regulatory Action—Under the Act, a species may be determined to be an endangered species or threatened species because of any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We must consider the same factors in delisting a species. We may delist a species if the best scientific and commercial data indicate the species is neither endangered nor threatened for one or more of the following reasons: (1) The species is extinct; (2) the species has recovered and is no longer threatened or endangered; or (3) the original scientific data used at the time the species was classified were in error.

Threats to the Oregon chub at the time of listing in 1993, included loss of habitat, water quality, and competition with and predation by nonnative fishes. We reviewed all available scientific and commercial information pertaining to the five threat factors in our status review of the Oregon chub, and the results are summarized below.

- We consider the Oregon chub to be ''recovered'' because all substantial threats to this fish have been ameliorated and the species is now abundant and well-distributed throughout much of its presumed historical range.
- All remaining potential threats to the species and its habitat, with the exception of effects related to climate change, have been ameliorated, and many populations exist on public lands managed for fish and wildlife conservation.
- We do not consider effects related to climate change to be a substantial threat to the species at this time, and we do not expect climate change effects to rise to the magnitude or severity such that the species will be likely to become an endangered species within the foreseeable future. While we recognize that climate change effects such as rising air temperatures, reduced snowpack, and increased drought may have potential effects to the Oregon chub and its habitat, the best available information does not indicate that such

effects will significantly impact the Oregon chub or its habitat. We expect that the Oregon chub's susceptibility to climate change effects is low given the wide range of temperature tolerances of Oregon chub, the range and diversity of habitats occupied by the species, and because effects of climate change will be ameliorated by multiple storage dams in the Willamette River Basin.

- We find that delisting the Oregon chub is warranted and thus we are removing this taxon from the Federal List of Endangered and Threatened Wildlife.
- We prepared a final post-delisting monitoring plan to monitor the Oregon chub after delisting to verify that the species remains secure.

Previous Federal Actions

Please refer to the proposed rule to remove the Oregon chub from the Federal List of Endangered and Threatened Wildlife (79 FR 7136, February 6, 2014) for a detailed description of previous Federal actions concerning this species. This document is our final rule to remove the Oregon chub from the Federal List of Endangered and Threatened Wildlife.

Background

This is a final rule to remove the Oregon chub from the Federal List of Endangered and Threatened Wildlife. It is our intent to discuss in this final rule only those topics directly relevant to the removal of the Oregon chub from the Federal List of Endangered and Threatened Wildlife.

Species Information

The following section contains information updated from that presented in the proposed rule to remove Oregon chub from the Federal List of Endangered and Threatened Wildlife, which published in the **Federal Register** on February 6, 2014 (79 FR 7136). A thorough discussion of the species' description, population density, and abundance is also found in the proposed rule.

Species Description and Life History—The Oregon chub is a small minnow in the Cyprinid family. Young of the year range in length from 7 to 32 millimeters (mm) (0.3 to 1.3 inches (in)), and adults grow up to 90 mm (3.5 in) in length (Pearsons 1989, p. 17). The Oregon chub reaches maturity at about 2 years of age (Scheerer and McDonald 2003, p. 78) and in wild populations can live up to 9 years. Oregon chub spawn from May through August and are not known to spawn more than once a year.

The Oregon chub live in slack water off-channel habitats such as beaver (*Castor canadensis*) ponds, oxbows, side channels, backwater sloughs, low-gradient tributaries, and flooded marshes. These habitats usually have little or no water flow, are dominated by silty and organic substrate, and contain considerable aquatic vegetation providing cover for hiding and spawning (Pearsons 1989, p. 27; Markle *et al.* 1991, p. 289; Scheerer and McDonald 2000, p. 1). The average depth of habitat used by the Oregon chub is less than 1.8 meters (m) (6 feet (ft)), and summer water temperatures typically exceed 16 degrees Celsius (61 degrees Fahrenheit). Adult Oregon chub seek dense vegetation for cover and frequently travel in the mid-water column in beaver channels or along the margins of aquatic plant beds. Larval Oregon chub congregate in shallow near-shore areas in the upper layers of the water column, whereas juveniles venture farther from shore into deeper areas of the water column (Pearsons 1989, p. 16). In the winter months, Oregon chub are found buried in the detritus or concealed in aquatic vegetation (Pearsons 1989, p. 16). Fish of similar size school and feed together. In the early spring, Oregon chub are most active in the warmer, shallow areas of aquatic habitats.

The Oregon chub is an obligatory sight feeder (Davis and Miller 1967, p. 32). It feeds throughout the day and stops feeding after dusk (Pearsons 1989, p. 23). The Oregon chub feeds mostly on water column fauna. The diet of Oregon chub adults collected in a May sample consisted primarily of minute crustaceans including copepods, cladocerans, and chironomid larvae (Markle *et al.* 1991, p. 288). The diet of juvenile Oregon chub also consisted of minute organisms such as rotifers and cladocerans (Pearsons 1989, p. 2).

Range—The Oregon chub is endemic to the Willamette River drainage of western Oregon. Historical records show the Oregon chub existed as far downstream as Oregon City and as far upstream as the town of Oakridge. Historically a dynamic, alluvial river, the Willamette and its tributaries created broad floodplains and braided reaches with many side channels, sloughs, and other similar slack-water habitats that support the Oregon chub. The Willamette is typical of river systems on the west side of the Cascade Mountains, with the largest river flows/floods influenced by heavy rain, or rain-on-snow events during the late winter and spring. Snowmelt in the spring typically produces an elongated flow peak in the spring, with decreasing flows throughout summer.

Extensive human activities in the Willamette River Basin have substantially reduced the floodplain habitats and altered water temperatures, as well as the timing, duration, and magnitude of floods in the basin. In the 1950s and 1960s, the U.S. Army Corps of Engineers (USACE) constructed 13 large dams on many of the tributaries of the Willamette River, with the primary purpose of flood risk reduction. Though the Willamette River mainstem and some tributaries remain undammed, miles of levees have also been constructed to further increase agricultural and urban use of these former floodplain areas.

At the time of listing in 1993 (58 FR 53800, October 18, 1993), only nine known populations of Oregon chub existed, and few estimates existed of the number of individuals within each population. The locations of these populations represented a small fraction (estimated as 2 percent based on stream miles) of the species' formerly extensive distribution within the Willamette River drainage.

Abundance and Distribution—Since we listed the Oregon chub as endangered in 1993, the status of the species improved dramatically due to the discovery of many new populations and successful reintroductions within the species' historical range (Scheerer 2007, p. 97). Recently, since we reclassified the Oregon chub to threatened status in 2010 (75 FR 21179, April 23, 2010), a substantial number of new Oregon chub populations were discovered (34 populations) and established through introductions (8 populations). In 2013, the Oregon Department of Fish and Wildlife (ODFW) confirmed the existence of Oregon chub at 77 locations in the Molalla River, Luckiamute River, North and South Santiam River, McKenzie River, Middle Fork and Coast Fork Willamette Rivers, and several tributaries to the mainstem Willamette River downstream of the Coast Fork and Middle Fork Willamette River confluence (Bangs *et al.* 2012, pp. 7–9), including 56 naturally occurring and 21 introduced populations. In 2013, the estimated abundance of 41 Oregon chub populations was greater than 500 fish each, and 23 of these populations exhibited a stable or increasing trend over the last 7 years (Bangs *et al.* 2013, p. 1). The current status of Oregon chub populations meets the goals of the species recovery plan for delisting. The distribution of these sites is shown in Table 1.

TABLE 1—DISTRIBUTION OF OREGON CHUB POPULATIONS MEETING RECOVERY CRITERIA FOR DELISTING

[Bangs *et al.* 2013, pp. 5–8]

Recovery subbasin	Number of populations	Number of large populations (≥500 adult fish)	Number of large populations with stable/increasing abundance trend	Total estimated abundance in subbasin
Santiam	19	13	7	32,714
Mainstem Willamette [1]	26	10	6	71,840
Middle Fork Willamette	28	17	10	54,285
Coast Fork Willamette [2]	4	1	0	824
Total	77	41	23	159,663

[1] Includes McKenzie River subbasin.

[2] The Coast Fork Willamette was identified as a subbasin containing Oregon chub in the recovery plan, but was not identified as a Recovery Area.

Although certain populations of the Oregon chub remain relatively stable from year to year, we observed substantial fluctuations in abundance within populations. For instance, the largest known population at Ankeny National Wildlife Refuge was 21,790 Oregon chub individuals in 2010, and increased to 96,810 in 2011. The population then declined from 82,800 to 47,920 between 2012 and 2013. We observed similar substantial fluctuations in 2013, at the Dunn Wetland and at the Hills Creek Pond populations. While substantial, these fluctuations commonly occur, and appear natural and cyclical. For example, we estimated the population abundance at the Dexter Reservoir Alcove ''PIT1'' site at 140 in 1995. Although annual estimated abundance fluctuated, this population reached 1,440 estimated individuals in 2000. The population then declined to 70 individuals in 2004, and then increased again to reach 1,370 estimated individuals in 2009 (Scheerer *et al.* 2005, p. 2).

A major component of recovery efforts for the Oregon chub was introducing the species into hydrologically isolated habitats that are free from nonnative fish species. Twenty-one new populations were established since 1988 (Table 2). In 2013, 14 introduced populations existed with more than 500 Oregon chub each; 6 of these populations exhibited a stable or increasing 7-year abundance trend (Bangs *et al.* 2013, p. 14).

TABLE 2—INTRODUCED OREGON CHUB POPULATIONS

[Bangs *et al.* 2013, pp. 6–8, 15]

[MS—Mainstem Willamette River, S—Santiam River, CF—Coast Fork Willamette River, and MF—Middle Fork Willamette River]

Site name	Subbasin	Year of first introduction	Number of fish introduced	Estimated abundance (2013)
Dunn Wetland	MS	1997	573	6,439
Finley Display Pond	MS	1998	500	118
Russell Pond	MS	2001	500	133
Finley Cheadle Pond	MS	2002	530	157
Ankeny Willow Marsh	MS	2004	500	47,920
St. Paul Ponds	MS	2008	195	442
Finley-Buford Pond	MS	2011	160	1,009
Murphy Pond	MS	2011	214	1,079
Ellison Pond	MS	2012	110	9
McCrae Reservoir	MS	2013	29	29
Foster Pullout Pond	S	1999	500	3,412
South Stayton Pond	S	2006	439	1,102
North Stayton Pond	S	2010	620	3,724
Budeau South Pond	S	2010	312	2,810
Budeau North Pond	S	2010	310	8,350
Herman Pond	CF	2002	400	184
Sprick Pond	CF	2008	65	608
Wicopee Pond	MF	1992	178	4,375
Fall Creek Spillway Ponds	MF	1996	500	9,107
Haws Enhancement Pond	MF	2009	133	788
Hills Creek Pond	MF	2010	1,127	14,613

Genetic Diversity—The Service's Abernathy Fish Technology Center conducted a genetic analysis on the Oregon chub in 2010 (DeHaan *et al.* 2010, 2012, entire). The analysis examined genetic diversity at 10 microsatellite loci within and among 20 natural and 4 introduced populations. The findings suggest that four genetically distinct groups of the Oregon chub exist, corresponding to the four subbasins of the Willamette River. Levels of genetic diversity were high across the range of the species and equal to, or greater than, other threatened or endangered species of minnows (*i.e.,* cyprinids). In addition, the levels of genetic diversity for Oregon chub were similar to the creek chub *Semotilus atromaculatus,* a widespread and abundant species of minnow (DeHaan 2012, pp. 548–549). Despite fluctuations in population abundance of Oregon chub, genetic diversity remained stable

over a 7- to 8-year interval (three to four Oregon chub generations). Two populations of the 24 evaluated had reduced genetic diversity: A recent bottleneck was observed in the Shetzline population, and the Geren Island population showed evidence of decreasing diversity, possibly due to reductions in the population size from 8,660 to 360 fish between 1997 and 2000 (Bangs *et al.* 2012, p. 109). Currently, both populations are abundant and exhibit an increasing trend in population growth over the last 7 years (Bangs *et al.* 2013, pp. 7–8).

The genetic assessment (DeHaan *et al.* 2010, p. 18; DeHaan *et al.* 2012, p. 545) shows that the current Oregon chub translocation guidelines (ODFW 2006, entire) (which require the donor population from within same subbasin, and a minimum of 500 Oregon chub introduced) are effective in establishing genetically viable populations. Levels of genetic diversity were similar to natural populations in three out of four of the introduced sites studied. Introduced populations from multiple sources had increased diversity and showed evidence of interbreeding. The Dunn wetland population, which had three donor populations, had the highest genetic diversity of all sites (natural and introduced). The Wicopee Pond population had relatively low levels of genetic diversity, which was likely because this population was founded with only 50 Oregon chub originating from 1 source population. These data support introducing greater numbers of individuals and using multiple sources from within a subbasin.

Recovery and Recovery Plan Implementation

Background—Section 4(f) of the Act (16 U.S.C. 1531 *et seq.*) directs us to develop and implement recovery plans for the conservation and survival of endangered and threatened species unless we determine that such a plan will not promote the conservation of the species. Under section 4(f)(1)(B)(ii), recovery plans must, to the maximum extent practicable, include: ''Objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of [section 4 of the Act], that the species be removed from the list.'' However, revisions to the list (adding, removing, or reclassifying a species) must reflect determinations made in accordance with sections 4(a)(1) and 4(b) of the Act. Section 4(a)(1) requires that the Secretary determine whether a species is endangered or threatened (or not) because of one or more of five threat factors. Section 4(b) of the Act requires that the determination be made ''solely on the basis of the best scientific and commercial data available.'' Therefore, recovery criteria should help indicate when we would anticipate that an analysis of the five threat factors under section 4(a)(1) would result in a determination that the species is no longer an endangered species or threatened species because of any of the five statutory factors (see Summary of Factors Affecting the Species).

While recovery plans provide important guidance to the Service, States, and other partners on methods of minimizing threats to listed species and measurable objectives against which to measure progress towards recovery, they are not regulatory documents and cannot substitute for the determinations and promulgation of regulations required under section 4(a)(1) of the Act. A decision to revise the status of or remove a species from the Federal List of Endangered and Threatened Wildlife (50 CFR 17.11) is ultimately based on an analysis of the best scientific and commercial data then available to determine whether a species is no longer an endangered species or a threatened species, regardless of whether that information differs from the recovery plan.

Recovery plans may be revised to address continuing or new threats to the species, as new, substantive information becomes available. The recovery plan identifies site-specific management actions that will achieve recovery of the species, measurable criteria that set a trigger for review of the species' status, and methods for monitoring recovery progress. Recovery plans are intended to establish goals for long-term conservation of listed species and define criteria that are designed to indicate when the substantial threats facing a species have been removed or reduced to such an extent that the species may no longer need the protections of the Act.

There are many paths to accomplishing recovery of a species, and recovery may be achieved without all criteria being fully met. For example, one or more criteria may be exceeded while other criteria may not yet be accomplished. In that instance, we may determine that the threats are minimized sufficiently and the species is robust enough to delist. In other cases, recovery opportunities may be discovered that were not known when the recovery plan was finalized. These opportunities may be used instead of methods identified in the recovery plan. Likewise, information on the species may be discovered that was not known at the time the recovery plan was finalized. The new information may change the extent to which criteria need to be met for recognizing recovery of the species. Recovery of a species is a dynamic process requiring adaptive management that may, or may not, fully follow the guidance provided in a recovery plan.

Recovery Planning—The Oregon Chub Working Group, which was formed prior to listing the species, is a proactive force in improving the conservation status of the Oregon chub. This group of Federal and State agency biologists, academicians, land managers, and others has met each year since 1991, to share information on the status of the Oregon chub, results of new research, and ongoing threats to the species. Additionally, an interagency conservation agreement was established for the Oregon chub in 1992 (ODFW *et al.* 1992). The objectives of the agreement were to: (1) Establish a task force drawn from participating agencies to oversee and coordinate Oregon chub conservation and management actions; (2) protect existing populations; (3) establish new populations; and (4) foster greater public understanding of the species, its status, and the factors that influence it (ODFW *et al.* 1992, pp. 3–5). These objectives are similar to that of the subsequently developed recovery plan.

The Recovery Plan for the Oregon Chub was approved by the Service on September 3, 1998 (Service 1998). The recovery plan outlines recovery criteria to assist in determining when the Oregon chub has recovered to the point that the protections afforded by the Act are no longer needed. These delisting criteria are: (1) 20 populations of at least 500 individuals each are established and maintained; (2) all of these populations must exhibit a stable or increasing trend for 7 years; (3) at least 4 populations (meeting criteria 1 and 2) must be located in each of the 3 subbasins (Mainstem Willamette, Middle Fork Willamette, and Santiam Rivers); and (4) management of these 20 populations must be guaranteed in perpetuity (Service 1998, pp. 27–28).

Recovery Plan Implementation—The status of the Oregon chub has improved dramatically since it was listed as endangered. The improvement is due largely to the implementation of actions identified in the interagency conservation agreement and the Oregon chub recovery plan. These actions include the establishment of additional populations via successful introductions within the species' historical range and the discovery of many new populations as a result of the ODFW's surveys of the basin (Scheerer 2007, p. 97). Over 20

years have passed since the species was listed, and it is now abundant and well-distributed throughout much of its presumed historical range. Currently, there are 77 Oregon chub populations, of which 41 have more than 500 adults (Bangs *et al.* 2013, pp. 5–11). The risk of extinction is substantially reduced as threats have been ameliorated and new populations have been discovered or established. The following criteria for delisting the Oregon chub are met or exceeded as described in the recovery plan:

Delisting Criterion 1: 20 populations of at least 500 individuals are established and maintained. This criterion was exceeded; in 2013, we identified 41 populations with more than 500 adult Oregon chub (see Table 1, above).

Delisting Criterion 2: All of these populations (20) must exhibit a stable or increasing trend for 7 years. This criterion was met. Currently, 23 populations of at least 500 individuals exhibit a stable or increasing trend for 7 years (see Table 1, above).

Delisting Criterion 3: At least four populations (meeting criteria 1 and 2) must be located in each of the three subbasins (Mainstem Willamette, Middle Fork, and Santiam Rivers). This criterion was exceeded in all three subbasins. Six populations in the Mainstem Willamette River subbasin, 10 populations in the Middle Fork Willamette River subbasin, and 7 populations in the Santiam River subbasin meet the first 3 delisting criteria (see Table 1, above).

Delisting Criterion 4: Management of these 20 populations must be guaranteed in perpetuity. The level of management protection recommended in the Oregon chub recovery plan (*i.e.,* management guaranteed into perpetuity) exceeds the requirements of the Act in evaluating whether a species meets the statutory definition of endangered or threatened, as adequate protection for the species in the long term may be provided otherwise. Although we do not have guarantees that all of the populations will be managed into perpetuity, we have a high level of confidence that management of the Oregon chub sites will continue to provide adequate protection for the species in the long term, as further discussed below. Of the 41 sites with populations of more than 500 Oregon chub, 28 of the sites are in public or Tribal ownership, with either active conservation management programs, or practices where land managers consider the needs of the Oregon chub when implementing site management activities. Additionally, eight of the sites with abundant populations of the Oregon chub are on land that is privately owned, either where landowners have signed conservation agreements or are enrolled in our Safe Harbor Program. Three additional sites are on land that is in a permanent easement or ownership by the McKenzie River Trust, a land trust dedicated to conservation of wetland and riparian habitat.

Based on our review of the Oregon chub recovery plan, we conclude that the status of the species has improved due to implementation of recovery activities and the objectives of the recovery plan have been met. Our analysis of whether the species has achieved recovery and thus no longer requires the protections of the Act because it is no longer an endangered or threatened species is based on the five statutory threat factors identified in section 4 of the Act, and discussed below in the Summary of Factors Affecting the Species.

Summary of Comments and Recommendations

In the proposed rule published February 6, 2014 (79 FR 7136), we requested that all interested parties submit written comments on the proposal by April 7, 2014. We also contacted appropriate Federal and State agencies, scientific experts and organizations, and other interested parties and invited them to comment on the proposal. The Service hosted a media event with local and national news coverage announcing the proposed rule on February 4, 2014. We did not receive any requests for a public hearing.

During the comment period for the proposed rule, we received five comment letters (three from peer reviewers, one from the ODFW, and one from the public) directly addressing the proposed removal of the Oregon chub from the Federal List of Endangered and Threatened Wildlife. All substantive information provided during the comment period is either incorporated directly into this final determination or is addressed below. The following section summarizes issues and information we consider to be substantive from peer review and public comments, and provides our responses.

Peer Review

In accordance with our policy, ''Notice of Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities,'' which was published on July 1, 1994 (59 FR 34270), we solicited expert opinion on the proposed rule and the draft post-delisting monitoring plan from three knowledgeable independent individuals with scientific expertise that included familiarity with Oregon chub and its habitat, biological needs, recovery efforts, and threats. We received responses from all three peer reviewers. Issues and information provided by the peer reviewers are summarized in the *Peer Reviewer Comments* section, and where they overlap with similar issues identified by the public, they are included in the *Public Comments* section.

Peer Reviewer Comments

Comment (1): Two peer reviewers suggested that the lower bounds of the confidence intervals should be used to determine the number of populations meeting Delisting Criterion #1.

Our response: The species' recovery plan does not define the method to determine population size for Delisting Criterion #1. The ODFW uses a single-sample mark-recapture model, also called an adjusted Petersen estimate, to estimate population abundance (Bangs *et al.* 2013, p. 5). This method is supported in the literature (Seber 1973, pp. 59–60, Ricker 1975, pp. 75–79), and demonstrates reliable estimates for sampling conditions similar to what ODFW experiences monitoring Oregon chub. The ODFW also demonstrates the reliability in its population abundance estimates by providing a 95 percent confidence interval (Bangs *et al.* 2013, pp. 9–12). The calculation of the confidence interval is highly influenced by the sample size; a narrower interval requires sampling more individuals (Seber 1973, p. 61). Thus, in small populations, greater sampling effort would be required to demonstrate if a population met Delisting Criterion #1 if the lower bound was used, thus exposing more individuals to the risk of trapping or handling mortality. We do not agree with the reviewer's suggestion to use the lower bound of the 95 percent confidence interval, as this method exposes individuals in small populations to greater risk of mortality than the method used by the ODFW.

Comment (2): One peer reviewer asked why the Coast Fork Willamette Oregon chub populations were not mentioned under Delisting Criterion #3.

Our response: Under the recovery plan for Oregon chub, the Coast Fork Willamette was not included in the Mainstem, Santiam, or Middle Fork Willamette recovery areas. The recovery plan states: ''Although a single small population of Oregon chub currently occurs in a fourth subbasin, the Coast Fork, recovery efforts will not focus on this subbasin because surveys have not

revealed any other suitable habitats, and nonnative fish are very common.'' Although we are encouraged that two additional, small populations of Oregon chub were discovered and two introduced populations were established in the Coast Fork subbasin, recovery criteria were met without the inclusion of the populations in this subbasin.

Comment (3): One peer reviewer asked that the Service provide a more current summary of the 2009–2010 Willamette Floodplain Report (Bangs *et al.* 2011a, entire). This peer reviewer also suggested that the delisting rule incorporate 2013 data.

Our response: The Willamette Floodplain Report, with analysis of data from 2009–2012, is currently in preparation by the ODFW, and is expected to be available late spring 2015 at the earliest. As such, we are using the best available information at this time. We agree with the second part of this comment, and updated the rule to include the 2013 data.

Public Comments

Comment (4): One commenter stated that the Service did not adequately consider effective population size in the decision to delist the Oregon chub. The commenter stated that the general rule for short-term (50) and long-term (500) effective population size is not appropriate, as an effective population size of 500 individuals does not sufficiently reduce extinction risk. The commenter stated that determining a minimum viable population based on effective population size should include additional factors, such as environmental and demographic stochasticity, spatial dispersion, overlapping generations, and synergistic interactions among the risk factors. As an example, the commenter mentioned that the largest population of Oregon chub in the Middle Fork Willamette subbasin is in Hills Creek Pond; the population abundance was estimated at 13,460 individuals in 2012. The commenter noted that this was the total population size and not the effective population size, and was too small to assure viability.

Our response: The minimum viable population is the smallest estimated population size with a high probability of long-term persistence. Minimum viable population factors in risks associated with demographic and environmental stochastic events, and the impacts of inbreeding and limited genetic diversity. The effective population size is the number of breeding individuals in the population that contribute genetic material to the next generation, and can be used to determine the impacts of inbreeding and limited genetic diversity during the analysis of the minimum viable population. The recovery criteria in the recovery plan (Service 1998) do not require measuring effective population sizes for Oregon chub. At the time the recovery plan was written, the Service used the best available science to set the recovery criterion abundance threshold at 500 adult fish per population. This threshold is based on the total adult population size, not effective population size, and takes into account effects of limited genetic diversity and inbreeding associated with small population size and the risk associated with stochastic events.

Jamieson and Allendorf (2012, p. 583) suggested that, at a minimum, an effective population size of 500 individuals is needed for conservation of endangered species, including the potential impacts of stochastic events on conservation genetics. Jamieson and Allendorf (2012, p. 580) suggested an effective population size of 500 individuals is the total for all populations of a species, and not the size of individual populations. The total Oregon chub population size in 2013 was approximately 160,000 adult fish (Bangs *et al.* 2013, pp. 6–9).

DeHaan (2012, p. 543) determined effective population size for three isolated Oregon chub populations as part of a genetic analysis of the species. While these isolated populations represent a worst-case scenario for negative genetic effects, the study suggested: (1) There was no immediate threat from inbreeding or genetic drift, and (2) many Oregon chub populations have some degree of connectivity to other populations. This study also determined that genetic diversity remains high and stable over time, despite fluctuations in individual population size. Further, the ODFW (Bangs *et al.* 2013, p. 17) documented movement of individual Oregon chub between populations, which provides a mechanism for genetic exchange between populations that will maintain genetic variation (DeHaan 2012, p. 543). Despite the recent genetic analysis (DeHaan 2012, p. 543), the best available information is not sufficient to determine a minimum viable population size for Oregon chub.

In our decision to delist the Oregon chub, we are required to analyze the current or foreseeable threats to the species to determine whether a species meets the definition of endangered or of threatened, based on the best available scientific information. Our analysis includes recent genetic data that demonstrate Oregon chub are not threatened by low genetic diversity. We conclude that the recovery criterion abundance threshold of 500 adult fish per population is adequate, and analyzing the effective population size or determining the minimum viable population is not required in order to assess the status of the species.

Comment (5): One commenter stated that the Service was not conservative in the analysis of population size and must err on the side of caution. The reviewer commented that stochastic events and small population sizes decreases the population viability and increases the extinction risk of Oregon chub. The commenter further stated that the extreme annual variability within individual Oregon chub population sizes suggests considerable risk of extinction, even in locally abundant populations. The commenter mentioned that in addition, population growth is impacted by demographic stochasticity.

Our response: We disagree. The Act does not require that we ''err on the side of caution'' in determining the status of a species; it requires that we determine, based on the best available scientific information, whether a species meets the definition of endangered or of threatened. The Willamette River floodplain where Oregon chub evolved has always been highly dynamic. Oregon chub are extremely well adapted to surviving stochastic events. For instance, Oregon chub habitats have been known to freeze each winter, experience high magnitude flood flows in the spring, and reach in excess of 25 degrees Celsius (77 degrees Fahrenheit) in the summer, yet Oregon chub survive. Oregon chub are now well-distributed throughout their historical range in a variety of habitats, which reduces the risk of effects of severe stochastic events to the species throughout its range. Each habitat is impacted by stochastic effects in different ways. For example, while populations in shallow water habitats with high solar exposure may be impacted by severe hot and dry weather that raises temperatures to unsuitable levels for chub, populations in habitats that are deep and well-shaded may benefit by water warmed to the preferred temperature range for the species. Oregon chub have been documented in new, suitable habitat created by floodplain processes in the McKenzie River subbasin, and voluntary movement of Oregon chub was documented between populations in the Middle Fork Willamette River (Bangs *et al.* 2012, p. 19) and McKenzie River subbasins (Bangs *et al.* 2013, p. 17). These findings demonstrate the ability

of Oregon chub to colonize new habitats, resulting in exchange of genetic material between established populations, thus reducing the potential effects of stochastic events on small populations.

Further, for each ''stable'' population (as defined in the recovery plan), we calculate the coefficient of variation for the past 7 years. If the coefficient of variation is greater than one (in other words, if the variation is greater than the mean abundance), we consider the population ''unstable'' and do not consider that population to meet the recovery criteria. The 20 populations in 2012, and 23 populations in 2013, that met delisting criteria had either a ''stable'' or ''increasing'' abundance trend. This leads us to conclude that the variability in population abundance is not a factor that will impact future survival of these populations, provided the abundance criteria (500 adult fish) is met, because genetic diversity remains high and stable over time, despite fluctuations in individual population size (DeHaan 2012, p. 543). Overall, trend analysis conducted since 1996 demonstrates that the Oregon chub populations are stable and that the concerns raised by the commenter are not affecting Oregon chub recovery and are not expected into the foreseeable future.

Comment (6): One commenter and one peer reviewer suggested including a better description of population trends for Oregon chub populations that are coexisting with nonnative predators. One peer reviewer also suggested that the Service discuss specific predators that may impact Oregon chub, instead of combining all nonnatives, specifically western mosquitofish (*Gambusia affinis*) and largemouth bass (*Micropterus salmoides*). One peer reviewer suggested that the Service include western mosquitofish as a potential predator on larval Oregon chub, and that we include this species in the predation discussion. One commenter recommended that efforts to limit largemouth bass colonization should be discussed in the final rule to delist Oregon chub. The peer reviewer asked that the Service explore alternative management of mosquitoes by using native minnows instead of nonnative western mosquitofish. One commenter stated that the inadequacy of existing regulatory mechanisms to prevent spread of western mosquitofish and largemouth bass into connected watersheds was not adequately analyzed, and should be discussed. Additionally, one peer reviewer recommended that the post-delisting monitoring (PDM) plan focus on specific nonnative species of concern (mosquitofish and largemouth bass).

Our response: The best available data show no relationship between the presence of nonnative fish and Oregon chub population abundance trends (Bangs *et al.* 2013, p. 17). Thirteen of the 23 populations that met delisting criteria with either a stable or increasing abundance trend in 2013 occur with nonnative fish; 1 of the 2 populations that had a declining abundance trend occurs with nonnative fish (Bangs *et al.* 2013, p. 17). Nonnative fish that are thought to have the potential to impact Oregon chub populations through predation and competition include largemouth bass, smallmouth bass (*Micropterus dolomieu*), bluegill (*Lepomis macrochirus*), pumpkinseed sunfish (*Lepomis gibbosus*), warmouth (*Lepomis gulosus*), green sunfish (*Lepomis cyanellus*), yellow perch (*Perca flavescens*), walleye (*Sander vitreus*), black crappie (*Pomoxis nigromaculatus*), white crappie (*Pomoxis annularis*), common carp (*Cyprinus carpio*), brown bullhead (*Ameiurus nebulosus*), yellow bullhead (*Ameiurus natalis*), and western mosquitofish (Markle *et al.* 1991, p. 91). We agree that western mosquitofish are potential predators on larval Oregon chub, and we have included an analysis of their impact in this final rule. While we acknowledge that some of these fish species may represent a larger threat to individual Oregon chub populations than others, we maintain that monitoring should include all nonnative species. We determine in the five factor analysis (see Factors A, C, and E) that the threats of nonnative fish to the Oregon chub have been ameliorated; thus, there is no existing or potential future significant threat that is inadequately addressed through existing regulatory mechanisms (see Factor D). Additionally, a regulatory mechanism is in place to prevent the translocation of nonnative fish. Within the State of Oregon, it is unlawful to transport, release, or attempt to release any live fish into the waters of this State (Oregon Administrative Rules (OAR) 635–007–0600). Abiotic factors such as water flow through connected habitats and variability in water temperature and depth keep largemouth bass and nonnative predators from becoming dominant in these habitats. Through the PDM, the ODFW will continue to monitor Oregon chub populations that are thriving, despite the presence of nonnative fish, to better understand the factors that allow this to occur. While we support efforts to limit the proliferation of nonnative fish in the Willamette River Basin, creating a management action for nonnative fish or addressing vector control guidelines is outside the scope of this rule and the PDM plan.

Comment (7): Two peer reviewers and one public commenter discussed the need to consider the effects of climate change, environmental stochasticity, human population growth, and resulting changes in water availability on the viability and vulnerability of Oregon chub populations and suitable habitats. Primary concerns included effects to Oregon chub from: Extreme climatic variation (including drought effects, effects to instream flows, and increased reservoir drawdown); water temperature increases and reduced cool water refugia; the potential reduction in habitat size and quality; habitat fragmentation; and likely increases in populations of predatory and competitor nonnative fish species.

Our response: The Service reviews the best scientific and commercial information available when conducting a threats analysis. In considering what factors might constitute a threat we must look beyond the mere exposure of the species to the factor to determine whether the exposure causes actual impacts to the species. The mere identification of factors that could negatively impact a species is not sufficient to compel a finding that listing (or maintaining a currently listed species on the Federal Lists of Endangered or Threatened Wildlife or Plants) is appropriate. We require evidence that these factors are operative threats currently acting on the species to the point that the species meets the definition of endangered or of threatened under the Act.

The Service acknowledges that environmental changes could occur over the next several decades due to both climate change effects and human population growth. However, it is difficult to: (1) Predict with any certainty how those changes may influence Oregon chub populations and their habitats in the Willamette Valley, and (2) accurately describe and assess the net effects when considering the potential negative consequences together with the potential positive consequences to Oregon chub populations. Additional information and explanation was added to this final rule in the section on ''Effects Related to Climate Change'' (see Factor A).

Comment (8): One commenter stated that if Oregon chub are delisted, the terms and conditions required under the Service's biological opinion issued under section 7 of the Act to the USACE and other Federal agencies on the

continued operation and maintenance of dams in the Willamette River Basin will no longer be required, thereby removing key protections for the Oregon chub. This commenter also expressed a concern that delisting will eliminate consultation and agency review of actions permitted via the USACE permit program.

Our response: Since 2002, the USACE has implemented minimum dam outflow targets that sustain downstream floodplain habitat, which has reduced the threat of habitat loss for the Oregon chub. These minimum flow targets will continue to be required into the future, even after the Oregon chub is delisted, under existing biological opinions from the Service and National Marine Fisheries Service (NMFS) on the USACE's Willamette Valley Project (Service 2008b, pp. 40–51; NMFS 2008, pp. 2–43 to 2–52), because these biological opinions apply to other listed fish species (Upper Willamette spring chinook salmon (*Oncorhynchus tshawytscha*), Upper Willamette winter steelhead (*Oncorhynchus mykiss*), and bull trout (*Salvelinus confluentus*)). The USACE also has a memorandum of understanding (MOU) with The Nature Conservancy's (TNC) Sustainable Rivers Project, an ongoing collaboration to promote ecologically sustainable flows below USACE dams in the Willamette River Basin (USACE and TNC 2000, 2011; entire). For these reasons, we anticipate that the USACE will continue to meet these minimum flow targets after delisting of the Oregon chub. Also, the acquisition of floodplain habitat for long-term conservation and restoration, including off-channel locations preferred by the Oregon chub, has gained momentum in the Willamette River Basin by a variety of Federal, State, Tribal, local governmental, and nongovernmental agencies, which provides assurances that Oregon chub habitat will continue to be managed for the species. Given the MOU between the USACE and TNC regarding the Sustainable Rivers Project, and the minimum flows required under two existing biological opinions (NMFS 2008, pp. 2–43 to 2–52; Service 2008b, pp. 40–51) for bull trout, Upper Willamette spring chinook, Upper Willamette winter steelhead, and their designated critical habitats, we anticipate that flow management trending towards natural flow regimes below Willamette Project dams will continue to create and rejuvenate off-channel habitats to the benefit of the Oregon chub into the foreseeable future.

