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Rules and Regulations

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DEPARTMENT OF JUSTICE

28 CFR Parts 0 and 90

[OVW Docket No. 111]

RIN 1105–AB43

Grants To Encourage Arrest Policies and Enforcement of Protection Orders

AGENCY: Office on Violence Against Women, Justice.

ACTION: Final rule.

SUMMARY: This rule amends the regulations for the Grants to Encourage Arrest Policies and Enforcement of Protection Orders Program (Arrest Program) to incorporate statutory changes, make minor technical corrections, and streamline existing regulations to reduce repetition of statutory language. This rule also amends the regulations to clarify that existing regulations on grant-related procedures continue to apply to grants made by the Office on Violence Against Women.

DATES: This rule is effective March 9, 2015.

FOR FURTHER INFORMATION CONTACT: Marnie Shiels, Office on Violence Against Women, 145 N Street NE., Suite 10W.121, Washington, DC 20530, by telephone (202) 307–6026 or by email at *marnie.shiels@usdoj.gov.*

SUPPLEMENTARY INFORMATION:

Background

The Violence Against Women Act and Subsequent Legislation

In 1994, Congress passed the Violence Against Women Act (VAWA), a comprehensive legislative package aimed at ending violence against women. VAWA was enacted on September 13, 1994, as title IV of the Violent Crime Control and Law Enforcement Act of 1994, Pub. L. 103–322, 108 Stat. 1796. VAWA was designed to improve criminal justice system responses to domestic violence, sexual assault, and stalking, and to increase the availability of services for victims of these crimes. VAWA recognized the need for specialized responses to violence against women given the unique barriers that impede victims from accessing assistance from the justice system. To help communities develop these specialized responses, VAWA authorized several grant programs, including the Grants to Encourage Arrest Policies Program (Arrest Program). The Arrest Program is codified at 42 U.S.C. 3796hh through 3796hh–4. The final rule for the Arrest Program, found at 28 CFR part 90, subpart D, was promulgated on August 6, 1996.

On October 28, 2000, Congress enacted the Violence Against Women Act of 2000 (VAWA 2000), Division B of the Victims of Trafficking and Violence Protection Act of 2000, Pub. L. 106–386, 114 Stat. 1464. On January 5, 2006, Congress enacted the Violence Against Women and Department of Justice Reauthorization Act (VAWA 2005), Pub. L. 109–162, 119 Stat. 2960. On March 7, 2013, Congress enacted the Violence Against Women Reauthorization Act of 2013 (VAWA 2013), Pub. L. 113–4, 127 Stat. 54. These reauthorizations all enhanced the Arrest Program in different ways.

Grants To Encourage Arrest Policies and Enforcement of Protection Orders Program

The Arrest Program is designed to encourage State, local, and tribal governments and State, local, and tribal courts to treat domestic violence, dating violence, sexual assault, and stalking as serious violations of criminal law. The Arrest Program recognizes that sexual assault, domestic violence, dating violence, and stalking are crimes that require the criminal justice system to hold offenders accountable for their actions through investigation, arrest, and prosecution of violent offenders, and through close judicial scrutiny and management of offender behavior. The Arrest Program challenges the community to listen, communicate, identify problems, and share ideas that will result in new responses to ensure victim safety and offender accountability.

VAWA 2000 made several changes to the Arrest Program including prioritizing enforcement of protection orders, recognizing the roles of courts, probation, and parole, and addressing the specific needs of older victims and victims with disabilities. VAWA 2005 made additional changes including expanding the program to address sexual assault, adding new purpose areas, and adding new certification requirements relating to HIV testing of sex offenders and prohibiting polygraphing of sexual assault victims. VAWA 2013 added several sexual assault-specific purpose areas, a set aside of funds of 25% for projects that address sexual assault, and improved the certification and eligibility requirements.

Description of Changes

This amends the regulations for the Arrest Program to comply with statutory changes and reduce repetition of statutory language.

In addition, the Violence Against Women Office Act, title IV of the 21st Century Department of Justice Appropriations Authorization Act, Pub. L. 107–273, codified at 42 U.S.C. 3796gg–0 *et seq.,* authorized the Office on Violence Against Women as a ''separate and distinct office within the Department of Justice.'' To avoid any possible confusion, this rule clarifies that the existing grant-making provisions of 28 CFR part 18, which set forth hearing and appeal procedures available for applicants and for recipients of certain Department of Justice grant funding, apply to grants administered by the Office on Violence Against Women.

The Office on Violence Against Women published the Notice of Proposed Rulemaking in the **Federal Register** on August 5, 2014. The comment period closed on October 6, 2014. Two comments were received, both of which supported the goal of this regulation to incorporate statutory changes, make minor technical corrections, and streamline existing regulations to reduce repetition of statutory language. Neither comment made any recommendations for the regulation. Therefore, the Office on Violence Against Women is finalizing the proposed rule without change.

Executive Orders 12866 and 13563—Regulatory Review

This regulation has been drafted and reviewed in accordance with Executive Order 12866, ''Regulatory Planning and Review'' section 1(b), Principles of Regulation, and in accordance with Executive Order 13563 ''Improving Regulation and Regulatory Review'' section 1(b), General Principles of Regulation.

The Department of Justice has determined that this rule is not a ''significant regulatory action'' under Executive Order 12866, section 3(f), Regulatory Planning and Review, and accordingly this rule has not been reviewed by the Office of Management and Budget. This rule relates to matters of agency practice and procedure and amends the applicable regulations to conform to statutory changes.

Executive Order 13132

This regulation 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. Therefore, in accordance with Executive Order 13132, it is determined that this rule does not have sufficient federalism implications to warrant preparation of a Federalism Assessment.

Regulatory Flexibility Act

The Office on Violence Against Women, in accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), has reviewed this regulation and by approving it certifies that this regulation will not have a significant economic impact upon a substantial number of small entities for the following reason: the economic impact is limited to the Office on Violence Against Women's appropriated funds.

Unfunded Mandates Reform Act of 1995

This rule will not result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector of $100,000,000 or more in any one year, and it will not uniquely affect small governments. Therefore, no actions were deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995.

Small Business Regulatory Enforcement Fairness Act of 1996

This rule is not a major rule as defined by section 804 of the Small Business Regulatory Enforcement Fairness Act of 1996. This rule will not result in an annual effect on the economy of $100,000,000 or more; a major increase in cost or prices; or significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based companies to compete in domestic and export markets.

List of Subjects

28 CFR Part 0

Judicial administration, Reporting and recordkeeping requirements, Whistleblowing.

28 CFR Part 90

Grant programs—law, Judicial administration, Reporting and recordkeeping requirements, Women.

For the reason set forth in the preamble, the Office on Violence Against Women amends 28 CFR parts 0 and 90 as follows:

PART 0—ORGANIZATION OF THE DEPARTMENT OF JUSTICE

■ 1. The authority citation for part 0 continues to read as follows:

Authority: 5 U.S.C. 301; 28 U.S.C. 509, 510, 515–519.

■ 2. In § 0.122, add paragraph (c) to read as follows:

§ 0.122 Office on Violence Against Women.

* * * * *

(c) Departmental regulations set forth in part 18 of this title, shall apply with equal force and effect to grant programs administered by the Office on Violence Against Women, with references to the Office of Justice Programs and its components in such regulations deemed to refer to the Office on Violence Against Women, as appropriate.

PART 90—VIOLENCE AGAINST WOMEN

■ 3. The authority citation for part 90 continues to read as follows:

Authority: 42 U.S.C. 3711–3796gg–7; Sec. 826, Part E, Title VIII, Pub. L. 105–244, 112 Stat. 1581, 1815.

■ 4. Subpart D is revised to read as follows:

Subpart D—Grants to Encourage Arrest Policies and Enforcement of Protection Orders

Sec.
90.60 Scope.
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90.63 Eligibility.
90.64 Speedy notice to victims.
90.65 Application content.
90.66 Evaluation.
90.67 Review of applications.

§ 90.60 Scope.

The eligibility criteria, purpose areas, application requirements, and statutory priorities for this program are established by 42 U.S.C. 3796hh *et seq.*

§ 90.61 Definitions and grant conditions.

(a) *In general.* For purposes of this subpart, the definitions and grant conditions in 42 U.S.C. 13925 apply.

(b) *Unit of local government.* For the purpose of this subpart, a unit of local government is any city, county, township, town, borough, parish, village, or other general purpose political subdivision of a State. The following are not considered units of local government for purposes of this subpart:

(1) Police departments;
(2) Pre-trial service agencies;
(3) District or city attorneys' offices;
(4) Sheriffs' departments;
(5) Probation and parole departments;
(6) Shelters;
(7) Nonprofit, nongovernmental victim service providers; and
(8) Universities.

§ 90.62 Purposes.

(a) Purpose areas for the program are provided by 42 U.S.C. 3796hh(b).

(b) Grants awarded for these purposes must demonstrate meaningful attention to victim safety and offender accountability.

§ 90.63 Eligibility.

(a) *Eligible entities.* Eligible entities are described in 42 U.S.C. 3796hh(c).

(b) *Certifications*—(1) *State, local, and tribal governments.* State, local, and tribal government applicants must certify that they meet the requirements of 42 U.S.C. 3796hh(c)(A)–(E) or that they will meet the requirements by the statutory deadline.

(2) *Courts.* Court applicants must certify that they meet the requirements of 42 U.S.C. 3796hh(c)(C)–(E) or that they will meet the requirements by the statutory deadline.

(3) *State, tribal, or territorial domestic violence or sexual assault coalitions or victim service providers.* Applicants that are domestic violence or sexual assault coalitions or other victim service providers must partner with a State, local, or tribal government. The partner government must certify that it meets the requirements of 42 U.S.C. 3796hh(c)(A)–(E) or that it will meet the requirements by the statutory deadline.

(4) *Letters.* Eligible applicants or partners must submit a letter with proper certifications signed by the chief executive officer of the State, local government, or tribal government

participating in the project, in order to satisfy these statutory requirements. OVW will not accept submission of statutes, laws or policies in lieu of such a letter.

(c) *Partnerships*—(1) *Governments and courts.* All State, local, and tribal government and court applicants are required to enter into a formal collaboration with victim service providers and, as appropriate, population specific organizations. Sexual assault, domestic violence, dating violence, or stalking victim service providers must be involved in the development and implementation of the project. In addition to the requirements of 42 U.S.C. 13925, victim service providers should meet the following criteria:

(i) Address a demonstrated need in their communities by providing services that promote the dignity and self-sufficiency of victims, improve their access to resources, and create options for victims seeking safety from perpetrator violence; and

(ii) Do not engage in or promote activities that compromise victim safety.

(2) *Coalitions and victim service providers.* All State, tribal, or territorial domestic violence or sexual assault coalition and other victim service provider applicants are required to enter into a formal collaboration with a State, Indian tribal government or unit of local government, and, as appropriate, population specific organizations.

§ 90.64 Speedy notice to victims.

(a) *In general.* A State or unit of local government shall not be entitled to 5 percent of the funds allocated under this subpart, unless the State or unit of local government certifies that it meets the requirements regarding speedy notice to victims provided in 42 U.S.C. 3796hh(d).

(b) *Units of local governments.* (1) Units of local government grantees may certify based on State or local law, policy, or regulation.

(2) In the event that a unit of local government does not have authority to prosecute ''crime[s] in which by force or threat of force the perpetrator compels the victim to engage in sexual activity[,]'' the unit of local government may submit a letter from an appropriate legal authority in the jurisdiction certifying that the jurisdiction does not have the authority to prosecute ''crime[s] in which by force or threat of force the perpetrator compels the victim to engage in sexual activity'' and that therefore the certification is not relevant to the unit of local government in question.

§ 90.65 Application content.

(a) *Format.* Applications from eligible entities must be submitted as described in the relevant program solicitation developed by the Office on Violence Against Women and must include all the information required by 42 U.S.C. 3796hh–1(a).

(b) *Certification.* Each eligible applicant must certify that all the information contained in the application is correct. All submissions will be treated as a material representation of fact upon which reliance will be placed, and any false or incomplete representation may result in suspension or termination of funding, recovery of funds provided, and civil and/or criminal sanctions.

§ 90.66 Evaluation.

(a) Recipients of Arrest Program funds must agree to cooperate with federally-sponsored research and evaluation studies of their projects at the direction of the Office on Violence Against Women.

(b) Grant funds may not be used for purposes of conducting research or evaluations. Recipients of Arrest Program funds are, however, strongly encouraged to develop a local evaluation strategy to assess the impact and effectiveness of their projects. Applicants should consider entering into partnerships with research organizations that are submitting simultaneous grant applications to the National Institute of Justice or other research funding sources for this purpose.

§ 90.67 Review of applications.

The provisions of 42 U.S.C. 3796 *et seq.* and this subpart provide the basis for review and approval or disapproval of applications and amendments in whole or in part.

Dated: December 23, 2014.

Bea Hanson,

Principal Deputy Director.

[FR Doc. 2014–30766 Filed 1–7–15; 8:45 am]

BILLING CODE 4410–FX–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 64

[WC Docket No. 13–39; FCC 14–175]

Rural Call Completion

AGENCY: Federal Communications Commission.

ACTION: Final rule; correction.

SUMMARY: The Commission published in the **Federal Register** of December 10, 2014, a document concerning an *Order on Reconsideration* (*Order*) affirming the Commission's commitment to ensuring that high quality telephone service must be available to all Americans. In the *Order,* the Commission established rules to combat extensive problems with successfully completing calls to rural areas, and created a framework to improve the ability to monitor call problems and take appropriate enforcement action. In the *Order,* the Commission denies several petitions for reconsideration that, if granted, would impair the Commission's ability to monitor, and take enforcement action against, call completion problems. The Commission does, however, grant one petition for reconsideration because the Commission finds that modifying its original determination will significantly lower providers' compliance costs and burdens without impairing the Commission's ability to obtain reliable and extensive information about rural call completion problems.

DATES: This rule corrects an amendment that contains new or modified information collection requirements that will not be effective until approved by the Office of Management and Budget. The Federal Communications Commission will publish a document in the **Federal Register** announcing the effective date.

FOR FURTHER INFORMATION CONTACT: Claude Aiken, Wireline Competition Bureau, Competition Policy Division, (202) 418–1580, or send an email to *claude.aiken@fcc.gov*

SUPPLEMENTARY INFORMATION: The Commission published a document in the **Federal Register** of December 10, 2014, (79 FR 73227), amending § 64.2101 of the Commission's rules.

In Final rule FR Doc. 2014–28936 published on December 10, 2014, (79 FR 73237), make the following correction. On page 73237, in the second column, revise amendatory instruction 2 regarding § 64.2101, and remove the ''(f)'' before the definition of ''Long-distance voice service.''

The revision reads as follows:

■ ''2. Amend § 64.2101 by removing the paragraph (f) designation for the definition of ''Long-distance voice service'' and revising the definition to read as follows:''

Federal Communications Commission.

Sheryl D. Todd,

Deputy Secretary.

[FR Doc. 2014–30870 Filed 1–7–15; 8:45 am]

BILLING CODE 6712–01–P

Proposed Rules

Federal Register

Vol. 80, No. 5

Thursday, January 8, 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 TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2012–0002; Directorate Identifier 2011–NE–42–AD]

RIN 2120–AA64

Airworthiness Directives; Continental Motors, Inc. Reciprocating Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (NPRM); reopening of comment period.

SUMMARY: We are revising an earlier proposed airworthiness directive (AD) for certain Airmotive Engineering Corp. (AEC) replacement parts manufacturer approval (PMA) cylinder assemblies marketed by Engine Components International Division (ECi). These cylinder assemblies are used on all Continental Motors, Inc. (CMI) model 520 and 550 reciprocating engines, and on all other CMI engine models approved for the use of model 520 and 550 cylinder assemblies, such as the CMI model 470 when modified by supplemental type certificate (STC). The NPRM proposed to require initial and repetitive inspections, replacement of cracked cylinder assemblies, and replacement of cylinder assemblies at reduced times-in-service. The NPRM also proposed to prohibit the installation of affected cylinder assemblies into any engine. The NPRM was prompted by reports of multiple cylinder head-to-barrel separations and cracked and leaking aluminum cylinder heads. This supplemental NPRM (SNPRM) modifies the schedule for removal of the affected cylinder assemblies, adds that overhauled affected cylinder assemblies be removed within 80 hours, eliminates a reporting requirement, and removes the requirement for initial and repetitive inspections. We are proposing this SNPRM to prevent failure of the cylinder assemblies, which could lead to failure of the engine, in-flight shutdown, and loss of control of the airplane. We are reopening the comment period to allow the public the chance to comment on the proposed changes to the NPRM.

DATES: We must receive comments on this SNPRM by February 23, 2015.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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 Engine Components International Division, 9503 Middlex Drive, San Antonio, TX 78217; phone: 210–820–8101; Internet: *http://www.eci.aero/pages/tech_svcpubs.aspx*. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781–238–7125.

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–2012–0002; 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 SNPRM, the regulatory evaluation, any comments received, and other information. Given the volume of comments received, we are not identifying the individual commenters within this SNPRM. However, we identify all commenters, other than individuals, in the docket. The street address for the Docket Office (phone: 800–647–5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Jurgen E. Priester, Aerospace Engineer, Special Certification Office, FAA, Rotorcraft Directorate, 2601 Meacham Blvd., Fort Worth, TX 76137; phone: 817–222–5190; fax: 817–222–5785; email: *jurgen.e.priester@faa.gov*.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite your review of the commenter list provided in Docket No. FAA–2012–0002. If you submitted a comment to an organization and do not see the name of the organization in the commenter list, please submit your comment directly to us as provided for in this SNPRM. If you submitted as an individual, you will not be listed as a commenter.

We also invite you to review our responses to comments, and to resubmit your comment if you conclude that your comment was not responded to below.

We also invite you to send any written relevant data, views, or arguments about this SNPRM. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2012–0002; Directorate Identifier 2011–NE–42–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this SNPRM. We will consider all comments received by the closing date and may amend this SNPRM because of those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this SNPRM.

Discussion

We issued an NPRM to amend 14 CFR part 39 by adding an AD that would apply to certain AEC replacement PMA cylinder assemblies marketed by ECi. These assemblies are used on CMI model 520 and 550 reciprocating engines, and all other CMI engine models approved for the use of models 520 and 550 cylinder assemblies such as the CMI model 470 when modified by STC. The NPRM published in the **Federal Register** on August 12, 2013 (78

FR 48828). The NPRM proposed to require initial and repetitive inspections, immediate replacement of cracked cylinder assemblies, and replacement of cylinder assemblies at reduced times-in-service (TIS) since new. The NPRM also proposed to prohibit the installation of affected cylinder assemblies into any engine.

Actions Since Previous NPRM Was Issued

Since the NPRM published on August 12, 2013 (78 FR 48828), we received numerous comments on the proposed rule. We reviewed those comments and considered their impact to safety. Some of those comments included additional failure information that we subsequently incorporated in our updated risk analysis.

Following our comment review, we determined that we needed to review how we proposed to address the unsafe condition. So, we formed a multi-directorate/multi-disciplinary team to review the technical basis of the proposed rule, as well as the numerous public comments, and the additional failure information provided by commenters, to the NPRM. This team confirmed that the subject cylinder assemblies are unsafe.

The team's review of the new data provided by commenters supports a lengthier compliance interval. This team therefore recommended several changes to the NPRM, which resulted in this SNPRM.

Comments

We gave the public the opportunity to comment on the NPRM (78 FR 48828, August 12, 2013). The following presents the comments received on the NPRM and the FAA's response to each comment.

Request To Withdraw the NPRM Because ECi Cylinder Assemblies Are Not Unsafe

Many operators, maintenance organizations, and private citizens asked that we withdraw the NPRM (78 FR 48828, August 12, 2013). The commenters claimed that the affected ECi cylinder assemblies have an equivalent, or lower, failure rate than that of cylinder assemblies manufactured by the original equipment manufacturer (OEM). We concluded that these commenters were requesting that we withdraw the NPRM because they believe that the ECi cylinder assemblies are not unsafe.

We disagree. The rate of separation for the affected ECi cylinder assemblies is at least 32 times greater than that of OEM cylinder assemblies over the same period. Although there are approximately four times as many OEM cylinder assemblies in service than ECi cylinder assemblies, the ECi cylinder assemblies suffered more cylinder head separations than OEM cylinder assemblies since 2004. This data is available for review in Docket No. FAA–2012–0002. We did not withdraw the NPRM.

Request To Withdraw the NPRM Because Airplanes Can Operate Safely With a Separated Cylinder Head

Numerous aircraft operators, maintenance organizations, and private citizens commented that we should not issue the AD because airplanes can continue to operate safely even after a cylinder head separation. Several commenters have also stated that airplane engines are designed and certified to safely operate with one failed cylinder. They cited 14 CFR 33.43 in support of their position.

We disagree. The safety consequences represented by a cylinder head separation in flight are significant, and include multiple secondary effects, like fire. We did not withdraw the NPRM.

We also disagree that § 33.43, Vibration Test, supports the commenter's position that airplanes are certified to operate safely after a cylinder head separation. Section 33.43(d), addressing the engine vibration survey of § 33.43(a), requires assessment of crankshaft vibration for an engine that has one cylinder that ''is not firing.'' That paragraph, like the rest of § 33.43, does not discuss cylinder head separation. We did not withdraw the NPRM.

Request To Withdraw the NPRM Because Root Cause of Cylinder Failure Is Unknown

Numerous aircraft operators, maintenance organizations, and private citizens requested that we withdraw the NPRM (78 FR 48828, August 12, 2013) because the FAA failed to identify the root cause(s) of cylinder head separations.