The USACE permits in-water work including construction and dredging in navigable waters under section 404 of the Clean Water Act (CWA; 33 U.S.C. 1251 *et seq.*). While we acknowledge that consultation under section 7 of the Act will no longer be required for Oregon chub, the Service will continue to provide comments to the USACE on individual section 404 permits in the Willamette Valley through our authorities under the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*). The USACE routinely sends the Service individual permit applications for our review, and we provide specific comments and recommendations to reduce negative effects to fish and wildlife, including unlisted species. For most section 404 projects, any potential negative impacts to habitat and species are generally short-term. While in-water work has the potential to impact individual Oregon chub populations, this impact for the overall population is considered a low risk because the species is widely distributed across multiple subbasins with many abundant populations. In the past 4 years, we have received approximately 13 such requests to review section 404 permits from the USACE. Of those 13 projects, we found that 9 were not likely to adversely affect Oregon chub and 2 projects only required technical assistance; we completed 1 formal consultation for a river restoration study that only anticipated short-term effects and long-term benefits. The last project was an emergency consultation when the USACE had to take action to maintain water levels in Oregon chub habitat on their property, as the habitat was affected by atypical, unexpected operations necessary for dam safety. The USACE worked with the ODFW to introduce Oregon chub into Hills Creek Pond during the drawdown as a back-up to the Dexter RV Park Pond ''DEX3'' and the Dexter Reservoir Alcove ''PIT1'' populations, in case either population failed during the drawdown.

Comment (9): One commenter stated that there are no regulatory mechanisms to protect Oregon chub habitat in the floodplain habitats that have been acquired for long-term conservation and restoration.

Our response: We disagree. One of the factors identified as a threat to Oregon chub at the time of listing was habitat loss. This threat has been ameliorated by the actions of multiple conservation partners over the last 20 years. In 2010, the Bonneville Power Administration (BPA) and the State of Oregon signed the Willamette River Basin Memorandum of Agreement Regarding Wildlife Habitat Protection and Enhancement (BPA and ODFW 2010, entire). The Agreement established goals for mitigating the effects of the construction, inundation, and operation of the Willamette River Basin Flood Control Projects in the Willamette Valley. Under the terms of the Agreement, the State of Oregon and the BPA agreed to acquire at least an additional 16,880 acres (ac) (6,831 hectares (ha)) of wildlife mitigation property to protect 26,537 ac (10,739 ha) (or more) by the end of 2025. Throughout the Willamette River Basin, floodplain properties have been, and will continue to be, acquired. All habitat acquisitions funded by the BPA must include provisions for permanent protections and enforcement of those protections. The acquisition of floodplain habitat for long-term conservation and restoration through these mechanisms provides assurances that Oregon chub habitats will continue to be managed for the species into the foreseeable future.

Summary of Factors Affecting the Species

This section contains updated information and associated analysis from that presented in the proposed rule (79 FR 7136, February 6, 2014). Updated information includes data collected during the 2013 field season (Bangs *et al.* 2013, entire) and additional information requested by peer and public reviewers.

Section 4 of the Act and its implementing regulations (50 CFR part 424) set forth the procedures for listing species, reclassifying species, or removing species from listed status. ''Species'' is defined by the Act as including any species or subspecies of fish or wildlife or plants, and any distinct vertebrate population segment of fish or wildlife that interbreeds when mature (16 U.S.C. 1532(16)). A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We must consider these same five factors in delisting a species. We may delist a species according to 50 CFR 424.11(d) if the best available scientific and commercial data indicate that the species is neither endangered nor threatened for the following reasons: (1) The species is extinct; (2) the species has recovered and is no longer endangered or threatened (as is the case with the Oregon chub); and/or (3) the

original scientific data used at the time the species was classified were in error.

A recovered species is one that no longer meets the Act's definition of endangered or of threatened. Determining whether the status of a species has improved to the point that it can be delisted or downlisted requires consideration of whether the species is endangered or threatened because of the same five categories of threats specified in section 4(a)(1) of the Act. For species that are already listed as endangered or threatened, this analysis of threats is an evaluation of both the substantial threats currently facing the species and the threats that are reasonably likely to affect the species in the foreseeable future following the delisting or downlisting and the removal or reduction of the Act's protections.

A species is an ''endangered species'' for purposes of the Act if it is in danger of extinction throughout all or a ''significant portion of its range'' and is a ''threatened species'' if it is likely to become endangered within the foreseeable future throughout all or a ''significant portion of its range.'' The word ''range'' in the significant portion of its range phrase refers to the range in which the species currently exists. For the purposes of this analysis, we will first evaluate whether the currently listed species, the Oregon chub, should be considered endangered or threatened throughout all its range. Then we will consider whether there are any significant portions of the Oregon chub's range where the species is in danger of extinction or likely to become so within the foreseeable future.

The Act does not define the term ''foreseeable future.'' For the purpose of this rule, we define the ''foreseeable future'' to be the extent to which, given the amount and substance of available data, we can anticipate events or effects, or reliably extrapolate threat trends, such that we reasonably believe that reliable predictions can be made concerning the future as it relates to the status of the Oregon chub. In considering the foreseeable future as it relates to the status of the Oregon chub, we considered the factors affecting the Oregon chub, historical abundance trends, and ongoing conservation efforts.

The following analysis examines all five factors currently affecting, or that are likely to affect, the Oregon chub within the foreseeable future.

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

When the Oregon chub was listed as endangered in 1993, the species was known to exist at nine locations, representing only 2 percent of the species' historical range (Markle 1991, pp. 288–289; Scheerer *et al.* 2007, p. 2; 58 FR 53800, October 18, 1993, p. 53800). The decline in Oregon chub abundance and distribution was attributed to the extensive channelization, dam construction, and chemical contamination that occurred in the Willamette River Basin, particularly from the 1940s through the late 20th century (Pearsons 1989, pp. 29–30).

Since listing, concerted efforts by Federal, State, and local governments and private landowners have greatly reduced the threats to the Oregon chub. For example, the introduction of the Oregon chub into secure habitats has created refugial populations in habitats that are isolated from the threats of habitat loss and invasion by nonnative fishes. Additionally, as explained below, research has expanded our understanding of suitable habitat for the Oregon chub, and increased survey efforts have led to the discovery of many natural populations. Since 2002, the USACE has implemented minimum dam outflow targets that sustain downstream floodplain habitat, which has reduced the threat of habitat loss for the Oregon chub. These minimum flow targets will continue to be required into the future under existing biological opinions from the Service and NMFS on the USACE's Willamette River Basin Project (see description below). The USACE also has a MOU with TNC regarding the Sustainable Rivers Project, an ongoing collaboration to promote ecologically sustainable flows below USACE dams in the Willamette River Basin. For these reasons, we anticipate that the USACE will continue to meet these minimum flow targets after delisting of the Oregon chub. Also, the acquisition of floodplain habitat for long-term conservation and restoration, including off-channel locations preferred by the Oregon chub, has gained momentum in the Willamette River Basin by a variety of Federal, State, Tribal, local governmental and nongovernmental agencies, which provides assurances that Oregon chub habitat will continue to be managed for the species.

Since 1992, the Oregon chub was introduced and established in 21 secure, isolated habitats (Bangs *et al.* 2013, p. 15). These populations contribute to recovery by providing redundancy to the naturally occurring populations, increasing the abundance of the Oregon chub in each recovery area, and providing refugial habitat that is less vulnerable, as compared to connected habitats, to the threats of habitat loss and invasion by nonnative fishes. The majority of Oregon chub individuals occur in populations at these introduction sites. In 2013, we estimated 106,408 Oregon chub in the 21 introduced populations. By contrast, we estimated 53,255 Oregon chub in the 56 naturally occurring populations. Eleven of the introduction sites are in public ownership by Federal and State agencies that manage these sites for conservation of the Oregon chub, and we have no information that suggest these sites would be managed otherwise into the foreseeable future.

The remaining 10 introduction sites are privately owned. Many of these introduction sites were created or restored under the Service's Partners for Fish and Wildlife Program managed by the staff of the Willamette Valley National Wildlife Refuge Complex. Most of these landowners have either signed conservation agreements or are participating in our Safe Harbor Program. In the interest of conserving the Oregon chub, our Safe Harbor Program participants volunteered to allow the introduction of the Oregon chub into ponds on their land, and signed management plans called cooperative agreements, which are designed to protect the species and its habitat. In exchange, the landowners received an incidental take permit that extended an exemption from take prohibitions under section 9 of the Act. If the Oregon chub is delisted, the species will no longer be protected under these take prohibitions and the incidental take permit associated with the safe harbor agreements will no longer be in effect. This means that landowners will no longer be legally bound to protect the species on their property. However, we anticipate, based on their past interest and cooperation in protecting the species, that most or all of these landowners will continue to manage their land for conservation of the Oregon chub into the future as described in their cooperative agreements. We will also seek to extend these agreements beyond their initial 10-year time period and, in the event the property is later sold or transferred, we will work with the future landowners to enroll them in a cooperative agreement.

In 2013, 20 of the 23 populations that met the recovery plan criteria for delisting were located on State, Federal, Tribal, or other property managed for long-term conservation; 3 populations were located on privately owned property. The close knit working relationship with private landowners is extremely important for the recovery of

Oregon chub; 40 percent of all Oregon chub populations exist on privately owned property. We see no reason why the conservation efforts of landowners would cease after delisting, as all efforts have been voluntary. There are an additional 9 recently discovered or introduced populations that exist on public lands with abundances greater than 500 adult Oregon chub, further supporting our determination to delist the species.

In the 2008 5-year review of the status of the Oregon chub (Service 2008a, p. 26), we identified concerns about the ability to achieve recovery due to the focus on managing primarily isolated populations with limited genetic exchange. To reduce threats associated with habitat isolation, we suggested that future recovery efforts should integrate habitat that is connected to the floodplain. Successful efforts to integrate floodplain habitat into Oregon chub recovery were facilitated in part through consultation with several Federal agencies under section 7 of the Act. Specifically, in 2008, the Service and the NMFS completed consultation with the USACE, BPA, and the Bureau of Reclamation under section 7 of the Act on the continued operation and maintenance of 13 large flood-control dams in the Willamette River Basin, collectively known as the Willamette River Basin Project (Willamette Project). The Service's biological opinion considered the Willamette Project's effects to the Oregon chub, the bull trout, and bull trout critical habitat (Service 2008b, entire), while the NMFS' biological opinion considered effects to threatened salmon and steelhead (salmonids) and associated critical habitat (NMFS 2008, entire). The terms and conditions of the Service's biological opinion required the USACE to fund a floodplain study that would increase our understanding of the effects of flow management on connected downstream Oregon chub habitat. The ODFW subsequently pursued opportunities to study these effects and to integrate floodplain habitat in recovery efforts, in part, through funding provided by the USACE under the terms and conditions of the biological opinion.

The floodplain study required by the Willamette Project biological opinion began in 2009 (Bangs *et al.* 2010a, p. 1). Under this study, the ODFW sampled fish assemblages and monitored habitat conditions (*i.e.,* bathymetry, pond volume, percent vegetation, water temperature) in several off-channel habitats in the Middle Fork Willamette River downstream of Dexter Dam in Lowell, Oregon, to Jasper, Oregon (Bangs *et al.* 2010a, pp. 2–4). The ODFW chose the Dexter to Jasper reach of the Middle Fork Willamette River as a study area because several off-channel habitats in this reach were known to be occupied by the Oregon chub, and the majority of the adjacent land is in public ownership and accessible.

The ODFW sampled most of the hydrologically connected, off-channel habitat in this reach and discovered that the Oregon chub also occupied sites previously thought to be unsuitable. These sites contain greater habitat complexity than sites where Oregon chub were previously known to occur. Although these habitats have features such as beaver dams and shallow, inundated benches that were known to provide suitable habitat for Oregon chub, the recently discovered sites also include channels that have frequent connectivity to the adjacent river channel (Bangs 2013, pers. comm.). Frequently connected sites such as these were thought to be unsuitable because these sites were accessible to nonnative fishes that prey upon or compete with the Oregon chub for resources.

The discovery of Oregon chub in these connected sites facilitated a better understanding of the diversity of habitats occupied by Oregon chub, and prompted the ODFW to shift their basin-wide sampling efforts from primarily focusing on isolated habitats or habitats with infrequent river connection to sampling frequently connected, off-channel habitats. They sampled similar habitat in other recovery subbasins and found that Oregon chub also occupied many of these frequently connected habitats. Between 2009 and 2013, the ODFW discovered 34 additional Oregon chub populations throughout the 3 recovery subbasins (Bangs *et al.* 2013, pp. 6–8). In 2013, 14 of the 23 populations that met the delisting criteria were in naturally occurring sloughs, beaver pools, and pond habitats. Fifty-six of the 77 habitats containing Oregon chub were naturally occurring; 21 populations were introduced. In addition, 50 Oregon chub populations are located in habitat that experiences some level of connectivity to the adjacent river channel. The Service has determined that the minimum aquatic area necessary to support a population of at least 500 adult Oregon chub is 500 square meters (m^2) (5,400 square feet (ft^2)) (74 FR 10412, March 10, 2009, p. 10417). Out of the 77 populations, only a single location, Dougren Island Slough, has an aquatic area smaller than 500 m^2 (5,400 ft^2); the site is 400 m^2 (4,300 ft^2) and supported 1,700 adult Oregon chub in 2013.

Several anthropogenic and natural environmental factors, discussed below, may continue to have effects on Oregon chub and its habitat in the foreseeable future. Many of these factors are included in this discussion because the Service previously identified them as threats to the continued existence of the species in the listing and downlisting rules. Additionally, new factors affecting the species are discussed.

Activities Related to the Willamette Project

The Oregon chub occupies 45 connected habitats that are downstream of Willamette Project dams or adjacent to reservoirs; these habitats are influenced by Willamette Project operations. The Willamette Project biological opinions were signed in 2008, and continue until 2023 (NMFS 2008, p. 1–11; Service 2008b, p. 85). In addition to normal operations of the Willamette Project, several actions required under the terms and conditions of the biological opinions may affect Oregon chub populations and habitat in the future.

Temperature and flow augmentation—The USACE is implementing a number of structural and operational changes to alter flows and water temperatures downstream of Willamette Project dams to increase survival of federally listed salmon and steelhead (salmonids). These operational and structural changes have resulted in downstream water temperatures closer to that which existed prior to the construction of the dams (*i.e.,* river temperatures downstream of the reservoirs are now warmer in early summer, and cooler in the late summer and early fall). The USACE also operates to meet mainstem and tributary flow objectives identified in the Willamette Project biological opinion to benefit listed salmonids; these flows also benefit the Oregon chub by sustaining floodplain habitat downstream. In addition, the USACE works with partners in the Willamette River Basin as part of TNC's Sustainable Rivers Project to implement a set of environmental flow objectives designed to improve channel morphology in a manner that will create and sustain new, and improve existing, fish habitat (Gregory *et al.* 2007, p. 11).

The effects of water flow augmentation and temperature normalization on fish communities in off-channel habitat are largely unknown. The ODFW has a monitoring program in place (Bangs *et al.* 2011a, entire) to detect any negative effects on Oregon chub and its habitat. With the delisting of Oregon chub, this monitoring

program, which is detailed in our PDM plan, will continue for several years post-delisting (Service and ODFW 2013, entire). The PDM plan identifies thresholds and responses for detecting and reacting to significant changes in Oregon chub protected habitat, distribution, and persistence. If declines are detected that exceed the thresholds, the Service, in combination with other PDM participants, will investigate causes of these declines and determine if the Oregon chub warrants expanded monitoring, additional research, additional habitat protection, or relisting as an endangered or threatened species under the Act. Additional discussion about temperature and instream flows is presented in the ''Effects of Climate Change'' section (also in Factor A).

Reservoir drawdowns—As required in the NMFS biological opinion for the Willamette Project, the USACE is implementing an annual complete reservoir drawdown of Fall Creek Reservoir on the Middle Fork Willamette River. The biological objectives of the reservoir drawdown are to improve fish passage efficiency and survival of juvenile Chinook salmon migrating out of Fall Creek Reservoir, and to reduce nonnative fish populations inhabiting the Fall Creek Reservoir. This is expected to result in reduced nonnative predation and competition with juvenile Chinook salmon rearing in the reservoir. While reservoir drawdown benefits Chinook salmon, there are potential negative effects to the Oregon chub from sedimentation of Oregon chub habitats.

Willamette River Basin flood control dams inhibit the transport of sediment downstream, causing sedimentation to occur in the reservoirs. During a complete reservoir drawdown, released reservoir water scours the reservoir bed and transports sediment downstream. During the initial Fall Creek Reservoir drawdowns, a massive volume of silt, sand, and debris was flushed, causing sediment deposition to occur in off-channel habitats downstream of the dam. Sampling for Oregon chub populations in the Fall Creek drainage occurred after the first drawdown and three previously undocumented Oregon chub populations were found. The extent to which these populations were affected is unknown because Oregon chub were discovered at these sites after the sedimentation occurred and we cannot determine the area of habitat or number of Oregon chub that existed prior to the sedimentation. Fewer than five Oregon chub were found in each of these three sites after the sedimentation occurred. These sites experienced the accumulation of fine sediments, perhaps beyond typical historical levels, which reduced the amount of habitat available to Oregon chub (Bangs 2013, pers. comm.). However, little sedimentation was observed in the few Oregon chub habitats that occur farther downstream of the confluence of Fall Creek and the Middle Fork Willamette River. Most of the abundant populations of Oregon chub in off-channel habitats of the Middle Fork Willamette River were not affected because they occur upstream of these impacts.

Although partial drawdowns of Willamette Project reservoirs are likely to occur in the near future, they are unlikely to result in large volumes of sediment moving downstream because the water level will remain above the sediment bed and little sediment will be moved. Complete reservoir drawdowns to the extent seen at Fall Creek are not currently planned at other reservoirs. The effects of a complete reservoir drawdown would vary by location; it is difficult to predict what habitat changes may occur downstream. However, any future proposal to implement this scale of drawdown will include extensive coordination and planning among the Service, ODFW, USACE, and other land managers. Additionally, in cooperation with the USACE, we developed monitoring guidance and recommended responses in the event a drawdown is planned (Service and ODFW 2013, pp. 18–19). We do not anticipate that potential negative impacts from reservoir drawdowns will affect the overall status of Oregon chub. Additional discussion about reservoir drawdown is presented in the ''Effects of Climate Change'' section (also in Factor A).

Another concern related to drawdowns is that nonnative predatory fishes are common in reservoir habitats. During a drawdown, these fish are likely transported downstream, where they may invade off-channel habitats. The risks to the Oregon chub associated with nonnative fishes are discussed under Factors C and E, below.

Reservoir water level fluctuations—Fluctuating water levels in Lookout Point Reservoir on the Middle Fork Willamette River may limit the breeding success of the Oregon chub population in Hospital Pond, which provides habitat for the species in a pool connected to the reservoir by a culvert (Service 2008b, p. 160). Between 2001 and 2003, the USACE, which manages Lookout Point Reservoir as part of the Willamette Project, implemented a series of actions to protect the population of Oregon chub in Hospital Pond. The goal was to allow the USACE to manage the water level in Lookout Point Reservoir independently of the water elevation in Hospital Pond. In order to achieve this, they installed a gate on Hospital Pond's outlet culvert and lined the porous berm between the pond and reservoir (Service 2002, pp. 1–11). They also excavated additional areas to create more suitable spawning habitat in the pond (Service 2003, pp. 1–3).

Despite these actions, water elevation in Hospital Pond continues to be influenced by reservoir water levels. Hospital Pond currently supports a large, stable population of the Oregon chub; however, future Willamette Project operations may result in reservoir elevations that are below the levels necessary to inundate the spawning habitat in Hospital Pond (Service 2008b, p. 160). This reduction in spawning habitat may result in limited breeding success for the Oregon chub in Hospital Pond into the foreseeable future. However, the Hospital Pond population is not critical to meeting recovery criteria because additional surveys in the Middle Fork Willamette River subbasin have found that the subbasin has the highest number of Oregon chub populations (29 populations) across the range of the species. Currently, 17 of the Oregon chub sites in this subbasin have abundant (greater than 500 individuals) populations of the Oregon chub. This redundancy of large populations provides additional security to the species in the event that single populations decline.

Inability to meet minimum flow targets—During low water or drought years, the USACE may not be able to meet the seasonal minimum water flow targets established in the Willamette Project biological opinions. Analysis performed by the USACE determined that from 1936 to 1999, low flow and drought conditions occurred 9 percent and 16 percent of the years, respectively (USACE 2007, pp. 2–45). If this occurs in the future, it may have negative effects on Oregon chub habitat downstream through a temporary reduction in pond volume and increased water temperatures. Under the floodplain study, the ODFW mapped the bathymetry (habitat depth) and installed equipment to measure pond elevation, area, volume, and temperature in Oregon chub sites that are influenced by Willamette Project flows. This information was used to determine the effect that low flows may have on the extent of habitat area available to Oregon chub. The USACE has considered these data in managing flows and has a notification process in

place to coordinate with the Service and the ODFW during low water periods before flows are reduced to levels below the minimum flow targets. To date, except for during malfunctions and emergency operations explained below, flows below minimum targets have been of short duration and have not resulted in observable adverse effects to Oregon chub populations (Bangs 2013, pers. comm.). Further, when minimum targets cannot be met, the Service, ODFW, NMFS, and USACE coordinate on a regular basis to discuss reduced flow releases in advance; this coordination allows the Service to weigh in on the magnitude of reductions and mitigate any reductions in flows that may affect Oregon chub populations. This coordination will continue into the future, as required by the two biological opinions, for other listed fish species (Service 2008b, pp. 38–40; NMFS 2008, pp. 2–39 to 2–43).

Willamette Project malfunctions and emergency operations resulting in the USACE not meeting minimum flow targets or necessitating restrictions on reservoir pool elevations have affected Oregon chub habitats. These incidents have been infrequent, but resulted in short-term negative effects on a few Oregon chub populations. For instance, in 2009, two of the three spillway gates at the USACE Big Cliff dam on the North Santiam River failed (Bangs *et al.* 2010b, p. 16). While repairing the gates, the outflow from Big Cliff Dam was reduced to below the minimum summer flow target. Record high air temperatures coincided with the low flow levels. Monitoring during this event detected that three Oregon chub sites downstream were nearly desiccated and fish mortalities were observed. Screened pumps were used to increase the volume of water in the ponds and to reduce water temperatures. The effects of this incident on Oregon chub populations were short-term, and the numbers of Oregon chub in these three populations have either increased or are exhibiting a stable trend (Bangs *et al.* 2013, pp. 6–8).

The minimum flow targets protect not only the Oregon chub, but many other native aquatic species, including listed salmonids. If the Oregon chub is delisted, these minimum flow targets will continue to be required under existing biological opinions from the Service and the NMFS on the Willamette Project for listed bull trout, Chinook salmon, and steelhead. Moreover, the USACE was proactive in implementing recommended flows before the Willamette Project biological opinions were completed (USACE 2007, pp. 3–19). Therefore, we anticipate that the USACE will continue to meet these minimum flow targets after delisting of the Oregon chub, except under infrequent, extreme conditions such as drought.

In 2010, the USACE determined that the condition and reliability of the spillway gates at 13 Willamette Project dams represented an unacceptable risk to public safety (Bangs *et al.* 2011b, p. 16). To mitigate this risk, the USACE proposed implementing pool elevation restrictions at Willamette Project reservoirs to lower than normal levels to support maintenance and repair of the spillway gates. The imposed restrictions affected one population (Dexter Reservoir Alcove ''PIT1'' site) of Oregon chub by reducing the pond below levels critical for Oregon chub survival. The Dexter Reservoir Alcove ''PIT1'' site had filled with sediment over the years and in consultation with the USACE, we determined that removing some of this sediment was the best measure to prevent desiccation of the pond. Prior to removing sediment, the ODFW captured and relocated a total of 1,127 Oregon chub to Hills Creek Pond, a site with perennial flow located on USACE property at Hills Creek Dam. This site is within the historical range of Oregon chub, but at the time was not occupied by the species. The pond site is adjacent to the Middle Fork Willamette River and has historically been managed by USACE staff for wildlife habitat enhancement. The spillway gate repairs were completed, the pool elevation restriction for Dexter Reservoir was lifted in 2011, and the reservoir has returned to normal operations. The Oregon chub population abundance in Dexter Reservoir Alcove ''PIT1'' site and Dexter RV Park Pond ''DEX3'' are both currently stable and contribute towards meeting recovery criteria for delisting (Bangs *et al.* 2013, p. 8). The translocation of Oregon chub into Hills Creek Pond created a large, secure population that is now the largest Oregon chub population within the Middle Fork Willamette River subbasin with an estimated abundance of 14,610 Oregon chub (Bangs *et al.* 2013, p. 8). Additional discussion about minimum flow requirements is presented in the ''Effects of Climate Change'' section (also in Factor A).

Siltation Resulting From Timber Harvest

As previously noted, Oregon chub habitats are generally associated with low gradient floodplain habitats not generally subject to timber harvest activities. However, there are a small number of Oregon chub populations that exist within, or adjacent to, forested landscapes that were, or could be, subject to adverse effects of timber harvest. These adverse effects include siltation (deposition of fine sediment) of stream habitats from ground-disturbing activities involved with standard logging practices. State and private lands in Oregon are subject to water quality as well as fish and wildlife protective measures under the Oregon Forest Practices Act, whereas Federal lands are subject to land and resource management plans that also provide protective guidelines for water quality and fish and wildlife protections. While siltation resulting from timber harvest has not been identified as a significant threat to Oregon chub, there is at least one instance where siltation from timber harvest may have contributed to a decrease in habitat suitability and availability that resulted in a drop in chub abundance.

In the 1990s, timber harvest occurred on private lands upstream of East Fork Minnow Creek. Flood events in the watershed in 1996, 1997, and 1998 caused accelerated siltation into East Fork Minnow Creek Pond, a pond downstream that is occupied by Oregon chub, and over half of the habitat was lost (Scheerer 2009, pers. comm.). The Oregon chub population in East Fork Minnow Creek Pond declined dramatically following these events (Scheerer 2009, pers. comm.). In 2010, the Oregon Department of Transportation excavated accumulated sediment in the pond and created a pool that will provide a buffer from the effects of future siltation. The population subsequently rebounded and it now meets the delisting criterion for a stable or increasing trend over 7 years.

In 2012, timber harvest on private land occurred upstream of an Oregon chub site on the William L. Finley National Wildlife Refuge (Finley NWR) known as Gray Creek Swamp. Due to concerns about potential sedimentation to Oregon chub habitat in Gray Creek Swamp, we negotiated with the landowner who agreed to increase the width of the no-cut riparian buffer along the streams within the harvest area to reduce the risk of siltation in Oregon chub habitat downstream. Siltation of this Oregon chub habitat following harvest has not been observed, but the site will continue to be monitored by the ODFW during the 9-year post-delisting monitoring period.

The potential for adverse effects to Oregon chub habitat from timber harvest was also identified at three other sites: Dexter Reservoir Alcove ''PIT1'' site, Buckhead Creek, and Wicopee Pond (Scheerer 2008, pers. comm.). However, we did not observe levels of siltation at

these sites that resulted in habitat loss, and all of the Oregon chub populations within each of the five sites located downstream of harvest activities met the delisting criteria in 2013. Additionally, the U.S. Forest Service (USFS) manages several Oregon chub sites within the Willamette National Forest. As noted above, forests managed by the USFS operate under land and resource management plans that include management practices protective of fish (USFS 1990, pp. IV–61–64), and we anticipate these resource management plans will continue to guide forest management into the future.

While future siltation of habitats occupied by Oregon chub from timber harvest activities clearly is possible, the frequency is anticipated to be very low, as will be the potential number of affected populations. Given this fact, and the protections afforded by the Oregon Forest Practices Act and Federal land management plans, we do not believe siltation from timber harvest represents a substantial population-level threat to Oregon chub now or in the foreseeable future.

Floods and Seasonal High-Water Events

The Oregon chub is a low-elevation, floodplain-dependent species that evolved under dynamic environmental conditions created by seasonal flooding and droughts. As a result, the species' life history reflects these dynamic conditions. While floods and seasonal high-water events constitute a potential stressor to individuals or specific Oregon chub populations, these events create and maintain off-channel habitats necessary for the long-term persistence of the species, and they function to transport the Oregon chub to colonize these new sites.

For example, in 2007, a flood event in the Santiam River caused channel avulsion (a shift in the stream channel that results in the rapid abandonment of a river channel and formation of a new river channel) at an Oregon chub site, reducing the extent of habitat available at this location and likely negatively affecting this population. Yet in another example, between 2000 and 2003, new off-channel habitat formed in the McKenzie River due to flooding and, after aquatic vegetation became established, the site was subsequently colonized by the Oregon chub (Bangs 2013, pers. comm.). Although we cannot predict the magnitude or the extent to which current Oregon chub habitats may be affected by flooding and seasonal high water events, the number and distribution of large populations, in combination with habitat heterogeneity, increases the species' resilience in recovering from periodic disturbance, as the species would have historically. Additional discussion about increased flood events is presented in the ''Effects of Climate Change'' section (also in Factor A).

Water Quality Issues

The analysis of threats in the final rule to list the Oregon chub as an endangered species and the recovery plan for the species discussed numerous potential threats to water quality in Oregon chub habitats. However, in the 20 years since the Oregon chub was listed, only a few of these concerns, discussed below, have materialized, and even then, these were localized and of short duration.

In the spring of 2011, the ODFW noted the complete die-off of the introduced Oregon chub population in Cheadle Pond on the Finley NWR. They assessed the water quality (temperature, pH, and dissolved oxygen) and discovered that the pH level was abnormally high (mean pH: 9.6, range: 8.4–10.2). The pH level in Oregon chub habitats typically ranges between 7.42 and 8.66. The cause of the increased pH level was unknown and had not been observed previously at this site. The ODFW subsequently conducted an in-situ 7-day bioassay using 30 adult Oregon chub from the Gray Creek Swamp population. All of the Oregon chub survived the trial and were released into Cheadle Pond following the bioassay. We have not observed, and do not anticipate based on this one event, similar incidents in other Oregon chub habitats.

Nutrient enrichment may have caused the extirpation of the Oregon chub population at Oakridge Slough in the Middle Fork Willamette River subbasin. The slough is downstream from the Oakridge Sewage Treatment Plant, and increased nitrogen and phosphorus concentrations were detected in the slough prior to a decline in the population. While the nutrient concentrations are not believed to be directly harmful to the species, the elevated nutrient levels may have contributed to habitat conditions that were unsuitable for Oregon chub (*i.e.,* an increase in growth of algae, which then decomposed and led to low oxygen conditions below what the Oregon chub requires to survive) (Buck 2003, p. 12).

Several Oregon chub sites are located adjacent to agricultural land. Runoff from farm fields may contain pesticides or fertilizers that could adversely affect the water quality in Oregon chub habitats. However, many of these sites have protective vegetated buffers between crops and the aquatic habitat. To date, we have not observed declines in Oregon chub populations that can be attributed to agricultural practices, and several Oregon chub habitats located adjacent to farmland have supported abundant populations of Oregon chub for many years.

Several Oregon chub sites are located adjacent to private forestland (as previously discussed above under ''Siltation Resulting from Timber Harvest''). Additionally, the USFS manages several Oregon chub sites within the Willamette National Forest. Forests managed by the USFS operate under land and resource management plans that include management practices protective of fish (USFS 1990, pp. IV–61–64), and we anticipate these resource management plans will continue to guide forest management into the foreseeable future. On private forestland, the use of chemicals is regulated by the Oregon Department of Forestry, and operators are required to comply with product labels and additional protective measures to protect waters of the State, including leaving untreated vegetated buffers and limiting aerial applications near areas of standing open water larger than one-quarter acre (Oregon Revised Statutes (ORS) 527.765 and OAR 629–620–0000 through 629–620–0800). Although we have no information regarding landowners' compliance with these rules on forestland in the vicinity of Oregon chub habitats, we have not observed harmful effects to Oregon chub populations due to chemical exposure related to forestry operations.

During our analysis of the factors affecting the Oregon chub, we determined that spills via sewage discharge, hazardous cargo from trucks, railways and pipelines, which were identified as threats when the species was first listed, no longer pose a significant threat to the species. At the time of listing, of the nine Oregon chub populations known to exist, seven of these locations were directly adjacent to major transportation corridors where threats to water quality had the potential to impact Oregon chub. Currently, Oregon chub have been documented in 77 populations widely distributed throughout the Willamette River Basin; 20 of these locations are adjacent to transportation corridors. In addition, two populations are adjacent to sewage treatment plants. Despite the proximity to potential threats to water quality, in the 20 years since the Oregon chub was listed, only a few of these concerns have materialized, and even then, these were localized and of short duration. The current distribution of the Oregon chub in many abundant

populations located across multiple subbasins reduces the risk that the above factors will affect a large portion of Oregon chub and its habitat. In summary, we conclude that none of the existing or potential water quality-related threats, either alone or in combination with others, constitutes a substantial threat to the Oregon chub now or in the foreseeable future. Additional discussion about temperature and dissolved oxygen levels is presented in the ''Effects of Climate Change'' section (also in Factor A).

Aggradation

Aggradation is an alluvial process where sediment deposition (deposition of all sizes of sediments, both coarse and fine) is more rapid than the capacity of a river to transport sediment downstream. We observed aggradation at the Geren Island North Channel in the North Santiam River. Natural movement of the river channel changed sediment deposition in the upstream end of this location, which had the potential to block water flow into the site. The City of Salem, which manages the site, excavated a portion of the channel to allow free-flowing water to enter Oregon chub habitat. To date, we have not observed a decline in the Geren Island population. With the exception of this site and habitats in Fall Creek, which we discussed previously, no other Oregon chub habitats are negatively impacted by aggradation. We consider the potential negative impacts to the overall status of Oregon chub from aggradation to be very low now and in the foreseeable future.

Succession

Succession resulting from the manipulation of river flows was identified as a potential threat to Oregon chub habitat in the downlisting rule (75 FR 21179, April 23, 2010). Succession is a natural, long-term ecological process that ponds go through as they mature. As vegetation dies back seasonally, it deposits on the substrate of the pond, causing a reduction in water depth over time. Eventually, plant communities shift from aquatic to amphibious wetland plants, and the open-water ponds are replaced by seasonal wetland and marsh habitat. Historically, seasonal high flows and alluvial floodplain processes created off-channel habitat, and rejuvenated existing habitats by flushing out sediment and diversifying the aquatic plant community. These processes no longer function as they did historically because flows are regulated under the USACE's Willamette Project. The Willamette Project dams were constructed in the 1940s through the 1960s. Oregon chub populations have persisted under managed flow conditions for more than 60 years. In addition, under the Service's Willamette Project biological opinion (Service 2008b, pp. 40–51) and the NMFS Willamette Project biological opinion (NMFS 2008, pp. 2–43 to 2–52), minimum flow levels established for listed salmonids will continue to protect Oregon chub habitat. Other non-regulatory efforts are working to restore floodplain function and sediment transport, such as TNC's Willamette Sustainable Rivers Project. In this project, TNC has developed an MOU with the USACE to release stored water in high-flow pulses to restore natural processes in managed portions of the Middle Fork, McKenzie, and Santiam Rivers. Given the MOU between the USACE and TNC regarding the Sustainable Rivers Project, and the minimum flows required under existing biological opinions from the Service and NMFS, we anticipate flow management trending towards natural flow regimes below Willamette Project dams will continue to create and rejuvenate off-channel habitats and benefit Oregon chub into the future.

We are not aware of any particular sites that are vulnerable to succession in the near future; however, the sites that remain hydrologically isolated during high flows are cut off from these natural processes, and succession may continue resulting in a reduction of open water habitat. For instance, succession occurred at Herman Pond, an isolated Oregon chub site in the Coast Fork Willamette Basin, which led to a reduction in habitat area and a decline in population abundance. In 2005, the site was excavated to remove successional vegetation. This activity was successful in increasing open water habitat and led to an increase in Oregon chub abundance at this location. Given the wide distribution and number of Oregon chub habitats under different land ownership, we are uncertain whether manual modification of chub habitats to reverse the effects of succession will occur in the future following delisting. However, given that we are not aware of any particular sites vulnerable to succession in the foreseeable future, we determined that there is very little potential negative impact, if any, to the overall status of Oregon chub from succession.

Irrigation Withdrawals

A few Oregon chub sites may be influenced by irrigation water withdrawals. In recent years, at Elijah Bristow Berry Slough in the Middle Fork Willamette River subbasin, a drop in summer water level and a significant decline in Oregon chub abundance coincided with increased irrigation use by a farm located upstream. However, this was an isolated event that we have not observed at other sites. Many Oregon chub populations occur on publicly owned lands or on areas managed for conservation, where direct water withdrawals do not occur. In addition, water levels at habitats adjacent to mainstem river channels are highly dependent on river flow, and are less likely to be negatively impacted by irrigation withdrawals due to the amount of hyporheic (subsurface) flow into these habitats from the adjacent river. Based on the wide distribution of Oregon chub, we consider the potential negative impact to the overall status of Oregon chub from irrigation withdrawals to be very low.

Effects Related to Climate Change

Our analyses under the Act include consideration of observed or likely environmental changes resulting from ongoing and projected changes in climate. As defined by the Intergovernmental Panel on Climate Change (IPCC), the term ''climate'' refers to the mean and variability of different types of weather conditions over time, with 30 years being a typical period for such measurements, although shorter or longer periods also may be used (IPCC 2013a, p. 1450). The term ''climate change'' thus refers to a change in the mean or the variability of relevant properties, which persists for an extended period, typically decades or longer, due to natural conditions (*e.g.,* solar cycles) or human-caused changes in the composition of atmosphere or in land use (IPCC 2013a, p. 1,450).

Scientific measurements spanning several decades demonstrate that changes in climate are occurring. In particular, warming of the climate system is unequivocal, and many of the observed changes in the last 60 years are unprecedented over decades to millennia (IPCC 2013b, p. 4). The current rate of climate change may be as fast as any extended warming period over the past 65 million years and is projected to accelerate in the next 30 to 80 years (National Research Council 2013, p. 5). Thus, rapid climate change is adding to other sources of extinction pressures, such as land use and invasive species, which will likely place extinction rates in this era among just a handful of the severe biodiversity crises observed in Earth's geological record (American Association for the Advancement of Sciences (AAAS) 2014, p. 17).

Examples of various other observed and projected changes in climate and associated effects and risks, and the basis for them, are provided for global and regional scales in recent reports issued by the IPCC (2013c, 2014), and similar types of information for the United States and regions within it can be found in the National Climate Assessment (Melillo et al. 2014, entire).

Results of scientific analyses presented by the IPCC show that most of the observed increase in global average temperature since the mid-20th century cannot be explained by natural variability in climate and is ''extremely likely'' (defined by the IPCC as 95 to 100 percent likelihood) due to the observed increase in greenhouse gas (GHG) concentrations in the atmosphere as a result of human activities, particularly carbon dioxide emissions from fossil fuel use (IPCC 2013b, p. 17 and related citations).

Scientists use a variety of climate models, which include consideration of natural processes and variability, as well as various scenarios of potential levels and timing of GHG emissions, to evaluate the causes of changes already observed and to project future changes in temperature and other climate conditions. Model results yield very similar projections of average global warming until about 2030, and thereafter the magnitude and rate of warming vary through the end of the century depending on the assumptions about population levels, emissions of GHGs, and other factors that influence climate change. Thus, absent extremely rapid stabilization of GHGs at a global level, there is strong scientific support for projections that warming will continue through the 21st century, and that the magnitude and rate of change will be influenced substantially by human actions regarding GHG emissions (IPCC 2013b, 2014; entire).

Global climate projections are informative, and, in some cases, the only or the best scientific information available for us to use. However, projected changes in climate and related impacts can vary substantially across and within different regions of the world (*e.g.,* IPCC 2013c, 2014; entire) and within the United States (Melillo et al. 2014, entire). Therefore, we use ''downscaled'' projections when they are available and have been developed through appropriate scientific procedures, because such projections provide higher resolution information that is more relevant to spatial scales used for analyses of a given species (see Glick et al. 2011, pp. 58–61, for a discussion of downscaling).

Various changes in climate may have direct or indirect effects on species. These may be positive, neutral, or negative, and they may change over time, depending on the species and other relevant considerations, such as interactions of climate with other variables such as habitat fragmentation (for examples, see Franco et al. 2006; Forister et al. 2010; Galbraith et al. 2010; Chen et al. 2011). In addition to considering individual species, scientists are evaluating potential climate change-related impacts to, and responses of, ecological systems, habitat conditions, and groups of species (*e.g.,* Deutsch et al. 2008; Berg et al. 2010; Euskirchen et al. 2009; McKechnie and Wolf 2010; Sinervo et al. 2010; Beaumont et al. 2011; McKelvey et al. 2011; Rogers and Schindler 2011).

Climate change effects present substantial uncertainty regarding the future environmental conditions in the Willamette River Basin and may place an added stress on the Oregon chub and its habitats. The IPCC has concluded that recent warming is already strongly affecting aquatic biological systems, as evidenced by increased runoff and earlier spring peak discharge in many glacier- and snow-fed rivers (IPCC 2007, p. 8). Projections for climate change effects in North America include decreased snowpack, more winter flooding, and reduced summer flows (IPCC 2007, p. 14), which may increase periods of drought (Oregon Climate Change Research Institute (OCCRI) 2010a, p. 112).

Observed changes in temperature in the Pacific Northwest (PNW) already show an increase of 1.5 degrees Celsius over the past century due to human activities (OCCRI 2010b, p. 6). Global climate models project temperature increases for the PNW of approximately 2 to 4 degrees Celsius (3 to 10 degrees Fahrenheit) by 2080 (OCCRI 2010b, p. 7). Projections for climate change effects in the Willamette Valley in the next century also include warmer air temperatures that will lead to lower soil moisture and increased evaporation from streams and lakes (Climate Leadership Initiative (CLI) and National Center for Conservation Science and Policy (NCCSP) 2009, p. 9; OCCRI 2010a, p. 71). The frequency of short-term (3- and 6-month) droughts in the Willamette Valley will likely increase due to decreased summer rainfall, which may result in reduced summer baseflows and exacerbate water temperature increases. However, long-term droughts (12 and 24 months) are not projected to substantially change across most of the Willamette Basin (OCCRI 2010a, p. 112).

The 29,700-km^2 (11,467-mi^2) Willamette River Basin is a large complex river basin, influenced by two mountain ranges: the Cascades and the Coast Range (Chang and Jung 2010, pp. 187–190). The rain-dominated Coast Range occupies about 20 percent of the basin; the Cascade Range occupies more than 50 percent, and includes the rain-dominated Western Cascades and the snow-dominated High Cascades. The Willamette Valley region lies between these two ranges. Thus, the basin has complex terrain and geology, and a wide range of elevations that influence the timing and magnitude of runoff. Given this physical variability, the effects of climate change will not uniformly affect all areas or subbasins of the Willamette River (Chang and Jung 2010, pp. 194–204).

The hydrology of the Willamette River Basin is largely influenced by winter rainfall and spring snowmelt, with 77 percent of the flow occurring between November and April (Chang and Jung 2010, p. 190). Overall, the Willamette Basin is considered water abundant in Oregon. In addition to rainfall, the basin is influenced by spring snowmelt and spring-fed tributaries at higher elevations (*e.g.,* High Cascades region), and shallow groundwater aquifers in low-elevation areas in the valley that recharge during the rainy season (OCCRI 2010a, p. 97–104). The Willamette River and its tributaries are highly altered with multiple large reservoirs and other human influences such as dams, levees, and floodplain development. Multiple, large USACE dams, constructed in the 1950s and 1960s for flood reduction, altered seasonal discharge and temperatures, reduced peak flood flows, and augmented summer low flows (OCCRI 2010a, p. 77). Climate change effects that may affect Oregon chub include increased winter flooding, increased temperatures, reduced summer baseflows, and increased negative interactions with nonnative fishes. Each of these is discussed below.

Increased Winter Floods—Effects of climate change predicted for the PNW may include increased winter flood events (OCCRI 2010a, pp. 87–88). These events, which are often associated with an increased proportion of annual precipitation falling as rain instead of snow and reduced snowpack, may better mimic natural riverine processes (such as channel migration, scour, etc.) to create and maintain riverine habitats on which Oregon chub depend. Oregon chub evolved in a dynamic, alluvial river with broad floodplains and braided reaches with many side channels, sloughs, and other similar slack-water habitats. Large floods

commonly rearranged these side-channel habitats, creating new habitats in some locations, and filling in other areas. The construction and operation of the USACE's Willamette Project, a system of 13 flood control dams, has reduced flooding and associated habitat forming processes in the Willamette River Basin, thereby simplifying mid- to low-elevation, aquatic habitats considerably. During previous flood events, the Willamette Project dams have been able to capture and reduce the magnitude of the flow to keep flood waters from impacting downstream communities; the magnitude of these flows were still high enough to alter the stream and floodplain habitat. Increased flows associated with climate change may contribute to the creation and maintenance of off-channel floodplain habitats upon which Oregon chub depend (*e.g.,* side channels, oxbows, etc.), thereby increasing the amount of suitable habitat for the species. For these reasons, it is possible that increases in winter floods associated with climate change may benefit Oregon chub through the creation and maintenance of their habitats.

Temperature and Dissolved Oxygen Effects—The Oregon chub is tolerant of a wide range of temperatures and thus less vulnerable to temperature effects of climate change than other listed fish species in the Willamette River Basin (*e.g.,* bull trout, spring chinook salmon, and winter steelhead). Oregon chub do not require cool temperatures for spawning or other life-history needs and appear tolerant of low dissolved oxygen (DO) levels. DO levels and temperature are related because at higher temperatures, water has a reduced ability to store oxygen. While the upper lethal temperature limit of Oregon chub has not been determined, the best available data based on field observations suggest this limit is approximately 31 to 35 degrees Celsius (88 to 95 degrees Fahrenheit) for adult Oregon chub, and that tolerance may be associated with low DO levels (Scheerer and Apke 1997, p. 25; Bangs et al. 2009, p. 17). Temperature and DO tolerances for juvenile Oregon chub appear to be higher than that of adults (Scheerer and Apke 1997, p. 25; Bangs et al. 2009, p. 17). The observed maximum summer temperature range of occupied Oregon chub habitat is from 23 to 39 degrees Celsius (73 to 102 degrees Fahrenheit) (Bangs 2014, pers. comm.). Despite a proportion of these habitats experience temperatures in excess of 35 degrees Celsius (95 degrees Fahrenheit) (which may result in the loss of some individuals within that population), an entire population has not been lost due to temperature increases and associated low DO levels.

While global climate models project a temperature increase for the PNW of approximately 2 to 4 degrees Celsius (3.6 to 7.2 degrees Fahrenheit) by 2080 (OCCRI 2010b, p. 7), climate models primarily predict air temperature changes, which have led many to believe that water temperatures will also correspondingly rise (Arismendi *et al.* 2012, p. 1). However, water temperatures did not follow expected warming trends or experience the same magnitude of increased temperature as air temperature when analyzing stream temperature data from the Pacific continental United States (Arismendi *et al.* 2012, p. 4). In many cases, water temperatures were found to have more cooling trends than warming trends since 1987, and less variability, especially in highly human-influenced rivers (Arismendi *et al.* 2012, pp. 4–5). Such is the case in the Willamette River; the presence of the 13 USACE flood control dams in the Willamette Valley allows for some amelioration of extreme climate variation, such as temperature extremes and drought. These large dams may be able to adaptively operate in the future to partially offset some of the potential increases in water temperature and flow reductions below the dams, if determined appropriate.

Releases of water below the USACE's Willamette Project dams generally target water temperatures ranging from 12 to 18 degrees Celsius (54 to 64 degrees Fahrenheit), depending on the season. These releases decrease downstream summer river temperatures by 6 to 10 degrees Celsius (10.8 to 18 degrees Fahrenheit) from historic temperatures (Rounds 2010, p. 43) and augment summer low flows (OCCRI 2010a, p. 77). The USACE is working to better mimic historical temperature conditions through water releases at several dams, which primarily target temperature benefits to federally listed salmonids that remain protected under the Act. These salmonid species require much cooler waters than Oregon chub. For example, juvenile salmonids generally prefer temperatures from 11.7 to 14.7 degrees Celsius (53.1 to 58.5 degrees Fahrenheit), and spawning temperatures for these species are typically below 13.0 degrees Celsius (55.4 degrees Fahrenheit) (Richter and Kolmes 2005, pp. 27–28). The needs of these listed salmonids will continue to influence future management decisions. Thus, dam releases targeting these cooler temperature requirements will be protective of Oregon chub habitats downstream of these dams.

Potential reductions in summer baseflows may increase water temperatures (OCCRI 2010a, p. 114). Increased frequency of short-term droughts (3 to 6 months) may reduce the USACE's ability to meet all of the minimum instream flow volumes, especially during late summer and early fall. Many populations (40 out of 77 populations, and 10 of the 23 populations that meet recovery criteria) exist in riverine habitats influenced by releases from the USACE's dams.

While increased frequency of short-term drought may reduce the USACE's ability to meet required instream flows for listed salmonids, we do not anticipate these reductions will result in temperature increases that constitute a substantial threat to Oregon chub now or into the foreseeable future. These dams currently maintain cooler summer temperatures and higher summer baseflows below the dams than existed prior to dam construction, and thereby provide a buffer from increased temperatures. Further, the USACE is required to coordinate with the Service, ODFW, and NMFS when minimum instream flows cannot be met, which allows the Service to weigh in on the magnitude of reductions and mitigate negative effects to Oregon chub populations if necessary. For these reasons, we determine potential instream flow reductions, and any associated temperature increases and reduced DO levels due to increased short-term droughts do not constitute a substantial threat to Oregon chub in habitats below the dams.

Other populations exist outside the influence of the dam releases. Eighteen populations exist in ''up-slope'' habitats that are not directly influenced rivers (6 of these populations met all recovery criteria in 2013); 14 populations occur on or adjacent to undammed rivers (3 met recovery criteria); 5 are adjacent to USACE reservoirs (4 met recovery criteria). The potential effects to each of these habitat categories are discussed below.

The 18 ''upslope'' populations were introductions into isolated ponds, as discussed above. Predicted reductions in summer rainfall and increased evaporation may reduce the volume or depth of these ponds in late summer, increase water temperature, and correspondingly decrease DO levels in these habitats. However, these introduction sites were selected because the habitat is expected to remain stable during extreme climatic events such as droughts or floods. Each of these habitats was chosen for its ability to remain wetted during drought and provide a diversity of habitats

throughout a range of pool elevations. For example, some sites rely on ground water springs or modern water control structures to maintain pond elevations throughout summer.

While it is possible that climate change may impact some aquatic habitats to the extent they no longer can support Oregon chub, the probability of that occurring is low given the wide tolerances of this species to water temperatures and corresponding DO levels. The diversity of isolated Oregon chub habitats spread across multiple watersheds provides further buffers against population level impacts from climate change. For these reasons, we determine that temperature effects due to climate change to these ''up-slope'' habitats do not constitute a substantial threat to Oregon chub now or into the foreseeable future.

Fourteen Oregon chub populations occur on or adjacent to undammed rivers: 13 of these populations are naturally occurring and on or adjacent to rain-dominated, undammed tributaries to the Willamette River (*e.g.,* Marys, Molalla, and Luckiamute Rivers, and Muddy Creek); and 1 population occurs in a spring-fed pond upstream of a USACE dam and thus is unlikely to experience substantial temperature increases or other negative impacts from climate change. For the 13 populations, potential reductions in summer baseflows and associated increases in water temperature are the most likely negative impacts to these populations from climate change effects (including short-term droughts). However, uncertainty in the extent and magnitude of summer baseflow reductions remains high despite modeling efforts (Chang and Jung 2010, pp. 198–202; see following discussion). Given this uncertainty regarding summer baseflow reductions, we cannot predict to what level summer baseflows may drop (and thereby increase water temperatures) and negatively impact these habitats.

We anticipate few of these habitats will be negatively affected to such an extent Oregon chub cannot exist given the high tolerance of Oregon chub to temperature and associated reduced DO levels, the fact that ground water connections to these habitats may remain, and these habitats are distributed across several watersheds with differing influences (Chang and Jung 2010, p. 204). For these reasons, we determine that temperature effects due to climate change in these rain-dominated, undammed tributary habitats do not constitute a substantial threat to Oregon chub now or into the foreseeable future.

The remaining five populations occupy habitats adjacent to USACE reservoirs in the Middle Fork Willamette River: Two populations at Lookout Point Reservoir, two at Dexter Reservoir, and one at Fall Creek Reservoir. Reductions in snow, increases in rain, increased frequency of short-term droughts, instream flow requirements, and related increased water demand for agricultural and municipal uses during droughts may put additional stresses on water supply in the Willamette Basin. These stresses may reduce the USACE's ability to maintain reservoir levels year-round, especially during the late summer and early fall. These reservoir-associated populations are most likely to experience temperature increases, reduced DO levels, and reduction in habitat from loss of connection with the reservoirs, which may occur in the future during predicted short-term droughts. However, we have direct experience with this situation: in 2010, the USACE drew these reservoirs down through the summer of 2011 for dam-safety repairs.

The ODFW monitored these populations closely during and after reservoirs returned to normal levels (Bangs *et al.* 2012, p. 18). No populations were lost due to these reduced reservoir levels, despite reduced habitat and high summer temperatures. While some populations experienced a decline the following year, one population increased. Those populations that experienced a decline due to lowered reservoir levels recovered to previous abundance levels (Bangs *et al.* 2012, p. 10).

In summary, the Oregon chub is tolerant of a wide range of temperatures and not dependent on cool waters to complete its life history. Oregon chub populations are dispersed across a wide range of diverse habitats, each influenced by site specific factors. The predicted increases in water temperature and associated reductions in DO levels from climate change effects are not anticipated to exceed the tolerances for Oregon chub throughout its range. Also, coordination between the Service and the USACE is required when minimum instream flow requirements will not be met. For these reasons, we determine that temperature increases associated with climate change effects are not a threat to Oregon chub across its range.

Oregon chub are tolerant of a wide range of temperatures and associated decreases in DO, and are thus less vulnerable to temperature effects of climate change than other listed fish species in the Willamette Valley. Information specific to Oregon chub regarding its ability to make behavioral or physiological responses to temperature changes is not available. However, given their observed temperature tolerance (up to 31 to 35 degrees Celsius, 88 to 95 degrees Fahrenheit) relative to potential climate increases in water temperature, the coordination of instream flows and reservoir management with the USACE, and the multiple populations across a range of ecological settings and tributaries in the Willamette Basin, we conclude that temperature effects from climate change do not constitute a substantial threat to Oregon chub now, or in the foreseeable future.

Reduction in Summer Baseflows—Climate change effects with the most potential to negatively affect Oregon chub are reduced summer baseflows, which may reduce habitat availability within existing habitats and exacerbate increases in water temperature and declines in DO. Chang and Jung (2010, entire) examined future runoff projections in the Willamette River Basin under eight global climate models and two emissions scenarios. Some consistent trends exist between different models with regards to summer flow conditions: the 7-day low flow minimum decreased in most subbasins of the Willamette River Basin, and the Western Cascade basins (medium elevation) showed greater declines than those in the Willamette Valley (low elevation) and the High Cascades (high elevation) (Chang and Jung 2010, pp. 198–202). However, the range of predicted changes was much more variable in the Willamette Valley and Western Cascades where the majority of Oregon chub populations exist. Further, the predicted changes for both summer runoff and the 7-day low flow minimum were very different depending on the emissions scenario used in the model, and the predicted changes varied by subbasin (Chang and Jung 2010, pp. 201–202).

Given the uncertainty in climate change predictions with differing models and future emission scenarios, we cannot specify the amount of reductions in summer baseflows for each subbasin and extrapolate how those reductions will affect habitat availability, temperatures, and DO (alone or in concert) in individual Oregon chub habitats. Such fine-scale models are not available. Despite modeled projections of changes in temperature, precipitation, and runoff at the global, regional, and basin scale, we cannot: (1) Predict with any certainty how those changes may influence Oregon chub populations and their

individual habitats in the Willamette Valley; and (2) accurately describe and assess the net effects when considering the potential negative consequences together with the potential positive effects to Oregon chub populations.

Oregon chub habitats are often located in side-channel and off-channel areas that are highly influenced by site-specific conditions, including, but not limited to factors such as above- and below-ground water connections between the habitat and the river system or aquifer, and total volume and depth of the habitat. For example, lower baseflows that seasonally disconnect above-ground flow to a side-channel habitat may or may not result in reduced habitat availability and increased temperatures, depending on whether cooler, below-ground water connection to the side channel is maintained.

Oregon chub habitats exist throughout the Willamette River Basin in a variety of subbasins at a variety of elevations, with varying geology and topography, and with differing climatic influences. Modeling conducted by Chang and Jung (2010, pp. 198–204) suggests that the interactions between climate change and land surface hydrology are complex. Because of these varying factors, each subbasin will respond differently to the effects of climate change. Thus, not all Oregon chub populations in the Willamette River Basin will be similarly affected by climate change effects. Because of the variety of habitats within a single subbasin, it is unlikely that all habitats within a single subbasin will experience negative effects to the extent that habitat no longer supports Oregon chub. Further, potential reductions in summer baseflows in portions of the Willamette Basin will likely be moderated by the continuing operations of the USACE's large storage dams that capture a portion of the flood flows from winter and spring precipitation events (including snowmelt) and gradually release these flows over the summer. Thus, for many existing Oregon chub populations, we do not anticipate substantial reductions in summer baseflows. If such reductions are necessary, our coordination with the USACE, as described earlier in this document, will allow the Service to minimize and mitigate impacts to Oregon chub.

For Oregon chub habitats outside of the influence of USACE dam releases, insufficient information exists to determine the magnitude of future reductions in summer baseflows and associated changes in temperature and DO levels. Substantial reductions, if they occur, may result in the reduction of available habitat or in some instances the loss of individual populations. However, we do not anticipate such negative effects across the range of Oregon chub. Based on the existing information collected on Oregon chub since its listing, we anticipate Oregon chub will continue to exist because of its demonstrated resiliency in the past in the face of continual change: Oregon chub have survived despite significant landscape changes across the Willamette River Basin, including the effects of many dams and floodplain development. Studies to date have shown this species is highly adaptable, and able to quickly colonize new habitats. The effects of climate change will continue to progress into the future gradually. We anticipate that not all Oregon chub populations as they exist today will still exist 40 to 50 years from now, but that Oregon chub will exist in abundant and stable populations throughout the Willamette River Basin, colonizing new side channels and habitats as hydrology and floodplains adjust to a changed climate. Thus, we determine that reductions in summer baseflows and any associated increases in temperatures and declines in DO levels do not constitute a substantial threat to Oregon chub now, nor will they be in the foreseeable future.

Competition and Predation by Nonnative Fish Species—Climate change effects may locally alter Oregon chub habitats to the advantage of nonnative species known to compete with and prey on Oregon chub via increasing water temperature and reducing connectivity to river systems during low flow conditions (*e.g.,* summer baseflows). However, the best available data show no relationship between the presence of nonnative fish and Oregon chub population abundance trends (Bangs *et al.* 2013, p. 17). Thirteen of the 23 populations that met delisting criteria with either a stable or increasing abundance trend in 2013 occur with nonnative fish; 1 of the 2 populations that had a declining abundance trend occurs with nonnative fish (Bangs *et al.* 2013, p. 17). The primary driver affecting the abundance and dominance of nonnative fish in suitable Oregon chub habitats appears to be connectivity of these off-channel habitats to the larger river system. To date, these nonnative competitors and predators have not completely overtaken suitable Oregon chub habitats that remain seasonally connected to these river systems because annual flood flows disrupt and flush the nonnative species out of these suitable habitats, whereas Oregon chub have developed behaviors that allow them to remain as they evolved with these high flows. In summary, we do not anticipate climate change effects on the abundance and distribution of nonnative fish in the Willamette Basin will increase competition and predation. We determine that this competition and predation does not constitute a substantial threat to Oregon chub now, nor will they be in the foreseeable future.

Summary for Climate Change Effects—The Willamette River Basin is a geologically complex system, as well as a highly altered and managed system with multiple large reservoirs and other human influences. Although effects of climate change are almost certain to impact aquatic habitats in the Willamette River Basin (CLI and NCCSP 2009, p. 1), researchers have great uncertainty about the specific effects of climate change, including which models and emission scenarios are the best representation of the future. Thus, despite modeled projections of changes in temperature, precipitation, and runoff, we cannot: (1) Predict with any certainty how those changes may influence individual Oregon chub populations and their habitats in the Willamette Basin; and (2) accurately describe and assess the net effects when considering the potential negative consequences together with the potential positive effects to Oregon chub populations.

The effects of climate change have potentially both positive and negative impacts to Oregon chub habitats; there is a wide diversity of habitats occupied by Oregon chub that are individually influenced by the site-specific factors and suitable habitats for Oregon chub are found throughout the Willamette Basin. Oregon chub as a species has proven itself highly adaptable and resilient to change. We cannot project with any certainty whether the effects of climate change will provide more benefits or threats to Oregon chub. However, the best available information suggests that Oregon chub and their habitats are not highly vulnerable to the potential effects of climate change across their range and we do not anticipate that climate change will have population level effects to Oregon chub.

The Service developed a strategic plan to address the threat of climate change to vulnerable species and ecosystems. Goals of this plan include maintaining ecosystem integrity by protecting and restoring key ecological processes such as nutrient cycling, natural disturbance cycles, and predator–prey relationships (Service 2010, p. 23). The Oregon chub recovery

program worked to establish conditions that allow populations of Oregon chub to be resilient to changing environmental conditions and to persist as viable populations into the future. Our recovery program for the species focused on maintaining large populations distributed within the species' entire historical range in a variety of ecological settings (*e.g.,* across a range of elevations). This approach is consistent with the general principles of conservation biology. In their review of minimum population viability literature, Traill *et al.* (2009, p. 3) found that maintenance of large populations across a range of ecological settings increases the likelihood of species persistence under the pressures of environmental variation, and facilitates the retention of important adaptive traits through the maintenance of genetic diversity. Maintaining multiple populations across a range of ecological settings, as described in the recovery plan, increases the likelihood that many abundant populations will persist under the stresses of a changing climate.

Summary of Factor A

Many of the factors discussed above were previously identified as threats to the continued existence of the Oregon chub. These factors include activities associated with the operation of the Willamette Project dams, sedimentation from timber harvest, floods or high-water events, water quality-related impacts, succession, and the effects of climate change. Modifications to the Willamette Project dam operations have provided flows that create and sustain off-channel habitat used by the Oregon chub, and we anticipate these flow targets will continue into the future due to requirements under biological opinions from the Service and NMFS, and the Sustainable Rivers Project collaboration between the USACE and TNC. Sedimentation from timber harvest is not currently indicated in the decline of any Oregon chub populations, and we expect that riparian buffers protected from timber harvest under State and Federal regulations will provide habitat protection in future timber harvest operations. Flooding and high-water events are largely unpredictable. However, Oregon chub evolved within a dynamic environment and the current distribution of Oregon chub in many abundant populations within subbasins and across multiple subbasins reduces the risk that these events will negatively affect a large proportion of Oregon chub and its habitat. Declines in water quality related to factors such as chemical contamination, nutrient enrichment, siltation, and hazardous material spills have the potential to affect individual populations, but few observations of negative effects due to water quality issues have materialized over the past 20 years that we have been monitoring Oregon chub populations. Succession was a factor at one Oregon chub site and may occur in the future, particularly at sites that are isolated from the floodplain. However, succession is a slow process that can be addressed through ongoing monitoring and habitat management, and is not currently a cause for concern at any of the known Oregon chub sites.

Other factors that may affect the Oregon chub and its habitat include actions required under the terms and conditions of the Willamette Project biological opinions, aggradation, and irrigation withdrawals. Actions required under the Willamette Project biological opinions began in 2008, but the effects to Oregon chub habitat from these actions are not well understood as the focus of most of these actions is recovery of listed salmonids. Research into the effects of these actions on off-channel habitats started in 2009 and will continue for the next few years. This research may lead to an improved understanding of the habitat characteristics that support abundant populations of Oregon chub in connected habitats and flow management recommendations specific to maintaining Oregon chub habitat. Aggradation from natural causes has been identified at one Oregon chub site, and aggradation from a complete drawdown of Fall Creek Reservoir resulted in large deposits of sediment in three previously unknown Oregon chub habitats. Other than these events, aggradation has not been observed at Oregon chub sites. Irrigation withdrawal was observed to negatively affect the volume of water available in one Oregon chub habitat in the Middle Fork River subbasin, but is not considered a widespread concern throughout the range of Oregon chub.

In summary, the factors discussed under Factor A continue to occur across the subbasins occupied by Oregon chub, but only a few populations have exhibited declines as a result of any of the factors or combination of factors. The threat of habitat loss has been reduced by changes in flow management and by introducing the species into secure, isolated habitats that are not influenced by floodplain processes. We also better understand the diversity of connected habitats used by Oregon chub and, as a result, discovered many abundant populations in these habitats across multiple subbasins. Therefore, based on the best available information and because we expect that current management practices will continue into the foreseeable future, we conclude that the present or threatened destruction, modification, or curtailment of its habitat or range does not constitute a substantial threat to Oregon chub now and is not expected to in the foreseeable future.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Overutilization for commercial, recreational, scientific, or educational purposes was not a factor in listing, nor is it currently known to be a threat to the Oregon chub.

C. Disease or Predation

Predation by Nonnative Fishes and Amphibians

In the final rule to downlist the Oregon chub (75 FR 21179, April 23, 2010), we identified predation by, and competition with, nonnative fishes as primary threats to Oregon chub (competition with nonnative fishes is addressed below under Factor E). The Willamette River Basin contains 31 native fish species and 29 nonnative species (Hulse *et al.* 2002, p. 44). The large-scale alteration of the Willamette River Basin's hydrologic system (*i.e.,* construction of dams and the resultant changes in flood frequency and intensity) created conditions that favor nonnative, predatory fishes, and reservoirs throughout the basin have become sources of continual nonnative fish invasions in the reaches downstream (Li *et al.* 1987, p. 198). Significant declines in Oregon chub abundance due to the presence of nonnative fishes were documented. For instance, after floods in 1996, nonnative fish were first collected from several sites containing Oregon chub in the Santiam River drainage; the two largest populations of Oregon chub (Geren Island North Pond and Santiam Easement) subsequently declined sharply in abundance (Scheerer 2002, p. 1076).

Nonnative fish, which prey upon Oregon chub, were also introduced into Oregon chub habitats. For example, illegal planting of largemouth bass at East Ferrin Pond in the Middle Fork Willamette River drainage coincided with the collapse of an Oregon chub population that had once totaled more than 7,000 fish. A regulatory mechanism is in place to prevent the translocation of nonnative fish. Within the State of Oregon, it is unlawful to transport, release, or attempt to release any live

fish into the waters of this State (OAR 635–007–0600). Although similar illegal introductions may still occur in the future, they have historically been infrequent in habitats known to be occupied by Oregon chub.

Predatory, nonnative centrarchids (bass and sunfish), western mosquitofish (*Gambusia affinis*), and bullhead catfish (*Ameiurus* spp.) are common in the off-channel habitats preferred by Oregon chub (Scheerer 2002, p. 1,075). The Oregon chub is most abundant at sites where nonnative fishes are absent (Scheerer 2007, p. 96). However, ODFW biologists recently found many abundant Oregon chub populations that coexist with nonnative fish in hydrologically connected habitats (Bangs *et al.* 2011a, pp. 21–24). One of the primary objectives of the floodplain study funded under the Willamette Project biological opinion (Service 2008b, pp. 180–182; see previous discussion under Factor A) is to examine the relationship between the environmental conditions at hydrologically connected sites and the fish community, with a focus on Oregon chub and nonnative fish. The results to date indicate that spatial and seasonal differences in temperature within these off-channel habitats may provide areas that are suitable for Oregon chub but not suitable for nonnatives. In other words, Oregon chub may be able to coexist with nonnative fish because the habitat provides a diverse range of temperatures that partitions habitats among the species (Bangs *et al.* 2011a, pp. 9–10 and 16–17). Currently, 41 percent of all known Oregon chub habitats and 50 percent of the habitats supporting abundant populations (more than 500 Oregon chub) contain nonnative fishes. Research conducted under the study will continue to: (1) Improve our understanding of the effects of nonnative fishes on Oregon chub in these connected habitats; and (2) document the habitat conditions that allow these species to coexist. Sampling results to date indicate that Oregon chub coexist with nonnatives more frequently than previously known. Additional discussion about predation by nonnative fish is presented in the ''Effects of Climate Change'' section (discussed under Factor A).

Bullfrogs (*Rana catesbeiana*) were identified as a threat to Oregon chub in the recovery plan (Service 1998, p. 13) because they may compete with Oregon chub for food resources (*e.g.,* invertebrates). However, bullfrogs are prevalent in most of the habitats occupied by Oregon chub and their presence is not correlated with a decline in Oregon chub abundance (Bangs 2013, pers. comm.).

The Oregon chub is not known to be threatened by disease.

Summary of Factor C

Although the habitat conditions that allow Oregon chub to coexist with nonnative fish are not yet well understood, we documented several abundant Oregon chub populations in multiple subbasins that coexist with nonnative, predatory fish. These Oregon chub populations exist in habitat that is connected to the active floodplain. Ongoing research conducted under the floodplain study funded by the USACE will continue to improve our understanding of the interactions between Oregon chub and nonnative fishes.

While the presence of nonnative fishes in isolated sites may be associated with higher rates of predation on Oregon chub, the species has been introduced into 21 isolated habitats that are protected from the risk of invasion by nonnative fishes due to the habitat distance from the floodplain or other fish barriers. As discussed elsewhere in this document, these introductions act as refugial habitats, and the guidelines used to select sites ensure that these locations remain stable during extreme climactic events, such as droughts or floods. During major flooding in the Willamette River Basin in 1996, these sites remained isolated from neighboring water bodies. In addition, the introduction sites are less vulnerable to the threats of habitat loss compared to connected habitats, and the translocation guidelines ensured that the Oregon chub in these isolated populations are genetically diverse. Introduced populations at these sites have been highly successful, and the majority of Oregon chub individuals occur in populations at these sites. Therefore, based on the best available information, we conclude that disease and predation do not constitute substantial threats to Oregon chub now, nor are they expected to in the foreseeable future.

D. The Inadequacy of Existing Regulatory Mechanisms

In evaluating the inadequacy of existing regulatory mechanisms, we first identify threats under one or more of the other four factors that are affecting the species to the extent it meets the definition of an endangered or a threatened species under the Act. We then identify and evaluate the adequacy of existing regulatory mechanisms that may prevent or reduce those threats. The Oregon chub, however, is no longer facing substantial threats to its long-term survival due to the other four factors; thus the inadequacy of existing regulatory mechanisms is also no longer a threat to the species' continued existence. Therefore, our discussion of this factor focuses on regulatory mechanisms not previously discussed that may provide benefits to Oregon chub.

Wetlands and waterways in Oregon are protected by both Federal and State laws. The Environmental Protection Agency (EPA) administrates the Clean Water Act (CWA; 33 U.S.C. 1251 *et seq.*)), which regulates discharges of pollutants into waters of the United States and regulates water quality standards. The EPA sets standards for pollution control programs and water quality standards for all contaminants in surface waters. Many of the water quality criteria are set for human health standards or salmon and steelhead life stage needs, which exceed biological requirements for Oregon chub. For example, the upper temperature tolerance of Oregon chub is significantly higher than the maximum allowable temperatures set by EPA criteria for salmon and steelhead spawning and rearing.

While we acknowledge that there are Oregon chub in reaches in the Willamette River that are on the section 303(d) list of impaired and threatened waters under the CWA, Oregon chub populations have continued to expand throughout the Willamette River Basin in spite of these section 303(d) waters. Further, we do not foresee future water quality declines (*i.e.,* temperature, dissolved oxygen, biological criteria) that are a threat to the continued existence of Oregon chub and require its continued listing under the Act. The Service has consulted with the EPA on existing Oregon water quality standards and the Service's biological opinion concluded that the Oregon water quality standards are not likely to jeopardize the continued existence of Oregon chub (Service 2004, pp. 76–77). While the courts remanded the 2004 biological opinion back to the Service, and we continue to work with the EPA to complete this consultation, the remand was based on thermal requirements for bull trout, not Oregon chub.

Under section 404 of the CWA, the USACE regulates the discharge of dredged material and fill material into waters of the United States, including navigable waters and wetlands that may contain Oregon chub. Oregon's Removal-Fill Law (ORS 196.795–990) requires people who plan to remove or fill material in waters of the State to obtain a permit from the Oregon

Department of State Lands (DSL). Projects impacting waters often require both a State removal-fill permit, issued by the DSL, and a Federal permit issued by the USACE. A permit is required only if 50 cubic yards (1,350 cubic feet) or more of fill or removal will occur. The removal-fill law does not regulate the draining of wetlands. Projects permitted under these programs must avoid and minimize impacts to wetlands or waterways, or propose mitigation to replace the functions and values lost as a result of the project (Oregon Department of State Lands 2013, p. 64). Some actions, however, such as construction and maintenance of irrigation-diversion structures and other activities associated with ongoing farming operations in existing cropped wetlands, are exempt from CWA requirements. Additionally, projects authorized under a nationwide USACE permit program receive minimal public and agency review unless the action may affect a listed species, in which case, consultation under section 7 of the Act is required. Individual permits are subject to a more rigorous review, as well as nationwide permit activities with more than minimal impacts.