We disagree. The root cause of the cylinder head separation is not the unsafe condition. We have identified the unsafe condition—cylinder head separation. Removal of the cylinder assembly resolves the unsafe condition. We did not withdraw the NPRM.

Request To Withdraw the NPRM Because Pilot Error Is Causing Cylinder Head Separations

Numerous organizations, aircraft operators, and private citizens commented that cylinder head separations involving the ECi cylinder assemblies affected by this NPRM (78 FR 48828, August 12, 2013) were caused by pilot error rather than by design deficiencies of the cylinder assemblies. They therefore requested that we not issue the AD.

We disagree. If pilot error was leading to cylinder head separation, then we would expect to see similar damage in engines with other than ECi cylinder assemblies installed where the pilots exceeded the same limitation(s). However, we do not have any such data. We did not withdraw the NPRM.

Request To Adopt Less Stringent Compliance Requirements

The National Transportation Safety Board (NTSB), other organizations, numerous aircraft operators, and private citizens commented that the compliance requirements in the proposed AD are too severe and that we should adopt less stringent requirements.

We agree that the requirements for removal of the cylinder assemblies can be made less severe. Our updated analysis indicates that our proposed reduced compliance interval with the attendant removal from service of affected cylinder assemblies and lesser impact to operators addresses the unsafe condition and is consistent with our risk guidelines. We revised the compliance paragraphs in this SNPRM by changing the schedule for removal of affected cylinder assemblies to a phased removal schedule for all affected cylinder assemblies based on total time in service since new.

The NTSB also recommended in NTSB Safety Recommendation A–12–7 that we impose a repetitive inspection requirement for certain ECi cylinder assemblies and their removal once they reach the manufacturer's recommended time between overhaul (TBO).

We disagree. Repetitive inspections until TBO as suggested by the commenter, is inconsistent with the serious hazard represented by cylinder assembly failures. Therefore, we are requiring removal of affected cylinder assemblies from service prior to TBO. Also, engine overhaul is not a requirement for all operators. Therefore, tying the proposed recurrent inspection to engine overhaul would not resolve the unsafe condition. We did not change this proposed AD based on this comment.

The NTSB also noted that the proposed rule would affect many more cylinder assemblies than the NTSB had included in its safety recommendation letter A–12–7, dated February 24, 2012, to the FAA. The NTSB commented that the NPRM's proposal to remove Group A cylinder assemblies (S/Ns 1 through

33696) with fewer than 500 hours TIS or more than 1,000 hours TIS within 25 hours does not appear to be supported by existing service information or discussions between the NTSB and the FAA.

We disagree. Based on service failure data and known implementation of design improvements, this proposed AD must apply to cylinder assemblies S/Ns 1 through 61176. We did not change this proposed AD based on this comment.

Request for FAA To Follow Its Own Risk Assessment Policies

Numerous aviation associations, aircraft operators, maintenance organizations, and private citizens commented that the FAA had not followed its own risk assessment policies in issuing the NPRM (78 FR 48828, August 12, 2013).

We disagree. The corrective actions proposed in the NPRM, and as revised by this SNPRM, are consistent with FAA Order 8040.4A, ''Safety Risk Management Policy,'' dated April 30, 2012, and the Monitor Safety/Analyze Data (MSAD) process defined in FAA Order 8110.107A, ''Monitor Safety/Analyze Data,'' dated October 1, 2012. The requirements of this proposed AD are also consistent with the guidance of Engine & Propeller Directorate memorandum ''Risk Assessment for Reciprocating Engine Airworthiness Directives,'' PS–ANE–100–1999–00006, dated May 24, 1999. We did not change this SNPRM as a result of this comment.

Request To Withdraw the NPRM Because of the Risk of Maintenance Errors

Numerous aircraft operators, maintenance organizations, and private citizens commented that the FAA should withdraw the NPRM (78 FR 48828, August 12, 2013) because the removal and replacement of affected cylinder assemblies before TBO would result in maintenance errors that would adversely affect safety.

We disagree. Our regulatory framework presumes that maintenance will be performed correctly by personnel authorized by the FAA to return aircraft to service in an airworthy condition. Further, we have not observed any negative effects on safety due to removal of these cylinder assemblies during maintenance. Also, cylinder removal and replacement is a maintenance action addressed in engine maintenance manuals. We did not withdraw the NPRM.

Request To Review Repetitive Compression Test and Leak Check

Some aircraft operators commented that they successfully passed the compression test with the piston at top-dead-center, while still finding the cylinders cracked. We interpret the comment to be that the proposed inspection and test was inadequate to detect a cracked cylinder assembly.

We agree. The inspection and test may not detect cracks. Also, we have received field reports of separated cylinders that occurred within the repetitive 50-hour compression test and leak check inspection intervals proposed by the NPRM. We therefore concluded that these tests are not sufficiently reliable and the cost associated with such ongoing tests outweighs the safety benefit. We changed this SNPRM by removing the requirement for repetitive compression and leak inspection tests.

Request To Withdraw the NPRM Because of Excessive Cost

Numerous aviation associations, aircraft operators, maintenance organizations, and private citizens commented that the FAA should withdraw the NPRM (78 FR 48828, August 12, 2013) because the cost of compliance is excessive to owners and operators of aircraft with engines that have affected cylinder assemblies.

We disagree. We find that the safety benefits of the proposed rule, as changed by this SNPRM, outweigh its estimated cost. Further, we recalculated the cost of the NPRM (78 FR 48828, August 12, 2013). Our previous estimate was based on 36,000 cylinder assemblies. Based on data available to the FAA, we subsequently reduced the number affected cylinder assemblies to 28,874.

We also determined that a replacement cost based on a pro-rated life of the cylinder assemblies more accurately reflects the true cost of replacing the cylinder assemblies. In the NPRM, we used $1,700 per cylinder assembly for the entire affected cylinder assembly population. We recalculated the total value for loss of the part based on a pro-rated estimate of usage for the cylinder assembly population over their current accumulated time in service. This recalculated loss is $19,867,882 for the entire affected cylinder assembly population.

Finally, since we issued the NPRM, we eliminated those inspections and their associated cost from this SNPRM. For further information on the estimated cost of this AD, please see our Initial Regulatory Flexibility Analysis (IRFA) in the text of this SNPRM. We did not withdraw the NPRM.

Miscellaneous Comments to the NPRM

We received several comments on the rulemaking process, including several who supported the NPRM (78 FR 48828, August 12, 2013) as proposed. Several commenters stated that hundreds of failures of the affected cylinder assemblies had been reported to the FAA and ECi.

We thank the commenters for their participation in the rulemaking process.

Summary of Changes to the NPRM

First, we removed the 50 hour repetitive inspection requirement in the NPRM (78 FR 48828, August 12, 2013). We did so because we determined that the inspection, compression test, and leak check proposed by the NPRM was not effective in detecting cracked cylinders. Based on further review of service information, we determined that a compression test and leak check will not identify a crack until the crack has propagated all the way through the cylinder wall to some detectable location. Therefore, we are relying on the phased removal of the cylinders along with annual or 100-hour inspections already required by other regulations to provide an adequate level of safety.

We eliminated the requirement to report details of all cylinder assemblies removed per the requirements of the AD to the FAA. This information is no longer needed since we will rely on our established reporting channels, *e.g.,* Service Difficulty Reporting (SDR) and Malfunction/Defect (M/D) reports, to report future cylinder head failures.

We reduced the estimated population of affected cylinder assemblies from 36,000 to 28,874.

We used a pro-rated loss of cylinder life which more accurately reflects the cost of replacing the affected cylinder assemblies.

We removed the cost of inspection from this SNPRM since the recurrent visual inspections and compression/leak tests proposed by the NPRM were ineffective in detecting the unsafe condition.

We changed the compliance paragraphs by removing references to ''Group A'' (serial numbers (S/Ns) between 1 and 33696) and ''Group B'' (S/Ns between 33697 and 61176). We determined that TIS and serial number (S/N) are sufficient to identify and correct the suspect cylinder assembly population.

We modified the compliance schedule for removal of affected cylinder assemblies from 500 or 1,000 operating

hours for all affected cylinder assemblies to a phased removal schedule based on total hours TIS since new. We determined that information submitted by commenters to the proposed rule justified a phased drawdown of the assemblies from service.

Finally, we specified in this SNPRM that overhauled cylinder assemblies should be removed within 80 hours after the effective date of this AD. We concluded that overhauling of the cylinder assembly does not diminish the fatigue damage that has already accumulated in the cylinder head.

FAA's Determination

We are proposing this SNPRM because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design. Certain changes described above revise the scope of the NPRM (78 FR 48828, August 12, 2013). As a result, we have determined that it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this SNPRM.

Proposed Requirements of This SNPRM

This SNPRM would require removal of the affected cylinder assemblies, including overhauled cylinder assemblies, according to a phased removal schedule.

Costs of Compliance

We estimate that this proposed AD would affect about 5,000 CMI models IO–520, TSIO–520, IO–550, and IOF–550 reciprocating engines and all other CMI engine models approved for the use of CMI models 520 and 550 cylinder assemblies (such as the CMI model 470 when modified by STC), installed on airplanes of U.S. registry. The average labor rate is $85 per hour. We estimate that about 18 hours would be required to replace all six cylinder assemblies during overhaul maintenance. We estimate the pro-rated value of the cost of replacement of six cylinder assemblies to be about $4,202 per engine. Based on these figures, we estimate the total cost of this proposed AD to U.S. operators to change all ECi cylinder assemblies to be $28,660,000. Our cost estimate is exclusive of possible warranty coverage.

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 Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) establishes ''as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the business, organizations, and governmental jurisdictions subject to regulation.'' To achieve that principle, the RFA requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The RFA covers a wide range of small entities, including small businesses, not-for-profit organizations and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the Act.

This proposed rule would have a significant impact on a substantial number of small entities of part 135 operators and smaller air services businesses.

The U.S. Small Business Administration (SBA) classifies businesses as small based on size standards, typically expressed as number of employees. The FAA identified 609 part 135 operators that meet the SBA definition of a small entity (entities with 1,500 or fewer employees) which would be affected by this proposed rule. Of these 609, the FAA identified 209 small part 135 operators on which the rule would have a significant economic impact. We consider this a substantial number of small entities. In addition, we estimate that more than 2,000 smaller air services businesses would be affected by this proposed rule. This business segment also has a substantial number of small entities. The FAA is unaware of the assets or financial resources of these businesses. The FAA requests comments from these businesses regarding their economic impact.

The FAA estimates the compliance cost from this AD to be the sum of the replacement cost per aircraft, plus the loss of use due to earlier replacement, plus minor paperwork cost. The labor cost to replace all six cylinder assemblies is the average labor rate $85 per hour multiplied by the estimated 18 hours to complete the task.

The FAA believes that a pro-rated value of the replacement cost of the cylinder assemblies is more accurate and reflects on the true cost to replacing the cylinder assemblies. This AD would result in a loss-of-use as some cylinder assemblies would be replaced sooner than current practice. This AD requires removal of the cylinder assemblies at an average of 1,000 hours instead of at the average TBO of 1,700 hours. This means that the allowable life is only 1,000 of the original 1,700 hours, or at 58.82% of the current life. Therefore the life value that is lost equals 0.4118 ($1.0 - 0.5882$). We estimate the pro-rated loss of life value for six cylinder assemblies to be about $4,200 per engine ($1,700 \times 6 \times .4118$). The loss-of-use expense implicitly includes the earlier purchase of the replacement cylinder assemblies.

Therefore the AD cost per aircraft equals the labor costs of $1,530 and the loss-of-service cost of $4,202, or about $6,000. Based on the number of aircraft owned by the operators impacted, total compliance costs range between $6 thousand to $525 thousand per small entity encompassing one to eighty-eight aircraft.

To determine whether the compliance cost would be a significant economic impact, we measured the annualized compliance cost relative to the value of the aircraft. The estimated value of their aircraft ranges between $22 thousand to $21 million. Using the preceding information, the FAA estimates that their ratio of annualized cost to asset value is higher than 5 percent for many of these operators. Based on this information the FAA decided that the rule would have a significant economic impact on a substantial number of entities. Therefore, we have performed a regulatory flexibility analysis for these small entities.

Initial Regulatory Flexibility Analysis

Under Section 603(b) of the RFA, the initial analysis must address:

(1) Description of reasons the agency is considering the action;

(2) Statement of the legal basis and objectives for the proposed rule;

(3) Description of the record keeping and other compliance requirements of the proposed rule;

(4) All federal rules that may duplicate, overlap, or conflict with the proposed rule;

(5) Description and an estimated number of small entities to which the proposed rule will apply; and

(6) Describe alternatives considered.

Description of Reasons the Agency is Considering the Action

This proposed AD was prompted by failure reports of multiple cylinder head-to-barrel separations and cracked and leaking aluminum cylinder heads. This AD would apply to certain Airmotive Engineering Corp. replacement PMA cylinder assemblies marketed by ECi, used on CMI model 520 and 550 reciprocating engines, and all other engine models approved for the use of CMI models 520 and 550 cylinder assemblies, such as the CMI model 470 when modified by STC.

Description and an Estimated Number of Small Entities to Which the Proposed Rule Would Apply

We estimate that this proposed AD would affect about 5,000 Continental Motors, Inc. models IO–520, TSIO–520, IO–550, and IOF–550 reciprocating engines and all other engine models approved for the use of CMI models 520 and 550 cylinder assemblies (such as the CMI model 470 when modified by STC), installed on airplanes of U.S. registry.

The FAA will affect 609 part 135 operators and more than 2,000 air service businesses for which the rule will have an economic impact. The affected entities fly fixed wing aircraft; employ less than 1,500 employees; and conduct a variety of air services such as fly passengers and cargo for hire. We estimate that the small part 135 operators have assets valued between $22 thousand to $21 million (range of 1 to 88 aircraft).

Description of the Recordkeeping and Other Compliance Requirements of the Proposed Rule

Public reporting for this collection of information is estimated to be approximately 5 minutes per response at an hourly wage rate of $85 per hour, including the time for reviewing instructions, completing and reviewing the collection of information. The paperwork cost for them is between $7 and $616.

All Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rule

The FAA is unaware of any Federal rules that duplicate, overlap, or conflict with this rule.

Description of Alternatives Considered

The FAA received comments concerning this AD. Some commenters requested withdrawal of this NPRM because of excessive cost with only negligible safety gains. In response to comments about problems with repetitive compression/soap test, the FAA agrees that these tests are not reliable and the costs associated with such ongoing tests outweigh the safety benefit. This SNPRM has removed the requirement for repetitive compression/soap inspection tests. We also considered these following alternatives:

(1) Do nothing—This option is not acceptable due to the number of failures of ECi cylinder assemblies and the consequences of the failures.

(2) Periodic inspections only (no forced removals)—Though the NTSB recommends this option, the service history has shown that such inspections may not reliably detect existing cracks and the rate of crack growth to separation is unknown and variable.

(3) Forced removal with periodic inspections—As stated above, such periodic inspections may not reliably detect cracks and the rate of crack growth to separation is unknown and variable.

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 to the extent that it justifies making a regulatory distinction, and

(4) Will 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 adding the following new airworthiness directive (AD):

Continental Motors, Inc. (formerly Teledyne Continental Motors, Inc., formerly Continental): Docket No. FAA–2012–0002; Directorate Identifier 2011–NE–42–AD.

(a) Comments Due Date

We must receive comments by February 23, 2015.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Continental Motors, Inc. (CMI) model 520 and 550 reciprocating engines, and to all other CMI engine models approved for the use of model 520 and 550 cylinder assemblies such as the CMI model 470 when modified by supplemental type certificate (STC), with Airmotive Engineering Corp. replacement parts manufacturer approval (PMA) cylinder assemblies, marketed by Engine Components International Division (hereinafter referred to as ECi), part number (P/N) AEC631397, with ECi Class 71 or Class 76, serial number (S/N) 1 through S/N 61176, installed.

(d) Unsafe Condition

This AD was prompted by multiple failure reports of cylinder head-to-barrel separations and cracked and leaking aluminum cylinder heads. We are issuing this AD to prevent failure of the cylinder assemblies, which could lead to failure of the engine, in-flight shutdown, and loss of control of the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Review the engine maintenance records to determine if any affected cylinder assemblies are installed.

(2) If you cannot determine based on review of engine maintenance records if any affected cylinder assemblies are installed, comply with paragraph (e)(4) of this AD.

(3) If you do not have any of the affected ECi cylinder assemblies installed on your engine, no further action is required.

(4) Cylinder Identification and Serial Number Location

(i) Check the cylinder assembly P/N and Class number. The ECi cylinder assembly, P/N AEC631397, Class 71 or Class 76, is stamped on the bottom flange of the cylinder barrel. Guidance on the P/N and Class number description and location can be found in ECi Service Instruction No. 99–8–1, Revision 9, dated February 23, 2009.

(ii) If you cannot see the cylinder assembly P/N when the cylinder assembly is installed on the engine, you may use the following alternative method of identification:

(A) Remove the cylinder assembly rocker box cover.

(B) Find the letters ECi, cast into the cylinder head between the valve stems.

(C) Check the cylinder head casting P/N. Affected cylinder assemblies have the cylinder head casting P/N, AEC65385, cast into the cylinder head between the valve stems.

(D) Find the cylinder assembly S/N as specified in paragraph (e)(4)(iii) or (e)(4)(iv) of this AD, as applicable.

(iii) For ECi cylinder assemblies, P/N AEC631397, manufactured through 2008, find the cylinder assembly S/N stamped on the intake port boss two inches down from the top edge of the head.

(iv) For ECi cylinder assemblies, P/N AEC631397, manufactured on or after January 1, 2009, find the cylinder assembly S/N stamped just below the top edge of the head on the exhaust port side.

(5) Removal From Service

(i) For any affected cylinder assembly with 680 or fewer operating hours time-in-service (TIS) since new on the effective date of this AD, remove the cylinder assembly from service before reaching 1,000 operating hours TIS since new.

(ii) For any affected cylinder assembly with more than 680 operating hours TIS since new and 1,000 or fewer operating hours TIS since new on the effective date of this AD, remove the cylinder assembly from service within the next 320 operating hours TIS or within 1,160 operating hours TIS since new, whichever occurs first.

(iii) For any affected cylinder assembly with more than 1,000 operating hours TIS since new on the effective date of this AD, remove the cylinder assembly from service within the next 160 operating hours or at next engine overhaul, whichever occurs first.

(iv) For any affected cylinder assembly that has been overhauled, remove the cylinder assembly from service within the next 80 operating hours TIS after the effective date of this AD.

(f) Installation Prohibitions

After the effective date of this AD:

(1) Do not repair, or reinstall onto any engine, any cylinder assembly removed per this AD.

(2) Do not install any affected ECi cylinder assembly that has been overhauled, into any engine.

(3) Do not install any engine that has one or more affected overhauled ECi cylinder assemblies, onto any aircraft.

(4) Do not return to service any aircraft that has an engine installed with an ECi cylinder assembly subject to this AD, if the cylinder assembly has 1,000 or more operating hours TIS.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Special Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

(1) For more information about this AD, contact Jurgen E. Priester, Aerospace Engineer, Special Certification Office, FAA, Rotorcraft Directorate, 2601 Meacham Blvd., Fort Worth, TX 76193; phone: 817–222–5190; fax: 817–222–5785; email: *jurgen.e.priester@faa.gov.*

(2) For ECi Service Instruction No. 99–8–1, Revision 9, dated February 23, 2009, which is not incorporated by reference in this AD, contact Engine Components International Division, 9503 Middlex Drive, San Antonio, TX 78217; phone: 210–820–8101; Internet: *http://www.eci.aero/pages/tech_svcpubs.aspx.*

(3) You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781–238–7125.

Issued in Burlington, Massachusetts, on December 23, 2014.

Colleen M. D'Alessandro,

Assistant Directorate Manager, Engine & Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2015–00152 Filed 1–7–15; 8:45 am]

BILLING CODE 4910–13–P

Notices

Federal Register

Vol. 80, No. 5

Thursday, January 8, 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

Forest Service

Powell Ranger District; Utah; Powell Travel Management Project

AGENCY: Forest Service, USDA.

ACTION: Notice of intent to prepare an environmental impact statement.

SUMMARY: The Forest Service will prepare an Environmental Impact Statement (EIS) to disclose the effects of revising the motorized travel plan for the Powell Ranger District (District) of the Dixie National Forest. The District is proposing to relocate, reclassify, or decommission a number of existing roads and trails as well as construct or designate new roads and trails. Some of the activities are proposed within Inventoried Roadless Areas. This revision only addresses subpart B of the Travel Management Rule which provides for a system of National Forest Roads, National Forest Trails, and areas on the National Forest System (NFS) lands that are designated for motorized use. This project does not address over the snow motor vehicle use, motorized cross-country travel, nor does it revisit motorized cross-country travel for big game retrieval. The project is limited to addressing known deficiencies for the District in the 2009 Dixie National Forest Motorized Travel Plan.

DATES: Comments concerning the scope of the analysis must be received by February 9, 2015. The draft environmental impact statement is expected in August, 2015, and the final environmental impact statement is expected in March, 2016.

ADDRESSES: Send written comments to: Paul Hancock, District Ranger; Powell Ranger District; Dixie National Forest; Attn: Powell Travel Management, 225 East Center Street, P.O. Box 80, Panguitch, UT 84759. Comments may also be sent via email to *comments-intermtn-dixie-powell@fs.fed.us,* or via facsimile to (435) 676–9391.

FOR FURTHER INFORMATION CONTACT: Keith Gustafson, Project Leader; 225 E. Center Street; P.O. Box 80; Panguitch, UT 84759; telephone: (435) 676–9354; email: *keithgustafson@fs.fed.us*.

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 this project is to revise the Motorized Travel Plan for the Powell Ranger District of the Dixie National Forest. The revision is to provide a road and trail system for the District, designated for motorized use that is considered safe and responsive to public needs and desires, conforms to the Forest Plan, and is environmentally sound. This action is needed because: (1) There is a need for travel management revisions to restore or protect forest resources and conditions. (2) There is a need for travel management revisions to provide a broad range of dispersed motorized recreation opportunities; to disperse motorized recreation users to prevent overuse in popular areas; and provide safety for the user. (3) There is a need for travel management revisions to improve special and public use administration and to reduce resource impacts from these activities.

Proposed Action

To meet the purpose and need for action, the Powell Ranger District of the Dixie National Forest proposes to make changes to the existing system of roads on the District. For details of the proposed action please visit the following Web page: *http://www.fs.usda.gov/projects/dixie/land management/projects* and click on Powell Travel Management Project.

Lead and Cooperating Agencies

Lead Agency—USDA Forest Service, Dixie National Forest.

Cooperating Agencies—Garfield and Kane Counties, Utah.

Responsible Official

Forest Supervisor, Dixie National Forest.

Scoping Process

This notice of intent initiates the scoping process, which guides the development of the environmental impact statement. Additional information about the project and information about scheduled public meetings can be found on the project Web page at *http://www.fs.usda.gov/projects/dixie/landmanagement/projects* and click on Powell Travel Management Project.

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.

Please keep comments specific to only this proposal. Comments which are not specific to the project and project area will be deemed outside the scope of the analysis and will not be considered. If you provide recommendations for changes to routes or areas, please include route numbers or location descriptions, as well as the reasons for your recommendations. If you are including references, citations, or additional information to be considered for this project, please specify exactly how the material relates to the project. Also indicate exactly what part of the material you would like the District to consider (such as page or figure number).

Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this project proposal. Individuals or organizations who submit timely and specific written comments regarding the proposed project will be eligible to file an objection (36 CFR 218). 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 nor will the respondent be eligible to provide an objection pursuant to 36 CFR 218.

Dated: January 2, 2015.

Paul H. Hancock,

Acting Forest Supervisor.

[FR Doc. 2015–00082 Filed 1–7–15; 8:45 am]

BILLING CODE 3410–11–P

CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD

Sunshine Act Meeting

TIME AND DATE: January 15, 2015, 6:00 p.m.–9:00 p.m. EST.

PLACE: Hilton Meadowlands Hotel, Two Meadowlands Plaza, East Rutherford, New Jersey 07073. Diamond Court Ballrooms A&B.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED: The Chemical Safety and Hazard Investigation Board (CSB) will convene a public meeting on January 15, 2015, starting at 6:00 p.m. at the Hilton Meadowlands Hotel, Two Meadowlands Plaza, Diamond Court Ballrooms A&B, East Rutherford, New Jersey 07073. At the public meeting, the Board will hear from teams investigating the 2012 explosion and fire at the US Ink facility located in East Rutherford, NJ, that injured seven workers. Time permitting, the Board may also consider a report into the CSB's investigation of the 2010 anhydrous ammonia release at Millard Refrigerated Services, a warehouse and distribution center in Theodore, Alabama, near Mobile, Alabama, where more than 130 members of the public sought medical attention as a result of an uncontrolled ammonia release.

This public meeting is intended to provide the community affected by the US Ink explosion and other interested stakeholders, with an opportunity to consider and hear about the CSB staff's findings on this matter. In addition, time permitting, the Board will also consider the staff's presentation and lessons learned resulting from the Millard ammonia release, with information into how these incidents occurred and how similar future incidents can be prevented or mitigated.

Following the staff presentation the Board will hear comments from the public. All staff presentations are preliminary and are intended solely to allow the Board to consider in a public forum the issues and factors involved in these cases. No factual analyses, conclusions, or findings presented by staff should be considered final. At the conclusion of the staff presentation the board may vote on the final product(s).

Lastly, the Board may consider such other items of business as determined by the Chairperson.

Additional Information

The meeting is free and open to the public. If you require a translator or interpreter, please notify the individual listed below as the ''Contact Person for Further Information,'' at least five business days prior to the meeting.

The CSB is an independent federal agency charged with investigating accidents and hazards that result, or may result, in the catastrophic release of extremely hazardous substances. The agency's Board Members are appointed by the President and confirmed by the Senate. CSB investigations look into all aspects of chemical accidents and hazards, including physical causes such as equipment failure as well as inadequacies in regulations, industry standards, and safety management systems.

Public Comment

Members of the public are invited to make brief statements to the Board at the conclusion of the staff presentation(s). The time provided for public statements will depend upon the number of people who wish to speak. Speakers should assume that their presentations will be limited to five minutes or less, but commenters may submit written statements for the record.

Contact Person for Further Information

Hillary J. Cohen, Communications Manager, *hillary.cohen@csb.gov* or (202) 446–8094. General information about the CSB can be found on the agency Web site at: *www.csb.gov*.

Dated: January 5, 2015.

Rafael Moure-Eraso,

Chairperson.

[FR Doc. 2015–00121 Filed 1–6–15; 4:15 pm]

BILLING CODE 6350–01–P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[B–61–2014]

Foreign-Trade Zone 82—Mobile, Alabama, Authorization of Production Activity, Airbus Americas, Inc. (Commercial Passenger Aircraft) Mobile, Alabama

On August 21, 2014, the City of Mobile, Alabama, grantee of Foreign-Trade Zone 82, submitted a notification of proposed production activity to the Foreign-Trade Zones (FTZ) Board on behalf of Airbus Americas, Inc., within Site 1, in Mobile.

The notification was processed in accordance with the regulations of the FTZ Board (15 CFR part 400), including notice in the **Federal Register** inviting public comment (79 FR 52630, 09/04/2014). The FTZ Board has determined that no further review of the activity is warranted at this time. The production activity described in the notification is authorized, subject to the FTZ Act and the Board's regulations, including Section 400.14.

Dated: December 26, 2014.

Andrew McGilvray,

Executive Secretary.

[FR Doc. 2015–00111 Filed 1–7–15; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[B–62–2014]

Foreign-Trade Zone 75—Phoenix, Arizona, Authorization of Production Activity, Orbital Sciences Corporation, (Satellites and Space Craft Launch Vehicles) Gilbert, Arizona

On August 28, 2014, Orbital Sciences Corporation, operator of FTZ 75—Site 10, submitted a notification of proposed production activity to the Foreign-Trade Zones (FTZ) Board for its facility in Gilbert, Arizona.

The notification was processed in accordance with the regulations of the FTZ Board (15 CFR part 400), including notice in the **Federal Register** inviting public comment (79 FR 53408, 9–9–2014). The FTZ Board has determined that no further review of the activity is warranted at this time. The production activity described in the notification is authorized, subject to the FTZ Act and the FTZ Board's regulations, including Section 400.14.

Dated: December 29, 2014.

Andrew McGilvray,

Executive Secretary.

[FR Doc. 2015–00108 Filed 1–7–15; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–012]

Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China: Antidumping Duty Order

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: Based on affirmative final determinations by the Department of Commerce (the Department) and the

International Trade Commission (the ITC), the Department is issuing an antidumping duty order on carbon and certain alloy steel wire rod (steel wire rod) from the People's Republic of China (PRC).

DATES: *Effective Date:* January 8, 2015.

FOR FURTHER INFORMATION CONTACT: Brian Smith or Brandon Custard, 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) 482–1766 or (202) 482–1823, respectively.

SUPPLEMENTARY INFORMATION:

Background

In accordance with sections 735(d) and 777(i)(1) of the Tariff Act of 1930, as amended (the Act) and 19 CFR 351.210(c), on November 19, 2014, the Department published its affirmative final determination of sales at less-than-fair-value in the antidumping duty investigation of steel wire rod from the PRC, and its affirmative final determination that critical circumstances exist, in part.[1] On January 2, 2015, the ITC notified the Department of its final determination that an industry in the United States is materially injured within the meaning of section 735(b)(1)(A)(i) of the Act by reason of less-than-fair-value imports of steel wire rod from the PRC.[2] The ITC also determined that critical circumstances do not exist with respect to imports subject to the Department's critical circumstances determination, within the meaning of section 735(b)(4)(A) of the Act.[3]

Scope of the Order

The scope of this order covers certain hot-rolled products of carbon steel and alloy steel, in coils, of approximately circular cross section, less than 19.00 mm in actual solid cross-sectional diameter. Specifically excluded are steel products possessing the above-noted physical characteristics and meeting the Harmonized Tariff Schedule of the United States (HTSUS) definitions for (a) stainless steel; (b) tool steel; (c) high nickel steel; (d) ball bearing steel; or (e) concrete reinforcing bars and rods. Also excluded are free cutting steel (also known as free machining steel) products (*i.e.,* products that contain by weight one or more of the following elements: 0.1 percent or more of lead, 0.05 percent or more of bismuth, 0.08 percent or more of sulfur, more than 0.04 percent of phosphorus, more than 0.05 percent of selenium, or more than 0.01 percent of tellurium). All products meeting the physical description of subject merchandise that are not specifically excluded are included in this scope.

The products under order are currently classifiable under subheadings 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093; 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035 of the HTSUS. Products entered under subheadings 7213.99.0090 and 7227.90.6090 of the HTSUS also may be included in this scope if they meet the physical description of subject merchandise above. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of this order is dispositive.

Antidumping Duty Order

As stated above, on January 2, 2015, in accordance with section 735(d) of the Act, the ITC notified the Department of its final determination in this investigation, in which it found material injury with respect to imports of steel wire rod from the PRC.[4] Because the Department determined that imports of steel wire rod from the PRC are being sold at less-than-fair value, and because the ITC determined that such imports are materially injuring a U.S. industry, all unliquidated entries of such merchandise from the PRC, entered or withdrawn from warehouse, are subject to the assessment of antidumping duties.

Therefore, in accordance with section 736(a)(1) of the Act, the Department will direct U.S. Customs and Border Protection (CBP) to assess, upon further instruction by the Department, antidumping duties equal to the amounts listed below for all relevant entries of steel wire rod from the PRC. These antidumping duties will be assessed on unliquidated entries of steel wire rod from the PRC entered, or withdrawn from warehouse, for consumption on or after September 8, 2014, the date of publication of the *Preliminary Determination.*[5]

Continuation of Suspension of Liquidation

In accordance with section 735(c)(1)(B) of the Act, we will instruct CBP to continue to suspend liquidation on all entries of steel wire rod from the PRC. We will also instruct CBP to require cash deposits equal to the amounts as indicated below. These instructions suspending liquidation will remain in effect until further notice.

Accordingly, effective on the date of publication of the ITC's final affirmative injury determination, CBP will require, at the same time as importers would normally deposit estimated duties on this subject merchandise, a cash deposit equal to the estimated weighted-average antidumping duty margins listed below.[6] For the purpose of determining cash deposit rates, the estimated weighted-average dumping margins for imports of subject merchandise from the PRC will be adjusted, as appropriate, for export subsidies found in the final determination of the companion countervailing duty investigation of this merchandise imported from the PRC.[7]

[1] *See Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part,* 79 FR 68860 (November 19, 2014) (*Final Determination*).

[2] *See Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China,* Investigation Nos. 701–TA–512 and 731–TA–1248 (Final), USITC Publication 4509, December 2014.

[3] *Id.*

[4] *Id.*

[5] *See Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China: Preliminary Determination of Sales at Less Than Fair Value and Preliminary Determination of Critical Circumstances, in Part,* 79 FR 53169 (September 8, 2014) (*Preliminary Determination*).

[6] *See* section 736(a)(3) of the Act.

[7] *See Final Determination,* 79 FR at 68861. *See also Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China: Final Affirmative Countervailing Duty Determination and Final Affirmative Critical Circumstances Determination,* 79 FR 68858 (November 19, 2014) (*CVD Final Determination*).

The weighted-average dumping margins are as follows:

Exporter	Producer	Weighted-Average dumping margin [8] (percent)
Rizhao Steel Wire Co., Ltd.	Rizhao Steel Wire Co., Ltd.	106.19
Hunan Valin Xiangtan Iron & Steel Co., Ltd.	Hunan Valin Xiangtan Iron & Steel Co., Ltd.	106.19
Jiangsu Shagang International Trade Co., Ltd.	Zhangjiagang Shajing Steel Co., Ltd.	106.19
Jiangsu Shagang International Trade Co., Ltd.	Zhangjiagang Runzhong Steel Co., Ltd.	106.19
Jiangsu Shagang International Trade Co., Ltd.	Zhangjiagang Hongxing Gaoxian Co., Ltd.	106.19
Jiangsu Shagang International Trade Co., Ltd.	Zhangjiagang Rongsheng Steel-Making Co., Ltd.	106.19
Jiangsu Shagang International Trade Co., Ltd.	Jiangsu Runzhong High-Tech Co., Ltd.	106.19
Jiangsu Shagang International Trade Co., Ltd.	Zhangjiagang Hongchang Gaoxian Co., Ltd.	106.19
PRC-wide Entity*		110.25

* The PRC-wide entity includes, among other companies, Benxi Beiying Iron and Steel Group Imp. and Exp. Corp. Ltd.,[9] Tangshan Iron and Steel Group Co. Ltd., Angang Group International Trade Corporation, Qingdao Iron and Steel Co., Ltd., Jiangsu Yonggang Group Co. Ltd., and Baotou Steel International Economic & Trading Co., Ltd.[10]

Critical Circumstances

With regard to the ITC's negative critical circumstances determination on imports of steel wire rod from the PRC, we will instruct CBP to lift suspension and refund any cash deposits made to secure the payment of estimated antidumping duties with respect to entries of subject merchandise entered or withdrawn from warehouse, for consumption on or after June 10, 2014 (*i.e.,* 90 days prior to the date of publication of the *Preliminary Determination*), but before September 8, 2014, (*i.e.,* the date of the publication of the *Preliminary Determination*).

Notification to Interested Parties

This notice constitutes the antidumping duty order with respect to steel wire rod from the PRC pursuant to section 736(a) of the Act. Interested parties may contact the Department's Central Records Unit, Room 7046 of the main Commerce Building, for copies of an updated list of antidumping duty orders currently in effect.

This order is published in accordance with section 736(a) of the Act and 19 CFR 351.211.

Dated: January 2, 2015.

Ronald K. Lorentzen,

Acting Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2015–00096 Filed 1–7–15; 8:45 am]

BILLING CODE 3510–DS–P

[8] As explained in the *Final Determination,* the estimated weighted average dumping margin for the separate companies and the PRC-wide Entity will be adjusted for export subsidies. *See Final Determination,* 79 FR at 68861. As a result of the adjustment for export subsidies, the cash deposit rate for the separate rate companies will be 93.18 percent and 97.24 percent for the PRC-wide entity. For information regarding these export subsidies, *see CVD Final Determination* and accompanying Issues and Decision Memorandum at 9–10 and Attachment entitled ''Description of Programs.''

[9] For the reasons explained in the *Preliminary Determination,* the Department finds it appropriate to consider Bei Tai Iron and Steel Group Imp. and Exp. (Dalian) Co., Ltd. a part of Benxi Beiying Iron and Steel Group Imp. and Exp. Corp. Ltd. *See Preliminary Determination,* and accompanying Preliminary Decision Memorandum at 9.

[10] For the reasons explained in the *Preliminary Determination,* the Department did not find these companies eligible for a separate rate. *See Preliminary Determination,* and accompanying Preliminary Decision Memorandum at 8–11.

DEPARTMENT OF COMMERCE

International Trade Administration

[C–570–938]

Citric Acid and Certain Citrate Salts From the People's Republic of China: Rescission, in Part, of 2013 Countervailing Duty Administrative Review

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

DATES: *Effective Date:* January 8, 2015.

FOR FURTHER INFORMATION CONTACT: Elizabeth Eastwood, 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) 482–3874.

Background

On May 29, 2009, the Department of Commerce (Department) published in the **Federal Register** the countervailing duty order on citric acid and certain citrate salts, from the People's Republic of China (PRC).[1] On May 1, 2014, the Department published a notice of opportunity to request an administrative review of the countervailing duty order on citric acid and certain citrate salts covering the period January 1, 2013, through December 31, 2013.[2] The Department received a timely request for a countervailing duty administrative review from RZBC Co. Ltd., RZBC Imp. & Exp. Co., Ltd., and RZBC (Juxian) Co., Ltd. (collectively, ''RZBC''). Additionally, the Department received a timely request for review from the petitioners[3] for the following companies: (1) Changsha Huir Biological-Tech Co., Ltd. (Changsha Huir); (2) Huangshi Xinghua Biochemical Co., Ltd. (Huangshi Xinghua); (3) Hunan Dongting Pharmaceutical Co., Ltd. (Hunan Dongting); (4) Jiali Bio Group (Qingdao) Co., Ltd. (Jiali Bio Group); (5) Juxian Hongde Citric Acid Co., Ltd. (Juxian Hongde); (6) Laiwu Taihe Biochemistry Co. Ltd. (Laiwu Taihe); (7) Lianyungang Debang Fine Chemical Co., Ltd. (Lianyungang Debang); (8) Lianyungang Dongtai Food Ingredients Co., Ltd. (Lianyungang Dongtai); (9) Lianyungang Hengsheng Fine Chemical Co., Ltd. (Lianyungang Hengsheng); (10) Lianyungang Yunbo Chemical Co., Ltd. (Lianyungang Yunbo); (11) Lianyungang Zhengrong Food Additive Factory (Lianyungang Zhengrong); (12) Nantong Feiyu Fine Chemical Co., Ltd. (Nantong Feiyu); (13) Ningxiang Xinyang Chemical Co., Ltd. (Ningxiang Xingyang); (14) Penglai Marine Bio-Tech Co., Ltd. (Penglai Marine Bio-Tech); (15) Qingdao Fuso Refining & Processing Co., Ltd. (Qingdao Fuso); (16) Reephos Chemical Co., Ltd. (Reephos Chemical); (17) Rugao Jiangbei Additive Co., Ltd.

[1] *See Citric Acid and Certain Citrate Salts From the People's Republic of China: Notice of Countervailing Duty Order,* 74 FR 25705 (May 29, 2009).

[2] *See Antidumping or Countervailing Duty Order, Finding, or Suspended Investigation; Opportunity To Request Administrative Review,* 79 FR 24670 (May 1, 2014).

[3] The petitioners in this administrative review are the Archer Daniels Midland Company, Cargill, Incorporated, and Tate & Lyle Ingredients Americas LLC.

(Rugao Jiangbei); (18) RZBC Group Shareholding Co., Ltd. (RZBC Group) and RZBC; (19) Shandong Hongshide Chemical Co., Ltd. (Shandong Hongshide); (20) Shandong TTCA Biochemistry Co., Ltd. (Shandong TTCA); (21) Shihezi City Changyum Biochemical Co., Ltd. (Shihezi City Changyum); (22) Weifang Ensign Industry Co., Ltd. (Weifang Ensign); (23) Wuhan Shuangfeng Citric Acid Co., Ltd. (Wuhan Shuangfeng); (24) Yixing Union Biochemical Co., Ltd. (Yixing Union); (25) Yixing Zhenfen Medical Chemical Co., Ltd. (Yixing Zhenfen); and (26) Yunnan No. 2 Fuel Factory (Yunnan Fuel).

On June 27, 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 with respect to these companies.[4] On July 14, 2014, RZBC withdrew their request for an administrative review. In addition, on August 6, 2014, the petitioners withdrew their request for an administrative review for all of the above-listed companies except Laiwu Taihe.

Rescission, 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. The petitioners' and RZBC's withdrawal of their requests were submitted within the 90-day period and, thus, are timely. Because the petitioners' and RZBC's withdrawal of their requests for review are timely and because no other party requested a review of these companies, in accordance with 19 CFR 351.213(d)(1), we are rescinding this administrative review, in part, with respect to the following companies: Changsha Huir, Huangshi Xinghua, Hunan Dongting, Jiali Bio Group, Juxian Hongde, Lianyungang Debang, Lianyungang Dongtai, Lianyungang Hengsheng, Lianyungang Yunbo, Lianyungang Zhengrong, Nantong Feiyu, Ningxiang Xinyang, Penglai Marine Bio-Tech, Qingdao Fuso, Reephos Chemical, Rugao Jiangbei, RZBC Group and RZBC, Shandong Hongshide, Shandong TTCA, Shihezi City Changyum, Weifang Ensign, Wuhan Shuangfeng, Yixing Union, Yixing Zhenfen, and Yunnan Fuel. The administrative review will continue with respect to Laiwu Taihe.

Assessment

The Department will instruct U.S. Customs and Border Protection (CBP) to assess countervailing duties on all appropriate entries. For the companies for which this review is rescinded, countervailing duties shall be assessed at rates equal to the cash deposit of estimated countervailing duties required at the time of entry, or withdrawal from warehouse, for consumption, during the period January 1, 2013, through December 31, 2013, 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 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: January 5, 2015.

Christian Marsh,

Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.

[FR Doc. 2015–00113 Filed 1–7–15; 8:45 am]

BILLING CODE 3510–DS–P

[4] *See Initiation of Antidumping and Countervailing Duty Administrative Reviews,* 79 FR 36462 (June 27, 2014).