Under section 303(c) of the CWA, States are required to adopt water quality standards to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Oregon adopted revised water quality standards for toxic pollutants in 2004. These standards are intended to protect native aquatic species, and are regulated by the Oregon Department of Environmental Quality. The State implements the standards through listing of waters that exceed criteria on the section 303(d) list of the CWA, calculating the Total Maximum Daily Loads (the maximum amount of pollutants that may enter a stream), and issuing or reissuing permits (*i.e.,* National Pollutant Discharge Elimination System). In 2012, we completed consultation under section 7 of the Act on the EPA's proposed approval of the State of Oregon's water quality criteria for toxic pollutants (Service 2012, entire). Although some Oregon chub sites may be affected by point-source discharges (*i.e.,* wastewater treatment facilities and stormwater discharge from a manufacturing plant) and non-point-source discharges (*i.e.,* runoff of agricultural and forestry pesticides and fertilizers) of toxic chemicals, we determined in our consultation with the EPA that the Oregon chub's exposure to these chemicals at the criteria levels and the resulting effects would not jeopardize the species' continued existence, adversely modify or destroy Oregon chub critical habitat, or reach levels preventing Oregon chub from attaining the abundance and distribution criteria for delisting identified in the recovery plan (Service 2012, pp. 351–352).

The Oregon chub is designated as ''Sensitive-Critical'' by the ODFW. Although this designation is a nonregulatory tool, it helps focus wildlife management and research activities, with the goal of preventing species from declining to the point of qualifying as ''threatened'' or ''endangered'' under the Oregon Endangered Species Act (ORS 496.171, 496.172, 496.176, 496.182, and 496.192). ODFW's ''Sensitive-Critical'' designation encourages, but does not require, the implementation of conservation actions for the species; however, other State agencies, such as the DSL and the Oregon Water Resources Department, refer to the Sensitive Species List when making regulatory decisions.

The ODFW's Sensitive Species List is reviewed and updated every 5 years. Each taxonomic group of animals is reviewed by the ODFW biologists and scientific experts from other agencies, universities, and private organizations. The scientists consider new and historic information on species distribution, population trends, and biological needs; changes in threats; gaps in knowledge and data; recent conservation actions; and State and Federal programs or regulations. The scientists may propose to remove, add, or re-classify species based on this information. The draft list is then peer-reviewed by State, Federal, university, and consulting biologists. The ODFW is currently updating the Sensitive Species List and plans to retain the ''Sensitive-Critical'' designation for Oregon chub for the duration of the post-delisting monitoring plan timeframe.

Summary of Factor D

Although existing regulatory mechanisms offer limited protection to Oregon chub, we have no indication that other factors, which these mechanisms are designed to address, are likely to occur at such a magnitude as to negatively impact large numbers of Oregon chub or a substantial area of habitat. Therefore, based on the best available information, we conclude that the inadequacy of existing regulatory mechanisms does not constitute a substantial threat to Oregon chub now, nor is it projected to in the future.

E. Other Natural or Manmade Factors Affecting Its Continued Existence

Interspecific Competition With Nonnative Fishes

Along with the adverse impacts of direct predation described under Factor C (above), nonnative fishes compete with Oregon chub for food resources, such as aquatic invertebrates. Competition with nonnative fishes may contribute to the decline in populations or exclusion of Oregon chub from suitable habitats. Observed feeding strategies and diet of nonnative fishes, particularly juvenile centrarchids and adult western mosquitofish, overlap with those described for Oregon chub (Li *et al.* 1987, pp. 197–198). At South Stayton Pond, a hydrologically isolated site in the Santiam River Basin, we observed a population of 6,200 Oregon chub decline to 2,200 in one season after invasion by western mosquitofish, a nonnative fish that competes with adults and potentially predates on larval Oregon chub. The source of this invasion is unknown, but it is likely that the western mosquitofish were illegally introduced into the pond. The population remained above 1,000 for the past 4 years (Bangs 2014, pers. comm.), demonstrating the ability of nonnative fish to competitively suppress Oregon chub populations. Other populations of the Oregon chub are possibly suppressed by competition with nonnative fishes. However, the current abundance of Oregon chub and its distribution throughout floodplain habitats in the Santiam, McKenzie, and Middle Fork Willamette Rivers indicates that competition by nonnative fish is not affecting Oregon chub populations to the degree that overall status declines are observed. Additional discussion about competition by nonnative fish is presented in the ''Effects of Climate Change'' section (see Factor A).

Isolated Populations

Twenty-eight populations of the Oregon chub are currently isolated; 21 of these sites are introduced sites where isolation was intentional in order to provide refugia from the threat of nonnative fishes. Other sites are isolated due to the reduced frequency and magnitude of flood events and the presence of migration barriers such as beaver dams. Managing species in isolation may have genetic consequences. Burkey (1989, p. 78) concluded that, when species are isolated by fragmented habitats, low rates of population growth are typical in local populations, and their probability of extinction is directly related to the degree of isolation and fragmentation.

Without sufficient immigration, growth of local populations may be low and probability of extinction high (Burkey 1989, p. 78). The genetic analyses performed on Oregon chub (DeHaan *et al.* 2010, pp. 14–19; 2012, pp. 548–549) found high levels of genetic variation at most locations. Also, the genetic analyses found that our guidelines for establishing introduction sites are effective, and introductions stocked from multiple donor sources have higher variability than those from single donor sources. In addition, 50 of the 77 Oregon chub populations are located in habitat that experiences some level of connectivity to the adjacent river channel; 34 of these populations were discovered since we downlisted the Oregon chub to threatened status in 2010. Furthermore, the ODFW documented Oregon chub in new habitat created by floodplain processes in the McKenzie River subbasin, and documented voluntary movement of Oregon chub between populations in the Middle Fork Willamette River (Bangs *et al.* 2012, p. 19) and McKenzie River subbasins (Bangs *et al.* 2013, p. 17). These findings demonstrate the ability of Oregon chub to colonize new habitats and exchange genetic material between established populations. Manual transport of Oregon chub between populations has not been proposed, and we think it unnecessary at this time for the maintenance of populations. Although a recent genetic analysis found that Oregon chub in isolated habitats have levels of genetic diversity equal to or greater than other cyprinids, additional Oregon chub may need to be introduced into these isolated populations in the future to maintain genetic diversity in the event a population shows a significant decline.

In the final rule to reclassify Oregon chub to threatened (75 FR 21179, April 23, 2010), we expressed concern about genetic isolation due to the lack of habitat connectivity between Oregon chub populations. As stated above, we discovered that many of the habitats occupied by the Oregon chub connect to the adjacent river channel more frequently and for longer duration than previously understood, which provides opportunities for genetic dispersal.

Summary of Factor E

Interspecific competition with nonnative fishes and isolation from genetic exchange may affect Oregon chub populations in the future. However, we observed population declines related to competition with nonnative fishes in only one Oregon chub population, South Stayton Pond, a small habitat area with limited resources. Although this decline was substantial (abundance of 6,200 chub declined to 2,200 chub in one season), the population since stabilized and persists with about 1,000 Oregon chub (Bangs *et al.* 2013, p. 6). We documented numerous additional abundant Oregon chub populations in habitats that are connected to the floodplain, which facilitates potential genetic exchange among populations. This has ameliorated the risk of a reduction in genetic diversity. The impacts associated with the effects of climate change will be somewhat ameliorated by the multiple storage dams in the Willamette River Basin, the wide range of temperature tolerances of Oregon chub, and the diversity of habitats occupied by the species. To the extent the effects of climate change manifest on the landscape, these impacts are, and will continue to be, reduced by the distribution of many abundant populations in diverse habitats across multiple subbasins. Therefore, based on the best available information, we conclude that other natural or manmade factors do not constitute a substantial threat to Oregon chub now, nor will they in the foreseeable future.

Cumulative Impacts

Some of the factors discussed in this five-factor analysis could work in concert with one another or synergistically to create cumulative impacts to Oregon chub populations. For example, effects from flow, dam operations, and temperature changes downstream of Willamette Project dams may coincide with an increase in nonnative fish species that prey upon and compete with Oregon chub. Although the types, magnitude, extent, or permutations of cumulative impacts are difficult to assess, the current status of Oregon chub indicates that no such synergies drive population declines now or have the potential to in the future, and the post-delisting monitoring plan is designed to detect such declines if they occur. As discussed below, the agencies and nongovernmental organizations that manage multiple populations agreed to cooperate on the implementation of the post-delisting monitoring plan, which will guide the monitoring and, should population declines occur, necessary research and conservation actions. The best scientific and commercial data available indicate that Oregon chub is genetically diverse, abundant, and well-distributed throughout its historical range and that the factors are not currently, or anticipated to, cumulatively cause declines in Oregon chub populations or its habitat.

Overall Summary of Factors Affecting Oregon Chub

The primary factors that threatened Oregon chub were loss of habitat, predation and competition by nonnative fishes, and the inadequacy of existing regulatory mechanisms. The threats that led to the species' listing under the Act have been removed or ameliorated by the actions of multiple conservation partners over the last 20 years. The introduction of Oregon chub into several secure habitats has provided populations that are isolated from the threats of habitat loss and invasion by nonnative fishes. The discovery of many natural populations, including a number of populations that are connected to the active floodplain and coexist with nonnative fishes, has increased our understanding of population persistence in spite of the presence of predators in the species' environment. The implementation of minimum instream flows and ongoing flushing flows from Willamette Project dams that sustain floodplain habitat downstream reduced the risk of habitat loss due to altered flows. The acquisition of floodplain habitat for long-term conservation and restoration provided assurance that management of floodplain habitat for the species will continue into the foreseeable future.

Many factors still exist that may affect Oregon chub populations; however, most of these factors were isolated incidents, and the magnitude of their effects were not observed on a wide scale across the distribution of Oregon chub populations. The abundance and distribution of known Oregon chub populations has increased each year since the downlisting to threatened, and has exceeded the goals of our recovery criteria for delisting. When the species was listed in 1993, only nine populations of Oregon chub within a small, restricted range were known to occur. Oregon chub populations now exist in 77 diverse habitats across multiple subbasins. Listing the species under the Act resulted in the implementation of focused recovery actions that led to protected, abundant, and well-distributed Oregon chub populations across several Willamette River Basin tributaries. We expect conservation efforts will continue to support persistent recovered Oregon chub populations post-delisting and into the future, as described above. Based on this assessment of factors potentially impacting the species, we consider Oregon chub to face no

substantial threats, now or into the foreseeable future.

Determination

An assessment of the need for a species' protection under the Act is based on whether a species is in danger of extinction or likely to become so because of any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. As required by section 4(a)(1) of the Act, we conducted a review of the status of this species and assessed the five factors to evaluate whether the Oregon chub is endangered or threatened throughout all of its range. We examined the best scientific and commercial information available regarding the past, present, and future threats faced by Oregon chub and its habitat. We reviewed the information available in our files and other available published and unpublished information, and we consulted with recognized experts and other Federal, State, and Tribal agencies.

In considering what factors might constitute threats, we must look beyond the mere exposure of the species to the factor to determine whether the exposure causes actual impacts to the species. If there is exposure to a factor, but no response, or only a positive response, that factor is not a threat. If there is exposure and the species responds negatively, the factor may be a threat and we then attempt to determine how significant the threat is. If the threat is significant, it may drive, or contribute to, the risk of extinction of the species such that the species warrants listing as endangered or threatened as those terms are defined by the Act. This determination does not necessarily require empirical proof of a threat. The combination of exposure and some corroborating evidence of how the species is likely impacted could suffice. The mere identification of factors that could impact a species negatively is not sufficient to compel a finding that listing is appropriate; we require evidence that these factors are operative threats that act on the species to the point that the species meets the definition of an endangered species or threatened species under the Act.

We find that Oregon chub populations are well-distributed among several subbasins and that many large, stable, or increasing populations exist that show no evidence of decline over the last 7 or more years. During our analysis, we did not identify any factors that are likely to reach a magnitude that threatens the continued existence of the species; significant impacts at the time of listing that could have resulted in the extirpation of all or parts of populations have been eliminated or reduced since listing, and we do not expect any of these conditions to substantially change post-delisting and into the foreseeable future. We conclude that the previously recognized impacts to Oregon chub from the present or threatened destruction, modification, or curtailment of its habitat or range (specifically, operation of the USACE's Willamette Project dams, sedimentation from timber harvest and floods, water quality issues, succession, and effects of climate change (Factor A); predation by nonnative species (Factor C); and interspecific competition with nonnative species, and isolation from genetic exchange (Factor E)), do not rise to a level of significance such that the species is in danger of extinction throughout all of its range now or in the foreseeable future.

Significant Portion of the Range Analysis

Having determined that the Oregon chub throughout all its range, is not endangered or threatened throughout all of its range, we next consider whether there are any significant portions of its range in which the Oregon chub is in danger of extinction or likely to become so. Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so throughout all or a significant portion of its range. The Act defines ''endangered species'' as any species which is ''in danger of extinction throughout all or a significant portion of its range,'' and ''threatened species'' as any species which is ''likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.'' We published a final policy interpreting the phrase ''Significant Portion of its Range'' (SPR) (79 FR 37578; July 1, 2014). The final policy states that (1) if a species is found to be endangered or threatened throughout a significant portion of its range, the entire species is listed as endangered or threatened, respectively, and the Act's protections apply to all individuals of the species wherever found; (2) a portion of the range of a species is ''significant'' if the species is not currently endangered or threatened throughout all of its range, but the portion's contribution to the viability of the species is so important that, without the members in that portion, the species would be in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range; (3) the range of a species is considered to be the general geographical area within which that species can be found at the time the Service or NMFS makes any particular status determination; and (4) if a vertebrate species is endangered or threatened throughout an SPR, and the population in that significant portion is a valid Distinct Population Segment (DPS), we will list the DPS rather than the entire taxonomic species or subspecies.

The procedure for analyzing whether any portion is an SPR is similar, regardless of the type of status determination we are making. The first step in our analysis of the status of a species is to determine its status throughout all of its range. If we determine that the species is in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range, we list the species as an endangered species (or threatened species) and no SPR analysis will be required. If the species is neither in danger of extinction nor likely to become so throughout all of its range, we next determine whether the species is in danger of extinction or likely to become so throughout a significant portion of its range. If it is, we list the species as an endangered species or threatened species, respectively; if it is not, we conclude that listing the species is not warranted.

When we conduct an SPR analysis, we first identify any portions of the species' range that warrant further consideration. The range of a species can theoretically be divided into portions in an infinite number of ways. However, there is no purpose in analyzing portions of the range that have no reasonable potential to be significant or in analyzing portions of the range in which there is no reasonable potential for the species to be endangered or threatened. To identify only those portions that warrant further consideration, we determine whether substantial information indicates that: (1) The portions may be ''significant'' and (2) the species may be in danger of extinction there or likely to become so within the foreseeable future. Depending on the biology of the species, its range, and the threats it faces, it might be more efficient for us to address the significance question first or the status question first. Thus, if we determine that a portion of the range is not ''significant,'' we do not need to determine whether the species is

endangered or threatened there; if we determine that the species is not endangered or threatened in a portion of its range, we do not need to determine if that portion is ''significant.'' In practice, a key part of the determination that a species is in danger of extinction in a significant portion of its range is whether the threats are geographically concentrated in some way. If the threats to the species are affecting it uniformly throughout its range, no portion is likely to have a greater risk of extinction, and thus would not warrant further consideration. Moreover, if any concentration of threats apply only to portions of the range that clearly do not meet the biologically based definition of ''significant'' (*i.e.,* the loss of that portion clearly would not be expected to increase the vulnerability to extinction of the entire species), those portions would not warrant further consideration.

We considered whether any portions of Oregon chub range might be both significant and in danger of extinction, or likely to become so in the foreseeable future. One way to identify portions would be to identify natural divisions within the range that might be of biological or conservation importance. The geographic range of Oregon chub can readily be divided into four subbasins (Santiam, Mainstem Willamette, Middle Fork Willamette, and Coast Fork Willamette Rivers). Although some of the factors we evaluated in the Summary of Factors Affecting the Species section, above, occur in specific habitat types (*i.e.,* hydrologically connected sites versus isolated sites) within these subbasins, the factors affecting Oregon chub generally occur at similarly low levels throughout its range. Because the low level of potential threats to the species is essentially uniform throughout its range and the populations of the species within the subbasins are not in danger of extinction or likely to become so within the foreseeable future due to lack of significant threats, no portion of the range warrants further consideration to determine if it is significant. Based on our review of the best available information concerning the distribution of the species and the potential threats, we have determined that the Oregon chub does not warrant further consideration to determine if there is a significant portion of the range that is endangered or threatened.

Summary

We carefully assessed the best scientific and commercial data available and determined that the Oregon chub is no longer in danger of extinction throughout all or a significant portion of its range, nor is it likely to become so within the foreseeable future. We conclude Oregon chub no longer requires the protection of the Act, and, therefore, we are removing it from the Federal List of Endangered and Threatened Wildlife.

Future Conservation Measures

Section 4(g)(1) of the Act requires us, in cooperation with the States, to implement a monitoring program for not less than 5 years for all species that have been recovered and delisted. The purpose of this post-delisting monitoring (PDM) is to verify that a species remains secure from risk of extinction after the protections of the Act are removed, by developing a program that detects the failure of any delisted species to sustain itself. If, at any time during the monitoring period, data indicate that protective status under the Act should be reinstated, we can initiate listing procedures, including, if appropriate, emergency listing under section 4(b)(7) of the Act.

Post-Delisting Monitoring Plan Overview

The Service developed a final PDM plan in cooperation with the ODFW. In addition, the USACE, USFS, Oregon Parks and Recreation Department, McKenzie River Trust, and Willamette Valley National Wildlife Refuge Complex agreed to cooperate with us in the implementation of the PDM plan. The PDM plan is designed to verify that the Oregon chub remains secure from the risk of extinction after removal from the Federal List of Endangered and Threatened Wildlife by detecting changes in its status and habitat throughout its known range. The final PDM plan consists of: (1) A summary of the species' status at the time of delisting; (2) an outline of the roles of PDM cooperators; (3) a description of monitoring methods; (4) an outline of the frequency and duration of monitoring; (5) an outline of data compilation and reporting procedures; and (6) a definition of thresholds or triggers for potential monitoring outcomes and conclusions of the PDM effort.

The final PDM plan will monitor Oregon chub populations following the same sampling protocol used by the ODFW prior to delisting. Monitoring will consist of three components: Oregon chub distribution and abundance, potential adverse changes to Oregon chub habitat due to environmental or anthropogenic factors, and the distribution of nonnative fishes in Oregon chub habitats. The PDM period consists of three 3-year cycles (9 years total), which will begin in 2015. Both Willamette Project biological opinions continue until 2023, and flow and temperature augmentation will be implemented during this period (Service 2008b, pp. 68–72; NMFS 2008, pp. 2–43 to 2–52, 2–125 to 2–128). Monitoring through this time period will allow us to address any possible negative effects to Oregon chub associated with changes to flow and temperatures. As funding allows, we will collect data on roughly three generations of Oregon chub in each of the three subbasins, which will allow time to observe fluctuations in population abundance that may be attributed to residual stressors. Sites included in the floodplain study will be sampled annually over the next 9 years, enabling the Service and PDM partners to recommend flow and temperature regimes that are beneficial to native fishes in to the future. Sites outside the floodplain study will be sampled only once during each 3-year cycle, thus reducing annual sampling costs from current levels.

The final PDM plan identifies measurable management thresholds and responses for detecting and reacting to significant changes in Oregon chub protected habitat, distribution, and persistence. If monitoring detects declines equaling or exceeding these thresholds, the Service in combination with other PDM participants will investigate causes of these declines, including considerations of habitat changes, substantial human persecution, stochastic events, or any other significant evidence. Such investigation will determine if Oregon chub warrants expanded monitoring, additional research, additional habitat protection, or relisting as an endangered or a threatened species under the Act. If relisting Oregon chub is warranted, emergency procedures to relist the species may be followed, if necessary, in accordance with section 4(b)(7) of the Act.

We will post the final PDM plan and any future revisions on our national Web site (*http://endangered.fws.gov*) and on the Oregon Fish and Wildlife Office's Web site (*http://www.fws.gov/oregonfwo/*).

Effects of the Rule

This final rule revises 50 CFR 17.11(h) by removing Oregon chub from the Federal List of Endangered and Threatened Wildlife. As such, as of the effective date of this rule (see **DATES**), the prohibitions and conservation measures provided by the Act, particularly through sections 7 and 9, no longer apply to this species (including

those contained in the existing conservation agreement, all safe harbor agreements, and all biological opinions for this species). There are no habitat conservation plans related to Oregon chub. Removal of Oregon chub from the Federal List of Endangered and Threatened Wildlife relieves Federal agencies from the need to consult with us under section 7 of the Act to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of this species. This final rule also revises 50 CFR 17.95(e) by removing the designated critical habitat for Oregon chub throughout its range.

Required Determinations

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act. This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), need not be prepared in connection with regulations pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

References Cited

A complete list of all references cited in this final rule is available at *http://www.regulations.gov* at Docket No. FWS–R1–ES–2014–0002, or upon request from the Oregon Fish and Wildlife Office (see **ADDRESSES**).

Authors

The primary authors of this rule are staff members of the Service's Oregon Fish and Wildlife Office with assistance from ODFW staff (see **ADDRESSES** and **FOR FURTHER INFORMATION CONTACT**).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as follows:

PART 17—[AMENDED]

■ 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

§ 17.11 [Amended]

■ 2. Amend § 17.11(h) by removing the entry for ''Chub, Oregon'' under FISHES in the List of Endangered and Threatened Wildlife.

§ 17.95 [Amended]

■ 3. Amend § 17.95(e) by removing the entry for ''Oregon Chub (*Oregonichthys crameri*)''.

Dated: December 16, 2014.

Stephen Guertin,

Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 2015–02951 Filed 2–18–15; 8:45 am]

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Part V

Department of Homeland Security

Coast Guard

46 CFR Parts 8 and 197

Commercial Diving Operations; Proposed Rule

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

46 CFR Parts 8 and 197

[Docket No. USCG–1998–3786]

RIN 1625–AA21

Commercial Diving Operations

AGENCY: Coast Guard, DHS.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes to amend its regulations for commercial diving that is conducted from deepwater ports or deepwater port safety zones, or in connection with Outer Continental Shelf (OCS) activities, or from vessels that are required to have a Coast Guard certificate of inspection. The regulations would be revised and updated to improve safety and to reflect current industry best practices. The proposed regulations would also allow the Coast Guard to approve independent third-party organizations to assist with ensuring regulatory compliance of commercial diving regulations. The proposed amendments promote the Coast Guard's maritime safety mission.

DATES: Comments and related material must either be submitted to our online docket via *http://www.regulations.gov* on or before May 20, 2015 or reach the Docket Management Facility by that date. Comments sent to the Office of Management and Budget (OMB) on collection of information must reach OMB on or before May 20, 2015.

ADDRESSES: Submit comments using *one* of the listed methods, and see **SUPPLEMENTARY INFORMATION** for more information on public comments.

- *Online—http://www.regulations.gov* following Web site instructions.
- *Fax*—202–493–2251.
- *Mail*—Docket Management Facility (M–30), U.S. Department of Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590–0001.
- *Hand deliver—mail* address, 9 a.m. to 5 p.m., Monday through Friday, except Federal holidays (telephone 202–366–9329).

Collection of information. You must submit comments on the collection of information discussed in section IX.D of this preamble both to the Coast Guard's docket and to the Office of Information and Regulatory Affairs (OIRA) in the White House Office of Management and Budget. OIRA submissions can use one of the listed methods.

- *Email* (preferred)—*oira_submission@omb.eop.gov* (include the docket number and ''Attention: Desk Officer for Coast Guard, DHS'' in the subject line of the email).
- *Fax*—202–395–6566.
- *Mail*—Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503, ATTN: Desk Officer, U.S. Coast Guard.

Viewing material proposed for incorporation by reference. Make arrangements to view this material by calling the Coast Guard's Office of Regulations and Administrative Law at 202–372–3870 or by emailing *HQS-SMB-CoastGuardRegulationsLaw@uscg.mil.*

FOR FURTHER INFORMATION CONTACT: If you have questions on this proposed rule, call or email Mr. Ken Smith, Project Manager, U.S. Coast Guard, Headquarters, Vessel and Facility Operating Standards Division, Commandant (CG–OES–2); telephone 202–372–1413, email *Ken.A.Smith@uscg.mil.* If you have questions on viewing or submitting material to the docket, call Cheryl Collins, Program Manager, Docket Operations, telephone 202–366–9826.

SUPPLEMENTARY INFORMATION:

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I. Public Participation and Comments

We encourage you to submit comments (or related material) on this rulemaking. We will consider all submissions and may adjust our final action based on your comments. Comments should be marked with docket number USCG–1998–3786, and should provide a reason for each suggestion or recommendation. You should provide personal contact information so that we can contact you if we have questions regarding your comments; but please note that all comments will be posted to the online docket without change and that any personal information you include can be searchable online (see the **Federal Register** Privacy Act notice regarding our public dockets, 73 FR 3316, Jan. 17, 2008).

Mailed or hand-delivered comments should be in an unbound 8½ x 11 inch format suitable for reproduction. The Docket Management Facility will acknowledge receipt of mailed comments if you enclose a stamped, self-addressed postcard or envelope with your submission. Documents mentioned in this notice, and all public comments, are in our online docket at *http://www.regulations.gov* and can be viewed by following the Web site's instructions. You can also view the docket at the Docket Management Facility (see the mailing address under **ADDRESSES**) between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

We are not planning to hold a public meeting but will consider doing so if public comments indicate a meeting would be helpful. We would issue a separate **Federal Register** notice to announce the date, time, and location of such a meeting.

II. Abbreviations

ACDE Association of Commercial Diving Educators
ADCI Association of Diving Contractors International
ANPRM Advance notice of proposed rulemaking
ANSI American National Standards Institute
ASME American Society of Mechanical Engineers
CDO Commercial Diving Operator
CFR Code of Federal Regulations
CG Coast Guard
DHS Department of Homeland Security
DMT Diving medical technician
FR Federal Register
IMO International Maritime Organization
MISLE Marine Information for Safety and Law Enforcement
NAICS North American Industry Classification System
NOSAC National Offshore Safety Advisory Committee
NPRM Notice of proposed rulemaking
OCMI Officer in Charge, Marine Inspection
OCS Outer Continental Shelf
OMB Office of Management and Budget
OSHA Occupational Safety and Health Administration
Psi (g) Pounds per square inch (gauge)
RA Regulatory Analysis
SCUBA Self-contained underwater breathing apparatus
§ Section symbol
TPO Third-party organization
U.S.C. United States Code

III. Basis and Purpose

The legal basis for this notice of proposed rulemaking (NPRM) is 33 U.S.C. 1509(b), which requires safety regulations for deepwater ports; 43 U.S.C. 1333(d)(1), which permits safety regulations for Outer Continental Shelf (OCS) facilities and their equipment; 46 U.S.C. 3306, which requires regulations to implement subtitle II of Title 46 of the U.S. Code with respect to inspected vessels, including offshore supply vessels and their equipment; 46 U.S.C. 3703, which requires safety and environmental protection regulations for liquid bulk dangerous cargo carriers and their equipment, to be issued after consultation with Federal, State, and local governments and with private sector entities (we specifically request interested government agencies and private sector entities to comment on this NPRM); and 46 U.S.C. 6101, which requires regulations for reporting and investigating marine casualties. The Secretary of Homeland Security's authority under all of these statutes has been delegated to the Commandant of the Coast Guard by Department of Homeland Security Delegation No. 0170.1, para. II (75), (90), and (92).

The purpose of the NPRM is to propose revisions and updates to our existing commercial diving regulations, to improve safety, to reflect current industry best practices, and to facilitate the use of approved third-party organizations to ensure regulatory compliance.

IV. Background

History. The Coast Guard issued commercial diving operation regulations (found at 46 CFR part 197, subpart B), in 1978. Generally, the regulations apply to commercial operations conducted from deepwater ports (such as offshore liquefied natural gas facilities), or as a part of OCS activities, or from vessels that are required to have a Coast Guard certificate of inspection.[1] Commercial diving operations conducted near shore or in U.S. internal waters from a vessel not required to have a Coast Guard certificate of inspection are not covered by Coast Guard regulations, but are regulated by the Occupational Safety and Health Administration (OSHA).[2]

We began this rulemaking in 1994 at the request of an industry group now known as the Association of Diving Contractors International (ADCI). Among other recommendations for updating our 1978 regulations, ADCI suggested the Coast Guard incorporate its consensus standards into regulation. We issued our first advance notice of proposed rulemaking (ANPRM) in 1998[3] and noted that our regulations were then already 20 years old and did not reflect the latest safety and technology standards and industry best practices. In 2009, a second ANPRM[4] discussed in detail the public comments we received for the 1998 ANPRM, recounted the early history of the rulemaking, and summarized developments between 1998 and 2009. The public comments received on the 1998 ANPRM revealed a deep split of opinion as to which industry group's standards should be incorporated in our regulations. Our position in the 2009 ANPRM was to encourage continued industry interest in this rulemaking and to solicit a new round of public comments.

Recommendations to the Coast Guard. We are aware of continuing issues such as proper dive manning, drill, medical and audit practices/requirements among others, that have continued to be evident in the industry. Consequently, in this NPRM, we propose a complete revision of the commercial diving operation regulations in 46 CFR part 197, subpart B. In doing so, we are mindful of the recommendations made in the Coast Guard's 1996 formal investigation report into a commercial diving fatality involving Cliff's Drilling Rig No. 12 (''the Rig 12 report''), and of recommendations made in 2008 and 2012 by the Diving Subcommittee of the National Offshore Safety Advisory Committee (''the NOSAC report''). (NOSAC is a Federal advisory committee that advises the Coast Guard on matters related to operations and safety on the OCS.) All recommendations in the reports discussed above are available in the online docket at *http://www.regulations.gov.*

The Rig 12 report recommended new requirements for additional safety equipment, standby divers, equipment maintenance records, and pre-dive planning. This NPRM proposes many of these measures. The Rig 12 report also recommended against delegating Coast Guard dive safety enforcement duties to third-parties. Although this NPRM proposes the use of independent third-party auditors, their proposed use is intended to leverage industry expertise and capabilities, and provide a framework for Coast Guard enforcement, not to relieve us of our regulatory responsibilities. Therefore, we do not regard the use of third-party organizations as being contrary to the Rig 12 report recommendation.

The 2008 NOSAC report to the Coast Guard[5] noted that two industry groups, ADCI and the International Marine Contractors Association, had published standards that were more up to date than our regulations. The 2008 NOSAC report's major recommendations included avoiding overly-prescriptive requirements that might stifle innovation in diving safety, developing specific requirements for each diving mode, and setting training requirements that balance practical experience with classroom instruction. To implement those major recommendations, we concluded that it would be better to completely revise our regulations instead of making the section-by-section changes NOSAC suggested.

The 2008 NOSAC report found that audits would be ''of great benefit'' but ''should be developed, implemented, and performed by industry in order to ensure full consideration of the operation in that geographical area.'' We encourage industry to conduct its own audits, this NPRM proposes the use of Coast Guard-approved third-party organizations subject to Coast Guard approval and oversight. In determining whether to approve a third-party organization, we would take into account the organization's ability to understand operating conditions within specific geographical areas.

NOSAC also recommended in 2008 against recognizing self-contained underwater breathing apparatus (SCUBA) diving as an offshore commercial diving application. However, our discussions with members of the commercial diving industry and knowledge of known commercial diving activities indicates that this mode of diving continues to be used in some commercial diving operations, especially in shallow water. Since we are aware that SCUBA continues to be used in commercial diving activities regulated by the Coast Guard, we believe SCUBA diving should continue to be addressed in our commercial diving regulations in order to maintain established minimum safety standards for that mode of diving.

In November 2009, NOSAC issued a report to the Coast Guard voicing concerns about the evacuation and medical treatment of injured workers from remote OCS facilities. Recognizing the importance of this matter, we asked NOSAC to reestablish the subcommittee

[1] 46 CFR 197.202.

[2] 29 CFR 1910.401–1910.441, 1915.6.

[3] 63 FR 34840 (Jun. 26, 1998).

[4] 74 FR 414 (Jan. 6, 2009).

[5] ''NOSAC Diving Subcommittee 46 CFR 197 Sub Part B General Revision Recommendations,'' Apr. 18, 2008.

on commercial diving operations to review and assess the various issues and challenges associated with providing timely medical attention and treatment to divers who become ill or are injured while working subsea/under pressures at remote OCS facilities or from the vessels servicing them. We asked the subcommittee to review and assess present capabilities, practices, and procedures for medical treatments and evacuations for injured divers to shore treatment facilities from offshore facilities, including industry and government agency resources and capabilities. We also asked the subcommittee to prepare a final report for NOSAC's review and approval, recommending how to alleviate the issues and problems associated with medical treatment or evacuation of injured divers from remote OCS facilities. On May 8, 2012, NOSAC made their final report to us, containing the following recommendations concerning commercial diving operations:

1. Require a certified diver medical technician on each surface-supplied and saturation diving operation taking place on the Outer Continental Shelf in the Gulf of Mexico;
2. Ensure that the certified diver medical technician in a saturation diving operation shall have saturation diving certification and experience;
3. Ensure that the certified diver medical technician in a surface diving operation shall have surface diving certification and experience; and
4. Ensure a detailed emergency action plan is in place for medical trauma or barotrauma related injuries for each diving operation. Environmental parameters, equipment, personnel, onboard medical supplies for remote operations and logistics should also be considered.

Our NPRM addresses these recommendations, except that we believe that certified diver medical technicians may only be necessary for saturated diving operations, which would be in keeping with current U.S. industry practices. Presently, the commercial diving industry is required to have at least one diver medical technician on all saturation diving projects, in accordance with the 6th edition of the Association of Diving Contractors, ''International Standards for Commercial Diving and Underwater Operations.'' Additionally, as part of adopting this industry standard for saturated diving operations, we would require an emergency evacuation system to help ensure that divers undergoing hyperbaric treatment can be safely removed in the event of an emergency.

V. Discussion of Comments on 2009 ANPRM

Comments received during the public comment period. The 2009 ANPRM specifically requested comment on six topics: (1) the possible regulatory adoption of industry standards, (2) the use of third-party organizations (TPOs) to conduct regulatory compliance audits, (3) compliance documentation, (4) recommendations made by the Rig 12 report, (5) regulatory priorities, and (6) regulatory costs and benefits. We received comments from seven individuals or associations during the public comment period and, for the most part, the seven did not explicitly address the six topics we requested.

One commenter asked if certain other organizations had posted comments and, if so, how to view their comments. Only one of the organizations mentioned by this commenter submitted a comment and it had already been posted online at *http://www.regulations.gov.* A second commenter asked the Coast Guard to regulate SCUBA diving for the commercial harvesting of coral in Hawaii. Coral harvesting is a form of commercial fishing and, as such, it is not covered by either our current or our proposed regulations, except when conducted from a Coast Guard-inspected vessel (most commercial fishing vessels are uninspected). Another commenter asked us to extend our commercial diving regulations to all marine assistance towing and salvage industry vessels. Proposals to extend the applicability of the commercial diving regulations to vessels or operations that are not now covered by those regulations are beyond the scope of this rulemaking.

The fourth commenter expressed support for the use of TPOs to help provide a consistent level of compliance auditing. We agree with this comment, and third-party auditing is a central concept of this NPRM.

The fifth commenter said that visual inspection of diver helmets is sufficient and that a requirement for annual helmet inspection only imposes unnecessary cost. Our review of commercial diving casualty data indicates that visual inspections are not enough to ensure that a helmet can be used safely in the hazardous conditions for which it is designed. We propose that helmets, as well as all other essential diving equipment, be inspected, maintained, and serviced in accordance with the manufacturer's instructions.

The sixth commenter, an association, noted its participation in developing NOSAC's 2008 recommendations for improving our commercial diving regulations, and confirmed its ongoing interest in improving safety and efficiency. This comment requires no substantive response.

The final commenter made 15 specific recommendations. In general, the recommendations dealt with safety equipment maintenance and repair guidelines and documentation, and with training requirements for safety equipment technicians and users. We believe our proposals align with the intent of those recommendations. The commenter also recommended specific reporting and chain of custody requirements for equipment involved in diving fatalities. In the event of a marine casualty or a serious marine incident, this NPRM proposes requiring the commercial diving operator (CDO) to suspend the commercial diving operation, take action to protect the safety of life and the environment, and resume the operation only after all commercial diving employees have fully complied with the reporting requirements of 46 CFR part 4. Additionally, the CDO would be required to analyze the event and take all reasonable action required to prevent further events from occurring, arrange for a timely post-casualty audit, and ensure that any equipment that may have contributed to the event is immediately removed from service and secured against unauthorized access and any change in its material condition. This NPRM also proposes requiring most diving equipment to carry a serial number or other unique identifier to aid in recording equipment maintenance and to facilitate casualty investigations. Finally, the commenter recommended standardizing training for Coast Guard regulatory compliance personnel. In lieu of standardizing training for Coast Guard regulatory compliance personnel, this NPRM would augment Coast Guard enforcement activities through the use of TPOs to provide another method for improving regulatory compliance. We invite the commenter to consider whether our NPRM proposals adequately address the concerns and to comment on those proposals.

Late comments. We also received six comments after the close of the public comment period.

The first late commenter said we should license all dive supervisors and life support technicians, that licensed supervisors and technicians should not be removed during diving operations except at their own request or for cause, and that we should make unannounced dive site inspections. We do not have authority to license commercial divers

or dive support personnel at this time. However, in this NPRM, we propose requiring commercial diving personnel to have the knowledge, skills, experience, and certification necessary to perform their assigned duties. Many of the desirable outcomes of a Coast Guard licensing program would be provided for by completing the training and experience requirements defined in this NPRM. We would enforce compliance through documentation requirements, inspections, and third-party audits. This commenter also recommended United States and British coordination of dive personnel requirements. We believe our incorporation of the international dive standards of ADCI and of International Maritime Organization (IMO) Assembly Resolution A.831(19), the International Code of Safety for Diving Systems, meets the intent of the commenter.

The other late commenters all suggested minimum dive team size and composition requirements. This NPRM reflects many of those suggestions and we are interested in hearing from the public as to whether our proposed minimum requirements are appropriate.

VI. Discussion of Proposed Rule

We propose revising the 1978 commercial diving regulations in subpart B of 46 CFR part 197 (Marine Occupational Safety and Health Standards, General Provisions). The scope of diving operations affected by these regulations would not change, and affected diving operators would still be able to substitute alternative measures, standards, or equipment if those can be shown to provide an equivalent level of safety. However, we would replace most of the regulations that impose specific operational, personnel, and equipment requirements with new regulations that draw on industry's best practices incorporated in ADCI's current consensus standards. We would also incorporate ADCI's commercial diver training requirements which are based in part on the consensus standards of the Association of Commercial Diving Educators (ACDE). Our proposed regulatory language does not duplicate all the provisions of either the ADCI or ACDE standards, but instead adapts them to create a new regulatory baseline. Affected diving operations would have to comply with that baseline, but where they can use practices that provide greater safety than our baseline, we encourage them to voluntarily do so.

The 2009 ANPRM[6] discussed our preference for using ''regulations as a tool to encourage compliance, before injuries or deaths occur, rather than as a way of punishing violators in the wake of a tragedy.'' Currently, the enforcement of commercial diving regulations is governed by the general civil and criminal penalty procedures found in 33 CFR subpart 1.07, and on the authority to initiate personnel actions against licensed mariners authorized under 46 CFR subchapter A (Procedures Applicable to the Public). We will retain these tools but believe they, alone, are inadequate to prevent accidents from happening. Therefore, this NPRM focuses on proactively promoting and supporting appropriate administrative, operational, and auditing environments to ensure or improve safety. Under our proposals, commercial diving operators would have to provide additional compliance documentation. Coast Guard personnel or approved TPOs would be authorized to inspect operator records, observe diving operations, and interview an operator's employees.

In some diving accidents, the dive team has been so small that it was unable to respond to the emergency or retrieve a disabled diver in time to avoid a serious injury or death. Often, a single dive team member holds multiple duties (for example serving as both the dive supervisor and as a standby diver). This NPRM proposes new minimum standards for the size and composition of dive teams. We also propose prohibiting standby divers from having multiple duties that could interfere with their ability to focus on their primary role or respond adequately to an emergency. These proposals are based on manning levels adopted by the ADCI and the International Association of Oil and Gas Producers. They are minimum levels for safe team operation in the emergency conditions that can readily arise in a dynamic operating environment.

We propose requiring U.S. inspected vessels conducting commercial diving operations in any waters and foreign vessels conducting diving operations on the U.S. Outer Continental Shelf to meet the IMO's International Code of Safety for Diving Systems.[7] This will help ensure that diving systems are designed, constructed, and surveyed in accordance with an accepted international standard. A diving system safety certificate would provide evidence of compliance. This certificate would be issued to a U.S. vessel by a recognized classification society; a foreign vessel's certificate would be issued by its flag state or their delegated authority.

Finally, we propose using TPOs to audit CDOs and determine, on our behalf, whether or not those CDOs are in compliance with our regulations. Our proposed use of TPOs to perform delegated regulatory oversight functions is similar to our longstanding use of recognized classification societies to perform delegated Coast Guard vessel inspection and certification functions, as described in 46 CFR part 8 subpart B. These arrangements enable the Coast Guard to make use of a commercial organization's trained personnel and resources. However, the Coast Guard specifically seeks public input on the following question: What merits and drawbacks can be associated with the proposed use of third parties acting on behalf of the Coast Guard to conduct audits of commercial diving operations?

Table 1 shows how the content of the current commercial diving regulations would be affected by this NPRM. Table 2 provides details about specific sections in the proposed regulations.

TABLE 1—TREATMENT OF CURRENT 46 CFR PART 197 SUBPART B SUBJECT MATTER IN PROPOSED REGULATIONS

Current 46 CFR part 197 subpart B	Proposed 46 CFR part 197 subpart B	Discussion
General, 197.201–197.210	General, 197.201–197.205	General provisions would be revised and reorganized with no change in substance, except for the addition of new definitions. Current 197.200 (Purpose of subpart) would be removed as unnecessary. Current 197.203 (Right of appeal) would be removed as unnecessarily duplicative of 46 CFR subpart 1.03. Current 197.208 (designation of person in charge) and 197.210 (designation of diving supervisor) would be replaced by new 197.220.
Equipment, 197.300–197.346	Equipment, 197.270–197.286	Equipment provisions would be substantively revised.

[6] 74 FR 414, 415.

[7] IMO Assembly Resolution A.831(19).

TABLE 1—TREATMENT OF CURRENT 46 CFR PART 197 SUBPART B SUBJECT MATTER IN PROPOSED REGULATIONS—Continued

Current 46 CFR part 197 subpart B	Proposed 46 CFR part 197 subpart B	Discussion
Operations, 197.400–197.420	Specific Operations, 197.260–197.267.	Operations provisions would be substantively revised.
Specific Diving Mode Procedures, 197.430–197.436.	Specific Operations, 197.260–197.267.	New provisions would be added for specific diving modes.
Periodic Tests and Inspections of Diving Equipment, 197.450–197.462.	Equipment, 197.270–197.286	Testing and inspection requirements for a specific item of equipment would appear in the section providing overall equipment requirements for that item. General testing and inspection requirements would appear under "Operational Duties" (197.220–197.225) and "Specific Operations (197.260–197.267)."
Records, 197.480–197.488	See Discussion column	Logbook requirements would appear in 197.221. Casualty record requirements would appear in 197.224.

TABLE 2—PROPOSED NEW OR AMENDED REGULATIONS, 46 CFR

46 CFR section	Proposed version	Comment on proposed version
46 CFR Part 8, Subpart C—International Convention Certificate Issuance		
8.320	Classification society authorization to issue international certificates.	Amend this section to add IMO diving system safety certificate to the list of certificates.
46 CFR Part 197, Subpart B—Commercial Diving Operations		
197.200–197.205 General		
197.200	Applicability	Add paragraph (d) concerning foreign vessels; otherwise, rewrite current 197.202 for improved clarity but without changing scope.
197.201	Definitions	Current 197.204 definitions with some revision and supplementing to reflect other proposed changes.
197.202	Incorporation by reference	Current 197.205 updated to conform to Office of **Federal Register** requirements and to reflect other proposed changes.
197.203	Equivalents	Current 197.206 dealing with acceptable regulatory substitutes, revised for clarity without changing the public's ability to use approved substitutes (equivalents) for regulatory standards.
197.204	Commercial diving operations conducted in foreign waters.	New provisions requiring certain operations to comply with the International Code of Safety for Diving Systems and to possess valid diving system safety certificates.
197.205	Enforcement	New provisions giving the Coast Guard additional enforcement authority and requiring certain vessels to document compliance with the International Code of Safety for Diving Systems.
197.209–197.213 Audits		
197.209	Third-party audits	New provisions for the internal and external auditing of diving-related operations.
197.210	Internal audits.	
197.211	External audits.	
197.212	Pre-audit notification.	
197.213	Audit reporting.	
197.220–197.225 Operational Duties		
197.220	Commercial diving operators	Places specific regulatory responsibilities on CDOs to ensure full organizational accountability. Current regulations provide specific responsibilities only for the person in charge and dive supervisor.
197.221	Persons in charge	Largely retains the person in charge's responsibilities listed in current 197.402, while adding new provisions relating to dive planning and dynamic positioning.
197.222	Dive supervisors	Retains several responsibilities that dive supervisors have under current 197.404, but adds new safety requirements, for example, explicitly giving the dive supervisor final authority over the dive, and requiring the dive supervisor to communicate with dive team members in a language they understand.
197.223	Operations manual	Largely unchanged from current 197.420, but revised for clarity.
197.224	Operational duties in the event of marine casualty or serious marine incident.	Substantively identical to requirements in current 197.484–197.488; revised for clarity.
197.225	Safety management system	New provisions establishing operations under a safety management system.

TABLE 2—PROPOSED NEW OR AMENDED REGULATIONS, 46 CFR—Continued

46 CFR section	Proposed version	Comment on proposed version
197.240–197.247 Personnel Training and Qualifications		
197.240	General requirement	New provisions to set minimum standards, generally and for each dive team position.
197.241	Standby divers..	
197.242	Dive supervisors.	
197.243	Divers and dive tenders.	
197.244	Life-support technicians.	
197.245	Saturation technicians.	
197.246	Individuals conducting underwater burning, welding, or exothermic cutting.	
197.247	Diver medical technicians.	
197.250–197.253 Health and Medical Requirements		
197.250	Medical examinations	New minimum health and medical standards.
197.251	Pre-operational verification.	
197.252	Work hours.	
197.253	Ascent to altitude after diving or flying after diving.	
197.260–197.267 Specific Operations		
197.260	Operations with potential for differential pressures in adjacent areas.	New minimum standards for specific operations.
197.261	Operations conducted from a dynamic positioning vessel.	
197.262	Operations conducted from a vessel that is liveboating.	
197.263	Operations involving SCUBA.	
197.264	Operations involving multiple dives by a diver.	
197.265	Operations in which a diver's decompression is required, but has been omitted.	
197.266	Operations in contaminated water.	
197.267	Operations involving underwater welding and burning.	
197.270–197.286 Equipment		
197.270	General requirements	New minimum equipment standards.
197.271	Commercial diving operator's general equipment duties.	
197.272	Person in charge's equipment duties.	
197.273	Dive supervisor's equipment maintenance logbook duties.	
197.274	Diver's equipment duties.	
197.275	Volume tanks.	
197.276	Compressed gas cylinders	Covers same topic as current 197.338, but adds new industry standard requirement.
197.277	Pressure vessels for human occupancy	Covers same topic as current 197.328–197.332, but adds new industry standard requirement.
197.278	Pressure piping	Similar to current 197.336, but proposes updated industry standard.
197.279	First aid and treatment equipment	Covers same topic as current 197.454, but adds new industry standard requirement and greater detail.
197.280	Diving ladders and stages	Covers same topic as current 197.320, but adds new industry standard requirement.
197.281	Surface-supplied helmets and masks	Covers same topic as current 197.322, but adds new industry standard requirement.
197.282	Diver's safety harness	Covers same topic as current 197.324, but adds new industry standard requirement.
197.283	Buoyancy-changing devices	Identical to current 197.342.
197.284	Inflatable flotation devices	Identical to current 197.344.
197.285	Oxygen safety	Substantively identical to current 197.326 and 197.452.
197.286	Miscellaneous equipment requirements	See discussion for specific items.
	—Breathing gas supply, diver-carried reserve.	Similar to current 197.340(e), but adds detail for unused ports.
	—Breathing gas supply, primary	Substantively identical to current 197.340(a).
	—Breathing gas supply, secondary	Substantively identical to current 197.340(b).
	—Oxygen	Substantively identical to current 197.340(f).

TABLE 2—PROPOSED NEW OR AMENDED REGULATIONS, 46 CFR—Continued

46 CFR section	Proposed version	Comment on proposed version
	—Nitrogen	Substantively identical to current 197.340(g).
	—Helium	Substantively identical to current 197.340(h).
	—Compressed air	Substantively identical to current 197.340(i).
	—Diving system power	New minimum equipment standards.
	—Equipment to which a manufacturer's service life specification applies.	
	—Equipment used with oxygen mixture greater than 23.5 percent by volume.	
	—Gauges and timekeeping devices	Substantively identical to current 197.318, but adds readability requirement for devices for monitoring diver exposure time under pressure.
	—Oxygen system, pressure greater than 125 psi(g).	Substantively identical to current 197.326.
	—Pressure piping repairs	Covers same topic as current 197.462, but adds new industry standards requirement.
	—Pressure vessel repairs	Covers same topic as current 197.462, but adds new industry standards requirement.
197.290 Dive Team Staffing		
197.290	Dive team staffing requirements	New minimum team size and composition standards.

VII. Requests for Specific Comments

We would like more information about the SCUBA dive teams, whether all dive teams should include medical technicians, and whether or not we should consider alternative approaches to our proposed regulations. The following questions relate to these three issues. In response to these questions we ask for public comments with supporting data and references if possible.

SCUBA dive teams. Our first issue is the minimum size of a SCUBA dive team. Our NPRM proposes setting the minimum at four members, the same as required by the Army Corps of Engineers, but one more than OSHA's minimum.

QUESTION 1: The Coast Guard proposes a SCUBA dive team consisting of four members, based on the assumption that prudent commercial diving operators use SCUBA only when conditions are favorable to the diver and risk is minimal: That is, underwater visibility is greater than 3 feet, currents are less than 1 knot, and dive depth is no more than 100 fsw with no decompression. Is that assumption valid? Should a SCUBA dive team consist of more or fewer than four members? Why? What costs would be incurred and what benefits would be gained by setting the minimum higher or lower than four members?

Medical technicians. The second issue involves certified diving medical technicians (DMTs). Commercial diving exposes divers to unique risks and physical challenges, such as barotrauma, that may require specialized and readily available medical care.

QUESTION 2: Should a DMT always be available, either as part of the dive team or at the dive site during a dive? Why or why not? What costs would be incurred and what benefits would be gained by requiring this level of availability?

Alternative approaches. Our third issue involves alternative approaches.

QUESTION 3: Under one alternative to our proposals, the Coast Guard would not directly oversee TPO audits of commercial diving operations and would allow TPOs to self-certify that their audits comply with Coast Guard standards. However, we would indirectly oversee audits by investigating reported marine casualties and associated civil penalty proceedings. Under a second alternative, neither the Coast Guard nor a TPO would conduct inspections or audits of commercial diving operations. The only compliance oversight would come through casualty investigations and civil penalty proceedings.

The Coast Guard requests input on what merits and drawbacks may be associated with these two alternative approaches?

VIII. Incorporation by Reference

Material for incorporation by reference appears in proposed 46 CFR 197.202. See **ADDRESSES** for information on viewing this material. Copies of the material are available from the sources listed in § 197.202. Before publishing a binding rule, we will submit this material to the Director of the Federal Register for approval of the incorporation by reference.

The following are proposed for incorporation by reference: International Consensus Standards for Commercial Diving and Underwater Operations, 6th Edition, 2010 (''ADCI Standards''): Industry consensus standards for commercial diving and underwater operations for commercial divers, tenders, deck support personnel and supervisors including requirements and guidelines for training, qualification, and certification of commercial divers and conducting various types of diving operations.

IMO Resolution A.831(19), International Code of Safety for Diving Systems, 1995: Internationally accepted minimum standards for design, construction and survey of diving systems on ships and floating structures engaged in commercial diving operations. IMO Resolution A.692(17), Guidelines and Specifications for Hyperbaric Evacuation Systems: International guidelines and specifications developed for design and operation of hyperbaric evacuation systems.

ASME PVHO–1–2012, Safety Standard for Pressure Vessels for Human Occupancy, 2012 (''ASME PVHO–1''): American standard for design, materials, fabrication, tests, inspection and marking of pressure vessels used for human occupancy.

ASME B31.1–2010, ASME Code for Pressure Piping, Power Piping, 2010 (''ASME B31.1''): American standard for design, materials, fabrication, tests, inspection, operation and maintenance of pressurized piping systems.

ASME National Board Inspection Code, NBBPVI, NB23–2011 (''ASME NBBPVI''): American standard for inspection, repair and alteration of boilers, pressure vessels, and pressure relief devices.

ANSI/ISO 15618–1:2001, Qualification testing of welders for underwater welding—Part 1: Diver-welders for hyperbaric wet welding (''ANSI/ISO 15618''): American standard specifying essential requirements, ranges of approval, acceptance requirements and certification for approval testing of diver-welder performance for welding steels underwater in hyperbaric wet environments.

ANSI/ACDE–01–2009, Divers—Commercial Diver Training—Minimum Standards, (''ANSI/ACDE–01–2009''): American standard specifying minimum standards for commercial diver training including what is to be taught, minimum length of training required, minimum qualifications of instructors, and minimum facilities and equipment required to support commercial diver training.

Publication G–4.1, Cleaning Equipment for Oxygen Service, 2009 (''Compressed Gas Association Publication G–4.1''): Cleaning methods for cleaning equipment used in production, storage, distribution, and use of liquid and gaseous oxygen.

Publication G–7, Compressed Air for Human Respiration, 6th Edition, 2008, (Compressed Gas Association Publication G–7''): Information relative to preparation, transportation, handling, storage, and use of compressed air used for human respiration. Publication G–7.1, Commodity Specification for Air, 6th Edition, 2011, (Compressed Gas Association Publication G–7.1): Specification requirements for air and data concerning quality, verification systems, sampling, analytical procedures, and typical uses for various grades and supplemental specification tables.

Federal Specification, BB–N–411C, Nitrogen Technical, 2000 (''Federal Specification BB–N–411C''): U.S. Federal specification outlining requirements for properties, purity, types, grades, classes, handling and storage of gaseous and liquid nitrogen.

Federal Specification, Oxygen, Technical, Gas and Liquid, BB–O–925a, 1961 (''Federal Specification BB–O–925a''): U.S. Federal specification outlining specification and standards for purity, sampling, inspection, testing, handling, storage and delivery of gaseous and liquid oxygen.

ISO 9001—2008, Quality Management Systems—Requirements: International standard specifying requirements for establishing, documenting, implementing, and maintaining a quality management system.

ISO 15618—2001, Qualification testing of welders for underwater welding—Part 1: Diver-welders for hyperbaric wet welding: International standard specifying essential requirements, ranges of approval, test conditions, acceptance requirements and certification for approval testing of diver-welder performance for welding steels underwater in hyperbaric wet environments.

U.S. Navy Diving Manual, 6th Edition, April 2008: Specifications for diving principles and policies, air diving, mixed-gas surface supplied diving, closed-circuit and semiclosed-circuit diving, and diving medicine and recompression chamber operations .

IX. Regulatory Analyses

We developed this proposed rule after considering numerous statutes and Executive Orders (E.O.s) related to rulemaking. Below we summarize our analyses based on these statutes or E.O.s.

A. Regulatory Planning and Review

E.O.s 12866 (''Regulatory Planning and Review'') and 13563 (''Improving Regulation and Regulatory Review'') direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

This proposed rule is not a significant regulatory action under section 3(f) of Executive Order 12866, Regulatory Planning and Review, as supplemented by Executive Order 13563, Improving Regulation and Regulatory Review. The Office of Management and Budget (OMB) has not reviewed it under that Order. Nonetheless, we developed an analysis of the costs and benefits of the proposed rule to ascertain its probable impacts on industry. We consider all estimates and analysis in this Regulatory Analysis (RA) to be preliminary and subject to change in consideration of public comments. A draft Regulatory Analysis including a draft preliminary Initial Regulatory Flexibility Analysis (IRFA) is available in the docket where indicated under the ''Public Participation and Request for Comments'' section of this preamble. A summary of the preliminary Regulatory Analysis and Initial Regulatory Flexibility Analysis follows. Our preliminary RA provides an evaluation of the impacts associated with this proposed rule. Table 3 below provides a summary of the affected population, costs, and benefits of the proposed rule.

TABLE 3—SUMMARY OF THE AFFECTED POPULATION, COSTS AND BENEFITS OF THE NPRM

Category	Summary
Applicability	Diving undertaken in connection with commercial operations conducted from deepwater ports (such as off-shore liquefied natural gas facilities), or OCS activities, or from vessels that are required to have a Coast Guard certificate of inspection; 46 CFR 197.200.
Affected Population	87 owners or operators of commercial diving operations (mainly heavy offshore marine construction or working from USCG-certificated vessels). 12 TPOs.
Costs ($, 7 percent discount rate)	Annualized: Manning: $1,460,500. Non-Manning: $350,000. Total: $1,811,000. 10-Year: Manning: $14,606,000. Non-Manning: $3,501,000. Total: $18,107,000.
Benefits ($, 7 percent discount rate)	*Monetized Benefits from Manning Requirement* Annualized: Fatalities: $2,366,000. Injuries: $116, 935. Total: $2,482,935.

TABLE 3—SUMMARY OF THE AFFECTED POPULATION, COSTS AND BENEFITS OF THE NPRM—Continued

Category	Summary
	10-Year: Fatalities: $23,660,000. Injuries: $1,169,350. Total: $24,635,350. Annualized Net Benefits: $1,056,000. Benefits attributable to other requirements cannot be quantified easily since they intersect with all improvements. Breakeven analysis on other rule items yields anywhere from 1 fatality per 44 years to 1 fatality every 3,056 years to breakeven.[8] Sets one industry standard, and provides Coast Guard with additional inspection options to implement commercial diving operations.

The purpose of this proposed rule is to save lives by revising and updating our existing commercial diving regulations to reflect current industry best practices.

Agencies take regulatory action for several reasons, one being the failure of markets to reach the socially optimal outcome. This can occur when there are economic incentives lacking for industry to pursue that outcome and such market failures are the impetus for this proposed rule. A negative externality is the by-product of a transaction between two parties that is not accounted for in the transaction. Vessels that operate with lower safety standards may cause harm or increased risk of harm without accounting for the consequences to third parties, who do not directly participate in the business transactions of the business entities such as merchant seaman. These costs are not borne by the responsible entities and are therefore external to the business decisions of the responsible entity.

The casualties resulting from commercial diving accidents are an example. The cost of the higher safety standards is typically borne by the vessel owner while the cost of an accident could be distributed across various entities, including the vessel owner, other vessel owners, related maritime businesses and commercial diver teams. These costs can be in the form of injuries and death.

The material failure of the private market increases the risk to other parties. There exists an uncompensated increase in risk due to potentially inconsistent safety practices in the commercial diving industry. Consequently, regulatory action is required to spur the industry to take action to reduce risk industry-wide and therefore attain the socially optimal outcome.

The functional benefits of this proposed rule are to reduce the number of accidents in all commercial diving operations that the Coast Guard has responsibility for (especially the offshore diving industry), as well as to minimize the adverse impacts in the event that an accident occurs.

Affected Population

Based on a review of current Association of Diving Contractors International industry information and Bureau of Labor Statistics diving population data, there are almost 200 domestic firms involved in commercial diving operations, of which 87 are subject to Coast Guard jurisdiction. Approximately 75 of these firms are registered with ADCI and, as such, are required to comply with the ADCI consensus standards. We estimate there are 12 firms covered by Coast Guard jurisdiction that are not members of ADCI. Table 4 demonstrates generally how Coast Guard went from the commercial diving population to a distribution of dive types and firms both within the ADCI framework and without.

TABLE 4—USCG REGULATED COMMERCIAL DIVING BY TYPE AND FIRM COMPOSITION

Item	Population of USCG regulated commercial divers by type					Total
	Saturation *	SCUBA **	Surface supplied air ***		Mixed gas	
			100 fsw/no decompression	Other		
ADCI Divers	336	40	93	191	96	756
Non-ADCI Divers	0	0	20	35		55
Total	336	40	113	226	96	811
ADCI Dive teams	24	10	23	38	19	114
Non-ADCI Dive Teams	0	0	5	7	0	12
Total	24	10	28	45	19	126
ADCI Marine Firms ****	12	10	13	21	19	75
Non-ADCI Marine Firms *****	0	0	5	7	0	12

[8] See RA's Appendix D for Breakeven Calculations.

TABLE 4—USCG REGULATED COMMERCIAL DIVING BY TYPE AND FIRM COMPOSITION—Continued

Item	Population of USCG regulated commercial divers by type					Total
	Saturation *	SCUBA **	Surface supplied air ***		Mixed gas	
			100 fsw/no decompression	Other		
Total	12	10	18	28	19	87

* Number of Saturation Vessels * 14 crewman * 2 crews.
** USCG estimate of 5% of total diver population.
*** USCG estimates based upon ADCI member distribution.
**** Known number of ADCI firms.
***** Inferred Number of Firms based upon "excess" (not accounted for in ADCI) Diver population.

Table 5 Commercial Diving Population that will Incur Costs

Requirements by Diver Type	Saturation Teams	SCUBA Teams	Surface Supplied Air Teams		Mixed Gas Teams	Total Teams
			110/fsw/No Decompression	Other		
ADCI Dive Teams	24	10	23	35	19	114
Manning			23			23
Audits						
Drills						
Med I						
Med II	24					
Rec & Doc	24	10	23	38	19	114
Non-ADCI Dive Teams			5	7		12
Manning			5			5
Audits			5	7		12
Drills			5	7		12
Med I			5	7		12
Med II						
Rec & Doc			5	7		12
Total	24	10	28	45	19	126

Source: USCG

The key population subset affected by the manning additional costs is the Surface Supplied Air 100fsw/no decompression mode. As shown in Table 5, both ADCI and no-ADCI firm groups are affected given the CG decision to increase the number of dive team members by one number. Most of the remaining costs impact the non-ADCI members, since we cannot confirm they are following ADCI protocols. Also, one qualification for saturation diving, that of taking a medical course every two years for saturation diving technicians, is an additional requirement for ADCI divers in that mode. Since we assume that non-ADCI commercial diving is composed of small firms and simpler diving modes than the complex saturation diving mode, this requirement does not affect them.

In addition, total TPO (auditor) population is expected to be 12. The TPO population includes current 10 auditors and the two estimated to be required by the non-ADCI firms.

Regulatory Alternatives

We considered four alternatives before settling on the approach proposed in this notice of proposed rulemaking (NPRM).

1. Take no action. We would leave the existing regulations in place without updating them. Voluntary compliance with commercial diving industry consensus standards and the possibility of civil liability would continue to be the primary drivers of improvements in commercial diver safety. We think this is inconsistent with our regulatory

responsibility to promote safety, and it also ignores the fact that some members of industry and the general public have criticized our existing regulations for being out of date.

2. Develop an international code. We would work with the International Maritime Organization to update its Code of Safety for Diving Systems, and adopt it as being applicable to all U.S. commercial diving operations wherever they were occurring. This could promote diver safety, and we do not rule out continued involvement in assisting in development of the standard. However, it would take years to develop and would not be effective without additional requirements necessary to further define the vague language that often accompanies international codes. Furthermore, we believe the existing IMO Code, coupled with the U.S. regulations we propose in this NPRM, should be applicable for U.S. vessels on an international voyage, but do not believe the international requirements should necessarily be imposed on U.S. vessels that are not engaged on international voyages.

3. Development of unique Coast Guard regulations: Under this alternative, the Coast Guard would develop its own updated regulations without reference to existing industry standards. This would involve additional regulatory time and effort for the Coast Guard, and ultimately might produce regulations that are similar to existing industry standards. However, this alternative would be contrary to the National Technology Transfer and Advancement Act, 15 U.S.C. 272 note, which requires agencies to use voluntary private sector consensus standards in their regulatory activities unless the agency provides Congress, through OMB, with an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Additionally, Coast Guard developed standards would likely place diving firms who are members of ADCI in the position of facing duplicative enforcement costs, due to the fact that they are already complying with the ADCI guidelines.

4. Adopting Industry Standards without Manning Changes Alternative: We considered and rejected this alternative, which entails proposing regulations that incorporate accepted industry consensus standards (*e.g.* ADCI International Consensus Standards for Commercial Diving and Underwater Operations, 6th edition), but without an increase in manning that CG might want. This would codify many current consensus industry standards and provide enforcement capability. CG would incorporate all or most of what is in the ADCI consensus standards. However, CG could not incorporate it in total because some of the items in our existing regulations are not included in the ADCI standard. Much of what is written in the proposed regulations is written to augment the consensus standards to ensure previous requirements are not lost. CG ultimately rejected this approach, although less expensive, because of the lack of direct manning benefits in reducing fatalities and injuries.

5. *Accepted alternative: Adaptation of industry standards:* We considered and accepted this alternative, which entails proposing regulations that incorporate accepted industry consensus standards (*e.g.* ADCI International Consensus Standards for Commercial Diving and Underwater Operations, 6th edition). This will codify many current consensus industry standards and provide enforcement capability. CG incorporated most of what is in the ADCI consensus standards. CG could not incorporate it in total because some of the items in our existing regulations are not included in the ADCI standard. Much of what is written in the proposed regulations is written to augment the consensus standards to ensure previous requirements are not lost. CG used our existing regulations as a baseline and incorporated ADCI mostly based on that and the recommendations we got from industry on certain topics. These requirements also include an increase in manning (by one person) for the Surface Supplied Air no decompression mode.

Table 6 summarizes these alternatives.

TABLE 6—DESCRIPTION OF ALTERNATIVES

Alternative	Costs	Benefits	Evaluation
Take No Action	None	None	Not preferred because of risks that appear to still exist within the industry in spite of ADCI protocols.
Develop an International Code.	Likely Costlier and less Timely than best approach due to Increased No of Parties Involved.	Reduce Remaining Risk	Not preferred because of timely expense of having many parties involved that would have slowed progress in getting a rule out expeditiously.
Develop Unique Coast Guard Regulations.	Might be Costlier due to Duplication with ADCI rules.	Reduce Remaining Risk	Not preferred because of high risk of duplication of many of ADCI protocols that already exist.
Proposed ADCI Duplicative Rule in NPRM without Manning.	$400,000	Reduce Remaining Risk	Marginal Approach especially given ADCI standards that still would not cover all CG desired requirements.
Proposed Rule in NPRM with Manning.	$1.81 million	$2.4 million	Best Approach consistent with comprehensive, extensive and timely approach that gives the best bang for the buck.

Source: USCG.

Costs

This proposed rule calls for CDOs and commercial divers to comply with a new regulatory baseline that is based on the industry-developed consensus standards of ADCI plus certain CG additions (in manning and medical area). We believe the majority (75 out of 87 identified commercial diving firms) of the affected population is in compliance with the proposed baseline. We know that the 75 ADCI firms are in general (except for manning and medical upgrades from CG) in compliance or else they would not qualify for ADCI membership. Members of ADCI must meet the Association's standard or face a suspension of their membership and potential loss of contracts. For example, ADCI members who fail an ADCI audit inspired by a complaint or a random audit exercise, are given time to correct the deficiency. If the deficiency is not corrected in a reasonable time, ADCI will (and has in the past) dis-enroll the offending member. Members generally know this

is a dangerous route to take as the re-enrollment process is very expensive, requiring complete audits of every facet of their operation. In general, not having the ADCI certification will likely result in fewer work opportunities particularly with the oil and natural gas industries.[9]

We have no gauge of any compliance for the inferred non-ADCI firms. However, we anticipate that some CDOs and divers will need to take steps to ensure compliance with the proposed audit system, drills and exercises, medical examination requirements, personal operational requirements, and reporting/recordkeeping requirements. We assess the costs for these CDOs and divers not already in compliance with ADCI (based upon the twelve Non-ADCI firms), as well as for all CDOs and divers to meet the other requirements added by the Coast Guard.

The costs impacting this rule are from changes in requirements in Dive manning, Drills, Audits, Med Issues, Records and Documentation. Total dive manning industry requirements are based upon 28 (23 ADCI and 5 non-ADCI) incremental divers in that SSA mode. Audits are required both internally and by external means (TPO) and range from $176-$2,096 depending on the cycle or vessel/firm. Drills can cost from $3300-$14000 per drill/firm depending on type (Standard Operations Review, Diver Recovery, or Emergency Rescue) for an annual total cost of $18000–26000. Medical costs comprise two items: The first item is an annual medical exam for the 55 non-ADCI divers while the second is a biennial training session on cardiopulmonary resuscitation (CPR) and first aid for Saturation Technicians that were not ADCI required (an oversight expected to be corrected in the near future) training. The costs of the first medical item are the 55 non-ADCI divers times the annual medical examination costs plus the records storage costs for a total $23,375 or ($1948 per firm). The second cost is the $60 cost of the training every other year times the Saturation Technicians (96) for a total of $5,760.

Costs for CDOs are shown in Table 7.

TABLE 7—AVERAGE COST PER FIRM: COMMERCIAL DIVING NPRM

Rule requirements	Cost per CDO (2012 $)
Dive Manning	52,163
Drills	18,220–25,508
Audits	3,549
Recordkeeping & Documentation	2,331
Medical I: Exams	1,948
Medical II: Training	240
Total	78,211–85,499

Source: USCG Calculations.

The majority of the costs are the result of new dive manning requirements, particularly for surface-supplied air. The proposed costs are the minimum required as, for example, adding more than one diver for all of the other modes would not be cost effective and in some cases. likely counter-productive. The dive manning levels now comport with industry practices.

Requirements for dive manning were calculated by first identifying the marine commercial diving population (BLS, ADCI sources) and developing the mode (Saturation, SCUBA, 3 types of Surface Supplied Air, and Mixed Gas) teams as explained in the population development description. CG subject matter experts considered the ADCI requirements and then decided another team member (Dive Tender) was necessary for Surface Supplied Air (100fsw/No decompression mode) (SSAn). The decision was based upon the notion that all divers in the water had to have a dive tender taking care of all the umbilical related lines for the in-the-water diver. That increment was then multiplied times the number of SSA teams found earlier. The per man cost was from BLS 2012 Commercial Diving Apprentice level and loaded with a 1.42 factor again based upon BLS information. All labor costs are generally based upon either an apprentice or a median experienced diver (loaded wages of $52,000–69,000).

For TPOs, the total costs estimated are $14.9 thousands of dollars over ten years due to the NPRM. The majority of costs accrue to labor requirements for various activities (developing the TPO auditor application, change of TPO auditor, and storage of audit records).

We estimate the total 10-year cost of the proposed rule to the commercial diving industry and third party organizations to be $17.8 million undiscounted, or $12.5 million at a 7-percent discount rate. We estimate the annualized cost of the proposed rule to be $1.78 million at a 7-percent discount rate. In addition to the private sector costs, we estimate the government will incur ($27,874) in annual reporting and record keeping review costs. This increases the total 10-year cost of the proposed rule to $18.1 million ($1.81 million annualized, 7-percent discount rate) (Table 8).

[9] Conclusions based upon various USCG conversations with industry participants.