DEPARTMENT OF COMMERCE

International Trade Administration

[C–570–013]

Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China: Amended Final Affirmative Countervailing Duty Determination and Countervailing Duty Order

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: Based on affirmative final determinations by the Department of Commerce (the Department) and the International Trade Commission (ITC), the Department is issuing a countervailing duty (CVD) order on carbon and certain alloy steel wire rod (steel wire rod) from the People's Republic of China (PRC). Also, as explained in this notice, the Department is amending its final determination to correct an error with respect to the identification of an affiliate of one of the respondents.

DATES: *Effective Date:* January 8, 2015.

FOR FURTHER INFORMATION CONTACT: Rebecca Trainor or Reza Karamloo, Office II, AD/CVD Operations, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–4007 and (202) 482–4470, respectively.

SUPPLEMENTARY INFORMATION:

Background

On November 19, 2014, the Department published its final determination that countervailable subsidies are being provided to producers and exporters of steel wire rod from the PRC.[1] On January 2, 2015, the ITC notified the Department of its final determination pursuant to sections 705(b)(1)(A)(i) and section 705(d) of the Tariff Act of 1930, as amended (the Act) that an industry in the United States is materially injured by reasons of subsidized imports of subject merchandise from the PRC.[2] The ITC also determined that critical circumstances do not exist.[3]

Scope of the Order

The scope of this order covers certain hot-rolled products of carbon steel and alloy steel, in coils, of approximately circular cross section, less than 19.00 mm in actual solid cross-sectional diameter. Specifically excluded are steel products possessing the above-noted physical characteristics and meeting the Harmonized Tariff Schedule of the United States (HTSUS) definitions for (a) stainless steel; (b) tool steel; (c) high nickel steel; (d) ball bearing steel; or (e) concrete reinforcing bars and rods. Also excluded are free cutting steel (also known as free machining steel) products

[1] *See Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China: Final Affirmative Countervailing Duty Determination and Final Affirmative Critical Circumstances Determination,* 79 FR 68858 (November 19, 2014) (*Final Determination*).

[2] *See Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China,* Investigation Nos. 701–TA–512 and 731–TA–1248 (Final), USITC Publication 4509, December 2014.

[3] *Id.*

(*i.e.,* products that contain by weight one or more of the following elements: 0.1 percent or more of lead, 0.05 percent or more of bismuth, 0.08 percent or more of sulfur, more than 0.04 percent of phosphorus, more than 0.05 percent of selenium, or more than 0.01 percent of tellurium). All products meeting the physical description of subject merchandise that are not specifically excluded are included in this scope.

The products under order are currently classifiable under subheadings 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6030, and 7227.90.6035 of the HTSUS. Products entered under subheadings 7213.99.0090 and 7227.90.6090 of the HTSUS also may be included in this scope if they meet the physical description of subject merchandise above. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of this order is dispositive.

Correction to the Final Determination

In the *Final Determination* we inadvertently omitted Benxi Iron & Steel (Group) Co., Ltd. from the list of companies comprising Benxi Beiying Iron & Steel Import & Export Corp./ Benxi Beiying Iron & Steel (Group) Co., Ltd.[4] Benxi Iron & Steel (Group) Co., Ltd. is properly included in the list of affiliates in the ''Suspension of Liquidation'' section of this notice.

Countervailing Duty Order

In accordance with sections 705(b)(1)(A)(i) and 705(d) of the Act, the ITC notified the Department of its final determination that the industry in the United States producing steel wire rod is materially injured by reason of subsidized imports of steel wire rod from the PRC. Therefore, in accordance with section 705(c)(2) of the Act, we are publishing this CVD order.

Pursuant to section 706(a) of the Act, the Department will direct U.S. Customs and Border Protection (CBP) to assess, upon further instruction by the Department, CVDs on unliquidated entries of steel wire rod entered, or withdrawn from warehouse, for consumption on or after July 8, 2014, the date on which the Department published its affirmative *Preliminary Determination*[5] in the **Federal Register**, and before November 5, 2014, the date on which the Department instructed CBP to discontinue the suspension of liquidation in accordance with section 703(d) of the Act. Section 703(d) of the Act states that the suspension of liquidation pursuant to a preliminary determination may not remain in effect for more than four months. Entries of steel wire rod made on or after November 5, 2014, and prior to the date of publication of the ITC's final determination in the **Federal Register** are not liable for assessment of CVDs, due to the Department's discontinuation, effective November 5, 2014, of the suspension of liquidation.

With regard to the ITC's negative critical circumstances determination, the Department will instruct CBP to lift suspension and refund any cash deposits of estimated CVDs for entries on or after April 9, 2014 (*i.e.,* 90 days prior to the date of the *Preliminary Determination*), but before July 8, 2014.

Suspension of Liquidation

In accordance with section 706 of the Act, the Department will direct CBP to reinstitute the suspension of liquidation of steel wire rod from the PRC, effective the date of publication of the ITC's notice of final determination in the **Federal Register**, and to assess, upon further instruction by the Department pursuant to section 706(a)(1) of the Act, CVDs for each entry of the subject merchandise in an amount based on the net countervailable subsidy rates for the subject merchandise. CBP must require, at the same time as importers would normally deposit estimated duties on this merchandise, a cash deposit equal to the rates listed below:

Company	Subsidy rate (percent)
Benxi Steel[6]	193.31
Hebei Iron & Steel Co Ltd Tangshan Branch	178.46
All Others	185.89

Notification to Interested Parties

This notice constitutes the CVD order with respect to steel wire rod from the PRC pursuant to section 706(a) of the Act. Interested parties may contact the Department's Central Records Unit, Room 7046 of the main Commerce Building, for copies of an updated list of countervailing duty orders currently in effect.

This order is issued and published in accordance with section 706(a) of the Act and 19 CFR 351.211(b).

Dated: January 2, 2015.

Ronald K. Lorentzen,

Acting Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2015–00095 Filed 1–7–15; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[C–570–980]

Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled Into Modules, From the People's Republic of China: Preliminary Results of Countervailing Duty Administrative Review; 2012; and Partial Rescission of Countervailing Duty Administrative Review

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: The Department of Commerce (the Department) is conducting an administrative review of the countervailing duty (CVD) order on crystalline silicon photovoltaic cells, whether or not assembled into modules (Solar Cells), from the People's Republic of China (PRC). The period of review (POR) is March 26, 2012, through December 31, 2012. This review covers multiple exporters/producers, two of which are being individually reviewed as mandatory respondents. We preliminarily determine that Lightway Green New Energy Co., Ltd. (Lightway), Shanghai BYD Co. Ltd. (Shanghai BYD) and its cross-owned affiliates received countervailable subsidies during the POR. Interested parties are invited to comment on these preliminary results.

DATES: *Effective Date:* January 8, 2015.

[4] *See Final Determination* at 68859, and the accompanying Issues and Decision Memorandum for the Final Determination in the Countervailing Duty Investigation of Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China at 1–2.

[5] *See Carbon and Certain Alloy Steel Wire Rod From the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination, Preliminary Affirmative Critical Circumstances Determination, and Alignment of Final Countervailing Duty Determination With Final Antidumping Duty Determination,* 79 FR 38490 (July 8, 2014) (*Preliminary Determination*).

[6] Benxi Steel is comprised of: Benxi Beiying Iron & Steel Group Import & Export Corp.; Benxi Beiying Iron & Steel (Group) Co., Ltd.; Benxi Steel Group Corporation; Beitai Iron & Steel (Group) Co., Ltd.; Benxi Northern Steel Rolling Co., Ltd.; Benxi Beifang Gaosu Steel Wire Rod Co., Ltd.; Benxi Beitai Gaosu Steel Wire Rod Co., Ltd.; Benxi Northern Steel Co., Ltd.; Benxi Beifang Second Rolling Co., Ltd.; Benxi Beitai Ductile Iron Pipes Co., Ltd.; Benxi Iron and Steel (Group) Metallurgy Co., Ltd.; Benxi Iron and Steel (Group) Real Estate Development Co., Ltd.; Benxi Iron & Steel (Group) Co., Ltd.; Bei Tai Iron and Steel Group Imp. and Exp. (Dalian) Co., Ltd.; and Bengang Steel Plate Co., Ltd.

FOR FURTHER INFORMATION CONTACT: Elfi Blum-Page, Lingjun Wang, or Andrew Huston, Office VII, AD/CVD Operations, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–0197, (202) 482–2316, and (202) 482–4261, respectively.

SUPPLEMENTARY INFORMATION:

Scope of the Investigation

The merchandise covered by this investigation is crystalline silicon photovoltaic cells, and modules, laminates, and panels, consisting of crystalline silicon photovoltaic cells, whether or not partially or fully assembled into other products, including, but not limited to, modules, laminates, panels and building integrated materials.[1]

Methodology

The Department is conducting this countervailing duty review in accordance with section 751(a)(1)(A) of the Tariff Act of 1930, as amended (the Act). For each of the subsidy programs found countervailable, we determine that there is a subsidy, *i.e.,* a financial contribution by an ''authority'' that confers a benefit to the recipient, and that the subsidy is specific.[2] For a full description of the methodology underlying our preliminary conclusions, including our reliance, in part, on adverse facts available pursuant to sections 776(a) and (b) of the Act, *see* the Preliminary Decision Memorandum.[3] The Preliminary Decision Memorandum is a public document and is on file electronically via Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS).[4] ACCESS is available to registered users at *http://access.trade.gov,* and is available to all parties in the Central Records Unit, room 7046 of the main Department of Commerce building. In addition, a complete version of the Preliminary Decision Memorandum can be accessed directly on the Internet at *http://enforcement.trade.gov/frn/index.html.* The signed Preliminary Decision Memorandum and the electronic versions of the Preliminary Decision Memorandum are identical in content.

Partial Rescission of the 2012 Administrative Review

Pursuant to 19 CFR 351.213(d)(1), the Department will rescind an administrative review, in whole or in part, if the parties that requested a review withdraw the request within 90 days of the date of publication of the notice of initiation. SolarWorld Industries America, Inc. (Petitioner) submitted the withdrawal of its review request within the deadline set forth under 19 CFR 351.213(d)(1). Therefore, in accordance with 19 CFR 351.213(d)(1), the Department is rescinding this review of the countervailing duty order on solar cells from the PRC with respect to the companies listed in Appendix II. No other party requested a review of any of the companies listed in Appendix II. The review will continue with respect to the other companies for which a review was requested: The mandatory respondents Lightway and Shanghai BYD, and the remaning companies not selected for individual review, listed in Appendix III.

Companies Not Selected for Individual Review

For the companies not selected for individual review (*see* Appendix III), because the rates calculated for Lightway and Shanghai BYD were above *de minimis* and not based entirely on facts available, we applied a subsidy rate based on a weighted average of the subsidy rates calculated for Lightway and Shanghai BYD using publicly ranged sales data submitted by respondents.

Preliminary Results of Review

As a result of this review, we preliminarily determine the countervailable subsidy rates to be:

Company	Subsidy rate (percent)
Lightway Green New Energy Co., Ltd	22.73
Shanghai BYD Co. Ltd. and its cross-owned affiliates [5]	8.63
Remaining Companies Subject to Review [6]	15.68

Disclosure and Public Comment

The Department intends to disclose to interested parties the calculations performed in connection with this preliminary determination within five days of its public announcement.[7] Interested parties may submit case and rebuttal briefs, as well as request a hearing.[8] Interested parties may submit written comments (case briefs) within 30 days of publication of the preliminary results and rebuttal comments (rebuttal briefs) within five days after the time limit for filing case briefs.[9] Rebuttal briefs must be limited to issues raised in the case briefs.[10] Parties who submit case or rebuttal briefs are requested to submit with the argument: (1) A statement of the issue; (2) a brief summary of the argument; and (3) a table of authorities.[11]

Interested parties who wish to request a hearing, or to participate if one is requested, must do so within 30 days of publication of these preliminary results by submitting a written request to the Assistant Secretary for Enforcement and Compliance, U.S. Department of Commerce, using Enforcement and Compliance's ACCESS system.[12] Requests should contain the party's name, address, and telephone number, the number of participants, and a list of the issues to be discussed. If a request for a hearing is made, we will inform parties of the scheduled date for the hearing which will be held at the U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230, at a time and location to be determined.[13] Parties should confirm by telephone the date, time, and location of the hearing. Issues addressed at the hearing will be limited to those raised in the briefs.[14] All briefs

[1] For a full description of the scope of the order, see ''Decision Memorandum for the Preliminary Results of the Countervailing Duty Administrative Review of Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled Into Modules, from the People's Republic of China'' from Gary Taverman, Associate Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations to Paul Piquado, Assistant Secretary for Enforcement and Compliance (Preliminary Decision Memorandum), dated concurrently with these results and herby adopted by this notice.

[2] *See* sections 771(5)(B) and (D) of the Act regarding financial contribution; section 771(5)(E) of the Act regarding benefit; and, section 771(5A) of the Act regarding specificity.

[3] *See* Preliminary Decision Memorandum. A list of topics discussed in the Preliminary Decision Memorandum can be found as an appendix to this notice.

[4] On November 24, 2014, Enforcement and Compliance changed the name of Enforcement and Compliance's AD and CVD Centralized Electonic Service System (''IA ACCESS'') to AD and CVD Centralized Electronic Service System (ACCESS). The Web site location was changed from *http://iaaccess.trade.gov* to *http://access.trade.gov.* The Final Rule changing the references to the Regulations can be found at 79 FR 69046 (November 20, 2014).

[5] Cross owned affiliates are Shangluo BYD Industrial Co., Ltd and BYD Company Limited, *see* Letter to the Department from Shanghai BYD, ''Crystalline Silicon Photovoltaic Products: Reporting Companies and Affiliation Data,'' (April 11, 2014).

[6] *See* Appendix III.

[7] *See* 19 CFR 351.224(b).

[8] *See* 19 CFR 351.309(c)–(d), 19 CFR 351.310(c).

[9] *See* 19 CFR 351.309(c)(l)(ii) and 351.309(d)(l).

[10] *See* 19 CFR 351.309(d)(2).

[11] *See* 19 CFR 351.309(c)(2) and (d)(2).

[12] *See* 19 CFR 351.310(c).

[13] *See* 19 CFR 351.310.

[14] *See* 19 CFR 351.310(c).

and hearing requests must be filed electronically and received successfully in their entirety through ACCESS by 5:00 p.m. Eastern Time on the due date.

Unless the deadline is extended pursuant to section 751(a)(3)(A) of the Act, we intend to issue the final results of this administrative review, including the results of our analysis of the issues raised by the parties in their comments, within 120 days after issuance of these preliminary results.

Assessment Rates and Cash Deposit Requirement

In accordance with 19 CFR 351.221(b)(4)(i), we assigned a subsidy rate for each producer/exporter subject to this administrative review. Upon issuance of the final results, the Department shall determine, and U.S. Customs and Border Protection (CBP) shall assess, countervailing duties on all appropriate entries covered by this review. We intend to issue instructions to CBP 15 days after publication of the final results of review.

Pursuant to section 751(a)(2)(C) of the Act, the Department also intends to instruct CBP to collect cash deposits of estimated countervailing duties, in the amounts shown above for each of the respective companies shown above, on shipments of subject merchandise entered, or withdrawn from warehouse, for consumption on or after the date of publication of the final results of this review. For all non-reviewed firms, we will instruct CBP to continue to collect cash deposits at the most-recent company-specific or all-others rate applicable to the company, as appropriate. These cash deposit requirements, when imposed, shall remain in effect until further notice.

These preliminary results are issued and published in accordance with sections 751(a)(1) and 777(i)(1) of the Act, and 19 CFR 351.221(b)(4).

Dated: December 31, 2014.

Paul Piquado,

Assistant Secretary for Enforcement and Compliance.

Appendix I

List of Topics Discussed in the Preliminary Decision Memorandum

I. Summary
II. Background
III. Subsidies Valuation
IV. Use of Facts Otherwise Available and Adverse Inferences
V. Analysis of Programs
VI. Disclosure and Public Comment
VII. Conclusion

Appendix II

1. Aiko Solar
2. Amplesun Solar
3. Boading Tianwei Yingli New Energy Resources Co., Ltd.
4. Beijing Hope Industry
5. Best Solar Hi-tech
6. CEEG (Shanghai) Solar Science Technology Co., Ltd.
7. CEEG Nanjing Renewable Energy Co., Ltd.
8. China Sunergy (Nanjing) Co., Ltd.
9. China Sunergy
10. Chinalight Solar
11. CNPV Dongying Solar Power Co., Ltd.
12. Dai Hwa Industrial
13. EGing
14. ENN Solar Energy
15. General Solar Power
16. Golden Partner development
17. Goldpoly (Quanzhou)
18. Hairun Photovoltaics Technology Co., Ltd
19. Hareon Solar Technology
20. HC Solar Power Co., Ltd.
21. JA Solar Technology Yangzhou Co., Ltd.
22. Jetion Solar (China) Co., Ltd.
23. Jia Yi Energy Technology
24. Jiasheng Photovoltaic Tech.
25. Jiangxi Green Power Co. Ltd.
26. Jiawei Solar Holding
27. Jiawei Solarchina Co. (Shenzhen), Ltd
28. JingAo Solar Co., Ltd.
29. Jiutai Energy
30. Linuo Photovoltaic
31. Ningbo Komaes Solar Technology Co., Ltd.
32. Perfectenergy
33. Polar Photovoltaics
34. Qiangsheng (QS Solar)
35. QXPV (Ningbo Qixin Solar Electrical Appliance Co., Ltd)
36. Refine Solar
37. Risen Energy Co, Ltd.
38. Risun Solar (JiangXi Ruijing Solar Power Co., Ltd.)
39. Sanjing Silicon
40. Shanghai Chaori Solar Energy
41. Shanghai JA Solar Technology Co., Ltd.
42. Shanghai Solar Energy Science & Technology Co., Ltd.
43. Shangpin Solar
44. Shanshan Ulica
45. Shenzen Topray Solar Co., Ltd.
46. Shenzhen Global Solar Energy Tech.
47. Shuqimeng Energy Tech
48. Skybasesolar
49. Solargiga Energy Holdings Ltd.
50. Sunflower
51. Sunlink PV
52. Sunvim Solar Technology
53. Tainergy Tech
54. tenKsolar (Shanghai) Co., Ltd.
55. Tianjin Jinneng Solar Cell
56. Topsolar
57. Trony
58. Weihai China Glass Solar
59. Wuxi Sun-shine Power Co., Ltd.
60. Wuxi University Science Park International Incubator Co., Ltd.
61. Yuhan Sinosola Science & Technology Co., Ltd.
62. Yuhuan Solar Energy Source Co., Ltd.
63. Yunnan Tianda
64. Yunnan Zhuoye Energy
65. Zhejiang Top Point Photovoltaic Co., Ltd.
66. Zhejiang Wanxiang Solar Co, Ltd.

Appendix III

1. Baoding Jiansheng Photovoltaic Technology Co., Ltd.
2. Boading Tianwei Yingli New Energy Resources Co., Ltd.
3. Beijing Tianneng Yingli New Energy Resources Co. Ltd.
4. Canadian Solar International Limited.
5. Canadian Solar Manufacturing (Changshu) Inc.
6. Canadian Solar Manufacturing (Luoyang) Inc.
7. Changzhou NESL Solartech Co., Ltd.
8. Changzhou Trina Solar Energy Co., Ltd.
9. Chint Solar (Zhejiang) Co., Ltd.
10. CSG PVTech Co., Ltd.
11. DelSolar Co., Ltd.
12. De-Tech Trading Limited HK.
13. Dongfang Electric (Yixing) MAGI Solar Power Technology Co. Ltd.
14. Eoplly New Energy Technology Co., Ltd.
15. Era Solar Co., Ltd.
16. ET Solar Energy Limited
17. Hainan Yingli New Energy Resources Co., Ltd.
18. Hangzhou Zhejiang University Sunny Energy Science and Technology Co. Ltd.
19. Hendigan Group Dmegc Magnetics.
20. Hengshui Yingli New Energy Resources Co., Ltd.
21. Himin Clean Energy Holdings Co., Ltd.
22. Innovosolar.
23. Jiangsu Green Power PV Co., Ltd.
24. Jiangsu Jiasheng Photovoltaic Technology Co., Ltd.
25. Jiangsu Sunlink PV Technology Co., Ltd.
26. Jiawei Solar Holding.
27. Jinko Solar Co., Ltd.
28. Jinko Solar Import and Export Co., Ltd.
29. Jinko Solar International Limited.
30. Konca Solar Cell Co., Ltd.
31. Kuttler Automation Systems (Suzhou) Co. Ltd.
32. LDK Solar Hi-tech (Suzhou) Co., Ltd.
33. LDK Solar Hi-tech (Nanchang)
34. Leye Photovoltaic Science & Technology Co., Ltd.
35. Wuxi Suntech
36. Lixian Yingli New Energy Resources Co., Ltd.

[FR Doc. 2015–00110 Filed 1–7–15; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–979]

Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled Into Modules, From the People's Republic of China: Preliminary Results of Antidumping Duty Administrative Review and Preliminary Determination of No Shipments; 2012–2013

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: The Department of Commerce (''the Department'') is conducting an administrative review of the antidumping duty order on crystalline silicon photovoltaic cells, whether or not assembled into modules (''solar cells''), from the People's Republic of

China (''PRC''). The period of review (''POR'') is May 25, 2012, through November 30, 2013. The administrative review covers two mandatory respondents, Yingli Energy (China) Company Limited and Wuxi Suntech Power Co., Ltd. The Department preliminarily finds that the mandatory respondent Yingli Energy (China) Company Limited sold subject merchandise in the United States at prices below normal value (''NV'') during the POR and that Wuxi Suntech Power Co., Ltd., is not eligible for a separate rate. Interested parties are invited to comment on these preliminary results.