Table 8 Total Cost ($) of Commercial Diving Rule (w USCG costs)

Year	Drills	Dive Manning	Audits	Recordkeeping & Documentation/1	Medical Issues/2/	Third Party/3	Total /4	Disc @7%	Disc @ 3%
1	43,729	1,460,554	42,589	233,625	31,260	3,220	1,818,277	1,699,324	1,765,317
2	43,729	1,460,554	42,589	233,625	25,500	1,296	1,807,292	1,578,559	1,703,546
3	43,729	1,460,554	42,589	233,625	31,260	1,296	1,813,052	1,479,991	1,659,200
4	43,729	1,460,554	42,589	233,625	25,500	1,296	1,807,292	1,378,775	1,605,756
5	43,729	1,460,554	42,589	233,625	31,260	1,296	1,813,052	1,292,681	1,563,955
6	43,729	1,460,554	42,589	233,625	25,500	1,296	1,807,293	1,204,275	1,513,579
7	43,729	1,460,554	42,589	233,625	31,260	1,296	1,813,053	1,129,078	1,474,178
8	43,729	1,460,554	42,589	233,625	25,500	1,296	1,807,293	1,051,861	1,426,693
9	43,729	1,460,554	42,589	233,625	31,260	1,296	1,813,053	986,180	1,389,554
10	43,729	1,460,554	42,589	233,625	25,500	1,296	1,807,293	918,736	1,344,795
Total	437,287	14,605,544	425,886	2,336,249	283,800	14,883	18,106,948	12,719,459	15,446,572
Annualized								1,810,965	1,810,810

Source: USCG Calculations

1) Includes $28,530 in annual reporting and record keeping costs for USCG
2) Costs for non-ADCI divers annual, but costs for Sat dive technicians are biennial
3/TPO costs include those for application, auditor change and storage of audit information.
4/Includes $3,300 cost to purchase ADCI 6 in year 1

Benefits

The primary benefits of this proposed rule are based on the reduction in risk of fatalities as well as injuries related to commercial diving incidents and are estimated from casualties foregone or mitigated as shown in Table 9.

TABLE 9—RULE REQUIREMENTS AND ASSOCIATED BENEFITS

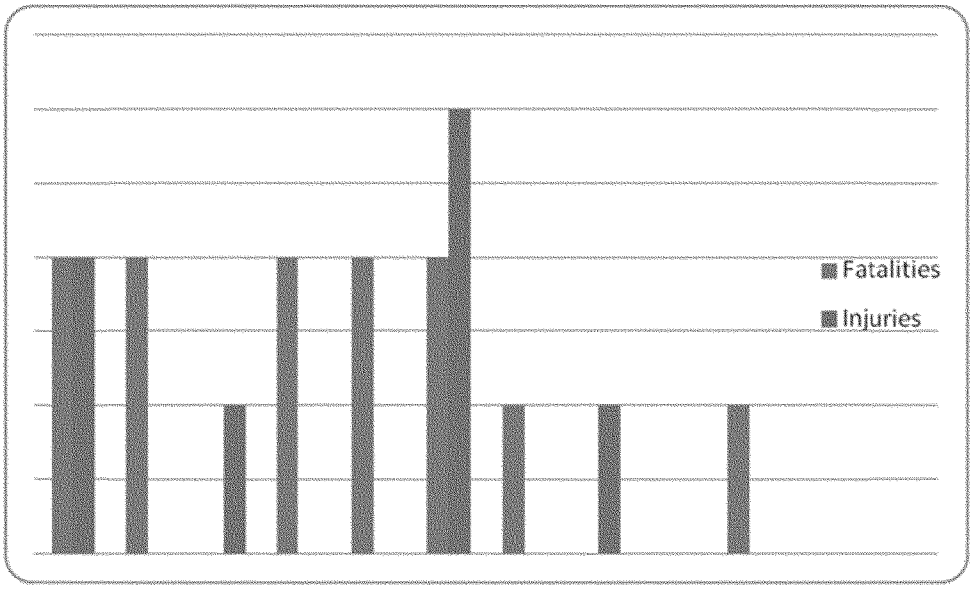
Rule requirements	Benefit
Dive Manning	Requires non-decompression Surface Supplied Air dive teams to add a 5th member to handle lines as a novice member.
Drills	Requires CDO operators to conduct a series of drills at least monthly to maintain skill levels in emergencies.
Audits	Requires all CDOs and associated vessels to have timely audits to record existing conditions of all equipment and record procedures. Consistent with ADCI requirements.

TABLE 9—RULE REQUIREMENTS AND ASSOCIATED BENEFITS—Continued

Rule requirements	Benefit
Recordkeeping & Documentation	Requires CDO s to develop and maintain for 5 years records of various aspects of CD operations from equipment maintenance to diving activities, to CG notifications, to logbooks. Maintaining records also assists the CDO by reminding him or her that actions are needed to remain in compliance with the rules.
Medical I: Exams	Requires all CDs, especially non-ADCI CDs to obtain an annual medical exam complete with hyperbaric analysis emulating the current ADCI requirements.
Medical II: Training	Requires certain members of a Saturation Dive Team (life support technician and saturation technician) to have a CPR & first aid certification.

We reviewed the Marine Information for Safety and Law Enforcement (MISLE) data set of the commercial diving fatalities from 2002–2011 (12 fatalities- an average 1.2 per year and 8 injuries an average of .8 per year). Exhibit 1 shows the distribution of fatalities and injuries over the ten year period.

Exhibit 1: Trends in USCG Regulated Commercial Diving Fatalities and Injuries



The incident reports suggest deficiencies in commercial diving operations, which would be addressed by the proposed provision, For dive manning, we identified 4 incidents that could benefit from the NPRM. Specific issues identified include lack of proper manning, lack of proper medical examination protocols, lack of maintenance of equipment, lack of drills lack of audits, etc. By identifying specific issues within each incident that likely would be mitigated by the NPRM, and applying an effectiveness factor, we were able to estimate a mitigated value using the value of a statistical life (VSL) approach.

TABLE 10—INCIDENT LINKS TO THE PROPOSED RULE

Activity ID	Related provision	Justification
Fatalities		
1483715	Personnel Operational Requirements.	Report indicated a standby diver was not properly suited up and ready to deploy as required by proposed rule. Investigative officer as well as fellow divers (during interviews) identified this as a potential cause.
	Drills	Additional drills could have exposed diver to a hot suit, reminded to follow procedures when in trouble, and provided practice on removing equipment.
	Audits	Regular audit procedures would likely have uncovered issues with equipment maintenance as well as operational procedures and readiness.

TABLE 10—INCIDENT LINKS TO THE PROPOSED RULE—Continued

Activity ID	Related provision	Justification
1645241	Records & Documentation Related to Equipment Inspection.	Problems were discovered with the helmet. However, diver-owned/-maintained helmet lacked a comprehensive record of repairs and maintenance. No records available to indicate when breathing hoses used by diver were last pressure tested or hydrostatic tested. Proposed regulation requires that log books be updated to track equipment tests. This could have ensured equipment was inspected periodically or a pre-dive inspection of equipment was conducted.
	Audits	Auditing requirement may have identified the marginal state of maintenance of the diver's helmet. Furthermore, audit would have likely discovered that the vessel did not have a supply of medical-use oxygen on board.
	Personnel Operational Requirements.	Standby diver was not outfitted with any rescue related equipment to address the situation as required by proposed rule.
	Drills	Drills required by proposed rule would help ensure diver follows procedure in an emergency. Diver did not slide the pneumofathometer underneath his neoprene neck dam and into his helmet. This would have taken him several seconds to do, but it could have provided him with an alternate source of breathing air.
2270536	Personnel Operational Requirements.	Report indicated that company personnel displayed fatigue due to lack of sleep. Proposed rule would include 12 hour work hour limits in 24 hour period.
	Drills	Drills would have improved the probability divers followed written and established safety procedure. As indicated in interviews, ''there was no safety meeting for the dive crew prior to incident. Divers were unaware of any safety procedure or plan to follow in case an emergency to retrieve an injured diver out of the water.'' As stated under the observations by the inspecting officer, ''Training for dive team personnel seemed to be lacking.''
	Records and Documentation Related to Equipment Inspection.	Interviews indicated that the diver's umbilical may have been fouled. Documentation of maintenance and inspection of equipment is required under the proposed regulation. This could have helped ensure equipment was periodically inspected.
2734747	Medical Exams	Proper medical examination may have revealed tears or irregularities in the diver's lungs and kept him from diving.
	Audits	Audits would ensure compliance with the medical fitness requirement for divers.
	Records and Documentation Related to Medical Records.	Documentation of medical examination is required by the proposed rule and maintains a history of medical conditions that could be used to avoid putting a diver in danger.
2765094	Personnel Operational Requirements.	Standby diver was not ready to enter water as required by rule.
	Audits	Regular Audits may identify failures of sufficient manning/certification levels of the dive team.
	Drills	Rescue diver had trouble donning gear when preparing to enter water. Investigating officer recommendation is for monthly emergency rescue and recovery diving training for all commercial diving vessels. In addition to a fatality, multiple injuries resulted from incident.
3281272	Personnel Operational Requirements.	One of the supervisors was also the standby diver. Proposed rules would not allow multiple responsibilities.
	Audits	Regular Audits may identify failures of sufficient manning/certification levels of the dive team.
	Medical Exam	Diver had previously unknown cardiac condition. A medical exam focused on hyperbaric exposure would have led to a cardiac exam which could have identified the cardiac condition and not permitted the dive.
3100303	Records and Documentation Related to Medical Records.	Documentation of diver's medical fitness may identify the diver's condition and medication risk.
2866598	Drills	Delays were experience in recovering troubled diver. Drills would have identified the difficulty of one tender/diver conducting diver retrieval.
	Personnel Operational Requirements.	Superintendent also was serving as dive supervisor. The proposed rules would not allow multiple responsibilities.
	Audits	Audits would ensure compliance with the medical fitness requirement for divers.
	Records and Documentation.	Documentation serving as a guide and checklist during the JHA may have prevented the diver's entanglement and the uncontrolled ascent of the lift bags.
1970383	Medical Exams	Lab test results indicated diver had hypertensive heart disease and drowned. Potential causal factor for this fatality was a pre-existing medical condition apparently aggravated by the individual performing strenuous activity while diving. Medical exams may have identified this precondition and prevented fatality.
Injuries		
2762375	Personnel Operation Requirements.	The need for a diver to work for such extended periods indicates a lack of sufficient manning as required by rule.
	Audits	Regular audits would identify substandard practices and excessive work hours resulting in fatigue.
1600506	Personnel Operational requirements.	Dive supervisor was acting as the diving tender. The Diving Supervisor could not oversee the safety of the operation if he was performing dive tender duties. The proposed rules would not allow multiple responsibilities.
2765094	(See Details Above)	(See Details Above).

For safety and security analysis, the VSL approach is used to monetize the value of fatalities prevented. The VSL does not represent the dollar value of a person's life, but the amount society would be willing to pay to reduce the probability of death. The VSL value used in this analysis to calculate an average annual cost of fatalities mitigated is $9.1 million.[10] The resulting benefit of the NPRM is $2.4 million. Subtracting out the $1.46 million in manning costs yields a marginal benefit of $940,000 for the manning provisions only. This amount is also the marginal fatality benefit for the rule since benefits from the other items could not be quantified even though they provide benefits. For example, the summaries of the following two case studies illustrate how complex and difficult it is to estimate benefits for this rule let alone quantify them.

Case Review Example 1

Incident Report 2765094

Vessel: Rowan Halifax/Global Explorer

Date:8/29/06

Damages:0
Deaths:1
Injuries:2
Edited Brief from MISLE (see RA for complete text)

Commercial divers using surface-supplied air were working on the rigging of the legs of a sunken MODU. A diver was attempting to attach a 2 and ¾ inch chain to a shackle for pre-rigging the MODU. Shortly after diver 1entered the water, there was a loss of communication with him, although a gurgling sound inside helmet was heard. The standby diver was ordered to splash. Diver 1 visibly panics and begins ascent towards diving bell Diver 2 dons gear, but has trouble with airflow to helmet. Problem fixed and he enters the water. Somehow Diver 1's helmet lands in worksite. Diver 2 descends, switching to 14% O2. He pulled his way to Diver 1 via latter's hose. He notices Diver 1's helmet from 20 feet away. Diver 2 arrives at Diver 1, shakes him with no response. Diver 2 notifies topside to pull up slack. Divers arrive at bell and with standby diver, attempt to pull Diver 1 into bell. Diver 1 is finally pulled up topside. Diver 2 becomes fouled on the bell, then unfouls himself. He begins his ascent but switches to air ''on the fly''. Vessel paramedic performs lifesaving procedures. Since the paramedic is not hyperbaric qualified, backup is ordered into hyperbaric chamber to continue lifesaving procedures. Shore side physician finally orders halt to lifesaving procedures. Shortly afterwards, Diver 2 shows signs of the bends, while backup, still ''dirty'', from an earlier dive that day, experiences decompression sickness. Investigation concluded that there was inadequate supervision and a good rule was misused.

Location Lat 028°04″4′ N, Lon 092°42″0′ W Gulf of Mexico.

Reviewer Notes: Supervisor did not have a standby diver ready on a moment's notice to splash and assist another diver in the water. The proposed NPRM rules provide for a very strict regime for the supervisor to follow. From Section 290 (a), (b) and (c) clearly require the supervisor to make sure ''. . . that minimum dive team requirements are met . . .'' and ''ensure that the necessary levels of personnel and equipment are available for all commercial diving operations.'' Further, Section 197.222 of the NPRM requires ''Each supervisor . . . must . . .: (a) Comply with this subpart and The applicable requirements for dive supervisors and diving modes outlined in sections 3.0 and 4.0 of the ADCI Standards (incorporated by reference . . .) . . .

Fatality at least partially resulted from inadequate supervision according to the report's conclusions. From the facts of the report, the standby diver was not ready to splash at a moment's notice and subsequently had equipment issues. This delay contributed to valuable time in getting the troubled diver out of the water. Also, the vessel paramedic was not trained in hyperbaric ailments.

Regular Audits may identify failures of sufficient manning/certification levels of the dive team.

Regular drills may have mitigated this incident. The rescue diver had trouble donning gear when preparing to enter water. Investigating officer recommendation is for monthly emergency rescue and recovery diving training for all commercial diving vessels. In addition to a fatality, multiple injuries resulted from incident.

Case Review Example 2

Incident Report 3929340

Vessel: NS Power

Date:1/26/2011

Damages:0
Deaths:1
Injuries:0
Edited Brief from MISLE (see RA for complete text)

On January 8, 2011, a series of divers were engaged in bottom cleaning, through solo dives, on the NS Power from a series of other vessels including the King Arthur. Four divers used in sequence to perform bottom cleaning work on the NS Power. During the course of the work evolution, a diver's helmet neck seal failed flooding the helmet. While the diver was able to leave the water, delay caused time constraints on the activity.. Then another diver reported regulator problems in his dive. Attempts to retrieve him are less than by the book and result in his drowning. Some 13 hours after the beginning of the dive evolution, Galveston receives word of an unresponsive diver on the King Arthur.

15 NM SE Galveston Texas Galveston Bay

Reviewer Notes: From the MISLE report: dive support team members were negligent in their duties while a diver was in the water resulting in the loss of life. Investigation concluded that there was inadequate supervision and a good rule was misused as well as active failures of equipment. Supervisor did not have a standby diver ready on a moment's notice to splash and assist another diver in the water. The proposed NPRM rules provide for a very strict regime for the supervisor to follow. From Section 290 (a), (b) and (c) clearly require the supervisor to make sure ''. . . that minimum dive team requirements are met . . .'' and ''ensure that the necessary levels of personnel and equipment are available for all commercial diving operations.'' Further, Section 197.222 of the NPRM requires ''Each supervisor . . . must . . .: (a) Comply with this subpart and The applicable requirements for dive supervisors and diving modes outlined in sections 3.0 and 4.0 of the ADCI Standards (incorporated by reference . . .) . . .

Regular Audits may identify failures of sufficient manning/certification levels of the dive team.

Regular drills may have mitigated this incident. The rescue diver had trouble donning gear when preparing to enter water.

In both cases, the addition of one more dive team member so that responsibilities were adequately spread around might have made all the difference in the world to the victims. In addition, other requirements of the NPRM rule could have mitigated the incidents. The rule's other benefits besides proper manning and manning procedures, while very visible, are more difficult to quantify. They are drills, audits, records and documentation, as well as medical requirements.

As seen in the first example case, regular drills likely would have mitigated one of the problems in that incident. Drills provide regular practice for situations that require immediate instinctive response.

Regular audits would have provided a paper trail to maintenance needs and if recommendations were followed through on. Audit procedures likely would have mitigated issues ion both incidents. Records and documentation are parallel with audits in providing a trail of responsibility for

[10] U.S. Department of Transportation Memorandum, Guidance on Treatment of the Economic Value of a Statistical Life in U.S. Department of Transportation Analyses, available at *http://www.dot.gov/sites/dot.dev/files/docs/VSL%20Guidance%202013.pdf*

maintaining equipment in proper working order.

Finally, at least two incidents in our baseline and one in the cases above might have been mitigated if the divers were undergoing regular medical examinations. Also, one other medical requirement in the NPRM rule has certain saturation dive team members taking CPR and first aid training. This requirement, only for the saturation dive team technicians (all other dive team members already satisfy this requirement), is critical to the successful operation of that dive mode.

Injury mitigation also is a benefit of this rule. Almost $117,000 per year in injury mitigation benefits are received from this rule as well. These benefits result from improved protocols in a wide variety of areas covered by the rule.

The total net benefits from the rule are $1,056,000 combined fatality mitigation and injury mitigation.

We also used a breakeven analysis approach for benefit estimation for the other rule items. In general, the typical CDO incident involves the death or injury of 1 diver, therefore the breakeven comparison against the VSL for 1 fatality is applicable, rather than other breakeven scenarios.

TABLE 11—INCREMENTAL BREAKEVEN ANALYSIS OF PROPOSED RULE

Item	Benefits description	Average annual cost *		Net benefits (7%, $ millions)	Fatalities reduced to breakeven
			Annualized (7%, millions)		
Proposed Rule Increment:					
Manning	Increase 1 crewman/team for SSA for both ADCI and non-ADCI firms.	2.4	1.46	0.94	N/A.
Documentation & Recordkeeping.	Assists CG with enforcement.	Not Quantifiable	0.205	N/A	1 every 44 years.
Drills	Non-ADCI Firm Drills provides regular training.	Not Quantifiable	0.0437	N/A	1 every 208 years.
Audits	Non-ADCI Firm Audits assists CG with enforcement.	Not Quantifiable	.0426	N/A	1 every 214 years.
Medical Exams	Medical Exams for Non-ADCI Firms provides safety measure.	Not Quantifiable	0.0238	N/A	1 every 389 years.
Medical Training	Support Saturation Diver Crewmen receive First Aid and CPR Training.	Not Quantifiable	0.003	N/A	1 every 3,056 years.
TOTAL		≥2.4	1.755	≥0.645	

Source: USCG Calculations
* Total may not sum due to rounding.

We assume that this proposed rule would result in a constant reduction in the risk of fatality due to a commercial diving fatal accident every year following the rule's implementation and therefore use annualized costs in the equation. For these other rule items, we use annualized costs at a 7-percent discount rate over a 10-year period, or $.3 million, for this proposed rule. We then take the $9.1 million,[11] as the benefit that would be derived from the proposed rule if one fatality per year is prevented and compare it to the annualized individual item's cost that would be incurred (*e.g.* for drills: $9.1 million/$43,729=218 years). At a 7-percent discount rate, this proposed rule's other cost elements would need to prevent anywhere from 1 fatality in 44 years to 1 in 3,056 years to breakeven.

B. Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601–612), we have conducted an Initial Regulatory Flexibility Analysis and considered whether this proposed rule would have a significant economic impact on a substantial number of small entities. The analysis is as follows: The U.S. Coast Guard (USCG) has performed this analysis of the impacts on small businesses from the proposed rule. USCG performed this assessment using the cost information discussed in cost chapter of this RA.

Whenever an agency is required by section 553 of the Regulatory Flexibility Act of 1980 [12] (RFA) or any other law, to publish general notice of proposed rulemaking for any proposed rule, or publishes a notice of proposed rulemaking for an interpretative rule involving the internal revenue laws of the United States, the Regulatory Flexibility Act requires that the agency prepare and make available for public comment an initial regulatory flexibility analysis. The RFA requires that such analysis describe the impact of the proposed rule on small entities and that the initial regulatory flexibility analysis or a summary be published in the **Federal Register** at the time of the publication of general notice of proposed rulemaking for the rule.

In addition, the RFA requires that the agency transmit a copy of an initial regulatory flexibility analysis to the Chief Counsel for Advocacy of the Small Business Administration. In the case of an interpretative rule involving the internal revenue laws of the United States, The RFA's requirements apply to interpretative rules published in the **Federal Register** for codification in the Code of Federal Regulations, but only to the extent that such interpretative rules impose on small entities a collection of information requirement.

Under the Regulatory Flexibility Act [13] the Coast Guard must consider whether the rule would have a significant economic impact on a substantial number of small entities. Small entities [14] include small

[11] Op. cit.

[12] Public Law 96–354 (5 U.S.C. 601–612).

[13] *http://www.sba.gov/advo/laws/regflex.html*

[14] The RFA considers ''small entity'' as having the same meaning as the terms ''small business,'' ''small organization'' and ''small governmental jurisdiction.''

businesses,[15] small not-for-profit organizations that are independently owned and operated and are not dominant in their fields,[16] and small governmental jurisdictions with populations of less than 50,000.[17]

Based on the information from this analysis, we found that:

- There are no governments or not-for-profit organizations which are anticipated to be affected by the proposed rule.
- There are 87 U.S. entities (all private firms) that would potentially be impacted by the proposed rule. Of the 87, 75 are ADCI-registered firms of which we have some information on, and 12 are non-ADCI firms of which we have no information on but are assumed to be small. Furthermore, of the 75 firms we can identify, we found ownership and revenue data for only 45 firms. Of these 45 firms, 37 were determined to be small entities based on available data.
- We assume firms without available ownership or revenue data are small. Therefore, of the 87 firms considered only 8 can be considered non-small given the evidence available for this analysis.
- Initial and annual recurring costs of the proposed rule would result in less than 1 percent impact on revenue for 32 percent of the small entities with available data;
- 68 percent of small entities with available data will incur costs greater than 1 percent of revenue.

This chapter provides an Initial Regulatory Flexibility Analysis for commercial diving operations.

Preliminary Initial Regulatory Flexibility Analysis

The Regulatory Flexibility Act of 1980 (Pub. L. 96–354) establishes ''as a principle of regulatory issuance that agencies shall endeavor, consistent with the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration.''

Under the RFA, we are required to consider if this rule will have a significant economic impact on a substantial number of small entities. Agencies must perform a review to determine whether a rule will have such an impact. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA. Under Section 603(b) of the RFA, the Initial Regulatory Flexibility Analysis (IRFA) must provide and address:

- A description of the reasons why action by the agency is being considered;
- A succinct statement of the objectives of, and legal basis for, the proposed rule;
- A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;
- A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
- An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule;
- A description of any significant alternatives to the proposed rule which accomplish the stated objectives of the applicable statutes and which minimize any significant economic impact of the proposed rule on small entities.

The term ''small entities'' comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. The rule affects only small private entities. The following describes the Initial Regulatory Flexibility Act (TRFA) process for this rule.

We determined that the rule affects a variety of small private entities and therefore, based on the requirements mentioned above, we have prepared the following IRFA assessing the impact on small entities for this proposed rule. The analysis presented below addresses the issues specific to small entities that we have not addressed elsewhere in this RA

5.2 IRFA Requirements

5.2.1 Descriptions of Reasons Why Action of by the Agency Is Being Considered

Agencies take regulatory action for various reasons, one being the failure of the market to reach the socially optimal outcome. This can occur when there are economic incentives lacking for industry to pursue that outcome and such market failures are the impetus for this proposed rule. A negative externality is the byproduct of a transaction between two parties that is not accounted for in the transaction. Vessels and commercial diving operations that operate with lower safety standards may cause harm or increased risk of harm without accounting for the consequences to third parties, who do not directly participate in the business transactions of the affected entities. These costs are not borne by the responsible entities and are therefore external to the business decisions of the responsible entity. Section 4.2 describes the externality addressed by this rule.

Objectives of, and Legal Basis for, the Proposed Rule

The purpose of this rulemaking is to clarify and update our existing commercial diving regulations to reflect current industry best practices and to facilitate the use of approved third-party organizations (TPOs) in ensuring regulatory compliance. There has been no update since the 1978 original diving rules.

In addition, a series of reports on commercial diving safety demonstrated a need for updating USCG commercial diving regulations. These reports were developed in response to a series of commercial diving accidents that gained major public attention starting with one in 1996. The report titled ''Investigation into the Circumstances Surrounding the Commercial Diving Accident Onboard the Mobile Offshore Diving Unit Cliff's Drilling Rig No. 12 on March 4, 1996 with the Loss of Life'' influenced the Coast Guard to improve its regulations for commercial diving. That report, released in March, 2001, and also known as the RIG 12 Report, started a

[15] The RFA defines ''small business'' has the same meaning as the term ''small business concern'' under section 3 of the Small Business Act, unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the **Federal Register.**

[16] The RFA defines the term ''small organization'' means any not-for-profit enterprise which is independently owned and operated and is not dominant in its field, unless an agency establishes, after opportunity for public comment, one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the **Federal Register;**

[17] The RFA defines small governmental jurisdiction ''means governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand, unless an agency establishes, after opportunity for public comment, one or more definitions of such term which are appropriate to the activities of the agency and which are based on such factors as location in rural or sparsely populated areas or limited revenues due to the population of such jurisdiction, and publishes such definition(s) in the **Federal Register.**''

process that has slowly gained momentum these past few years. The most recent findings, the 2008 National Offshore Safety Advisory Committee (NOSAC) report, provided Coast Guard with additional appropriate information regarding the industry and its safety efforts. The objective of the proposed rule is to establish safety regulations governing the inspection, standards, and operation of commercial diving operations. The proposed rule would promote safer work practices and reduce casualties in commercial diving operations by ensuring that those operations adhere to recommended safety standards and operational protocols.

The statutory bases for the Coast Guard's rulemaking are located in: 33 U.S.C. 1509(b), which requires safety regulations for deepwater ports; 43 U.S.C. 1333(d)(1), which permits safety regulations for Outer Continental Shelf (OCS) facilities and their equipment; 46 U.S.C. 3306, which requires regulations to implement subtitle II of Title 46 of the U.S. Code with respect to inspected vessels, including offshore supply vessels (OSVs) and their equipment; 46 U.S.C. 3703, which requires safety and environmental protection regulations for liquid bulk dangerous cargo carriers and their equipment, to be issued after consultation with Federal, State, and local governments and with private sector entities; and 46 U.S.C. 6101, which requires regulations for reporting and investigating marine casualties. These statutes confer regulatory authority on the Secretary of Homeland Security, who has delegated this authority to the Coast Guard; DHS Delegation No. 0170.1(75), (90), and (92). In addition, we are conducting this rulemaking in accordance with a December 19, 1979, Memorandum of Understanding between the Coast Guard and the Occupational Safety and Health Administration (OSHA), which regulates commercial diving operations conducted near shore or in U.S. internal waters.

Description and Estimate of the Number of Small Entities to Which the Proposed Rule Will Apply

5.2.3.1 Data Development

We used MISLE owner and operator name and address information as well as ADCI member information to research public databases (MANTA) for entity type (subsidiary or parent company), primary line of business, employee size, revenue, and other information.[18] We matched this information to the Small Business Administration's ''Table of Small Business Size Standards'' to determine if an entity is small in its primary line of business as classified in the North American Industry Classification System (NAICS).[19]

ADCI member data and Coast Guard data shows that there are 87 entities engaging in marine oriented commercial diving in the 2009–2011 timeframe. We acknowledge that only 75 diving firms belong to the ADCI.[20] USCG estimates that number of non-ADCI firms to be 12 based on our total population estimate (see affected population section for details). We found revenue and employment data for 45 firms that were ADCI in origin. Of the 45 firms, 37 were determined to be small businesses according to Small Business Administration standards. We assume that entities without small business data are small. In Table 12, we provide a summary of the small business data. As a result of our analysis, we concluded that small entities make up approximately 79 percent of the total affected marine population ((37 known small firms + 10 estimated and likely small firms + 30 firms with no revenue data)/87 total marine firms).

TABLE 12—FIRM DATA DEVELOPMENT

Firm type	Number of firms
Marine Commercial Marine Diving Firms in ADCI	75
Revenue and Employment Info	45
Number of Small Business Firms Based on Available Data	37

Source: USCG Calculations.

Table 13 provides small entity information, in the detail of the NAICS Code industries affected by this rule.

TABLE 13—SMALL ENTITIES BY NAICS CODES WITH SBA SIZE STANDARDS

NAICS Codes	Description	SBA Size standards (≤$M)	Number of small entities *	Percent of small entities
236220	Commercial & Inst. Building Construction	33.5	1	4.2
237990	Other Heavy and Civil Engineering Cons	33.5	3	12.5
238910	Site Preparation Contractors	14	5	20.8
541330	Marine Engineering and Naval Architecture	18.5	1	4.2
541990	All Other Prof., Scientific & Tech. Services	7	11	45.8
561499	All Other business Support Services	7	1	4.2
561990	All Other Support Services	18.5	2	8.3
Total			24	100

Source: USCG Calculations.
* ADCI Firms identified with revenue data.

Industries Affected by the Proposed Rule

A brief description of the industries[21] most affected by this proposed rule is presented as follows:

236220 Commercial and Institutional Building Construction—This industry comprises establishments primarily responsible for the construction (including new work, additions, alterations, maintenance, and repairs) of commercial and institutional buildings and related structures, such as stadiums, grain elevators, and indoor swimming facilities. This industry includes establishments responsible for the on-site assembly of modular or prefabricated commercial and institutional buildings. Included in this

[18] We used information and data from Manta (*http://Manta.com*).

[19] The SBA lists small business size standards for industries described in the North American Industry Classification System (NAICS). See *http://www.smallbusinessnotes.com/fedgovernment/sba/13cfr121/201-4849.html* (as of April 7, 2008).

[20] See commercial dive firm population calculation in Appendix B.

[21] These descriptions were excerpted from the U.S. Census Bureau. (*http://www.census.gov/cgi-bin/sssd/naics/naicsrch*).

industry are commercial and institutional building general contractors, commercial and institutional building for-sale builders, commercial and institutional building design-build firms, and commercial and institutional building project construction management firms.

237990 Other Heavy and Civil Engineering Construction—This industry comprises establishments primarily engaged in heavy and engineering construction projects (excluding highway, street, bridge, and distribution line construction). The work performed may include new work, reconstruction, rehabilitation, and repairs. Specialty trade contractors are included in this group if they are engaged in activities primarily related to engineering construction projects (excluding highway, street, bridge, distribution line, oil and gas structure, and utilities building and structure construction). Construction projects involving water resources (*e.g.,* dredging and land drainage), development of marine facilities, and projects involving open space improvement (*e.g.,* parks and trails) are included in this industry.

238910 Site Preparation Contractors—This industry comprises establishments primarily engaged in site preparation activities, such as excavating and grading, demolition of buildings and other structures, and septic system installation. Earth moving and land clearing for all types of sites (*e.g.,* building, non-building, and mining) are included in this industry. Establishments primarily engaged in construction equipment rental with operator (except cranes) are also included.

541330 Engineering Services—This industry comprises establishments primarily engaged in applying physical laws and principles of engineering in the design, development, and utilization of machines, materials, instruments, structures, processes, and systems. The assignments undertaken by these establishments may involve any of the following activities: Provision of advice, preparation of feasibility studies, preparation of preliminary and final plans and designs, provision of technical services during the construction or installation phase, inspection and evaluation of engineering projects, and related services.

541990 All Other Professional, Scientific, and Technical Services—This industry comprises establishments primarily engaged in the provision of professional, scientific, or technical services (except legal services; accounting, tax preparation, bookkeeping, and related services; architectural, engineering, and related services; specialized design services; computer systems design and related services; management, scientific, and technical consulting services; scientific research and development services; advertising, public relations and related services; market research and public opinion polling; photographic services; translation and interpretation services; and veterinary services).

561499 All Other Business Support Services—This U.S. industry comprises establishments primarily engaged in providing business support services (except secretarial and other document preparation services; telephone answering and telemarketing services; private mail services or document copying services conducted as separate activities or in conjunction with other office support services; monetary debt collection services; credit reporting services; repossession services; and court reporting and stenotype recording services).

561990 All Other Support Services—This industry comprises establishments primarily engaged in providing day-to-day business and other organizational support services (except office administrative services, facilities support services, employment services, business support services, travel arrangement and reservation services, security and investigation services, services to buildings and other structures, packaging and labeling services, and convention and trade show organizing services).

Census Data by NAICS

Table 5–3 presents census data for selected industries in Table 14. The Small Business Administration uses industry NAICS to determine if an entity is small based on their revenue data. The table below provides a distribution of the number of entities per industry by revenue.

TABLE 14—DISTRIBUTION OF FIRMS BY REVENUE

NAICS Code	Industry title	Number of entities by revenue						
		$0–$99k	$100k–$500k	$500k–$1M	$1M–$5M	$5M–$10M	$10M+	Grand total
236220	Commercial and Inst. Building Construction.	2,373	9,805	5,695	11,601	3,319	4,415	37,208
237990	Other Heavy and Civil Engineering Construction.	1,463	4,504	1,770	2,083	339	343	10,502
238910	Site Preparation Contractors	3,968	14,725	5,091	5,217	887	608	30,496

Source: US Census Bureau 2002. (*http://www.census.gov/econ/census02/guide/INDRPT23.HTM*).

Revenue Impact on Small Entities

The regulatory costs in this rule (including Manning, Drills, Audits, Records & Documentation and Medical Examinations) are evaluated in total in the following conventional IRFA analysis. To estimate the revenue impact on the identified small businesses, we followed guidance from the U.S. Small Business Administration's Office of Advocacy's ''A Guide for Government Agencies: How to Comply with the Regulatory Flexibility Act.'' We compared the total cost per business to the revenue data collected to assess the impact of the rule to those businesses. Using this information we were able to estimate the impact as a percentage of revenue for the affected firms.

As a result of our analysis, we concluded that small entities with a significant impact likely comprise 68 percent of the small entity population evaluated. Of the 37 small entities with available business data, we determined that 32 percent of small entities would have an annual cost-to-revenue impact of less than 1 percent. Further, we estimated that 41 percent of the small entities would have a cost-to-revenue impact between 1 and 3 percent and 27 percent would have an impact equal to or greater than 3 percent. These results are summarized in Table 15. We estimate 68 percent of small entities would have an impact greater than 1 percent from a cost to revenue ratio perspective.

TABLE 15—REVENUE IMPACTS ON SMALL ENTITIES

Impact	Sample	Percentage
0% ≤ Impact ≤ 1%	12	32
1% > Impact < 3%	15	41
≥ 3% Impact	10	27
Total	37	100

Source: USCG Calculations in Appendix B.

Description of the Projected Reporting, Recordkeeping, and Other Compliance Requirements of Small Entities

The Coast Guard expects new reporting or record keeping requirements resulting from this rule. The proposed rule impacts commercial marine diving operations under Coast Guard jurisdiction and requires each operation perform documentation preparation and maintenance tasks that fall under the category of reporting and recordkeeping. This documentation provides a historical record of when a piece of equipment was inspected or serviced and by whom. The process will also include the documentation of new equipment as often as new equipment is added to a firm's asset base. In addition, the documentation also takes into account logbook entries of diving activities as well as maintenance of logbooks, audit reporting, and operations manuals.

Duplication With Other Federal Rules

There are no relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule. OSHA has commercial diving responsibility to the 3-mile limit, and Coast Guard has responsibility beyond the 3-mile limit, and also for any activity off of a Coast Guard inspected vessel within the 3-mile limit. The latter is composed of most of the non-Gulf of Mexico commercial divers discussed earlier.

Description of Any Significant Alternatives to the Proposed Rule

The Coast Guard considered four alternatives to the NPRM alternative. A description of these alternatives is presented in Chapter 1. In general, safety rules do not lend themselves to alternatives favoring smaller entities. Being a small entity does not change necessarily the safety requirement.

Three alternatives involved a different regulatory approach from a status quo and ranged from involving the IMO in a global rulemaking to a consolidation of OSHA and US Coast Guard rules. All were rejected for reasons presented in Chapter 1.

SBREFA Compliance

In accordance with the Regulatory Flexibility Act (5 U.S.C. 601–612) and section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), the Coast Guard considered whether this rulemaking would have a significant economic impact on a substantial number of small entities. The term ''small entities'' comprises small business, not-for-profit organizations and governmental jurisdictions with populations of less than 50,000. In reviewing the potential costs of compliance and the relative impact on a small business' revenue, the Coast Guard cannot certify the proposed rulemaking would not have a significant economic impact on a substantial number of small entities.

The Coast Guard will help small entities understand the proposed rulemaking so that they can better evaluate its effect on them and participate in the rulemaking process. The preamble of the proposed rulemaking provides small businesses or organizations an opportunity to comment and lists a point of contact for any questions concerning the proposed rulemaking's provisions or options for compliance.