DATES: *Effective Date:* January 8, 2015.

FOR FURTHER INFORMATION CONTACT: Brandon Farlander or Drew Jackson, AD/CVD Operations, Office IV, Enforcement & Compliance, International Trade Administration, Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–0182 or (202) 482–4406, respectively.

SUPPLEMENTARY INFORMATION:

Scope of the Order

The merchandise covered by the order is crystalline silicon photovoltaic cells, and modules, laminates, and panels, consisting of crystalline silicon photovoltaic cells, whether or not partially or fully assembled into other products, including, but not limited to, modules, laminates, panels and building integrated materials.[1] Merchandise covered by this review is classifiable under subheading 8501.61.0000, 8507.20.80, 8541.40.6020, 8541.40.6030, and 8501.31.8000 of the Harmonized Tariff Schedule of the United States (''HTSUS''). Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope of the order is dispositive.

Preliminary Determination of No Shipments

Based on an analysis of U.S. Customs and Border Protection (''CBP'') information, and comments provided by a number of companies, the Department preliminarily determines that 23 of the companies that claimed no shipments during this POR did not have any reviewable transactions during the POR.[2] We found that two companies which claimed no exports, sales or entries of subject merchandise during the POR did, in fact, sell subject merchandise to the United States during the POR. Neither of these companies filed a separate rate application or certification and thus they have not established their entitlement to a separate rate in this review. For additional information regarding this determination, *see* the Preliminary Decision Memorandum.

Consistent with an announced refinement to its assessment practice in non-market economy (''NME'') cases, the Department is not rescinding this review, in part, but intends to complete the review with respect to the companies for which it has preliminarily found no shipments and issue appropriate instructions to CBP based on the final results of the review.[3]

Preliminary Affiliation and Single Entity Determination

Based on record evidence, the Department preliminarily finds that the mandatory respondent Yingli Energy (China) Company Limited is affiliated with the following seven companies pursuant to section 771(33)(F) of the Tariff Act of 1930, as amended (''the Act''): (1) Baoding Tianwei Yingli New Energy Resources Co., Ltd.; (2) Tianjin Yingli New Energy Resources Co., Ltd.; (3) Hengshui Yingli New Energy Resources Co., Ltd.; (4) Lixian Yingli New Energy Resources Co., Ltd.; (5) Baoding Jiasheng Photovoltaic Technology Co., Ltd.; (6) Beijing Tianneng Yingli New Energy Resources Co., Ltd.; and (7) Hainan Yingli New Energy Resources Co., Ltd. (collectively ''Yingli''). Furthermore, the Department preliminarily finds that the mandatory respondent Wuxi Suntech Power Co., Ltd. is affiliated with the following three companies pursuant to section 771(33)(F) of the Act: (1) Luoyang Suntech Power Co., Ltd.; (2) Suntech Power Co., Ltd.; and (3) Wuxi Sunshine Power Co., Ltd. (collectively, ''Wuxi Suntech Single Entity''). In addition, based on the information presented in this review, we preliminarily find that each of the mandatory respondents and the respective companies listed above should be treated as a single company for the purposes of this review pursuant to 19 CFR 351.401(f). For additional information, *see* the Preliminary Decision Memorandum.

PRC-Wide Entity

Several companies for which the Department initiated this review failed to respond to the Department's request for quantity and value information. Therefore, these companies are not eligible for separate rate status.[4] Accordingly, the Department preliminarily finds that the PRC-wide entity includes these companies. Furthermore, because necessary information is not available on the record and the PRC-wide entity withheld requested information, failed to provide information in a timely manner and in the form requested, and significantly impeded this proceeding, the Department relied on facts otherwise available (''FA'') to determine the PRC-wide rate.[5]

Additionally, the Department finds that the PRC-wide entity failed to cooperate by not acting to the best of its ability to comply with a request for information. Therefore, pursuant to section 776(b) of the Act, the Department is using an adverse inference when selecting from among the facts otherwise available. Thus, the Department is relying on adverse facts available (''AFA'') in order to determine a margin for the PRC-wide entity, pursuant to sections 776(a)(1), 776(a)(2)(A), (B), (C) and 776(b) of the Act. For additional information, *see* the Preliminary Decision Memorandum.

Verification

As provided in section 782(i) of the Act, the Department verified information provided by Yingli. The Department conducted the verification using standard verification procedures including the examination of relevant sales and financial records and the selection and review of original documentation containing relevant information. The results of the

[1] For a complete description of the scope of the order, *see* ''Decision Memorandum for the Preliminary Results of the 2012–2013 Antidumping Duty Administrative Review of Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled into Modules, from the People's Republic of China'' from Gary Taverman, Associate Deputy Assistant Secretary for Antidumping and Countervailing Operations, to Paul Piquado, Assistant Secretary for Enforcement and Compliance, issued concurrently with and hereby adopted by this notice (''Preliminary Decision Memorandum'').

[2] We treated two companies which reported making no shipments during the POR, Luoyang Suntech Power Co., Ltd. and Suntech Power Co., Ltd., as part of a single entity together with the mandatory respondent, Wuxi Suntech Power Co., Ltd. *See* the ''Preliminary Affiliation and Single Entity Determination'' section of this notice.

[3] *See Non-Market Economy Antidumping Proceedings: Assessment of Antidumping Duties,* 76 FR 65694, 65694–95 (October 24, 2011) and the ''Assessment Rates'' section, below.

[4] *See Initiation of Antidumping and Countervailing Duty Administrative Reviews and Request for Revocation in Part,* 79 FR 6147 (February 3, 2014) (''Furthermore, firms to which the Department issues a Quantity and Value (''Q&V'') questionnaire in the antidumping duty administrative review of solar cells and modules from the PRC must submit a timely and complete response to the Q&V questionnaire, in addition to a timely and complete Separate Rate Application or Certification in order to receive consideration for separate-rate status.'').

[5] *See* Section 776(a) of the Act.

verification are outlined in the public version of the verification reports. The verification reports will be on file electronically *via* Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System (''ACCESS'').[6] ACCESS is available to registered users at *https://access.trade.gov,* and is available to all parties in the Department's Central Records Unit, located in room 7046 of the main Department of Commerce building.

Use of Partial Facts Available and Adverse Facts Available

Section 776(a) of the Act provides that the Department shall apply FA if (1) necessary information is not on the record, or (2) an interested party or any other person (A) withholds information that has been requested, (B) fails to provide information within the deadlines established, or in the form and manner requested by the Department, subject to subsections (c)(1) and (e) of section 782 of the Act, (C) significantly impedes a proceeding, or (D) provides information that cannot be verified as provided by section 782(i) of the Act.

Section 776(b) of the Act further provides that the Department may use an adverse inference in applying FA when a party has failed to cooperate by not acting to the best of its ability to comply with a request for information. Such an adverse inference may include reliance on information derived from the petition, the final determination, a previous administrative review, or other information placed on the record.

Based on findings at verification, pursuant to sections 776(a) and (b) of the Act, we are applying partial AFA to a portion of Yingli's U.S. sales. Moreover, Yingli did not report FOP data from certain suppliers or tollers based on the specific facts on the record of this review. Thus, because necessary information is not available on the record, and in accordance with section 776(a)(1) of the Act, the Department is applying FA with respect to these unreported FOP data. For details regarding these determinations, *see* the Preliminary Decision Memorandum.

The Wuxi Suntech Single Entity's Separate Rate Status

Wuxi Sunshine, an exporter and member of the Wuxi Suntech Single Entity, reported that certain shareholders are state-owned companies.[7] Because of the level of government ownership in Wuxi Sunshine, and the control or potential to exercise control that such ownership establishes, we preliminarily conclude that Wuxi Sunshine, and thus the Wuxi Suntech Single Entity, does not satisfy the criteria demonstrating an absence of *de facto* government control over export activities.[8] Consequently, we preliminarily determine that the Wuxi Suntech Single Entity is ineligible for a separate rate.

Rate for Separate-Rate Companies Not Individually Examined

The statute and the Department's regulations do not address the establishment of a rate to be applied to individual respondents not selected for examination when the Department limits its examination in an administrative review pursuant to section 777A(c)(2)(B) of the Act. Generally, the Department looks to section 735(c)(5) of the Act, which provides instructions for calculating the all-others rate in an investigation, for guidance when calculating the rate for respondents which we did not examine in an administrative review. Section 735(c)(5)(A) of the Act articulates a preference that we are not to calculate an all-others rate using rates which are zero, *de minimis* or based entirely on facts available. Accordingly, the Department's usual practice has been to average the weighted-average dumping margins for the selected companies, excluding rates that are zero, *de minimis,* or based entirely on facts available.[9] Because we preliminarily determine that the Wuxi Suntech Single Entity is ineligible for a separate rate, the Department assigned to the companies that it did not individually examine, but which demonstrated their eligibility for a separate rate, a margin calculated for mandatory respondent Yingli.

Methodology

The Department conducted this review in accordance with section 751(a)(1)(B) of the Act. The Department calculated export prices and constructed export prices in accordance with section 772 of the Act. Given that the PRC is a NME country, within the meaning of section 771(18) of the Act, the Department calculated NV in accordance with section 773(c) of the Act.

For a full description of the methodology underlying the preliminary results of this review, *see* the Preliminary Decision Memorandum. The Preliminary Decision Memorandum is a public document and is made available to the public *via* ACCESS. In addition, a complete version of the Preliminary Decision Memorandum can be found at *http://enforcement.trade.gov/frn/.* The signed and the electronic versions of the Preliminary Decision Memorandum are identical in content.

Preliminary Results of Review

The Department preliminarily determines that the following weighted-average dumping margins exist for the POR:

Exporter	Weighted-average dumping margin (Percent)
Yingli Energy (China) Company Limited/Baoding Tianwei Yingli New Energy Resources Co., Ltd./Tianjin Yingli New Energy Resources Co., Ltd./Hengshui Yingli New Energy Resources Co., Ltd./Lixian Yingli New Energy Resources Co., Ltd./Baoding Jiasheng Photovoltaic Technology Co., Ltd./Beijing Tianneng Yingli New Energy Resources Co., Ltd./Hainan Yingli New Energy Resources Co., Ltd.	1.82
Canadian Solar International Limited	1.82

[6] On November 20, 2014, Enforcement and Compliance changed the name of the Import Administration AD and CVD Centralized Electronic Service System (''IA ACCESS'') to AD and CVD Centralized Electronic Service System (''ACCESS''). The Web site location was changed from *http://iaaccess.trade.gov* to *http://access.trade.gov. See Enforcement and Compliance; Change of Electronic Filing System Name,* 79 FR 69046 (November 20, 2014).

[7] *See* Wuxi Sunshine's April 4, 2014 Separate-Rate Application at 11. The details regarding Wuxi Sunshine's ownership by the PRC government is business proprietary information and may not be publically disclosed. For further information regarding the Department's separate rate analysis, *see* Memorandum to Abdelali Elouaradia, Director, Office IV, AD/CVD Operations from Drew Jackson, International Trade Analyst, Office IV, AD/CVD Operations, regarding, ''Antidumping Duty Review of Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled into Modules, from the People's Republic of China: Wuxi Suntech Single Entity Separate Rate Analysis,'' dated December 31, 2014 (''Wuxi Suntech Separate Rate Memorandum'').

[8] *Id.*

[9] *See Ball Bearings and Parts Thereof From France, Germany, Italy, Japan, and the United Kingdom: Final Results of Antidumping Duty Administrative Reviews and Rescission of Reviews in Part,* 73 FR 52823, 52824 (September 11. 2008), and accompanying Issues and Decision Memorandum at Comment 16.

Exporter	Weighted-average dumping margin (Percent)
Canadian Solar Manufacturing (Changshu) Inc.	1.82
Canadian Solar Manufacturing (Luoyang) Inc.	1.82
Changzhou Trina Solar Energy Co., Ltd./Trina Solar (Changzhou) Science and Technology Co., Ltd.[10]	1.82
Chint Solar (Zhejiang) Co., Ltd.	1.82
De-Tech Trading Limited HK	1.82
Eoplly New Energy Technology Co., Ltd.	1.82
Hangzhou Zhejiang University Sunny Energy Science and Technology Co., Ltd.	1.82
Jinko Solar Import and Export Co., Ltd.	1.82
LDK Solar Hi-tech (Nanchang) Co., Ltd.	1.82
Ningbo Qixin Solar Electrical Appliance Co., Ltd.	1.82
Renesola Jiangsu Ltd.	1.82
Shanghai BYD Co., Ltd.	1.82
Shenzhen Topray Solar Co. Ltd.	1.82
Sopray Energy Co., Ltd.	1.82
Star Power International Limited	1.82
Sun Earth Solar Power Co., Ltd.	1.82
Yingli Green Energy Holding Company Limited	1.82
Yingli Green Energy International Trading Company Limited	1.82
Zhejiang Sunflower Light Energy Science & Technology Limited Liability Company	1.82
PRC-Wide Entity[11]	[12] 238.56

Disclosure and Public Comment

The Department intends to disclose to parties the calculations performed for these preliminary results of review within five days of the date of publication of this notice in accordance with 19 CFR 351.224(b). Interested parties may submit case briefs no later than 30 days after the date of publication of these preliminary results of review.[13] Rebuttal briefs may be filed no later than five days after case briefs are due and may respond only to arguments raised in the case briefs.[14] A table of contents, list of authorities used, and an executive summary of issues should accompany any briefs submitted to the Department. The summary should be limited to five pages total, including footnotes.

Interested parties who wish to request a hearing must submit a written request to the Assistant Secretary for Enforcement and Compliance, U.S. Department of Commerce, within 30 days after the date of publication of this notice.[15] Requests should contain the party's name, address, and telephone number, the number of participants, and a list of the issues to be discussed. Oral argument presentations will be limited to issues raised in the briefs. If a request for a hearing is made, the Department intends to hold the hearing at the U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230, at a date and time to be determined.[16] Parties should confirm by telephone the date, time, and location of the hearing two days before the scheduled date.

All submissions, with limited exceptions, must be filed electronically using ACCESS.[17] An electronically filed document must be received successfully in its entirety by the Department's electronic records system, ACCESS, by 5 p.m. Eastern Time (''ET'') on the due date. Documents excepted from the electronic submission requirements must be filed manually (*i.e.,* in paper form) with the APO/Dockets Unit in Room 1870 and stamped with the date and time of receipt by 5 p.m. ET on the due date.[18]

Unless otherwise extended, the Department intends to issue the final results of this administrative review, which will include the results of its analysis of issues raised in any briefs, within 120 days of publication of these preliminary results, pursuant to section 751(a)(3)(A) of the Act.

Assessment Rates

Upon issuance of the final results of this review, the Department will determine, and CBP shall assess, antidumping duties on all appropriate entries covered by this review.[19] The Department intends to issue assessment instructions to CBP 15 days after the publication date of the final results of this review. For each individually examined respondent in this review whose weighted-average dumping margin in the final results of review is above *de minimis* (*i.e.*, greater than or equal to 0.5 percent), the Department intends to calculate importer- (or customer)-specific assessment rates, in accordance with 19 CFR 351.212(b)(1).[20] Where the respondent reported reliable

[10] In the investigation in this proceeding, the Department treated Changzhou Trina Solar Energy Co., Ltd. and Trina Solar (Changzhou) Science & Technology Co., Ltd. as a single entity. *See Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled into Modules, from the People's Republic of China: Final Determination of Sales at Less Than Fair Value, and Affirmative Final Determination of Critical Circumstances, in Part,* 77 FR 63791 (October 17, 2012). Absent information to the contrary, the Department has continued to treat these companies as a single entity for purposes of this review.

[11] The PRC-wide entity includes the following companies: (1) Changzhou NESL Solartech Co., Ltd.; (2) CSG PVTech Co., Ltd. (3) Era Solar Co., Ltd.; (4) Innovosolar; (5) Jiangsu Sunlink PV Technology Co., Ltd.; (6) Jiawei Solarchina Co., Ltd.; (7) Jinko Solar Co., Ltd.; (8) LDK Solar Hi-tech (Suzhou) Co., Ltd.; (9) Leye Photovoltaic Co., Ltd.; (10) Magi Solar Technology; (11) Ningbo ETDZ Holdings, Ltd.; (12) ReneSola; (13) Shanghai Machinery Complete Equipment (Group) Corp., Ltd.; (14) Shenglong PV-Tech; (15) Solarbest Energy-Tech (Zhejiang) Co., Ltd.; (16) Suzhou Shenglong PV–TECH Co., Ltd.; (17) Zhejiang Shuqimeng Photovoltaic Technology Co., Ltd.; (18) Zhejiang Xinshun Guangfu Science and Technology Co., Ltd.; (19) Zhejiang ZG-Cells Co., Ltd.; (20) Zhiheng Solar Inc.; (21) Wuxi Suntech Power Co., Ltd./Luoyang Suntech Power Co., Ltd./Suntech Power Co., Ltd./Wuxi Sunshine Power Co. Ltd. In addition, the PRC-wide entity includes the companies listed in Appendix II of the notice *Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled Into Modules From the People's Republic of China: Amended Partial Rescission of Antidumping Duty Administrative Review,* 79 FR 43713 (July 28, 2014).

[12] This PRC-wide entity rate equals the PRC-wide entity rate of 249.96% adjusted for export subsidies and estimated domestic subsidy pass-through.

[13] *See* 19 CFR 351.309(c)(ii).

[14] *See* 19 CFR 351.309(d).

[15] *See* 19 CFR 351.310(c).

[16] *See* 19 CFR 351.310(d).

[17] *See generally* 19 CFR 351.303.

[18] *See Antidumping and Countervailing Duty Proceedings: Electronic Filing Procedures; Administrative Protective Order Procedures,* 76 FR 39263 (July 6, 2011).

[19] *See* 19 CFR 351.212(b)(1).

[20] *See Antidumping Proceedings: Calculation of the Weighted Average Dumping Margin and Assessment Rate in Certain Antidumping Proceedings: Final Modification,* 77 FR 8101 (February 14, 2012) (''*Final Modification*'').

entered values, the Department intends to calculate importer- (or customer)-specific *ad valorem* rates by aggregating the dumping margins calculated for all U.S. sales to the importer- (or customer) and dividing this amount by the total entered value of the sales to the importer- (or customer).[21] Where the Department calculates an importer- (or customer)-specific weighted-average dumping margin by dividing the total amount of dumping for reviewed sales to the importer- (or customer) by the total sales quantity associated with those transactions, the Department will direct CBP to assess importer- (or customer)-specific assessment rates based on the resulting per-unit rates.[22] Where an importer- (or customer)-specific ad valorem or per-unit rate is greater than *de minimis*, the Department will instruct CBP to collect the appropriate duties at the time of liquidation. Where either the respondent's weighted average dumping margin is zero or *de minimis*, or an importer (or customer-) specific *ad valorem* or per-unit rate is zero or *de minimis*, the Department will instruct CBP to liquidate appropriate entries without regard to antidumping duties.[23]

On October 24, 2011, the Department announced a refinement to its assessment practice in NME antidumping duty cases.[24] Pursuant to this refinement in practice, for entries that were not reported in the U.S. sales database submitted by an exporter individually examined during this review, the Department will instruct CBP to liquidate such entries at the PRC-wide rate. Additionally, pursuant to this refinement, if the Department determines that an exporter under review had no shipments of the subject merchandise, any suspended entries that entered under that exporter's case number will be liquidated at the PRC-wide rate.

In accordance with section 751(a)(2)(C) of the Act, the final results of this review shall be the basis for the assessment of antidumping duties on entries of merchandise covered by the final results of this review and for future deposits of estimated duties, where applicable.

Cash Deposit Requirements

The Department will instruct CBP to require a cash deposit equal to the weighted-average amount by which the normal value exceeds U.S. price. The following cash deposit requirements will be effective upon publication of the final results of this administrative review for shipments of the subject merchandise from the PRC entered, or withdrawn from warehouse, for consumption on or after the publication date of this notice, as provided by section 751(a)(2)(C) of the Act: (1) For the exporters listed above, the cash deposit rate will be equal to the weighted-average dumping margin established in the final results of this review (except, if the rate is zero or *de minimis*, then the cash deposit rate will be zero for that exporter); (2) for previously investigated or reviewed PRC and non-PRC exporters not listed above that have separate rates, the cash deposit rate will continue to be the exporter-specific rate published for the most recently completed segment of this proceeding; (3) for all PRC exporters of subject merchandise which have not been found to be entitled to a separate rate, the cash deposit rate will be the rate for the PRC-wide entity and (4) for all non-PRC exporters of subject merchandise that have not received their own rate, the cash deposit rate will be the rate applicable to the PRC exporter that supplied that non-PRC exporter. These deposit requirements, when imposed, shall remain in effect until further notice.

Notification to Importers

This notice also serves as a preliminary 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 POR. Failure to comply with this requirement could result in the Department's presumption that reimbursement of antidumping duties occurred and the subsequent assessment of double antidumping duties.

We are issuing and publishing these results in accordance with sections 751(a)(1) and 777(i)(1) of the Act and 19 CFR 351.213.

Dated: December 31, 2014.

Paul Piquado,

Assistant Secretary for Enforcement and Compliance.