Executive Order 13272: Consideration for Small Entities

Section 1 of Executive Order 13272 directs Federal agencies to establish procedures and policies to promote compliance with the Regulatory Flexibility Act. It also requires Federal agencies to review thoroughly draft rules to assess and take appropriate account of the potential impact on small businesses, small governmental jurisdictions, and small organizations, as provided by the Act.

Executive Order 13272 requires Federal agencies to notify the Chief Counsel for Advocacy of the Small Business Administration of any proposed rulemakings that may have a significant economic impact on a substantial number of small entities. The proposed rulemaking is anticipated to have a significant economic impact on a substantial number of small entities. USCG will seek input from the Chief Counsel for Advocacy of the Small Business Administration in the promulgation of this rulemaking.

The Coast Guard solicits comments from Advocacy on the proposed rulemaking and will give every appropriate consideration to any comments provided by Advocacy on the proposed rulemaking. Similarly, USCG has proffered a comment period to small entities in compliance with the Executive Order and relevant laws and regulations.

Small businesses are encouraged to contact the agency for more information on the proposed rulemaking. For questions on this proposed rulemaking, call Ken Smith at the US Coast Guard (202) 372–1413. The public may also write the Coast Guard at the following address: U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC 20593–0001.

C. Assistance for Small Entities

Under Section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this proposed rule. If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and you have questions concerning its provisions or options for compliance, please consult Mr. Ken Smith, U.S Coast Guard, using the contact information listed above. Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by Coast Guard employees, call 1–888–REG–FAIR (1–888–734–3247). The Coast Guard will not retaliate against small entities that question or complain about this proposed rulemaking or any policy or action of the Coast Guard.

The Coast Guard Office of Domestic Compliance has prepared a notice to be

circulated to the general public and to be placed on the Coast Guard's Web site to assist small businesses and other interested parties in understanding the proposed rulemaking. The Coast Guard plans to continue its coordination and communication with maritime organizations such as the Chamber of Shipping of America and other ship owner associations so that they may inform and assist their respective members with understanding the rule.

In compliance with Executive Order 13563,[22] USCG will offer a public comment period of at least 60 days. Information about the proposed rule will be provided to USCG contacts as well as through **Federal Register** notice and press releases to encourage public participation.

D. Collection of Information

This proposed rule would call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). As defined in 5 CFR 1320.3(c), ''collection of information'' comprises reporting, recordkeeping, monitoring, posting, labeling, and other similar actions. The title and description of the new information collection, a description of those who must collect the information, and an estimate of the total annual burden follow. The estimate covers the time for reviewing instructions, searching existing sources of data, gathering and maintaining the data needed, and completing and reviewing the collection.

Title: Marine Occupational Health and Safety Standards for Commercial Diving Operations—46 CFR 197 Subpart B.

OMB Control Number: 1625–NEW.

Summary of the Collection of Information: This proposed rule would include reporting and record keeping requirements ranging from updating the operations manual, maintaining and periodically updating a log book, reporting and storing examination scores and certifications, and maintaining records of equipment inspections. The collection of information would aid the regulated public in assuring safe practices associated with commercial diving operations.

Need for Information: The Coast Guard needs this information to determine whether an entity meets the regulatory requirements.

Proposed Use of Information: The Coast Guard would use this information to determine compliance with the regulatory requirements.

Description of the Respondents: The respondents are owners and operators of U.S. commercial diving operations.

Number of Respondents: The burden of this proposed rule for this collection of information includes certifications, procurement of written materials, preparation of records, and records of inspections. This collection of information applies to owners/operators of commercial diving operations. We estimate the maximum number of respondents to be 87.

Frequency of Responses: This proposed rule would vary the number of responses each year by requirement. Details are provided in the preliminary regulatory analysis.

Burden of Response: The burden of response for each regulatory requirement varies. Details are provided in the preliminary regulatory analysis.

Estimate of Total Annual Burden: We estimate an annual burden of 6,059 hours for the industry.

As required by the Paperwork Reduction Act, we will submit a copy of this proposed rule to OMB for its review of the collection of information.

We ask for public comment on the proposed collection of information to help us determine how useful the information is; whether it can help us perform our functions better; whether it is readily available elsewhere; how accurate our estimate of the burden of collection is; how valid our methods for determining burden are; how we can improve the quality, usefulness, and clarity of the information; and how we can minimize the burden of collection.

If you submit comments on the collection of information, submit them both to OMB and to the Docket Management Facility where indicated under **ADDRESSES**, by the date under **DATES**.

You need not respond to a collection of information unless it displays a currently valid control number from OMB. Before the Coast Guard could enforce the collection of information requirements in this proposed rule, OMB would need to approve the Coast Guard's request to collect this information.

E. Federalism

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under that Order and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132. Our analysis is explained below.

It is well settled that States may not regulate in categories reserved for regulation by the Coast Guard. It is also well settled, now, that all of the categories covered in 46 U.S.C. 3306, 3703, 7101, and 8101 (design, construction, alteration, repair, maintenance, operation, equipping, personnel qualification, and manning of vessels), as well as the reporting of casualties and any other category in which Congress intended the Coast Guard to be the sole source of a vessel's obligations, are within the field foreclosed from regulation by the States. (See the decision of the Supreme Court in the consolidated cases of *United States* v. *Locke and Intertanko v. Locke,* 529 U.S. 89, 120 S.Ct. 1135 (March 6, 2000)). This proposed rule regulates equipment and operations for commercial diving conducted from inspected vessels in order to promote the safety of life. States may not regulate within this category, and therefore, this rule is consistent with the principles of federalism and preemption requirements in Executive Order 13132. Additionally, Congress specifically granted the authority to regulate artificial islands, installations, and other devices permanently or temporarily attached to the OCS and in the waters adjacent thereto as it relates to the safety of life to the Secretary of the Department in which the Coast Guard is operating. This includes floating installations and other devices engaged in OCS activities. 43 U.S.C. 1333(d)(1) states that the Secretary ''shall have authority to promulgate and enforce such reasonable regulations with respect to lights and other warning devices, safety equipment, and other matters relating to the promotion of safety of life and property on the artificial islands, installations, and other devices . . . as he may deem necessary.'' As this proposed rule would regulate equipment and operations to ensure safety of life for commercial diving

[22] The Executive Order directs Federal agencies to take action to use and encourage public participation; it states ''Regulations shall be adopted through a process that involves public participation. To that end, regulations shall be based, to the extent feasible and consistent with law, on the open exchange of information and perspectives among State, local, and Tribal officials, experts in relevant disciplines, affected stakeholders in the private sector, and the public as a whole.''

In accordance with Executive Order 13563, USCG solicited public input on the current voluntary compliance of the regulated public on several of the proposed provisions. This action was limited due to the restrictions of the Paperwork Reduction Act for which contacts with the public exceeding nine contacts on the same question must be approved by OMB. In addition, a Notice of Inquiry was issued in the **Federal Register** in January 2012.

being conducted from such OCS installations, it falls within the scope of authority Congress granted exclusively to the Secretary. This authority has been delegated to the Coast Guard and is exercised in this proposed rule. Therefore, since the States may not regulate within this category, preemption under Executive Order 13132 is not an issue.

Finally, Congress granted the authority to regulate deepwater ports to the Secretary of Transportation. 33 U.S.C. 1509(b) states that the Secretary of Transportation ''shall issue and enforce regulations with respect to lights and other warning devices, safety equipment, and other matters relating to the promotion of safety of life and property in any deepwater port and the waters adjacent thereto.'' When the Coast Guard was an agency within the Department of Transportation, the authority to issue regulations with respect to safety on deepwater ports was delegated to the Coast Guard. See 49 CFR 1.46(s) (2002). The Homeland Security Act of 2002, Public Law 107–296, transferred the Coast Guard to the Department of Homeland Security. Pursuant to the Homeland Security Act, authorities that were delegated to the Coast Guard remained intact during this transfer by operation of law. The authority was then delegated to the Commandant of the Coast Guard through Department of Homeland Security Delegation 0170.1. Since this rule regulates equipment and operation to ensure safety for commercial diving being conducted from deepwater ports, it falls within the scope of authority that has been transferred and delegated to and exercised by the Coast Guard.

F. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of $100,000,000 (adjusted for inflation) or more in any one year. Though this proposed rule would not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

G. Taking of Private Property

This proposed rule would not cause a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

H. Civil Justice Reform

This proposed rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

I. Protection of Children

We have analyzed this proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This proposed rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

J. Indian Tribal Governments

This proposed rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it would not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

K. Energy Effects

We have analyzed this proposed rule under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use. We have determined that it is not a ''significant energy action'' under that order because it is not a ''significant regulatory action'' under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The Administrator of the Office of Information and Regulatory Affairs has not designated it as a significant energy action. Therefore, it does not require a statement of energy effects under Executive Order 13211.

L. Technical Standards

The National Technology Transfer and Advancement Act (15 U.S.C. 272 note) directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through the Office of Management and Budget, with an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.,* specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies. The proposed regulations use voluntary consensus standards developed by ADCI and would allow commercial diving operators to apply for equivalency determinations if they comply with similar voluntary consensus standards used by other organizations.

M. Environment

We have analyzed this proposed rule under Department of Homeland Security Management Directive 023–01 and Commandant Instruction M16475.lD, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321–4370f), and have made a preliminary determination that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. A preliminary environmental analysis checklist supporting this determination is available in the docket where indicated under the ''Public Participation and Request for Comments'' section of this preamble. This rule is likely to be categorically excluded under section 2.B.2, figure 2–1, paragraphs (34)(a), (c), (d) and (e) of the Instruction and 6(a) of the **Federal Register**, Vol. 67, No. 141, Tuesday, July 23, 2002, page 48243. This proposed rule involves regulations that are procedural, involving reporting and recordkeeping requirements; regulations concerning the training and qualifying of maritime personnel; regulations concerning manning and equipping of vessels; regulations concerning equipment approval and carriage requirements; and regulatory actions involving vessel operation safety standards. We seek any comments or information that may lead to the discovery of a significant environmental impact from this proposed rule.

List of Subjects

46 CFR Part 8

Administrative practice and procedure, Incorporation by reference, Organization and functions (Government agencies), Reporting and recordkeeping requirements, Vessels.

46 CFR Part 197

Benzene, Diving, Marine safety, Incorporation by reference, Occupational safety and health, Reporting and recordkeeping requirements, Vessels.

For the reasons discussed in the preamble, the Coast Guard proposes to amend 46 CFR parts 8 and 197 as follows:

PART 8—VESSEL INSPECTION ALTERNATIVES

■ 1. Revise the authority citation for part 8 to read as follows:

Authority: 46 U.S.C. 3103, 3306, 3316, 3703; Department of Homeland Security Delegation No. 0170.1(92.a), (92.b).

■ 2. Amend § 8.320 as follows:
■ a. In paragraph (b)(13), remove the word ''and'';
■ b. In paragraph (b)(14), after the word ''Certificate;'', remove the period and add in its place ''; and''; and
■ c. Add paragraph (b)(15).
The addition reads as follows:

§ 8.320 Classification society authorization to issue international certificates.

* * * * *

(b) * * *

(15) International Diving System Safety Certificate.

* * * * *

PART 197—GENERAL PROVISIONS

■ 3. Revise the authority citation for part 197 to read as follows:

Authority: 33 U.S.C. 1509; 43 U.S.C. 1333; 46 U.S.C. 3306, 3703, 6101; Department of Homeland Security Delegation No. 0170.1 (75), (90), (92.b), (92.d).

■ 4. Revise subpart B to read as follows:

Subpart B—Commercial Diving Operations

Sec.

General

197.200 Applicability.
197.201 Definitions.
197.202 Incorporation by reference.
197.203 Equivalents.
197.204 Commercial diving operations conducted in foreign waters.
197.205 Enforcement.
197.206–197.208 [Reserved]

Audits

197.209 Third-party audits.
197.210 Internal audits.
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Subpart B—Commercial Diving Operations

General

§ 197.200 Applicability.

(a) Except as provided in paragraph (b) of this section, this subpart applies to commercial diving operations taking place at or from any—

(1) Deepwater port or safety zone thereof as defined in 33 CFR part 150;

(2) Artificial island, installation, or other device on the Outer Continental Shelf (OCS) as defined in 33 CFR part 140 and their safety zones defined in 33 CFR part 147;

(3) Vessel operating on the navigable waters of the United States, as defined in 33 CFR part 2;

(4) United States vessel required to have a certificate of inspection issued by the Coast Guard, including a mobile offshore drilling unit regardless of its geographic location or;

(5) Foreign-flagged vessel engaged in an OCS activity as defined in 33 CFR part 140, or connected to a deepwater port as defined in 33 CFR part 150.

(b) This subpart does not apply to commercial diving operations performed solely for—

(1) Marine scientific research and development purposes by an educational institution;

(2) Research and development for the advancement of diving equipment and technology; or

(3) Search and rescue or related public safety purposes conducted by or under the control of a governmental agency.

(c) A commercial diving operation may deviate from the requirements of this subpart to the extent necessary to prevent or minimize a situation that is likely to cause death, injury, or major environmental damage. The circumstances leading to the situation, the deviations made, and the corrective action taken, if appropriate, to reduce the possibility of recurrence must be recorded by the diving supervisor in the logbook required by 46 CFR 197.221(c)(10).

(d) The owner or operator of a foreign-flagged vessel to which this part applies shall submit documentation specified in this section to the cognizant OCMI before that vessel enters the navigable waters of the United States, engages in OCS activities, or performs work connected to a deepwater port. Acceptable forms of documentation are as follows:

(1) An international diving systems safety certificate issued by the vessel's flag administration or a party acting on behalf of the flag administration.

(2) Certification from the vessel's flag administration or party acting on behalf of the flag administration that the vessel complies with the regulations found in this part or the requirements of a recognized classification society that has been determined by the Commandant, Office of Design and Engineering (CG–ENG) to provide an equivalent level of safety.

§ 197.201 Definitions.

As used in this subpart—

Accredited school means a commercial diving educational

organization recognized by the Association of Commercial Diving Educators as meeting the standards of ANSI/ACDE–001–2009.

Alcohol means any form or derivative of ethyl alcohol (ethanol).

Approved third-party organization means an organization approved by the Commandant.

Audit has the meaning defined in 46 CFR 197.209.

Auditor means a person meeting the qualifications set forth in 46 CFR 197.209(d).

Barotrauma means injury of a body part or organ as a result of changes in barometric pressure.

Bell means a compartment either at ambient pressure (open bell) or pressurized (closed bell) that allows a diver to be transported to and from an underwater work site, allows the diver access to the surrounding environment, and is capable of being used as a refuge during diving operations.

Breathing gas means a gas supplied to a diver for aspiration.

Commandant means the Office of Commercial Vessel Compliance, Commandant (CG–CVC), 2703 Martin Luther King Jr. Ave. SE., Stop 7501, Washington, DC 20593–7501 unless otherwise specified.

Commercial diver means a diver engaged in underwater work for hire, excluding sport, fishing, and recreational diving or the instruction or supervision thereof.

Commercial diving employee means any person providing commercial diving services or support to a commercial diving operator, and includes any commercial diver employed by or working on behalf of a commercial diving operator.

Commercial diving operation means all activities in support of a commercial diver.

Commercial diving operator or *CDO* means any person or entity that employs, contracts, or secures the services of commercial divers to undertake commercial diving operations.

Cylinder means a pressure vessel for the storage of gas under pressure.

Dangerous drug means a narcotic drug, a controlled substance, or a controlled substance analog, as defined in section 102 of the Comprehensive Drug Abuse and Control Act of 1970, 21 U.S.C. 802.

Decompression chamber means a pressure vessel for human occupancy, such as a surface decompression chamber, closed bell, or deep diving system especially equipped to recompress, decompress, and treat divers.

Decompression table means a profile or set of profiles of depth-time relationships for ascent rates and breathing mixtures to be followed after a specific depth-time exposure or exposures.

Deepwater port has the meaning defined in 33 CFR 148.5.

Deficiency means a failure to meet minimum requirements of an applicable statute or regulation.

Depth means the depth of a dive, the maximum pressure expressed in feet of seawater attained by a diver.

Dive means work performed by a diver or the activity that is taken in support of that work and that is the subject of a dive plan.

Dive location means a distinct geographic location or a portion of a vessel or facility from which a diving operation is conducted.

Dive mode or *diving mode* means a type of diving defined by the equipment used and supported by the relevant procedures, techniques, and processes, and includes self-contained underwater breathing apparatus, saturation, surface-supplied air, or surface-supplied mixed-gas modes.

Dive plan is the written plan described in 46 CFR 197.220(i).

Dive planning meeting means the meeting described in 46 CFR 197.220(i).

Diver, unless otherwise modified, means a commercial diver working beneath the surface, exposed to hyperbaric conditions, and using underwater breathing apparatus.

Dive supervisor means the person responsible to the commercial diving operator for planning, resourcing, supervising, and approving a dive to ensure its safety and directly responsible for the safety and health of all dive team members during the dive.

Dive team means the working divers, dive tenders, standby divers, dive supervisors, persons in charge, life support and saturation technicians, and diver medical technicians, when provided, that are engaged in a specific diving operation.

Dive tender means a properly trained and certified individual acting (dive tending) in support of a working or standby diver.

Diving systems safety certificate means a certificate issued to a U.S. flag vessel subject to inspection under 46 U.S.C. 3301, or for a foreign flag vessel by or on behalf of its flag administration, pursuant to the International Code of Safety for Diving Systems;

Dynamic positioning or *DP* refers to systems designed to maintain a vessel in a fixed position and heading that incorporates computerized control systems, thrusters, propulsion machinery, and advanced tracking systems in order to maintain that fixed position.

External audit means an audit conducted by an approved third-party organization.

Facility means a deepwater port, or an artificial island, installation, or other device on the Outer Continental Shelf subject to Coast Guard jurisdiction.

FSW means feet of sea water (or equivalent static pressure head).

Hyperbaric condition means a pressure condition in excess of surface atmospheric pressure.

Internal audit means an audit that is conducted by a party that has a direct affiliation to the vessel, facility, owner or managing operator, or organization being audited.

Life support technician means a properly trained and certified dive support person responsible for the safe operation of a hyperbaric system, gas blending system, or gas control and delivery system, and who is responsible for providing for the medical wellness of the dive team.

Liveboating means the support of a surfaced-supplied diver from a vessel underway without DP ability.

Major non-conformity means an identifiable deviation that poses a serious threat to personnel or vessel safety, or a serious risk to the environment that requires immediate corrective action.

Marine casualty or accident means any casualty or accident as defined in 46 CFR 4.03–1.

Mixed-gas dive means a dive mode in which the diver in the water is supplied with a breathing gas other than air.

New dive location means a specific dive location from which no dive operation has been conducted in the last 90 days.

No-decompression limits means the depth-time limits of the no-decompression limits and repetitive dive group designation table for no-decompression air dives, U.S. Navy Diving manual or equivalent.

Non-conformity means an observed situation where objective evidence indicates the non-fulfillment of a specified requirement.

Objective evidence means quantitative or qualitative information, records, or statements of fact pertaining to safety or to the existence and implementation of a safety management system element, which is based on observation, measurement, or testing that can be verified. This information may include, but is not limited to, equipment certificates and maintenance documents, training records, repair

records, Coast Guard documents and certificates, surveys, or recognized class society reports.

OCS activity has the meaning defined in 33 CFR 140.10.

OCS facility has the meaning defined in 33 CFR 140.10.

Officer in Charge, Marine Inspection or OCMI means any person designated as such by the Commandant of the Coast Guard and delegated the authority to perform the functions described in 33 CFR 1.01–20.

Operations manual means the operations manual required by 46 CFR 197.223.

Person in charge or *PIC* means a vessel's master or the person acting or designated as such in accordance with § 197.221(a) of this subpart.

Pressure vessel means a container capable of withstanding an internal maximum working pressure of more than 15 psi(g).

Psi (g) means pounds per square inch (gauge).

Pressure vessel for human occupancy or *PVHO* means a pressure vessel that encloses a human being within its pressure boundary and includes diving bells, personnel transfer capsules, decompression chambers, recompression chambers, and hyperbaric chambers. The term does not include pressure vessels for human occupancy that may be subjected to external pressures in excess of 15 psi(g) but can only be subjected to maximum internal pressures of 15 psi(g) or less (*i.e.*, submersibles, or one atmosphere observation bells).

Procedure means an established series of actions, acts, or operations which must be executed in the same manner in order to achieve a uniform approach to compliance with applicable policies.

Risk management measure means the assignment of additional or different personnel, equipment, or other resources, the implementation of effective policies or practices, or any other measure appropriate for the management or reduction of risks that may be anticipated during a dive.

Safety management system means a structured and documented system enabling a commercial diving operation to effectively implement the commercial diving operator's safety and environmental protection policies and that is routinely exercised and audited in a way that ensures the policies and procedures are incorporated into the daily performance of the commercial diving operation.

Saturation diving means a dive mode that involves saturating a diver's tissues with an inert gas in the breathing mixture to allow an extension of bottom time without additional decompression.

Self-contained underwater breathing apparatus or *SCUBA* means a dive mode in which the diver is supplied with a compressed breathing mixture from diver-carried equipment.

Serious marine incident has the meaning defined in 46 CFR 4.03–2.

Third-party auditor means a person who conducts external audits for an approved third-party organization.

Third-party organization means an entity that may be approved by the Coast Guard to act on behalf of the Coast Guard for the purpose of verifying compliance with applicable requirements outlined in Titles 33 or 46 of the Code of Federal Regulations, and that is not directly connected to the Coast Guard, an owner or operator of a vessel, facility, or operation of a vessel or facility.

Unit, in the context of a unit on the Outer Continental Shelf, has the meaning defined in 33 CFR 140.10.

Vessel has the meaning given it by 33 CFR 140.10.

Working pressure means the pressure to which a pressure containment device is exposed at any particular instant during normal operating conditions.

§ 197.202 Incorporation by reference.

(a) Certain material is incorporated by reference into this subpart with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Coast Guard must publish notice of change in the **Federal Register** and the material must be available to the public. All approved material is available for inspection at the U.S. Coast Guard by calling the Office of Regulations and Administrative Law at 202–372–3870 or emailing *HQS-SMB-CoastGuardRegulationsLaw@uscg.mil*, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030 or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

(b) Association of Diving Contractors International, 5206 Cypress Creek Parkway, Suite 202, Houston, TX 77069, *http://adc-int.org/*.

(1) International Consensus Standards for Commercial Diving and Underwater Operations, 6th Edition, 2010 (''ADCI Standards''), IBR approved for: 46 CFR 197.220, 197.222, 197.240, 197.242, 197.243, 197.244, 197.245, 197.250, 197.260, 197.261, 197.262, 197.263, 197.266, 197.267, 197.270, 197.275, 197.276, 197.277, 197.279, 197.280, 197.281, and 197.282.

(2) [Reserved]

(c) International Maritime Organization (IMO), 4 Albert Embankment, London SE1 7SR, United Kingdom, *http://www.imo.org*.

(1) IMO Resolution A.831(19), International Code of Safety for Diving Systems, 1995, IBR approved for 46 CFR 197.204.

(2) IMO Resolution A.692(17), Guidelines and Specifications for Hyperbaric Evacuation Systems, IBR approved for 46 CFR 197.270.

(d) American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016–5990, *http://www.asme.org/*.

(1) ASME PVHO–1–2013, Safety Standard for Pressure Vessels for Human Occupancy, 2013 (''ASME PVHO–1''), IBR approved for 46 CFR 197.277 and 197.286.

(2) ASME B31.1–2010, ASME Code for Pressure Piping, Power Piping, 2010 (''ASME B31.1''), IBR approved for 46 CFR 197.278 and 197.286.

(3) ASME National Board Inspection Code, NBBPVI, NB23–2011 (''ASME NBBPVI''), IBR approved for 46 CFR 197.286.

(e) American National Standards Institute (ANSI), 25 West 43rd Street, Fourth Floor, New York, NY 10036, *http://www.ansi.org*.

(1) ANSI/ISO 15618–1:2001, Qualification testing of welders for underwater welding—Part 1: Diver-welders for hyperbaric wet welding (''ANSI/ISO 15618''), IBR approved for 46 CFR 197.246.

(2) ANSI/ACDE–01–2009, Divers—Commercial Diver Training—Minimum Standards, (''ANSI/ACDE–01–2009''), IBR approved for 46 CFR 197.209, 197.243, and 197.246.

(f) Compressed Gas Association, 14501 George Carter Way, Suite 103, Chantilly, VA 20151–2923, *http://www.cganet.com/*.

(1) Publication G–4.1, Cleaning Equipment for Oxygen Service, 2009 (''Compressed Gas Association Publication G–4.1''), IBR approved for 46 CFR197.286.

(2) Publication G–7, Compressed Air for Human Respiration, 6th Edition, 2008, (Compressed Gas Association Publication G–7''), IBR approved for 46 CFR197.286.

(3) Publication G–7.1, Commodity Specification for Air, 6th Edition, 2011, (Compressed Gas Association Publication G–7.1), IBR approved for 46 CFR197.286.

(g) U.S. General Services Administration, One Constitution

Square, 1275 First St. NE., Washington, DC 20417, *http://www.gsa.gov/portal/category/100000.*

(1) Federal Specification, BB–N–411C, Nitrogen Technical, 2000 (''Federal Specification BB–N–411C''), IBR approved for 46 CFR 197.286.

(2) Federal Specification, Oxygen, Technical, Gas and Liquid, BB–O–925a, 1961 (''Federal Specification BB–O–925a''), IBR approved for 46 CFR 197.286.

(h) International Organization for Standardization (ISO), 1, ch. de la Voie-Creuse, CP 56–CH–1211 Geneva 20, Switzerland.

(1) ISO 9001–2008, American National Standard, Quality Management Systems—Requirements, IBR approved for 46 CFR 197.209 and 197.225.

(2) ISO 15618—2001, Qualification testing of welders for underwater welding—Part 1: Diver-welders for hyperbaric wet welding, IBR approved for 46 CFR 197.246.

(i) U.S. Government Printing Office, 723 North Capitol St. NW., Washington, DC 20401, *http://www.gpo.gov/.*

(1) U.S. Navy Diving Manual, 6th Edition, April 2008, IBR approved for 46 CFR 197.264 and 197.265.

(2) [Reserved]

§ 197.203 Equivalents.

(a) The Commandant may accept substitutes for equipment, materials, apparatus, arrangements, procedures, or tests required in this subpart if the substitute provides an equivalent level of safety.

(b) The person or entity receiving the equivalency determination must keep a copy of that determination and make it available to any of the person's or entity's employees, an approved third-party organization, or Coast Guard personnel upon request.

§ 197.204 Commercial diving operations conducted in foreign waters.

A U.S. vessel that is conducting commercial diving operations in foreign waters, and a foreign vessel that is conducting commercial diving operations on the OCS of the U.S., must have diving systems that comply with the International Code of Safety for Diving Systems (incorporated by reference, see 46 CFR 197.202) and possess a valid international diving systems safety certificate issued by the vessel's flag administration or a party acting on that flag administration's behalf. U.S. vessels needing an international diving systems safety certificate must contact a recognized classification society authorized by the Coast Guard to issue international certificates in accordance with 46 CFR 8.320.

§ 197.205 Enforcement.

(a) For the purpose of enforcing this subpart, and to the extent needed to verify compliance with this subpart, the Officer in Charge, Marine Inspection (OCMI) may at any time inspect the records and observe the operations of any commercial diving operator (CDO) or third-party organization (TPO), and may interview any employee or person working on behalf of the CDO or TPO.

(b) For noncompliance with this subpart, the OCMI may suspend or revoke a U.S. vessel's certificate of inspection in accordance with 46 CFR part 2, or may suspend a U.S. vessel's international diving systems safety certificate.

(c) Vessels, OCS facilities, or deepwater ports that do not comply with these regulations are subject to the following enforcement actions:

(1) The District Commander or the Captain of the Port (COTP) may prohibit a noncompliant vessel from engaging in commercial diving operations. A noncompliant vessel conducting commercial diving operations on the navigable waters of the United States, as defined in 33 CFR 2.36, is subject to orders and penalties authorized by the Ports and Waterways Safety Act and its implementing regulations.

(2) The OCMI may prohibit a noncompliant vessel or OCS facility from engaging in commercial diving operations. A noncompliant OCS facility, or vessel engaged in an OCS activity, is subject to penalties and orders authorized by the Outer Continental Shelf Lands Act and its implementing regulations.

(3) The OCMI may prohibit a noncompliant deepwater port from engaging in commercial diving operations. A noncompliant deepwater port, or a vessel connected to a deepwater port, is subject to penalties and orders authorized by the Deepwater Port Act and its implementing regulations.

§§ 197.206–197.208 [Reserved]

Audits

§ 197.209 Third-party audits.

(a) As used in this section, an ''audit'' means a systematic, independent, and documented process for obtaining audit evidence, which can be evaluated objectively to determine the extent to which audit criteria are fulfilled. An audit may be limited to random selection of a representative sampling throughout the system that presents the auditor with sufficient objective evidence of system compliance. It includes a thorough review of appropriate reports, documents, records, and other objective evidence to verify compliance with applicable regulations. It may include, but is not limited to—

(1) Examining records;

(2) Asking responsible persons how they accomplish specific tasks;

(3) Observing persons performing required tasks;

(4) Examining equipment to insure proper maintenance and operation; and

(5) Checking training records and work environments.

(b) This section establishes procedures for third-party organizations (TPOs) to obtain the Commandant's approval to perform audits on behalf of the Coast Guard for the purpose of determining regulatory compliance of vessels, personnel, and equipment with Coast Guard regulations issued under this part, and establishes criteria for the performance of those audits.

(c) A TPO that the Commandant approves may—

(1) Conduct audits of logs, records, documents, equipment, drills, or other data to verify compliance with applicable Coast Guard regulations;

(2) Conduct audits of specific vessel operations and interview a TPO's personnel to verify compliance with applicable Coast Guard regulations; and

(3) Issue reports detailing the results of audits.

(d) To receive the Commandant's approval to perform audits in accordance with this section, a TPO must demonstrate the skills and experience necessary to assess compliance with the requirements of this part. It must demonstrate, without consideration for any recreational diving experience, that each of its auditors has—

(1) Successfully completed a commercial diving training course meeting the requirements of ANSI/ACDE–01–2009 (incorporated by reference, see 46 CFR 197.202);

(2) Served as a diving supervisor overseeing the specific diving mode to be audited, with an auditor of commercial SCUBA, surface-supplied air, or mixed-gas diving having overseen at least 500 commercial dives in that mode and an auditor of saturation diving having overseen at least 100 commercial dives in that mode;

(3) Successfully completed a lead auditor/assessor course that meets the requirements of International Organization for Standardization (ISO) 9001–2008 (incorporated by reference, see 46 CFR 197.202) or a Coast Guard-recognized equivalent; and

(4) Either conducted at least eight audits within the past 5 years of a commercial diving operation utilizing a recognized consensus standard, or

successfully completed a required auditor apprenticeship consisting of at least four audits under the direction of a lead auditor.

(e) A TPO that the Commandant approves must notify the Commandant when it adds or removes an auditor. For each new auditor, the organization must demonstrate that the auditor qualifications specified in paragraph (c) of this section have been met.

§ 197.210 Internal audits.

(a) Each commercial diving operator (CDO), and vessel or facility owner that permits a commercial diving operation to take place on board, must perform an annual internal audit using one or more designated employees or persons contracted to perform the audit.

(b) The internal audit is not necessarily conducted as one event, and may be performed in segments over time, not to exceed 1 year.

(c) The internal audit must be of sufficient depth and breadth to ensure the CDO or vessel or facility owner that permits a commercial diving operation to take place on board has established adequate procedures and documentation to validate and maintain compliance with this subpart.

(d) Each internal auditor must have the authority to examine documentation, question personnel, examine vessel equipment, witness system testing, and observe personnel training as necessary to verify compliance.

§ 197.211 External audits.

(a) Each commercial diving operator (CDO), and vessel or facility owner that permits a commercial diving operation to take place on board, must have an external compliance audit conducted by an approved third-party organization at least twice in each 5-year period. Additionally, an external compliance audit must be conducted as soon as possible after any commercial diving casualty that is a serious marine incident.

(b) The external audit must be of sufficient depth and breadth to ensure that the CDO or vessel or facility owner that permits a commercial diving operation to take place on board complies with the requirements of this subpart.

(c) Each external auditor must be provided access to examine any requested documentation, question personnel, examine equipment, witness system testing, and observe personnel training, to the extent necessary to verify compliance with this subpart.

(d) The external auditor may broaden the scope of the audit if he or she finds a condition that is inconsistent with the records maintained or identifies an unsafe condition.

(e) The external auditor may verify compliance through a review of objective evidence and may conduct a visual sampling onboard vessels or facilities where commercial diving operations are conducted to determine whether or not the conditions onboard the vessel or at the facility are consistent with the records reviewed.

§ 197.212 Pre-audit notification.

(a) Each commercial diving operator (CDO) or vessel or facility owner that permits a commercial diving operation to take place on board must notify the cognizant Officer in Charge, Marine Inspection (OCMI) at least 5 working days before the start of any external audit conducted under 46 CFR 197.211.

(b) The OCMI may require that a Coast Guard representative accompany the auditor during part, or all, of an external audit.

(c) The Coast Guard may conduct an audit of the CDO or vessel or facility at any time.

§ 197.213 Audit reporting.

(a) An approved third-party organization conducting external audits in accordance with this subpart must submit an audit report to the cognizant Officer in Charge, Marine Inspection (OCMI) within 30 days after completing each audit under 46 CFR 197.211, except that any major non-conformity must be reported to the local OCMI upon completion of the audit.

(b) Each audit report must contain the name of the auditor, the audit results, and any continuing actions such as resolution of deficiencies and non-conformities.

(c) The TPO must keep each audit report for 5 years and make it available to the Coast Guard upon request.

(d) CDOs must retain copies of TPO audit reports and make them available for examination by the Coast Guard upon request.

§§ 197.214–197.219 [Reserved]

Operational Duties

§ 197.220 Commercial diving operators.

Each commercial diving operator (CDO) must ensure that—

(a) Commercial diving operations comply with or exceed the requirements of the ADCI Standards (incorporated by reference, see 46 CFR 197.202) as modified by this subpart;

(b) Each commercial diving operation or support function is conducted in a way that minimizes any prevailing or anticipated risk to life, property, or the environment;

(c) Each commercial diving operation is conducted with the required equipment and the proper operational procedures to ensure the safety of all commercial diving employees involved in the commercial diving operation;

(d) Each commercial diving employee taking part in a commercial diving operation receives written designation of the employee's individual roles and responsibilities for each commercial diving operation and has the equipment, knowledge, skills, experience, training, and certification necessary to perform the duties to which he or she is assigned;

(e) The name of the dive supervisor for each commercial diving operation is provided to the person in charge (PIC) of the vessel or facility before beginning the operation;

(f) Drills are conducted in accordance with table 197.220(f) in this section, and compliance documented by logging the date, location, nature, and scope of each drill and the name and job title of each drill participant;

TABLE 197.220(F)—DRILL REQUIREMENTS

Requirement	Detail
Ensure that each dive team member can perform his or her assigned dive team duties.	Drill at least once every 30 calendar days, before initiating a commercial diving operation at a new dive location, when adding a new member to the dive team, or whenever you change an emergency drill procedure or emergency response equipment described in the operations manual. Note: For each dive mode used, drill using the unique equipment, personnel, and operational procedures required by that mode.
Diver recovery	At least once every 90 days, drill on: (1) Deployment of standby divers; (2) recovery of a diver from depth to a decompression chamber and first aid station; and (3) for dive systems utilizing hyperbaric rescue chambers or hyperbaric rescue craft, a full launch and recovery drill at least every 90 days or when adding a new member to the dive team or when initiating a new dive location.

TABLE 197.220(F)—DRILL REQUIREMENTS—Continued

Requirement	Detail
Emergency rescue	Drill at least once every 30 calendar days. Ensure that personnel can successfully deploy the equipment and perform the procedures described in the operations manual for emergency rescue (it is not necessary to deploy the emergency aviation resources or vessels required to transport divers to offsite medical facilities).