Appendix—List of Topics Discussed in the Preliminary Decision Memorandum

1. Summary
2. Background
3. Scope of the Order
4. Preliminary Determination of No Shipments
5. Selection of Respondents
6. Single Entity Treatment
7. Discussion of the Methodology
   a. NME Country
   b. Separate Rates
   c. The PRC-wide Entity
   d. Use of Facts Available and AFA
   e. Surrogate Country
   f. Date of Sale
   g. Fair Value Comparisons
   h. U.S. Price
   i. Normal Value
   j. Section 777A(f) of the Act
   k. Currency Conversion
8. Conclusion

[FR Doc. 2015–00098 Filed 1–7–15; 8:45 am]

BILLING CODE 3510–DS–P

[21] *See* 19 CFR 351.212(b)(1).

[22] *Id.*

[23] *See Final Modification* at 8103.

[24] *See Non-Market Economy Antidumping Proceedings: Assessment of Antidumping Duties,* 76 FR 65694 (October 24, 2011), for a full discussion of this practice.

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–875]

Non-Malleable Cast Iron Pipe Fittings From the People's Republic of China: Preliminary Results of Antidumping Administrative Review; 2013–2014

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: The Department of Commerce (''Department'') is conducting an administrative review of the antidumping duty order on non-malleable cast iron pipe fittings (''NMPF'') from the People's Republic of China (''PRC'') for the period of review (''POR'') April 1, 2013, through March 31, 2014. This review covers one PRC company, Overseas Industrial Corporation (''OIC'').[1] The Department preliminarily finds that OIC is part of the PRC-wide entity. Interested parties are invited to comment on these preliminary results.

DATES: *Effective Date:* January 8, 2015.

FOR FURTHER INFORMATION CONTACT: Karine Gziryan, AD/CVD Operations, Office IV, Enforcement & Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–4081.

SUPPLEMENTARY INFORMATION:

Scope of the Order

The products covered by the order are finished and unfinished non-malleable cast iron pipe fittings with an inside diameter ranging from 1/4 inch to 6 inches, whether threaded or unthreaded, regardless of industry or proprietary specifications. For a full description of the scope of the order, *see* Preliminary Results Decision

[1] *See Initiation of Antidumping and Countervailing Duty Administrative Reviews,* 79 FR 30809 (May 29, 2014).

Memorandum from Gary Taverman, Associate Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations to Paul Piquado, Assistant Secretary for Enforcement and Compliance, dated concurrently with these results and hereby adopted by this notice (''Preliminary Decision Memorandum'').

Methodology

The Department conducted this review in accordance with section 751(a)(1)(B) of the Tariff Act of 1930, as amended (''the Act''). For a full description of the methodology underlying our conclusions, *see* the Preliminary Decision Memorandum. The list of topics discussed in the Preliminary Decision Memorandum is provided as an Appendix to the notice. This memorandum is a public document and is on file electronically via Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System (''ACCESS'').[2] ACCESS is available to registered users at *http://access.trade.gov* and in the Central Records Unit, room 7046 of the main Department of Commerce building. In addition, a complete version of the Preliminary Decision Memorandum can be accessed directly on the Internet at *http://www.trade.gov/enforcement/*. The signed Preliminary Decision Memorandum and the electronic versions of the Preliminary Decision Memorandum are identical in content.

Preliminary Results of Review

Because OIC has not demonstrated its eligibility for a separate rate, we preliminarily find it to be part of the PRC-wide entity[3] and subject for the rate previously established for the PRC-wide entity, *i.e.,* 75.50 percent.[4]

Disclosure and Public Comment

Interested parties are invited to comment on the preliminary results and may submit case briefs and/or written comments, filed electronically using ACCESS, within 30 days of the date of publication of this notice, pursuant to 19 CFR 351.309(c)(ii). Rebuttal briefs, limited to issues raised in the case briefs, will be due five days after the due date for case briefs, pursuant to 19 CFR 351.309(d). Parties who submit case or rebuttal briefs in this proceeding are requested to submit with each argument a statement of the issue, a summary of the argument not to exceed five pages, and a table of statutes, regulations, and cases cited, in accordance with 19 CFR 351.309(c)(2).

Pursuant to 19 CFR 351.310(c), interested parties, who wish to request a hearing, or to participate in a hearing if one is requested, must submit a written request to the Assistant Secretary for Enforcement and Compliance, U.S. Department of Commerce, filed electronically using ACCESS. Electronically filed case briefs/written comments and hearing requests must be received successfully in their entirety by the Department's electronic records system, ACCESS, by 5:00 p.m. Eastern Standard Time, within 30 days after the date of publication of this notice.[5] Hearing requests should contain: (1) The party's name, address and telephone number; (2) the number of participants; and (3) a list of issues to be discussed. Issues raised in the hearing will be limited to those issues raised in the respective case briefs. If a request for a hearing is made, parties will be notified of the time and date of the hearing which will be held at the U.S. Department of Commerce, 1401 Constitution Avenue NW., Washington DC 20230. The Department intends to issue the final results of this administrative review, including the results of its analysis of the issues raised in any written briefs, not later than 120 days after the date of publication of this notice, pursuant to section 751(a)(3)(A) of the Act.

Assessment Rates

Upon issuance of the final results, the Department will determine, and U.S. Customs and Border Protection (''CBP'') shall assess, antidumping duties on all appropriate entries covered by this review.[6] The Department intends to issue assessment instructions to CBP 15 days after the publication date of the final results of this review. The Department intends to instruct CBP to liquidate entries of subject merchandise from Overseas Industrial Corporation at 75.50 percent (the rate previously determined for the PRC-wide entity).

The Department announced a refinement to its assessment practice in NME antidumping duty cases. Pursuant to this refinement in practice, for merchandise that was not reported in the U.S. sales databases submitted by an exporter individually examined during this review, but that entered under the case number of that exporter (*i.e.,* at the individually-examined exporter's cash deposit rate), the Department will instruct CBP to liquidate such entries at the PRC-wide rate. Additionally, pursuant to this refinement, if the Department determines that an exporter under review had no shipments of the subject merchandise, any suspended entries that entered under that exporter's case number will be liquidated at the PRC-wide rate.[7]

Cash Deposit Requirements

The following cash deposit requirements will be effective upon publication of the final results of this administrative review for all shipments of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the publication date of the final results of review, as provided by section 751(a)(2)(C) of the Act: (1) For previously investigated or reviewed PRC and non-PRC exporters which are not under review in this segment of the proceeding but which have separate rates, the cash deposit rate will continue to be the exporter-specific rate published for the most recent period; (2) for all PRC exporters of subject merchandise that have not been found to be entitled to a separate rate, including Overseas Industrial Corporation, the cash deposit rate will be the PRC-wide rate of 75.50 percent; and (3) for all non-PRC exporters of subject merchandise which have not received their own rate, the cash deposit rate will be the rate applicable to the PRC exporter(s) that supplied that non-PRC exporter. These deposit requirements, when imposed, shall remain in effect until further notice.

[2] On November 24, 2014, Enforcement and Compliance changed the name of Enforcement and Compliance's AD and CVD Centralized Electronic Service System (''IA ACCESS'') to AD and CVD Centralized Electronic Service System (''ACCESS''). The Web site location was changed from *http://iaaccess.trade.gov* to *http://access.trade.gov*. The Final Rule changing the references to the Regulations can be found at 79 FR 69046 (November 20, 2014).

[3] *See* Preliminary Decision Memorandum. Pursuant to the Department's change in practice, the Department no longer considers the non-market economy entity as an exporter conditionally subject to administrative reviews. *See Antidumping Proceedings: Announcement of Change in Department Practice for Respondent Selection in Antidumping Duty Proceedings and Conditional Review of the Nonmarket Economy Entity in NME Antidumping Duty Proceedings,* 78 FR 65963, 65970 (November 4, 2013). Under this practice, the non-market economy entity will not be under review unless a party specifically requests, or the Department self-initiates, a review of the entity. Because no party requested a review of the entity, the entity is not under review and the entity's rate is not subject to change.

[4] *See Notice of Antidumping Duty Order: Non-Malleable Cast Iron Pipe Filings (Sic.) From the People's Republic of China,* 68 FR 16765 (April 7, 2003).

[5] *See* 19 CFR 351.310(c).

[6] *See* 19 CFR 351.212(b)(1).

[7] *See Non-Market Economy Antidumping Proceedings: Assessment of Antidumping Duties,* 76 FR 65694 (October 24, 2011), for a full discussion of this practice.

Notification to Importers

This notice also serves as a preliminary 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 Department's presumption that reimbursement of antidumping duties occurred and the subsequent assessment of double antidumping duties.

We are issuing and publishing these results in accordance with sections 751(a)(1) and 777(i)(1) of the Act and 19 CFR 351.213.

Dated: December 30, 2015.

Paul Piquado,

Assistant Secretary for Enforcement and Compliance.

Appendix

List of Topics Discussed in the Preliminary Results Decision Memorandum

Summary
Background
Scope of the Order
Discussion of the Methodology
Separate Rates
Recommendation

[FR Doc. 2015–00112 Filed 1–7–15; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[File No. 18662]

RIN 0648–XD694

Marine Mammals

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

ACTION: Notice; receipt of application.

SUMMARY: Notice is hereby given that Allyson Hindle, Assistant Professor of Anesthesia, Massachusetts General Hospital, 55 Fruit Street, Thier 503, Boston, MA 02114, has applied in due form for a permit to receive, import, and export specimens of marine mammals for scientific research purposes.

DATES: Written, telefaxed, or email comments must be received on or before February 9, 2015.

ADDRESSES: The application and related documents are available for review by selecting ''Records Open for Public Comment'' from the *Features* box on the Applications and Permits for Protected Species (APPS) home page, *https://apps.nmfs.noaa.gov,* and then selecting File No. 18662 from the list of available applications.

These documents are also available upon written request or by appointment in the Permits and Conservation Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910; phone (301) 427–8401; fax (301) 713–0376.

Written comments on this application should be submitted to the Chief, Permits and Conservation Division, at the address listed above. Comments may also be submitted by facsimile to (301) 713–0376, or by email to *NMFS.Pr1Comments@noaa.gov*. Please include the File No. 18662 in the subject line of the email comment.

Those individuals requesting a public hearing should submit a written request to the Chief, Permits and Conservation Division at the address listed above. The request should set forth the specific reasons why a hearing on this application would be appropriate.

FOR FURTHER INFORMATION CONTACT: Rosa L. González or Amy Sloan, (301) 427–8401.

SUPPLEMENTARY INFORMATION: The subject permit is requested under the authority of the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1361 *et seq.*), the regulations governing the taking and importing of marine mammals (50 CFR part 216), the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*), the regulations governing the taking, importing, and exporting of endangered and threatened species (50 CFR 222–226), and the Fur Seal Act of 1966, as amended (16 U.S.C. 1151 *et seq.*).

The applicant proposes to receive, import, and export tissue and other specimen materials (*e.g.,* body fluids) for comparative research on the physiology and other biological aspects of marine mammals. Unlimited samples from up to 200 individual cetaceans and 200 individual pinnipeds (excluding walrus) are requested to be received, imported, or exported annually on an opportunistic basis. Marine mammal samples will be collected by others under separate existing permits and may be obtained from the following sources: (1) Animals killed during legal subsistence harvests in the U.S. and abroad; (2) animals that died incidental to legal commercial fishing operations in the U.S. and in foreign countries (*i.e.,* bycatch); (3) animals stranded alive or dead in foreign countries; (4) samples collected from captive animals, including live animals and those that die in captivity, where such samples were taken as a result of routine husbandry/medical procedures/examination or under separate permit or authorization in the U.S. and abroad; and (5) samples from other permitted research in the U.S. and abroad. Samples collected from stranded animals in the U.S. and received under separate authorization may be exported and re-imported. No takes of live animals is requested or would be permitted. The applicant has requested a 5-year permit.

In compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), an initial determination has been made that the activity proposed is categorically excluded from the requirement to prepare an environmental assessment or environmental impact statement.

Concurrent with the publication of this notice in the **Federal Register**, NMFS is forwarding copies of the application to the Marine Mammal Commission and its Committee of Scientific Advisors.

Dated: December 29, 2014.

Julia Harrison,

Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 2015–00072 Filed 1–7–15; 8:45 am]

BILLING CODE 3510–22–P

BUREAU OF CONSUMER FINANCIAL PROTECTION

[Docket No: CFPB–2014–0037]

Agency Information Collection Activities: Submission for OMB Review; Comment Request

AGENCY: Bureau of Consumer Financial Protection.

ACTION: Notice and request for comment.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (PRA), the Consumer Financial Protection Bureau (Bureau) is proposing a new information collection titled, ''Bridges to Financial Security: A Multi-site Demonstration Project.''

DATES: Written comments are encouraged and must be received on or before February 9, 2015 to be assured of consideration.

ADDRESSES: You may submit comments, identified by the title of the information collection, OMB Control Number (see below), and docket number (see above), by any of the following methods:

- *Electronic: http://www.regulations.gov*. Follow the instructions for submitting comments.

• *OMB:* Office of Management and Budget, New Executive Office Building, Room 10235, Washington, DC 20503 or fax to (202) 395–5806. Mailed or faxed comments to OMB should be to the attention of the OMB Desk Officer for the Bureau of Consumer Financial Protection. *Please note that comments submitted after the comment period will not be accepted.* In general, all comments received will become public records, including any personal information provided. Sensitive personal information, such as account numbers or social security numbers, should not be included.

FOR FURTHER INFORMATION CONTACT: Documentation prepared in support of this information collection request is available at *www.reginfo.gov* (this link active on the day following publication of this notice). Select ''information Collection Review,'' under ''Currently under review, use the dropdown menu ''Select Agency'' and select ''Consumer Financial Protection Bureau'' (recent submissions to OMB will be at the top of the list). The same documentation is also available at *http://www.regulations.gov.* Requests for additional information should be directed to the Consumer Financial Protection Bureau, (Attention: PRA Office), 1700 G Street NW., Washington, DC 20552, (202) 435–9575, or email: *PRA@cfpb.gov. Please do not submit comments to this email box.*

SUPPLEMENTARY INFORMATION:

Title of Collection: Bridges to Financial Security: A Multi-site Demonstration Project.

OMB Control Number: 3170–XXXX.

Type of Review: New collection (Request for a new OMB control number).

Affected Public: Individuals or households.

Estimated Number of Respondents: 15,120.

Estimated Total Annual Burden Hours: 42,488.

Abstract: The Consumer Financial Protect Bureau (CFPB), beginning in the winter of 2015, will launch a multi-site financial education demonstration project to provide one-on-one and group financial counseling/coaching services to individuals with disabilities transitioning into the workplace or already employed. The goal is twofold: (1) To improve the financial skills of approximately 15,000 individuals across the spectrum of disability to effectively navigate the financial marketplace, resulting in improved credit, reduced debt, and increased savings; and (2) to build the capacity of diverse multi-sector systems (non-disability and disability) in up to 14 cities to unite around the common purpose of building financial security for individuals with disabilities. CFPB envisions the need to collect a combination of client personally identifiable information (PII), including direct-identifying PII (*i.e.*, basic contact and demographic information), performance metrics (outputs), as well as other relevant organization-level outcomes. Monthly qualitative reports and quantitative aggregated individual data will be collected from participating sites to document the design, growth and impact of up to 14 integrated diverse delivery models serving primarily low-income populations with disabilities.

Request for Comments: The Bureau issued a 60-day **Federal Register** notice on October 17, 2014, 79 FR 62420. Comments were solicited and continue to be invited on: (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 utility; (b) The accuracy of the Bureau's estimate of the burden of the collection of information, including the validity of the methods and the 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 respondents, including through the use of automated collection techniques or other forms of information technology. Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget (OMB) approval. All comments will become a matter of public record.

Dated: December 23, 2014.

Ashwin Vasan,

Chief Information Officer, Bureau of Consumer Financial Protection.

[FR Doc. 2015–00104 Filed 1–7–15; 8:45 am]

BILLING CODE 4810–AM–P

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

Revised Notice of Intent and Scoping Meeting for Loxahatchee River Watershed Restoration Project (Formerly Called North Palm Beach County Part 1) Associated With Prior Notice of Intent To Develop a Draft Environmental Impact Statement Issued October 16th, 2002

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DoD.

ACTION: Revised notice of intent.

SUMMARY: The U.S. Army Corps of Engineers (Corps) Jacksonville District intends to prepare a National Environmental Policy Act (NEPA) assessment to restore and sustain the overall quantity, quality, timing, and distribution of freshwaters to the federally designated ''National Wild and Scenic'' Northwest Fork of the Loxahatchee River for current and future generations in Martin and Palm Beach Counties of Florida.

FOR FURTHER INFORMATION CONTACT: Mr. Andrew J. LoSchiavo, U.S. Army Corps of Engineers, Planning Division, Environmental Branch, P.O. Box 4970, Jacksonville, FL 32232–0019, by email *Andrew.J.LoSchiavo@usace.army.mil,* or by telephone at 904–232–2077.

SUPPLEMENTARY INFORMATION:

a. *Project Background and Authorization.* This notice is in regards to a re-scoping of a Comprehensive Everglades Restoration Plan (CERP) feasibility study originally entitled North Palm Beach County Part 1 and renamed the Loxahatchee River Watershed Restoration Project (LRWRP). The LRWRP contains several of the 68 restoration project components envisioned as part of the Comprehensive Everglades Restoration Plan authorized by the U.S. Congress in section 601 of the 2000 Water Resources Development Act. The LRWRP Project Delivery Team (PDT) identified a Tentatively Selected Plan (TSP) in August 2010. Prior to the approval of the TSP, a select component of the plan was repurposed to accomplish specific state water quality objectives and it was determined this component would not be available to achieve water quantity, timing, and distribution goals of the project. This resulted in the need to rescope project objectives and identify additional alternatives through the U.S. Army Corps of Engineers (Corps) SMART Planning process. This study will use the best available science to develop an array of project alternatives and select a recommended plan to achieve restoration within the Loxahatchee River Watershed and provide restoration flows to the Loxahatchee River Northwest Fork and estuary.

b. *Need or Purpose.* This NEPA Assessment will evaluate the potential benefits and impacts of restoring and sustaining the overall quantity, quality, timing, and distribution of freshwaters to the federally designated ''National Wild and Scenic'' Northwest Fork of the Loxahatchee River for current and future generations. This project also seeks to restore, sustain, and reconnect

the area's wetlands and watersheds that form the historic headwaters for the river. These areas include Jonathan Dickinson State Park, Pal Mar East/Cypress Creek, Dupuis Wildlife and Environmental Management Areas, J.W. Corbett Wildlife Management Area, Grassy Waters Preserve, Loxahatchee Slough, the last remaining riverine cypress stands in Southeast Florida in the Loxahatchee River, and the Loxahatchee River Estuary.

c. *Proposed Solution and Forecast Completion Date.* The LRWRP seeks to address these goals by developing alternatives that will capture, store, and redistribute water currently lost to tide; rehydrate headwater natural areas that have been hydrologically impacted by excessive draining and water diversions; reduce peak discharges to the project's estuarine systems; improve timing and distribution of water from the upstream watershed to increase the resiliency of freshwater riverine habitats to future sea-level changes; and reestablish connections among natural areas. If implemented, these actions will help restore more natural water deliveries, promote improved health and functionality of wetland and upland areas, and increase the quantity and quality of habitat available for native wildlife and vegetation.

d. *Prior EAs, EISs.* An EIS was prepared in 1999 associated with the Comprehensive Everglades Restoration Plan that proposed 68 project component modifications of the Central and Southern Florida Project.

e. Alternatives. A reevaluation of alternatives that include the following management measures will be pursued—

1. Spreader Canals, Flowways—Shallow canals to distribute and improve water delivery and connectivity of flow.

2. Spill Ways, Weirs, and Gravity Structures—to deliver allow water to move as specific depths.

3. Pump Stations—New Pump Stations to distribute and improve water delivery.

4. Backfill or plugging of canals—Internal drainage and routing features in the system would be plugged, partially or completely backfilled to improve surface water distribution and eliminate drainage.

5. Removal of levees and berms—Levees or berms would be degraded or removed to allow water to sheetflow freely.

6. Bridges and Culverts—Structures to be used to allow water flows through existing barriers in the systems.

7. Storage Features—Shallow, intermediate and deep water reservoirs, flow equalization basins and aquifer storage and recovery for capturing, holding and delivering both normal and peak flows and discharging when water required.

8. Operational Changes—Adjustments to operational criteria to improve timing and distribution of flow.

9. Non-Structural Solutions—Management measures that can address project goals and objectives without physical structural modifications to the managed/natural system. For example, leasing and/or purchasing land acquisition rights to maintain undeveloped natural areas adaptation zones above high tide to promote ecosystem adaptations to climate change.

Alternatives will also include the No Action alternative.

f. *Issues.* The effects on Federally listed threatened and endangered species, essential fish habitat, cultural resources, water supply, and flood damage risk reduction will be analyzed. Additionally, health and safety, water quality, aesthetics and recreation, fish and wildlife resources, energy conservation, socio-economic resources, and other impacts identified through scoping, public involvement, and interagency coordination will be discussed.

g. *Scoping Process.* A scoping meeting is scheduled for 12-Jan-2014 from 6:00–8:00 p.m. at: Indian River State College, Chastain Campus, 2400 Southeast Salerno Road, Stuart, FL 34997. The public will be involved in the planning process through mail solicitations and public notices listed on the following Web site—*http://www.saj.usace.army.mil/Missions/Environmental/EcosystemRestoration/LoxahatcheeRiverWatershedRestorationProject.aspx.*

h. *Public Involvement.* We invite the participation of affected Federal, state and local agencies, Tribes, and other interested private organizations and parties.

i. *Coordination.* The proposed action is being coordinated with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (NMFS) under section 7 of the Endangered Species Act, with the NMFS concerning Essential Fish Habitat and with the State Historic Preservation Officer.

j. *Other Environmental Review and Consultation.* The proposed action would involve evaluation for compliance with guidelines pursuant to section 404(b) of the Clean Water Act; application (to the State of Florida) for Water Quality Certification pursuant to section 401 of the Clean Water Act; certification of state lands, easements, and rights of way; and determination of Coastal Zone Management Act consistency.

k. *Agency Role.* The Corps and the non-Federal sponsor, South Florida Water Management District, will provide extensive information and assistance on the resources to be improved and those that would be impacted, mitigation measures, and alternatives.

l. *NEPA Assessment Preparation.* It is estimated that the NEPA Assessment will be available to the public on or about August 2016.

Dated: December 23, 2014.

Eric L. Bush,

Chief, Planning Division.

[FR Doc. 2015–00085 Filed 1–7–15; 8:45 am]

BILLING CODE 3720–58–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPP–2014–0479; FRL–9916–07]

Agency Information Collection Activities; Proposed Collection; Comment Request Reporting in the FIFRA Cooperative Agreement Work Plan and Report Template OMB Control No. 2070–NEW

Correction

In notice document 2014–30685 appearing on pages 40 through 41 in the issue of Friday, January 2, 2015, make the following correction:

1. On page 40, in the third column, in the **DATES** section, ''March 3, 2014'' should read ''March 3, 2015''

[FR Doc. C1–2014–30685 Filed 1–7–15; 8:45 am]

BILLING CODE 1501–01–D

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

Sunshine Act Meeting

AGENCY: Equal Employment Opportunity Commission.

DATE AND TIME: Wednesday, January 14, 2015, 9:30 a.m. Eastern Time.

PLACE: Commission Meeting Room on the First Floor of the EEOC Office Building, 131 ''M'' Street NE., Washington, DC 20507.

STATUS: The meeting will be open to the public.

MATTERS TO BE CONSIDERED:

Open Session

1. Announcement of Notation Votes, and
2. Preventing and Addressing Workplace Harassment.

Note: In accordance with the Sunshine Act, the meeting will be open to public observation of the Commission's deliberations and voting. Seating is limited and it is suggested that visitors arrive 30 minutes before the meeting in order to be processed through security and escorted to the meeting room. (In addition to publishing notices on EEOC Commission meetings in the **Federal Register**, the Commission also provides information about Commission meetings on its Web site, eeoc.gov., and provides a recorded announcement a week in advance on future Commission sessions.)

Please telephone (202) 663–7100 (voice) and (202) 663–4074 (TTY) at any time for information on these meetings. The EEOC provides sign language interpretation and Communication Access Realtime Translation (CART) services at Commission meetings for the hearing impaired. Requests for other reasonable accommodations may be made by using the voice and TTY numbers listed above.

CONTACT PERSON FOR MORE INFORMATION: Bernadette B. Wilson, Acting Executive Officer on (202) 663–4077.

Dated: January 5, 2015.

Bernadette B. Wilson,

Acting Executive Officer, Executive Secretariat.

[FR Doc. 2015–00202 Filed 1–6–15; 4:15 pm]

BILLING CODE 6570–01–P

FEDERAL ELECTION COMMISSION

Sunshine Act Meeting

AGENCY: Federal Election Commission.

DATE AND TIME: Tuesday January 13, 2015 at 10:00 a.m. and Its Continuation on Thursday January 15, 2015 at the Conclusion of the Open Meeting.

PLACE: 999 E Street NW., Washington, DC.

STATUS: This meeting will be closed to the public.

ITEMS TO BE DISCUSSED: Compliance matters pursuant to 2 U.S.C. 437g. Internal personnel rules and internal rules and practices. Matters concerning participation in civil actions or proceedings or arbitration.

* * * * *

PERSON TO CONTACT FOR INFORMATION: Judith Ingram, Press Officer, Telephone: (202) 694–1220.

Shelley E. Garr,

Deputy Secretary of the Commission.

[FR Doc. 2015–00173 Filed 1–6–15; 4:15 pm]

BILLING CODE 6715–01–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 January 23, 2015.

A. Federal Reserve Bank of Minneapolis (Jacquelyn K. Brunmeier, Assistant Vice President) 90 Hennepin Avenue, Minneapolis, Minnesota 55480–0291:

1. *Toby R. Kommer,* Fargo, North Dakota; to acquire voting shares of Hatton Bancshares, Inc., Fargo, North Dakota, and thereby indirectly acquire voting shares of The Farmers and Merchants National Bank of Hatton, Hatton, North Dakota.

Board of Governors of the Federal Reserve System, January 5, 2015.

Michael J. Lewandowski,

Associate Secretary of the Board.

[FR Doc. 2015–00064 Filed 1–7–15; 8:45 am]

BILLING CODE 6210–01–P

FEDERAL RESERVE SYSTEM

Notice of Proposals To Engage in or To Acquire Companies Engaged in Permissible Nonbanking Activities; Correction

This notice corrects a notice (FR Doc. 2014–30815) published on pages 226 and 227 of the issue for Monday, January 5, 2015.

Under the Federal Reserve Bank of Boston heading, the entry for New Hampshire Mutual Bancorp, Manchester, New Hampshire, is revised to read as follows:

A. Federal Reserve Bank of Boston (Richard Walker, Community Affairs Officer) 600 Atlantic Avenue, Boston, Massachusetts 02210–2204:

1. *New Hampshire Mutual Bancorp,* Manchester, New Hampshire; to establish MillRiver Trust Company, and transfer the existing trust business from New Hampshire Mutual Bancorp's subsidiary bank, Merrimack County Savings Bank, both in Concord, New Hampshire, to MillRiver Trust Company, pursuant to sections 225.28(b)(5), (b)(6), (b)(6)(ii), (b)(6)(v), (b)(6)(vi), (b)(7)(i), (b)(7)(ii) and (b)(11)(iii)(A).

Board of Governors of the Federal Reserve System, December 30, 2014.

Comments on this application must be received by January 20, 2015.

Board of Governors of the Federal Reserve System, January 5 2015.

Michael J. Lewandowski,

Associate Secretary of the Board.

[FR Doc. 2015–00065 Filed 1–7–15; 8:45 am]

BILLING CODE 6210–01–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; PAR14–272: Long-Term Outcomes of Medically Assisted Reproduction.

Date: February 3, 2015.

Time: 12 p.m. to 3 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: Clara M Cheng, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6170 MSC 7892, Bethesda, MD 20817, 301–435–1041, *chengc@csr.nih.gov.*

Name of Committee: Musculoskeletal, Oral and Skin Sciences Integrated Review Group; Skeletal Biology Development and Disease Study Section.

Date: February 5–6, 2015.

Time: 8 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: Marriott Courtyard Gaithersburg Washingtonian Ctr, 204 Boardwalk Place, Gaithersburg, MD 20878.

Contact Person: Aruna K Behera, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4211, MSC 7814, Bethesda, MD 20892, 301–435–6809, *beheraak@csr.nih.gov.*

Name of Committee: Digestive, Kidney and Urological Systems Integrated Review Group; Kidney Molecular Biology and Genitourinary Organ Development.

Date: February 6, 2015.

Time: 8 a.m. to 6 p.m.

Agenda: To review and evaluate grant applications.

Place: Crowne Plaza Washington National Airport, 1489 Jefferson Davis Highway, Arlington, VA 22202.

Contact Person: Ryan G Morris, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4205, MSC 7814, Bethesda, MD 20892, 301–435–1501, *morrisr@csr.nih.gov.*

Name of Committee: Integrative, Functional and Cognitive Neuroscience Integrated Review Group; Sensorimotor Integration Study Section.

Date: February 6, 2015.

Time: 8 a.m. to 6 p.m.

Agenda: To review and evaluate grant applications.

Place: JW Marriott New Orleans, 614 Canal Street, New Orleans, LA 70130.

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; Bioinformatics in Surgical Sciences, Imaging and Independent Living.

Date: February 6, 2015.

Time: 8 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892.

Contact Person: Guo Feng Xu, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5122, MSC 7854, Bethesda, MD 20892, 301–237–9870, *xuguofen@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel; PAR 13–345: Pediatric Drug Formulation and Delivery.

Date: February 6, 2015.

Time: 11 a.m. to 1 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: Yuan Luo, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5207, MSC 7846, Bethesda, MD 20892, 301–915–6303, *luoy2@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: December 31, 2014.

Michelle Trout,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–00041 Filed 1–7–15; 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, Bioengineering Research Partnerships (BRP): PAR14–092.

Date: January 29, 2015.

Time: 11:45 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: Mehrdad Mohseni, MD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5211, MSC 7854, Bethesda, MD 20892, 301–435–0484, *mohsenim@csr.nih.gov.*

Name of Committee: Oncology 2—Translational Clinical Integrated Review Group, Cancer Biomarkers Study Section.

Date: February 2–3, 2015.

Time: 8 a.m. to 6 p.m.

Agenda: To review and evaluate grant applications.

Place: Hilton Long Beach and Executive Center, 701 West Ocean Boulevard, Long Beach, CA 90831.

Contact Person: Lawrence Ka-Yun Ng, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6152, MSC 7804, Bethesda, MD 20892, 301–357–9318, *ngkl@csr.nih.gov.*

Name of Committee: Biological Chemistry and Macromolecular Biophysics Integrated Review Group, Biochemistry and Biophysics of Membranes Study Section.

Date: February 5–6, 2015.

Time: 8 a.m. to 5 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: Nuria E Assa-Munt, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4164, MSC 7806, Bethesda, MD 20892, (301) 451–1323, *assamunu@csr.nih.gov.*

Name of Committee: Digestive, Kidney and Urological Systems Integrated Review Group, Hepatobiliary Pathophysiology Study Section.

Date: February 9–10, 2015.

Time: 8 a.m. to 3 p.m.

Agenda: To review and evaluate grant applications.

Place: Doubletree Hotel Bethesda, (Formerly Holiday Inn Select), 8120 Wisconsin Avenue, Bethesda, MD 20814.

Contact Person: Bonnie L Burgess-Beusse, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 2182, MSC 7818, Bethesda, MD 20892, 301–435–1783, *beusseb@mail.nih.gov.*

Name of Committee: Brain Disorders and Clinical Neuroscience Integrated Review Group, Brain Injury and Neurovascular Pathologies Study Section.

Date: February 9–10, 2015.

Time: 8 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: Residence Inn Bethesda, 7335 Wisconsin Avenue, Bethesda, MD 20814.

Contact Person: Alexander Yakovlev, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5206, MSC 7846, Bethesda, MD 20892, 301–435–1254, *yakovleva@csr.nih.gov.*

Name of Committee: Cell Biology Integrated Review Group, Molecular and Integrative Signal Transduction Study Section.

Date: February 9–10, 2015.

Time: 8 a.m. to 6 p.m.

Agenda: To review and evaluate grant applications.

Place: Embassy Suites at the Chevy Chase Pavilion, 4300 Military Road, NW., Washington, DC 20015.

Contact Person: Raya Mandler, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5134, MSC 7840, Bethesda, MD 20892, (301) 402–8228, *rayam@csr.nih.gov.*

Name of Committee: Vascular and Hematology Integrated Review Group, Molecular and Cellular Hematology Study Section.

Date: February 9–10, 2015.

Time: 8 a.m. to 7 p.m.

Agenda: To review and evaluate grant applications.

Place: Mayflower Park Hotel, 405 Olive Way, Seattle, WA 98101.

Contact Person: Luis Espinoza, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6183, MSC 7804, Bethesda, MD 20892, 301–495–1213, *espinozala@mail.nih.gov.*

Name of Committee: Integrative, Functional and Cognitive Neuroscience Integrated Review Group, Neurotoxicology and Alcohol Study Section.

Date: February 9, 2015.

Time: 8 a.m. to 6 p.m.

Agenda: To review and evaluate grant applications.

Place: Doubletree Suites By Hilton Santa Monica, 1707 Fourth Street, Santa Monica, CA 90401.

Contact Person: Christine Melchior, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5176 MSC 7844, Bethesda, MD 20892, (301) 435–1713, *melchioc@csr.nih.gov.*

Name of Committee: Surgical Sciences, Biomedical Imaging and Bioengineering Integrated Review Group, Bioengineering, Technology and Surgical Sciences Study Section.

Date: February 9–10, 2015.

Time: 8 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: Bethesda North Marriott Hotel & Conference Center, 5701 Marinelli Road, Bethesda, MD 20852.

Contact Person: Khalid Masood, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5120, MSC 7854, Bethesda, MD 20892, 301–435–2392, *masoodk@csr.nih.gov.*

Name of Committee: Musculoskeletal, Oral and Skin Sciences Integrated Review Group, Arthritis, Connective Tissue and Skin Study Section.

Date: February 9–10, 2015.

Time: 8:30 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: BWI Airport Marriott, 1743 West Nursery Road, Linthicum, MD 21090.

Contact Person: Aftab A Ansari, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4108, MSC 7814, Bethesda, MD 20892, 301–237–9931, *ansaria@csr.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: December 31, 2014.

David Clary,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–00043 Filed 1–7–15; 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 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: Center for Scientific Review Special Emphasis Panel, Member Conflict: Aspects of NeuroAIDS.

Date: January 9, 2015.

Time: 1 p.m. to 5 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: Mary Clare Walker, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5208, MSC 7852, Bethesda, MD 20892, (301) 435–1165, *walkermc@csr.nih.gov.*

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

(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: December 31, 2014.

Michelle Trout,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–00040 Filed 1–7–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Allergy and Infectious Diseases: 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 Institute of Allergy and Infectious Diseases Special Emphasis Panel; NIAID Investigator Initiated Program Project Applications (P01).

Date: January 29, 2015.

Time: 12 p.m. to 4 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 5601 Fisher Lane, Rockville, MD 20892 (Telephone Conference Call).

Contact Person: Thomas F. Conway, Scientific Review Officer, Scientific Review Program, DEA/NIAID/NIH/DHHS, Room 2217, 6700–B Rockledge Dr., MSC–7616, Bethesda, MD 20892–7616, 301–451–4573, *thomas.conway@nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.855, Allergy, Immunology, and Transplantation Research; 93.856, Microbiology and Infectious Diseases Research, National Institutes of Health, HHS)

Dated: December 31, 2014.

David Clary,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2015–00042 Filed 1–7–15; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Agency Information Collection Activities: Proposed Collection; Comment Request

In compliance with Section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995 concerning opportunity for public comment on proposed collections of information, the Substance Abuse and Mental Health Services Administration (SAMHSA) will publish periodic summaries of proposed projects. To request more information on the proposed projects or to obtain a copy of the information collection plans, call the SAMHSA Reports Clearance Officer on (240) 276–1243.

Comments are invited on: (a) Whether the proposed collections of information are 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 collection of information; (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 respondents, including through the use of automated collection techniques or other forms of information technology.

Project: Community Mental Health Services Block Grant and Substance Abuse and Prevention Treatment Block Grant FY 2016–2017 Plan and Report Guidance and Instructions (OMB No. 0930–0168)—Revision

The Substance Abuse and Mental Health Services Administration (SAMHSA), is requesting approval from the Office of Management and Budget (OMB) for a revision of the 2016 and 2017 Community Mental Health Services Block Grant (MHBG) and Substance Abuse Prevention and Treatment Block Grant (SABG) Plan and Report Guidance and Instructions.

Currently, the SABG and the MHBG differ on a number of their practices (*e.g.,* data collection at individual or aggregate levels) and statutory authorities (*e.g.,* method of calculating MOE, stakeholder input requirements for planning, set asides for specific populations or programs, etc.). Historically, the Centers within SAMHSA that administer these block grants have had different approaches to application requirements and reporting. To compound this variation, states have different structures for accepting, planning, and accounting for the block grants and the prevention set aside within the SABG. As a result, how these dollars are spent and what is known about the services and clients that receive these funds varies by block grant and by state.

Increasingly, under the Affordable Care Act, more individuals are eligible for Medicaid and private insurance. This expansion of health insurance coverage will continue to have a significant impact on how State Mental Health Authorities (SMHAs) and Single State Agencies (SSAs) use their limited resources. In 2009, more than 39 percent of individuals with serious mental illnesses (SMI) or serious emotional disturbances (SED) were uninsured. Sixty percent of individuals with substance use disorders whose treatment and recovery support services were supported wholly or in part by SAMHSA block grant funds were also uninsured. A substantial proportion of this population, as many as six million people, will gain health insurance coverage in 2014 and will have various outpatient and other services covered through Medicaid, Medicare, or private insurance. However, these plans will not provide access to the full range of support services necessary to achieve and maintain recovery for most of these individuals and their families.

Given these changes, SAMHSA has conveyed that block grant funds be directed toward four purposes: (1) To fund priority treatment and support services for individuals without insurance or who cycle in and out of health insurance coverage; (2) to fund those priority treatment and support services not covered by Medicaid, Medicare or private insurance offered through the exchanges and that demonstrate success in improving outcomes and/or supporting recovery; (3) to fund universal, selective and targeted prevention activities and services; and (4) to collect performance and outcome data to determine the ongoing effectiveness of behavioral health prevention, treatment and recovery support services and to plan the implementation of new services on a nationwide basis.

To help states meet the challenges of 2016 and beyond, and to foster the implementation of an integrated physical health and mental health and addiction service system, SAMHSA must establish standards and expectations that will lead to an improved system of care for individuals with or at risk of mental and substance use disorders. Therefore, this application package includes fully exercising SAMHSA's existing authority regarding states', territories' and the Red Lake Band of the Chippewa Tribe's (subsequently referred to as ''states'') use of block grant funds, and a shift in SAMHSA staff functions to support and provide technical assistance for states receiving block grant funds as they fully integrate behavioral health services into health care.

Consistent with previous applications, the FY 2016–2017 application has sections that are required and other sections where additional information is requested. The FY 2016–2017 application requires states to submit a face sheet, a table of contents, a behavioral health assessment and plan, reports of expenditures and persons served, an executive summary, and funding agreements and certifications. In addition, SAMHSA is requesting information on key areas that are critical to the states success in addressing health care integration. Therefore, as part of this block grant planning process, SAMHSA is asking states to identify their technical assistance needs to implement the strategies they identify in their plans for FY 2016 and 2017.

To facilitate an efficient application process for states in FY 2016–2017, SAMHSA convened an internal workgroup to develop the application for the block grant planning section. In addition, SAMHSA consulted with representatives from SMHAs and SSAs to receive input regarding proposed changes to the block grant. Based on these discussions with states, SAMHSA is proposing several changes to the block grant programs, discussed in greater detail below.

Changes to Assessment and Planning Activities

The proposed revisions reflect changes within the planning section of the application. The most significant of these changes relate to evidenced based practice for early intervention for the MHBG, participant directed care, medication assisted treatment for the SABG, crisis services, pregnant women and women with dependent children, community living and the implementation of Olmstead, and quality and data readiness collection.

The FY2014–2015 application sections on the Affordable Care Act, health insurance marketplace, enrollment and primary and behavioral health care integration have been consolidated into a Health Care System and Integration section moving the emphasis to implementation of health care systems rather than preparation of the Affordable Care Act. Additionally, the FY2014–2015 Quality, Data and Information Technology sections have been consolidated into one section in the FY2016–2017 application. SAMHSA has provided a set of guiding questions to stimulate and direct the dialogue that states may engage in to determine the various approaches used to develop their responses to each of the focus areas.

The proposed revisions are described below:

• *Health Care System and Integration*—This section is a consolidation of the FY2014–2015 sections on the Affordable Care Act, health insurance marketplace, enrollment and primary and behavioral health care integration. It is vital that SMHAs and SSAs programming and planning reflect the strong connection between behavioral and physical health. Fragmented or discontinuous care may result in inadequate diagnosis and treatment of both physical and behavioral conditions, including co-occurring disorders. Health care

professionals, consumers of mental, substance use disorders, co-occurring mental, and substance use disorders treatment recognize the need for improved coordination of care and integration of primary and behavioral health care. Health information technology, including electronic health records (EHRs) and telehealth are examples of important strategies to promote integrated care. Use of EHRs—in full compliance with applicable legal requirements—may allow providers to share information, coordinate care and improve billing practices.

Implementation by SMHAs, SSAs and their partners of the Affordable Care Act is an important part of efforts to ensure access to care and better integrate care. In a recent report, the Congressional Budget Office estimates that by 2018, 25 million persons will have enrolled in the Affordable Care Act Marketplace and 12 million in Medicaid and the State Children's Health Insurance Program (SCHIP). The Department of Health and Human Services Assistant Secretary for Planning and Evaluation (ASPE) estimates that 32 million Americans will acquire coverage for mental and substance use disorder treatment as a result of the Affordable Care Act, including both previously uninsured persons and those enrolled in plans that lacked adequate coverage. In 2014, non-grandfathered health plans sold in the individual or the small group health insurance markets offered coverage for mental and substance use disorders as an essential health benefit.

• *Evidenced-Based Practices for Early Intervention for the MHBG*—In its FY 2014 appropriation, SAMHSA was directed to require that states set aside 5 percent of their MHBG allocation to support evidence-based programs that provide treatment to those with early SMI including but not limited to psychosis at any age. SAMHSA worked collaboratively with the National Institutes of Health, National Institute on Mental Health (NIMH) to review evidence showing efficacy of specific practices in ameliorating SMI and promoting improved functioning. NIMH has released information on Components of Coordinated Specialty Care (CSC) for First Episode Psychosis. Results from the NIMH funded *Recovery After an Initial Schizophrenia Episode (RAISE)* initiative, a research project of the NIMH, suggest that mental health providers across multiple disciplines can learn the principles of CSC for First Episode of Psychosis (FEP), and apply these skills to engage and treat persons in the early stages of psychotic illness.