(g) Each commercial diving employee's compliance with this subpart is documented, that the documentation is retained for at least 5 years, and that the documentation is made available upon request to the Coast Guard or approved third-party organizations operating under this subpart;

(h) The dive supervisor complies with this subpart and prepares and updates the operations manual described in 46 CFR 197.223; the operations manual is provided at the dive site; and all dive team members, including the dive supervisor, are trained in, familiar with, and compliant with the operations manual's contents;

(i) All dive team members participate in a dive planning meeting before each dive, that the meeting ensures that a dive plan is prepared specific to each dive identifying the person in charge of the vessel or facility, the dive supervisor, and the roles and responsibilities of all dive team members, the anticipated conditions and risks that could affect the dive and risk management measures implemented to reduce risks; and that each dive team member reviews and signs the plan to document participation in the meeting and agreement with the plan;

(j) All dive team members have access to approved documentation, manuals, guidance, policies, procedures, checklists, and any other publications for use in planning or conducting the dive and for properly using equipment in connection with the dive; and

(k) The local Officer in Charge, Marine Inspection is provided with a dive notice containing the contents specified in table 197.220(k) of this section at least 24 hours before any commercial diving operation begins.

TABLE 197.220(K)—DIVE NOTICE, REQUIRED CONTENTS

Content	Detail
Contact information	For the CDO, dive supervisor, and PIC: Name, telephone or e-mail, or other contact information.
Date and time	Scheduled start and end date and time.
Dive location	Geographic position (latitude and longitude).
Diving system safety certificate	Certificate number, date of expiration, flag administration, and issuing authority if other than the administration.
Mode	Mode of diving to be used.
Support platform	Name of each vessel or facility providing dive support.
Work	Description of work to be performed including maximum depth and exposure time.

§ 197.221 Persons in charge.

(a) The owner or operator of a vessel or facility must designate in writing an individual to be the person in charge (PIC) of the vessel or facility.

(b) Where a master is designated, the master is the PIC.

(c) The PIC must—

(1) Participate in the dive planning meeting and sign the dive plan;

(2) Not allow any commercial diving operation to begin until—

(i) The operation's dive supervisor has been designated;

(ii) The dive supervisor provides the PIC with a report on the nature and planned times of the planned operation; and the planned involvement of the vessel or facility, its equipment, and its personnel in the operation;

(3) Not permit any commercial diving operation involving dynamic positioning or liveboating to begin without first—

(i) Establishing a means of rapid communication with the dive supervisor while the diver is entering, in, or leaving the water; and

(ii) Ensuring a boat and crew for diver pickup is provided in the event of an emergency;

(4) Ensure that a boat and crew for SCUBA diver pickup is provided when SCUBA divers are not line-tended from the dive location;

(5) Coordinate the activities of the vessel or facility with the dive supervisor;

(6) Ensure that the vessel or facility equipment and personnel are kept clear of the dive location except after coordinating with the dive supervisor;

(7) Provide accurate and detailed plans of the area of the facility, infrastructure, or vessel that is the subject of the work to be performed;

(8) Ensure that any structures or components being worked on are prepared so as to minimize any danger that could pose a threat to the members of the dive team;

(9) Anticipate and monitor all conditions and risks that may affect the commercial diving operation, ensure the availability of risk management measures if needed, and terminate the operation if an unsafe condition exists; and

(10) Maintain a logbook and make it available to the Coast Guard or approved TPOs upon request. For vessels subject to 46 U.S.C. 11301, this may be the logbook required by that section and kept on form CG–706. The following must be included in the logbook:

(i) Date, time, and location at the start and completion of dive operations;

(ii) Approximate underwater and surface conditions (weather, visibility, temperatures, and currents);

(iii) Name of the dive supervisor;

(iv) General nature of work performed; and

(v) Maximum depth and exposure time.

§ 197.222 Dive supervisors.

Each dive supervisor for a commercial diving operation has the final authority to determine the required diving equipment, personnel, procedures, and diving modes needed to safely accomplish the intended task, and must—

(a) Comply with this subpart and the applicable requirements for dive supervisors and diving modes outlined in sections 3.0 and 4.0 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202) for the specific modes of diving for which supervision is provided;

(b) Ensure that diving operations conducted from a vessel or facility subject to this subpart comply with this subpart;

(c) Before beginning any commercial diving operation, give the person in charge (PIC) the report required by 46 CFR 197.221(c)(2)(ii), and coordinate with the PIC any changes that are made to that report;

(d) Anticipate and monitor all conditions and risks that may affect the dive, implement risk management measures as needed, and terminate the dive if necessary to ensure dive team safety;

(e) Conduct the dive planning meeting required by 46 CFR 197.220(i) and draft and sign the dive plan;

(f) Be properly trained and qualified to operate each diving system or mode used in the operation;

(g) Be able to read and communicate in a language clearly understood by all members of the dive team;

(h) Supervise and direct the actions of each dive team member;

(i) Coordinate with the PIC to ensure that clear and prompt notice of the commercial diving operation is given to any person, vessel, installation, or organization whose work could interfere with or affect the planned dive;

(j) Maintain an official dive log with information outlined in section 5.13 of the ADCI Standards and the—

(1) Dive mode used;

(2) PIC's name; and

(3) Name, date, time, treatment, circumstances, and extent of any fatality, injury, or illness that results in incapacitation of more than 72 hours or requires any dive team member to be hospitalized for more than 24 hours;

(k) Ensure that, for each diving operation deviating from the requirements of this subpart, the dive log records the—

(1) Circumstances leading to the situation;

(2) Deviation made; and

(3) Corrective action taken to reduce the possibility of recurrence;

(l) Keep a record in the dive log noting where and when testing occurred for each of the following, along with the test results—

(1) Medical kit check (monthly);

(2) Air compressor test;

(3) Breathing mixture check;

(4) Breathing supply system check;

(5) Cleaning of diving equipment for oxygen service, including which equipment was cleaned, the general cleaning procedure, and the names of persons involved;

(6) Breathing supply hose and system tests;

(7) Breathing gas supply system inspection;

(8) Depth gauge and timekeeping device test;

(9) Pressure vessel for human occupancy test and inspection;

(10) Diving equipment inspection;

(11) Pressure piping test and inspection; and

(12) Volume tank and cylinder test and inspection;

(m) Supervise the planning and execution of the diving operation, including the responsibility for the safety and health of the dive team; and

(n) Notify the PIC whenever decompression sickness or gas embolism is suspected or symptoms are evident, and provide a written report on the assessment of the decompression procedure that includes the following:

(1) Details of the investigation completed for each incident including dive and decompression profiles and the composition, depth, and time of breathing mixture changes;

(2) Symptoms, including depth and time of onset;

(3) Nature and results of the treatment;

(4) Evaluation of each incident based on the investigation, consideration of the past performance of the decompression table used, and individual susceptibility; and

(5) The corrective action taken to reduce the probability of recurrence.

§ 197.223 Operations manual.

(a) Each dive supervisor must provide the operations manual to the person in charge (PIC) prior to commencement of any diving operation and make it available at the dive location to all members of the dive team.

(b) The dive supervisor must modify the operations manual to reflect any change in the configuration or operation of the vessel or facility or in the specific diving operation as planned.

(c) The operations manual must provide for the safety and health of the divers, and must address the—

(1) Safety procedures and checklists for each diving mode used;

(2) Assignments and responsibilities of each dive team member for each diving mode used;

(3) Equipment procedures and checklists for each diving mode used;

(4) Dive team members' drills and training;

(5) Procedures for conducting a job safety analysis; and

(6) Procedures to be taken before, during, and after a dive for each diving mode conducted.

(d) The operations manual must also provide emergency procedures in the event of—

(1) Fire;

(2) Equipment failure;

(3) Adverse environmental conditions including, but not limited to, weather and sea state;

(4) Medical illness;

(5) Injuries; and

(6) Barotrauma.

(e) The operations manual must also provide procedures dealing with the use of—

(1) Hand-held power tools;

(2) Welding and burning equipment; and

(3) Explosives.

§ 197.224 Operational duties in the event of marine casualty or serious marine incident.

(a) In the event of a marine casualty or a serious marine incident the commercial diving operator must—

(1) Ensure that the commercial diving operation is suspended as soon as all actions have been taken to protect the safety of life and the environment, and resumed only after all commercial diving employees have fully complied with the reporting requirements of 46 CFR part 4 and this section;

(2) Analyze the event and take all reasonable action required to prevent further events from occurring;

(3) Arrange for a timely post-casualty audit to be conducted in accordance with 46 CFR 197.211;

(4)(i) Ensure that any equipment that may have contributed to the event is immediately removed from service and secured against unauthorized access and any change in its material condition is recorded;

(ii) Ensure that any repair to the equipment described in paragraph (a)(4)(i) of this section and any deviation from the requirements of paragraph (a)(4)(i) are reported to the local Officer in Charge, Marine Inspection (OCMI) as soon as possible;

(iii) Ensure that any equipment described in paragraph (a)(4)(i) of this section and any documentation relating to the event is retained, made available to the OCMI upon request, and not disposed of until the OCMI gives written permission; and

(5) Ensure that the commercial diving operation and all commercial diving employees comply with any conditions imposed by the OCMI to protect life, property, or the environment.

(b) In addition to the reporting requirements of 46 CFR subpart 4.05 and 33 CFR 146.30 and 150.815, the person in charge (PIC) must notify the OCMI as soon as possible after a diving casualty occurs if the casualty involves loss of life or a diving-related injury that causes incapacitation for more than 72 hours or hospitalization for more than 24 hours.

(c) The notice required in paragraph (b) of this section must contain the—

(1) Name and official number (if applicable) of the vessel or facility;

(2) Name of the owner or operator of the vessel or facility;

(3) Name of the PIC;

(4) Name of the dive supervisor;

(5) Description of the casualty including presumed cause;

(6) Maximum depth and exposure time; and

(7) Nature and extent of the injury.

(d)(1) In addition to the notice required in paragraph (b) of this section, the PIC must provide a written report in accordance with 46 CFR subpart 4.05 within 5 days of the casualty.

(2) When the marine casualty or serious marine incident occurs on a vessel's diving installation, the report must be submitted on Form CG2692. When the marine casualty or serious marine incident occurs on a facility's diving installation, the report can be in narrative written form if it contains the information required in paragraph (c) of this section and the information required to be submitted on Form CG2692.

(3) The report must be accompanied by a copy of the dive supervisor investigation report required in 46 CFR 197.222(n) when decompression sickness is involved.

(4) The report must include information relating to alcohol or drug involvement as required in 46 CFR 4.05–12.

(e) Each dive supervisor must promptly notify the PIC of any diving-related casualty, accident, or injury.

(f) The owner, agent, or PIC of a vessel or facility for which a report of casualty is made under paragraph (d) of this section must retain all records onboard that are maintained on the vessel or facility and those records required by this subpart, including all logbooks and reports, for 6 months after the report of a casualty is made or until advised by the OCMI that records need not be retained onboard, and must make them available for examination by any Coast Guard official or approved third-party organization authorized to investigate the casualty.

(g) Each CDO and owner of a vessel or facility that determines that a casualty or incident is, or is likely to become, a serious marine incident, must comply with the applicable chemical testing and reporting requirements outlined in 46 CFR subpart 4.06.

§ 197.225 Safety management system.

(a) Each commercial diving operator, and each vessel or facility owner that permits a commercial diving operation to take place on board or at the facility, must conduct the internal and external audits required by 46 CFR 197.210 and 197.211 and must conduct operations in accordance with a safety management system meeting the requirements of ISO 9001–2008, or equivalent standard recognized by the Office of Design and Engineering Standards, Commandant (CG–ENG).

(b) Each vessel engaged on an international voyage and subject to the International Convention for the Safety of Life at Sea must be operated in accordance with a Safety Management System meeting the requirements of the International Safety Management Code.

§§ 197.226–197.239 [Reserved]

Personnel Training and Qualifications

197.240 General requirements.

(a) Each commercial diving employee employed in a commercial diving operation must have the knowledge, skills, experience, training, and certification necessary to perform the duties to which he or she is assigned and must meet the requirements of the role to which he or she is assigned as outlined in section 3 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202), except insofar as it has been modified by this subpart.

(b) Each commercial diving team member must be trained in and maintain valid certification for cardiopulmonary resuscitation (CPR) and first aid (American Red Cross standard course or equivalent).

§ 197.241 Standby divers.

(a) No standby diver may perform any other duty that might interfere with his or her duties as a standby diver while another diver is in the water.

(b) Each standby diver must—

(1) Be fully dressed and able to enter the water in less than 1 minute and when directed to do so by the dive supervisor;

(2) Stay in the immediate location of the dive and dive support equipment while a diver is in the water; and

(3) Stay aware of events and conditions relevant to the dive.

§ 197.242 Dive supervisors.

(a) Except insofar as it has been modified by this subpart, each dive supervisor of a commercial diving operation must meet the requirements for the specific mode of diving being supervised, as outlined in section 3 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202).

(b)(1) A surface-supplied air dive supervisor must meet the requirements of a surface-supplied air diver, and complete at least 150 dives serving as a qualified surface-supplied air diver.

(2) A mixed-gas dive supervisor must meet the requirements of a mixed-gas diver and—

(i) Complete at least 150 mixed-gas dives as a qualified mixed-gas diver; and

(ii) Complete at least 150 dives as a surface-supplied air diving supervisor.

(3) A saturation dive supervisor must meet the requirements of a saturation diver, and—

(i) Complete at least 150 dives as a saturation diver; and

(ii) Complete at least 150 dives as a mixed-gas diving supervisor.

§ 197.243 Divers and dive tenders.

(a) Except insofar as it has been modified by this subpart, each diver and dive tender for a commercial diving operation must meet the commercial diving training requirements of section 2.2 and the diving personnel responsibilities, qualifications and certification requirements of section 3 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202).

(b) In lieu of the requirements in section 3.5.3(a) and (b) of the ADCI Standards (incorporated by reference, see 46 CFR 197.202), a mixed-gas diver must complete at least 100 dives as an air diver; and complete at least 50 dives as tender to a mixed-gas diver.

(c) In lieu of the requirements in section 3.7.3(a) and (b) of the ADCI Standards (incorporated by reference, see 46 CFR 197.202), a saturation diver must complete at least 200 dives as an air or mixed-gas diver; and complete at least 100 dives as a mixed-gas diver.

(d) A commercial diver or dive tender conducting diving operations prior to (30 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE) and having more than 5 years of commercial diving experience is exempt from having to meet the formal training requirements specified in section 2.2.1 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202).

(e) A commercial diver or dive tender conducting diving operations prior to (30 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE) and having less than 5 years of commercial diving experience must meet the formal training requirements specified in

section 2.2.1 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202) not later than 3 years after (30 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE).

§ 197.244 Life-support technicians.

Each life-support technician for a commercial diving operation must meet the requirements of section 3.9 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202).

§ 197.245 Saturation technicians.

Each saturation technician for a commercial diving operation must meet the requirements of section 3.10 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202).

§ 197.246 Individuals conducting underwater burning, welding, or exothermic cutting.

Each individual conducting underwater burning, welding, or exothermic cutting must provide the commercial diving operator and dive supervisor with documentation showing successful completion of a course for underwater welding, burning, and cutting containing curriculum based on ANSI/ACDE–01–2009 (incorporated by reference, see 46 CFR 197.202) and successful completion of a written and practical exam based on ANSI/ISO 15618 (incorporated by reference, see 46 CFR 197.202).

§ 197.247 Diver medical technicians.

Each individual acting as a diver medical technician must meet the requirements for commercial divers outlined in 46 CFR 197.243(a), be trained as an emergency medical technician according to the National Association of Emergency Medical Technicians, and be trained as a certified medical technician according to the National Board of Diving and Hyperbaric Medical Technology.

§§ 197.248–197.249 [Reserved]

Health and Medical Requirements

§ 197.250 Medical examinations.

(a) Except insofar as it has been modified by this subpart, each commercial diving employee subjected to hyperbaric conditions must comply with section 2.3 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202).

(b) Each commercial diving employee subjected to hyperbaric conditions must—

(1) Be physically and mentally able to safely wear and operate any required equipment, tools, and safety gear necessary to accomplish diving operations or otherwise be exposed to hyperbaric activities without undue danger to themselves or others;

(2) At the time of hire, and at least once every 12 months thereafter, undergo a medical examination by a licensed physician to determine the employee's physical and cognitive ability to meet the standard described in paragraph (b)(1) of this section, and must ensure that he or she provides the commercial diving operator and the dive supervisor with a written medical report from his or her attending physician that includes the—

(i) Date of the examination;

(ii) Physician's name, business address, and telephone number; and

(iii) Physician's medical determination of fitness for diving or otherwise being subjected to hyperbaric conditions, and any restrictions or limitations that would apply to work activities.

§ 197.251 Pre-operational verification.

(a) Before each commercial diving operation, the commercial diving operator (CDO) and the dive supervisor must ensure that each person who may be subjected to hyperbaric conditions has complied with 46 CFR 197.250.

(b) No CDO or dive supervisor may knowingly—

(1) Expose an employee to hyperbaric conditions if the employee has not complied with the requirements of this subpart; or

(2) Use the employee in a manner that is not consistent with any restrictions or limitations listed by a physician under 46 CFR 197.250(b)(2)(iii).

(c) Each CDO and dive supervisor must ensure that no dive team member is under the influence of alcohol, a dangerous drug, or a legal prescription or non-prescription medication whose use is inadvisable by a medical physician while performing the duty to which the person is assigned.

§ 197.252 Work hours.

Each commercial dive operator and dive supervisor must ensure that each dive member is provided the opportunity to obtain at least 12 hours of rest within any 24-hour period, except in an emergency or drills that may be required in accordance with 46 CFR 15.710(d).

§ 197.253 Ascent to altitude after diving or flying after diving.

Commercial divers leaving a dive site and traveling over mountains or departing by air must comply with Chapter 9–14 of the U.S. Navy Diving Manual (incorporated by reference, see 46 CFR 197.202).

§§ 197.254–197.259 [Reserved]

Specific Operations

§ 197.260 Operations with potential for differential pressures in adjacent areas.

Each commercial diving operator performing a commercial diving operation that has the potential for developing differential pressures in adjacent areas must comply with section 5.17 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202), and ensure that the recommendations outlined in section 5.17.3 of the ADCI Standards are implemented.

§ 197.261 Operations conducted from a dynamic positioning vessel.

(a) Each commercial diving operator (CDO) performing commercial diving operations from a vessel using a dynamic positioning (DP) system must comply with section 8.3 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202).

(b) Each CDO to whom this section applies must—

(1) Ensure that the DP system for the vessel is periodically inspected, tested, and maintained in accordance with the applicable manufacturer and/or classification society requirements for the specific DP system used;

(2) Ensure that periodic inspections, tests, and maintenance for the DP system on the vessel are recorded in the logbook required by 46 CFR 197.221(c)(10); and

(3) Ensure that the onboard dive location is not located within 5 meters of a propulsion source.

§ 197.262 Operations conducted from a vessel that is liveboating.

Each commercial diving operator performing commercial diving operations from a vessel that is liveboating must comply with section 8.2 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202) and must notify the person in charge before a diver enters or exits the water.

§ 197.263 Operations involving SCUBA.

Each commercial diving operator performing commercial diving operations involving the use of a self-contained underwater breathing apparatus must comply with section 4.2 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202), and must ensure that a boat is available for diver pickup when a diver is not line-tended from the dive location.

§ 197.264 Operations involving multiple dives by a diver.

Each commercial diving operator requiring divers to engage in multiple

dives must first make sure that equivalent air depth calculations are determined by the dive supervisor and the diver, and that those calculations are entered into the Standard Navy Air Tables contained in the U.S. Navy Dive Manual (incorporated by reference, see 46 CFR 197.202) to determine the subsequent dive profile.

§ 197.265 Operations in which a diver's decompression is required, but has been omitted.

Commercial diving operators must ensure that the procedures identified in the U.S. Navy Diving Manual, Sixth Edition (incorporated by reference, see 46 CFR 197.202) are followed when a diver's decompression is required but has been omitted.

§ 197.266 Operations in contaminated water.

Commercial diving operations conducted in contaminated water must comply with section 5.38 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202).

§ 197.267 Operations involving underwater welding and burning.

Commercial diving operations involving underwater welding and burning must comply with section 5.31 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202).

§§ 197.268–197.269 [Reserved]

Equipment

§ 197.270 General requirements.

(a) Each diving installation used on each vessel or facility subject to this subpart must comply with this subpart.

(b) In addition to the requirements of this subpart, equipment that is permanently installed on vessels and is part of the diving installation must comply with subchapters F and J of this chapter or other equivalent standards acceptable to the Office of Design and Engineering Standards, Commandant (CG–ENG).

(c) All equipment used to support a commercial diving operation, including, but not limited to, breathing gas hoses, umbilicals, compressor systems, volume tanks, compressed-gas cylinders, pressure vessels for human occupancy, diving ladders and stages, launch and recovery systems, entry and egress systems, emergency evacuation systems, helmets, masks, harnesses, gauges, timekeeping devices, and diver's dress must meet the applicable equipment requirements outlined in the ADCI Standards (incorporated by reference, see 46 CFR 197.202), in addition to the requirements of this subpart.

(d) A modular or packaged commercial diving unit placed aboard a vessel for use in a commercial diving operation must have documentation indicating that the unit and its installation have been reviewed and approved for its intended use by a recognized classification society that meets the requirements of 46 CFR part 8, or by another organization acceptable to the Office of Design and Engineering Standards, Commandant (CG–ENG).

(e) Where a hyperbaric lifeboat is provided as an emergency evacuation system it must—

(1) Be used for no other purpose;

(2) Not be counted to meet applicable carriage requirements for survival craft;

(3) Meet the hyperbaric evacuation system requirements of IMO Resolution A.692(17) (incorporated by reference, see 46 CFR 197.202); and

(4) Be type-approved by a recognized classification society as defined in 46 CFR 8.100, or issued a Coast Guard approval certificate under approval series 160.135.

§ 197.271 Commercial diving operator's general equipment duties.

(a) Each commercial diving operator (CDO) must ensure all commercial diving employees comply with this subpart and document compliance with paragraphs (b) through (e) of this section in an equipment maintenance logbook.

(b) The CDO must maintain, inspect, test, and use all equipment in accordance with the manufacturer's recommendations.

(c) The CDO must inspect, maintain, and repair all equipment in accordance with a documented maintenance system that designates the person or persons authorized to perform inspection and maintenance and that includes the following for each item of equipment—

(1) A permanently marked (by the manufacturer or equipment owner) unique identification number; except that no number is required for consumable supplies;

(2) A description and timeframes for periodic tests and maintenance, whether regularly scheduled or to be performed after repair or modification;

(3) Cable and lifting component certificates; and

(4) Manufacturer service life specifications, including the equipment's date of entry into dive service and recommended date of removal from service.

(d) The CDO must ensure that all equipment used for commercial diving operations is repaired or modified in accordance with manufacturer's recommendations by technicians certified by the manufacturer to make repairs or modifications.

(e) The CDO must ensure that any non-conforming equipment is physically destroyed, stored, displayed, or otherwise removed from service to prevent its use and marked or tagged to indicate why it was removed and whether the removal is temporary or permanent.

197.272 Person in charge's equipment duties.

Each person in charge (PIC) of a facility or a vessel providing equipment or support systems identified in this subpart and used by the commercial diving operator must document compliance with the manufacturer's equipment maintenance requirements in an equipment maintenance logbook. The PIC must keep the logbook for at least 5 years and make it available for inspection by the dive supervisor at the dive location.

197.273 Dive supervisor's equipment maintenance logbook duties.

Each dive supervisor must keep the equipment maintenance logbook required by 46 CFR 197.272 and make it available for inspection at the dive location.

197.274 Diver's equipment duties.

Each diver using personal dive equipment must maintain, inspect, and use the equipment in accordance with the manufacturer's specifications and this subpart. Before using personal equipment, the diver must provide the person in charge and the dive supervisor with documentation showing compliance with this requirement.

§ 197.275 Volume tanks.

(a) Each commercial diving operator (CDO) must ensure that each volume tank used in a diving system for a commercial diving operation complies with section 6.11.1 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202).

(b) Each CDO must ensure that each volume tank—

(1) Is equipped with intakes located away from areas containing internal combustion engine exhaust fumes or other hazardous contaminants; and

(2) Has an efficient filtration system if the tank is in a compressor used to supply breathing air to a diver.

§ 197.276 Compressed gas cylinders.

Each commercial diving operator must ensure that each compressed gas cylinder—

(a) Complies with section 6.11.2 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202);

(b) Complies with the applicable requirements of 49 CFR part 173,

subpart G; 46 CFR part 178, subpart C; and 46 CFR part 180, subpart C; and

(c) Is tested after any repair, modification, or alteration to the pressure boundaries.

§ 197.277 Pressure vessels for human occupancy.

(a) Each commercial dive operator must ensure that each pressure vessel for human occupancy (PVHO) complies with section 6.12 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202); is designed, constructed, tested, and maintained (including any pressure relief device and associated systems) in accordance with ASME PVHO–1 (incorporated by reference, see 46 CFR 197.202); or complies with the design and classification requirements of a classification society recognized in accordance with 46 CFR part 8; and complies with paragraphs (b) through (g) of this section.

(b) Each PVHO must—

(1) Have a check valve located on the outside of the PVHO within 1 foot of the pressure boundary on all piping exclusively carrying fluids into the PVHO;

(2) Have a pressure gauge in the interior of each compartment that is—

(i) Designed for human occupancy; and

(ii) Capable of having the compartment pressure controlled from inside the PVHO;

(3) Have a protective device on the inlet side of PVHO exhaust lines; and

(4) Have a means of overriding and controlling from the exterior all interior breathing and pressure supply controls.

(c) Each closed bell must meet the requirements of this section and have lifting equipment attached to the closed bell capable of returning the occupied closed bell when fully flooded to the dive location.

(d) Each closed bell must have a life support capability for the intact closed bell and its occupants for:

(1) Twelve hours after an accident severing the umbilical to the surface when the umbilical to the surface is the only installed means of retrieving the closed bell; or

(2) A period of time, at least equal to 1 hour plus twice the time required to retrieve the bell from its designed operating depth and attach an auxiliary life support system, after an accident severing the umbilical to the surface when the umbilical is one of the two independent installed means of retrieving the closed bell, each meeting the requirements of this paragraph (d).

(e) Each closed bell must be capable of attachment to another PVHO that allows the transfer of personnel and diver's equipment under pressure from the closed bell to a PVHO that—

(1) Meets the requirements of this section;

(2) Is capable of attachment to a decompression chamber meeting the requirements of this section; and

(3) Allows the transfer of personnel and diver's equipment under pressure from the PVHO to the decompression chamber.

(f) Each open bell must meet the requirements of section 6.8.2 of the ADCI Standards or other equivalent standard accepted by the Office of Design and Engineering Standards, Commandant (CG–ENG).

§ 197.278 Pressure piping.

Each piping system that is not an integral part of the vessel or facility, but is carrying fluids under pressures exceeding 15 pounds per square inch gauge, must be designed, maintained, and repaired in accordance with ASME B31.1 (incorporated by reference, see 46 CFR 197.202) or other equivalent standard accepted by the Office of Design and Engineering Standards, Commandant (CG–ENG), and must have the point of connection to the integral piping system of the vessel or facility clearly marked.

§ 197.279 First aid and treatment equipment.

(a) First aid and treatment equipment used at a commercial diving operation must comply with sections 5.4 and 5.20 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202) or other equivalent standard accepted by the Office of Operating and Environmental Standards, Commandant (CG–OES) and must comply with this subpart.

(b) The location of each commercial diving operation must have—

(1) A medical kit approved by a physician that includes any additional supplies necessary to treat minor trauma and illnesses resulting from hyperbaric exposure;

(2) A copy of an American Red Cross Standard First Aid handbook or equivalent; and

(3) The capability to remove an injured diver from the water.

(c) Each commercial diving operation must have a two-way communications system to obtain emergency assistance, except when the vessel or facility ship-to-shore, two-way communications system is readily available.

(d) Each dive location supporting mixed-gas dives, dives deeper than 100 feet of sea water, or dives outside the no-decompression limits must meet the requirements of paragraph (b) of this section and have—

(1) A decompression chamber that complies with 46 CFR 197.277;

(2) Decompression tables;

(3) A supply of breathing gasses sufficient to treat for decompression sickness;

(4) A medical kit as required by paragraph (b)(1) of this section that can be carried into the decompression chamber and that is suitable for use under hyperbaric conditions; and

(5) The capability to assist an injured diver into the decompression chamber.

§ 197.280 Diving ladders and stages.

(a) Each diving ladder and stage must meet the requirements of section 6.8 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202) or other equivalent standard accepted by the Office of Operating and Environmental Standards, Commandant (CG–OES) and must comply with this subpart.

(b) Each diving ladder must be firmly in place and available at the dive location for a diver to enter or exit the water unless a diving stage or bell is provided.

(c) Each diving stage must have an open-grating platform and must be available for a diver to enter or exit the water from the dive location and must be available for in-water decompression if the diver is—

(1) Wearing a heavyweight diving outfit; or

(2) Diving outside the no-decompression limits, except when a bell is provided.

§ 197.281 Surface-supplied helmets and masks.

(a) Each surface-supplied helmet or mask must meet the requirements of section 6.4 of the ADCI Standards (incorporated by reference, see 46 CFR 197.202) or other equivalent standard accepted by the Office of Operating and Environmental Standards, Commandant (CG–OES) and must comply with this subpart.

(b) Each surface-supplied air helmet or mask must—

(1) Ventilate at least 4.5 atmospheric cubic feet per minute at any depth at which it is operated; or

(2) Be able to maintain the diver's inspired carbon dioxide partial pressure below 0.02 atmospheres absolute when the diver is producing carbon dioxide at the rate of 1.6 standard liters per minute; and

(3) Have an exhaust valve.

§ 197.282 Diver's safety harness.

Each safety harness used in surface-supplied diving must meet the requirements of section 6.3.4 of the ADCI Standards (incorporated by

reference, see 46 CFR 197.202) or other equivalent standard accepted by the Office of Operating and Environmental Standards, Commandant (CG–OES), and it must have an attachment point for the umbilical life line that distributes the pulling force of the umbilical over the diver's body and prevents strain on the mask or helmet.

§ 197.283 Buoyancy-changing devices.

(a) A dry suit or other buoyancy-changing device not directly connected to the exhaust valve of the helmet or mask must have an independent exhaust valve.

(b) When used for SCUBA diving, a buoyancy-changing device must have an inflation source separate from the breathing gas supply.

§ 197.284 Inflatable flotation devices.

An inflatable flotation device for SCUBA diving must—

(a) Be capable of maintaining the diver at the surface in a face-up position;

(b) Have a manually activated inflation device;

(c) Have an oral inflation device;

(d) Have an over-pressure relief device; and

(e) Have a manually operated exhaust valve.

§ 197.285 Oxygen safety.

(a) Equipment used with oxygen or oxygen mixtures greater than 40 percent by volume must be designed for that use.

(b) Oxygen systems with pressures greater than 125 pounds per square inch gauge must have slow-opening shut-off valves; except that pressure boundary shut-off valves may be ball valves.

(c) The dive supervisor must ensure that equipment used with oxygen or oxygen mixtures greater than 40 percent by volume is cleaned of flammable materials, both before being placed into service, and after any repair, alteration, modification, or suspected contamination.

§ 197.286 Miscellaneous equipment requirements.

Each commercial diving operator must ensure that the commercial diving operation equipment listed in table 197.286 of this section complies with the requirements shown in that table.

TABLE 197.286—MISCELLANEOUS EQUIPMENT REQUIREMENTS

Equipment	Requirement
Breathing gas supply, diver-carried reserve.	Must be sufficient to allow diver to reach surface, or another source of breathing gas if primary supply fails, or be reached by a standby diver equipped with another source of breathing gas for the diver. Unused ports must be capped off to prevent unintended loss of watertight integrity.
Breathing gas supply, primary	Must be sufficient to support the diver, the standby diver, and the open or closed bell when provided, for duration of planned dive; and sufficient to supply the decompression chamber, for duration of the dive, or the treatment of an injured diver plus 1 hour after dive's completion. Unused ports must be capped off to prevent unintended loss of watertight integrity.
Breathing gas supply, secondary	Must be sufficient to support the diver while returning to the surface, the diver during decompression, the standby diver, the open or closed bell when returning the diver to surface, and the decompression chamber for duration of dive plus 1 hour after dive's completion. Unused ports must be capped off to prevent unintended loss of watertight integrity.
Oxygen	Oxygen used for breathing mixtures must meet the requirements of Federal Specification BB–O–925a, (incorporated by reference, see 46 CFR 197.202), and be type 1 (gaseous) grade A or B.
Nitrogen	Nitrogen used for breathing mixtures must meet the requirements of Federal Specification BB–N–411c, (incorporated by reference, see 46 CFR 197.202), be type 1 (gaseous); class 1 (oil free); and grade A, B, or C.
Helium	Helium used for breathing mixtures must be grades A, B, or C produced by the Federal government, or equivalent.
Compressed air	Compressed air used for breathing mixtures must meet the standards of the Compressed Gas Association Publications G–7 and G–7.1 (incorporated by reference, see 46 CFR 197.202).
Diving system power	Must minimize risk of injury, fire, explosion, or exposure of personnel to emissions or negative interaction with other equipment. Provide independent backup supply that, if the primary supply is disabled, will not interfere with the power requirements of the vessel or facility that supplies the backup, is ready for immediate use, and is sufficient to support safe termination of diving.
Equipment to which a manufacturer's service life specification applies.	The date the equipment entered into service, underwent repairs, and the date the service life expires must be entered into the equipment logbook.
Equipment used with oxygen mixture greater than 23.5 percent by volume.	Must be marked "FOR OXYGEN USE ONLY" and cleaned in accordance with Compressed Gas Association Publication G–4.1 (incorporated by reference, see 46 CFR 197.202).
Gauges and timekeeping devices	A diver depth gauge (if the dive is surface supplied) and timekeeping device must be at each dive location. All gauges and timepieces must be calibrated according to manufacturer's specifications. Devices for monitoring diver exposure time under pressure must be easily readable.
Oxygen system, pressure greater than 125 psi(g).	Slow-opening shut-off valves must be provided, except for pressure boundary shut-off valves, which may be ball valves.
Pressure piping repairs	Must be in accordance with ASME B31.1 (incorporated by reference, see 46 CFR 197.202) or 46 CFR part 56, as applicable.
Pressure vessel repairs	Must be in accordance with ASME NBBPVI, ASME PVHO–1, (incorporated by reference, see 46 CFR 197.202), 46 CFR part 54, or 49 CFR part 180 subpart C, as applicable.

Dive Team Staffing

§ 197.290 Dive team staffing requirements.

(a) Each commercial diving operator and dive supervisor must ensure that each diving operation is conducted with enough personnel to keep all personnel safe, to offset anticipated risks, and to properly perform the work. Diving operations lasting less than 12 hours, unless otherwise specified, must meet the minimum dive team requirements set forth in table 197.290 of this section.

TABLE 197.290—MINIMUM DIVE TEAM STAFFING SIZE AND COMPOSITION

Operation	Minimum dive team size	Minimum dive team composition
Saturation diving *	14 **	2 Dive supervisors, 2 Divers, 2 Standby divers (see note 1), 4 Dive tenders, Life-support technician supervisor, Life-support technician, Saturation system technician supervisor, Saturation system technician.
SCUBA	4	Dive supervisor, Diver, Tender (see note 2), Standby diver (see note 1).
Surface-supplied air diving	5	Dive supervisor, Diver, Tender (see note 2), Standby diver (see note 1), Standby diver tender (see note 3).
Surface-supplied diving, mixed-gas	5	Dive supervisor, Diver, Tender (see note 2), Standby diver (see note 1), Standby diver tender (see note 3).

Notes:

1. A standby diver must be fully dressed and either staged in the water as a safety diver, or capable of entering the water within 1 minute, at the dive supervisor's direction, to support a diver in distress.
2. The tender's only duty is to support the working diver to which assigned.
3. A standby diver tender may perform other duties directly supporting the dive in progress, except when the tender's standby diver is deployed.

* Staffing standards reflects operations exceeding 12-hour work cycles.

** With the exception of the supervisors and technicians, one member of the team shall be a diver medical technician.

(b) Dive supervisors must ensure that the minimum dive team requirements shown in table 197.290 are met based on one dive and any applicable decompression time required. When necessary, dive supervisors may increase manning levels and may require additional equipment for any diving in excess of one dive and any applicable decompression time required.

(c) Commercial dive operators and dive supervisors must ensure that proper pre-job planning is conducted in accordance with 46 CFR 197.220(i) to ensure that the necessary levels of personnel and equipment are available for all commercial diving operations.

(d) Mixed gas commercial diving operations must include a life support technician dedicated for the purpose of operating the mixed gas system.

§§ 197.303–197.309 [Reserved]

Dated: January 30, 2015.

J.G. Lantz,

Director of Commercial Regulations and Standards, United States Coast Guard.

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