States can implement models across a continuum, which have demonstrated efficacy, including the range of services and principles identified by NIMH. Utilizing these principles, regardless of the amount of investment, and with leveraging funds through inclusion of services reimbursed by Medicaid or private insurance, every state will be able to begin to move their system toward earlier intervention, or enhance the services already being implemented.

• *Participant Directed Care*—As states implement policies that support self-determination and improve person-centered service delivery, one option that states can consider is the role that vouchers may play in their overall financing strategy. Many states have implemented voucher and self-directed care programs to help individuals gain expanded access to care and to enable individuals to play a more significant role in the development of their prevention, treatment and recovery services. The major goal of a voucher program is to ensure individuals have a genuine, free, and independent choice among a network of eligible providers. The implementation of a voucher program expands mental and substance use disorder treatment capacity and promotes choice among clinical treatment and recovery support providers, providing individuals with the ability to secure the best treatment options available to meet their specific needs. A voucher program facilitates linking clinical treatment with critical recovery support services, such as care coordination, childcare, motivational development, early/brief intervention, outpatient treatment, medical services, housing support, employment/education support, peer resources, family/parenting services or transportation.

States interested in utilizing a voucher system should create or maintain a voucher management system to support vouchering and the reporting of data to enhance accountability by measuring outcomes. Meeting these voucher program challenges by creating and coordinating a wide array of service providers, leading them though the innovations and inherent system change processes results in the building of an integrated system that provides holistic care to individuals recovering from mental and substance use disorders.

• *Medication Assisted Treatment (MAT)*—There is a voluminous literature on the efficacy of Food and Drug Administration (FDA)-approved medications for the treatment of substance use disorders. However, many treatment programs in the U.S. still offer only abstinence-based treatment for these conditions. The evidence base for medication assisted treatment of these disorders is described in several of SAMHSA's Treatment Improvement Protocol Series (TIPS) publications numbered 40, 43, 45, and 49. SAMHSA strongly encourages the states to require that treatment facilities providing clinical care to those with substance use disorders be required to either have the capacity and staff expertise to utilize MAT or have collaborative relationships with other providers such that these MATs can be accessed as clinically indicated for patient need. Individuals with substance use disorders who have failed abstinence based treatment in the past and who have a disorder for which there is an FDA-approved medication treatment should have access to those treatments.

• *Crisis Services*—In the on-going development of efforts to build an evidence-based robust system of care for adults diagnosed with an SMI, children with a serious emotional disturbance (SED) and persons with addictive disorders and their families via a coordinated continuum of treatments, services and supports, growing attention is being paid across the country to how states and local communities identify and effectively respond to behavioral health crises. SAMHSA has taken a leadership role in deepening the understanding of what it means to be in crisis and how to effectively respond to crisis as experienced by people with behavioral health conditions.

A crisis response system will have the capacity to recognize and respond to crises across a continuum, from crisis planning, to early stages of support and respite, to crisis stabilization and intervention, to post-crisis follow-up and support for the individual and their family. SAMHSA expects that states will build on the emerging and growing body of evidence for effective community-based crisis response systems. Given the multi-system involvement of many individuals with behavioral health issues, the crisis response system approach provides the infrastructure to improve care coordination and outcomes, manage costs and better invest resources.

• *Pregnant Women and Women With Dependent Children*—Substance-abusing pregnant women have been a leading priority population throughout the history of the SABG (Section 1922(b) of Title XIX, Part B, Subpart II, of the PHS Act (42 U.S.C. 300x–22(b)). The authorizing legislation required states to expend not less than 5 percent of the FY 1993 and FY 1994 SABG to increase the availability of treatment services designed for pregnant women and women with dependent children. The purpose of these programs is to expand

the availability of comprehensive, residential substance use disorder treatment, and recovery support services for pregnant and postpartum women and their minor children, including services for non-residential family members. This population continues to be of utmost concern, since by helping such women along their recovery journey, additional benefits may result: Fetal alcohol spectrum disorder may be prevented; a normal birth-weight may be achieved; and intergenerational transmission of addiction may be interrupted. Women with dependent children are also identified as a priority for specialized treatment (as opposed to treatment as usual) in the implementing regulations governing the SABG. In 1995 and subsequent fiscal years states are required to expend no less than an amount equal to that spent by the state in prior fiscal years for treatment services designed for pregnant women and women with dependent children.

• *Community Living and the Implementation of Olmstead*—The community living and Olmsted section was included in the environmental factors/background section of the FY2014–2015 application and has been added to the planning section of the FY2016–2017 application. The integration mandate in Title II of the Americans with Disabilities Act (ADA) and the Supreme Court's decision in *Olmstead* v. *L.C.*, 527 U.S. 581 (1999), provide legal requirements that are consistent with SAMHSA's mission to reduce the impact of substance abuse and mental illness on America's communities. Being an active member of a community is an important part of recovery for persons with behavioral health conditions. Title II of the ADA and the regulations promulgated for its enforcement require that states provide services in the most integrated arrangement appropriate and prohibit needless institutionalization and segregation in work, living, and other settings. In response to the tenth anniversary of the Supreme Court's *Olmstead* decision, then HHS Secretary Sebelius directed the creation of the Coordinating Council on Community Living at the HHS. SAMHSA has been a key member of the Coordinating Council on Community Living and has funded a number of technical assistance opportunities to promote integrated services for people with behavioral health needs, including a policy academy to share effective practices with states.

Community living has been a priority across the federal government with recent changes to Section 811 and other housing programs operated by the Department of Housing and Urban Development (HUD). HUD and HHS collaborate to support housing opportunities for persons with disabilities, including persons with mental/substance use disorders. The Department of Justice (DOJ) and HHS Office of Civil Rights (OCR) cooperate on enforcement and compliance measures. DOJ and HHS OCR have expressed concern about some aspects of state mental health systems including use of traditional institutions and other residences that have institutional characteristics to house persons whose needs could be better met in community settings. More recently, there has been litigation regarding certain supported employment services such as sheltered workshops. States should ensure Block Grant funds are allocated to support treatment and recovery services in community settings whenever feasible and remain committed, as SAMHSA is, to ensuring services are implemented in accordance with Olmstead and Title II of the ADA.

• *Quality and Data Collection*—The FY2014–2015 Quality, Data and Information Technology sections have been consolidated into one section in the FY2016–2017 application and is part of the planning section. SAMHSA is moving forward on the task of advancing a system for the collection of client level substance abuse and mental health treatment data. As such, SAMHSA is undertaking a series of efforts designed to develop a set of common core performance, quality, and cost measures to demonstrate the impact of SAMHSA's discretionary and block grant programs and guide SAMHSA's evaluation activities.

The foundation of this effort is National Quality Behavioral Health Framework, which derives from the National Quality Strategy and seeks to improve the delivery of health care services, individual patient health outcomes, and the overall health of the population. The overarching goals are to ensure that services are evidence-based and effective; that they are person/family-centered; that care is coordinated across systems; that services promote healthy living; and that they are safe, accessible and affordable.

For the FY 2016–2017 MHBG and SABG reports, achieving these goals will result in a more coordinated behavioral health data collection program that complements other existing systems (*e.g.*, Medicaid administrative and billing data systems; and state mental health and substance abuse data systems), ensures consistency in the use of measures that are harmonized across various agencies and reporting systems, and provides a more complete understanding of the delivery of mental health and substance abuse services. Both goals can only be achieved through continuous collaboration with and feedback from SAMHSA's state partners.

SAMHSA anticipates this movement is consistent with the current state authority's movement toward system integration and will minimize challenges associated with changing operational logistics of data collection and reporting. SAMHSA understands some modifications to data collection systems may be necessary, but will work with the states to minimize the impact of these changes.

Other Changes

The overall format has been streamlined to integrate the environmental factors throughout the behavioral health assessment and plan narrative. This has reduced the length of the application by 10 pages.

While the statutory deadlines and block grant award periods remain unchanged, SAMHSA encourages states to turn in their application as early as possible to allow for a full discussion and review by SAMHSA. Applications for the MHBG-only is due no later than September 1, 2015. The application for SABG-only is due no later than October 1, 2015. A single application for MHBG *and* SABG is due no later than September 1, 2015.

Estimates of Annualized Hour Burden

The estimated annualized burden for a uniform application is 37, 429 hours. Burden estimates are broken out in the following tables showing burden separately for Year 1 and Year 2. Year 1 includes the estimates of burden for the uniform application and annual reporting. Year 2 includes the estimates of burden for the application update and annual reporting. The reporting burden remains constant for both years.

TABLE 1—ESTIMATES OF APPLICATION AND REPORTING BURDEN FOR YEAR 1

Application element	Number respondents	Responses/ respondents	Burden/ response (hours)	Total burden
Application Burden:				
Yr One Plan (separate submissions)	30 (CMHS) 30 (SAPT)	1	282	16,920
Yr One Plan (combined submission)	30	1	282	8,460
Application Sub-total	*60*			*25,380*
Reporting Burden:				
MHBG Report	59	1	186	10,974
URS Tables	59	1	35	2,065
SAPTBG Report	60 [1]	1	186	11,160
Table 5	15 [2]	1	4	60
Reporting Subtotal	*60*			*24,259*
Total	119			49,639

[1] Redlake Band of the Chippewa Indians from MN receives a grant.
[2] Only 15 States have a management information system to complete Table 5.

TABLE 2—ESTIMATES OF APPLICATION AND REPORTING BURDEN FOR YEAR 2

Application element	Number respondents	Responses/ respondents	Burden/ response (hours)	Total burden
Application Burden:				
Yr Two Plan	24	1	40	960
Application Sub-total	*24*			*960*
Reporting Burden:				
MHBG Report	59	1	186	10,974
URS Tables	59	1	35	2,065
SAPTBG Report	60	1	186	11,160
Table 5	15	1	4	60
Reporting Subtotal	*60*			*24,259*
Total	*119*			25,219

The total annualized burden for the application and reporting is 37,429 hours (49,639 + 25,219 = 74,858/2 years = 37,429).

Link for the application: *http://www.samhsa.gov/grants/block-grants*.

Send all comments via email to *blockgrants@samhsa.hhs.gov*. Written comments should be received by March 9, 2015.

Summer King,

Statistician.

[FR Doc. 2015–00063 Filed 1–7–15; 8:45 am]

BILLING CODE 4162–20–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Agency Information Collection Activities: Proposed Collection; Comment Request

In compliance with Section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995 concerning opportunity for public comment on proposed collections of information, the Substance Abuse and Mental Health Services Administration (SAMHSA) will publish periodic summaries of proposed projects. To request more information on the proposed projects or to obtain a copy of the information collection plans, call the SAMHSA Reports Clearance Officer on (240) 276–1243.

Comments are invited on: (a) Whether the proposed collections of information are 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 collection of information; (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 respondents, including through the use of automated collection techniques or other forms of information technology.

Proposed Project: Grantee Data Technical Assistance (GDTA) Training Needs Assessment Survey for SAMHSA Grantees—NEW

In 2014, the Center for Behavioral Health Statistics and Quality (CBHSQ) funded the GDTA contract to provide training and technical assistance to all grantees receiving funding from the Center for Substance Abuse Treatment (CSAT), the Center for Mental Health Services (CMHS), and some grantees receiving funding from the Center for Substance Abuse Prevention (CSAP) that fall under the GDTA contract. This currently only includes discretionary grants but is expected to include block grants in future years. Training and technical assistance from the GDTA contract will focus on helping grantees use their Government and Performance Results Act of 1993 (GPRA) data for performance management and monitoring, and services improvement. The information being collected in this needs assessment will inform CBHSQ regarding the types of activities SAMHSA's grants use their funding for and what types of training activities they would like to receive in the future.

Description of Forms: Forms will include two questions. The first question asks about the services provided under the grant. Answer options include activities such as behavioral health care services, screening, prevention activities, and services to specific populations. The second question asks respondents to

identify topics for training and technical assistance they would like to receive from a pre-populated list. Answer options include items such as data collection, data entry, and using data in creative ways. Both questions have an option for respondents to write-in an answer that is not included in the list.

Description of Respondents: The respondent universe for this data collection effort is one Project Director from each SAMHSA-funded grants being served by the GDTA contract. This currently only includes discretionary grants but is expected to include block grants in future years. There are currently 2,670 SAMHSA-funded discretionary grants served by the GDTA contract, therefore this is the number of respondents expected for this data collection effort.

TABLE 1—ANNUAL BURDEN ESTIMATE

Form name	Number of respondents	Annual responses per respondent	Total annual responses	Hours per response	Total annual hour burden
Grantee needs assessment	2,670	1	2,670	0.1	267

Send comments to Summer King, SAMHSA Reports Clearance Officer, Room 2–1057, One Choke Cherry Road, Rockville, MD 20857 *OR* email her a copy at *summer.king@samhsa.hhs.gov.* Written comments should be received by March 9, 2015.

Summer King,

Statistician.

[FR Doc. 2015–00059 Filed 1–7–15; 8:45 am]

BILLING CODE 4162–20–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

[Docket No. USCG–2014–0098]

Chemical Transportation Advisory Committee Meeting

AGENCY: Coast Guard, DHS.

ACTION: Notice of federal advisory committee meeting.

SUMMARY: The Chemical Transportation Advisory Committee and its subcommittees will meet on February 24, 25, and 26, 2015, in New Orleans, LA, to discuss the safe and secure marine transportation of hazardous materials. The meetings will be open to the public.

DATES: Subcommittees will meet on Tuesday, February 24, 2015, from 8:30 a.m. to 5 p.m. and on Wednesday, February 25, 2015, from 8:30 a.m. to 5 p.m. The full committee will meet on Thursday, February 26, 2015, from 8:30 a.m. to 5 p.m. Please note that these meetings may close early if the Committee has completed its business.

ADDRESSES: The meetings will be held at the NASA Michoud Assembly Facility, 13800 Old Gentilly Road, New Orleans, LA 70129. Attendees will be required to pre-register no later than 5 p.m. on February 13, 2015, to be admitted to the meeting. To pre-register contact Lieutenant Cristina Nelson at 202–372–1419 or *Cristina.E.Nelson@uscg.mil* and provide your name, company, and telephone number. Attendees will be required to provide a government-issued picture identification card in order to gain admittance to the building.

For information on facilities or services for individuals with disabilities or to request special assistance at the meeting, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** as soon as possible.

To facilitate public participation, we are inviting public comment on the issues to be considered by the Committee as listed in the ''Agenda'' section below. Written comments for distribution to Committee members must be submitted no later than February 13, 2015, if you want the Committee members to be able to review your comments before the meeting, and must be identified by USCG–2014–0098. Written comments may be submitted by *one* of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments. (This is the preferred method to avoid delays in processing.)
- *Fax:* 202–493–2252
- *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:* Same as mail address above, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number for this office is 202–366–9329.

Instructions: All submissions received must include the words ''Department of Homeland Security'' and the docket number for this action. Comments received will be posted without alteration at *http://www.regulations.gov,* including any personal information provided. You may review a Privacy Act notice regarding our public dockets in the January 17, 2008, issue of the **Federal Register** (73 FR 3316).

Docket: For access to the docket to read documents or comments related to this notice, go to *http://www.regulations.gov,* type USCG–2014–0098 in the Search box, press Enter, and then click on the item you wish to view.

FOR FURTHER INFORMATION CONTACT: Commander Evan Hudspeth, Designated Federal Official of the Chemical Transportation Advisory Committee, 2703 Martin Luther King Jr. Ave. SE., Stop 7509, Washington, DC 20593–7509, telephone 202–372–1420, fax 202–372–8380, or *Evan.D.Hudspeth@uscg.mil.* If you have any questions on viewing or submitting material to the docket, call Cheryl Collins, Program Manager, Docket Operations, telephone 202–366–9826 or 1–800–647–5527.

SUPPLEMENTARY INFORMATION: Notice of this meeting is given under the *Federal Advisory Committee Act,* 5 United States Code Appendix.

The Chemical Transportation Advisory Committee is an advisory committee authorized under section 871 of the Homeland Security Act of 2002, 6 United States Code 451, and is chartered under the provisions of the Federal Advisory Committee Act. The committee acts solely in an advisory capacity to the Secretary of the Department of Homeland Security through the Commandant of the Coast Guard and the Deputy Commandant for Operations on matters relating to safe and secure marine transportation of hazardous materials activities insofar as they relate to matters within the United States Coast Guard's jurisdiction. The Committee advises, consults with, and makes recommendations reflecting its independent judgment to the Secretary.

Agendas of Meetings

Subcommittee Meetings on February 24 and 25, 2015

The subcommittees on biofuels, liquefied gases, outreach, Ship to Ship

Transfer of Hazardous Material Outside of the Baseline, and the International Convention for the Prevention of Pollution from Ships (MARPOL) will meet to continue to address the task statements listed in paragraph (4) of the agenda for the February 26, 2015, meeting and the tasks given at the last Chemical Transportation Advisory Committee meeting. The task statements from the last committee meeting are located at Homeport at the following address: *https://homeport.uscg.mil.* Go to: Missions > Ports and Waterways > Safety Advisory Committees > CTAC Subcommittees and Working Groups.

The agenda for each subcommittee will include the following:

1. Review task statements, which are listed in paragraph (4) of the agenda for the February 26, 2015, meeting.
2. Work on tasks assigned in task statements mentioned above.
3. Public comment period.
4. Discuss and prepare proposed recommendations for the Chemical Transportation Advisory Committee meeting on February 26, 2015, on tasks assigned in detailed task statements mentioned above.

Committee Meeting on February 26, 2015

The agenda for the Chemical Transportation Advisory Committee meeting on February 26, 2015, is as follows:

1. Introductions and opening remarks.
2. Swear in newly appointed Committee members.
3. Public comment period.
4. Committee will review, discuss, and formulate recommendations on the following task statements:
   a. Harmonization of Response and Carriage Requirements for Biofuels and Biofuel Blends
   b. Recommendations on Safety Standards for the Design of Vessels Carrying Natural Gas or Using Natural Gas as Fuel
   c. Recommendations for Safety Standards for Ship to Ship Transfer of Hazardous Material Outside of the Baseline
   d. Recommendations for Guidance on the Implementation of Revisions to MARPOL Annex II and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (commonly known as the IBC Code)
   e. Improving Implementation of and Education about MARPOL Discharge Requirements under MARPOL Annex II and V
5. USCG presentations on the following items of interest:
   a. Update on International Maritime Organization activities as they relate to the marine transportation of hazardous materials
   b. Update on U.S. regulations and policy initiatives as they relate to the marine transportation of hazardous materials
6. Set next meeting date and location.
7. Set subcommittee meeting schedule.

A public comment period will be held during each Subcommittee and the full committee meeting concerning matters being discussed. Public comments will be limited to 3 minutes per speaker. Please note that the public comment period may end before the time indicated, following the last call for comments. Please contact Commander Evan Hudspeth, listed in the **FOR FURTHER INFORMATION CONTACT** section, to register as a speaker.

Dated: December 11, 2014.

J.G. Lantz,

Director of Commercial Regulations and Standards, United States Coast Guard.

[FR Doc. 2015–00062 Filed 1–7–15; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR–5759–N–19]

60-Day Notice of Proposed Information Collection: Assessment of HUD-Funded or Designated Neighborhood Networks Centers and Other Computer Labs Within Public Housing Authorities and Multifamily Housing Properties

AGENCY: Office of the Assistant Secretary for Public and Indian Housing, PIH, HUD; Office of the Deputy Assistant Secretary for Multifamily Housing, MF, HUD.

ACTION: Notice.

SUMMARY: HUD is seeking approval from the Office of Management and Budget (OMB) for the information collection described below. In accordance with the Paperwork Reduction Act, HUD is requesting comment from all interested parties on the proposed collection of information. The purpose of this notice is to allow for 60 days of public comment.

DATES: *Comments Due Date:* March 9, 2015.

ADDRESSES: Interested persons are invited to submit comments regarding this proposal. Comments should refer to the proposal by name and/or OMB Control Number and should be sent to: Colette Pollard, Reports Management Officer, QDAM, Department of Housing and Urban Development, 451 7th Street SW., Room 4176, Washington, DC 20410–5000; telephone 202–402–3400 (this is not a toll-free number) or email at *Colette.Pollard@hud.gov* for a copy of the proposed forms or other available information. Persons with hearing or speech impairments may access this number through TTY by calling the toll-free Federal Relay Service at (800) 877–8339.

FOR FURTHER INFORMATION CONTACT: Arlette Mussington, Office of Policy, Programs and Legislative Initiatives, PIH, Department of Housing and Urban Development, 451 7th Street SW., (L'Enfant Plaza, Room 2206), Washington, DC 20410; telephone 202–402–4109, (this is not a toll-free number). Persons with hearing or speech impairments may access this number via TTY by calling the Federal Information Relay Service at (800) 877–8339. Copies of available documents submitted to OMB may be obtained from Ms. Mussington.

SUPPLEMENTARY INFORMATION: This notice informs the public that HUD is seeking approval from OMB for the information collection described in Section A.

A. Overview of Information Collection

Title of Information Collection: Assessment of HUD-Funded or Designated Neighborhood Networks Centers and Other Computer Labs within Public Housing Authorities and Multifamily Housing Properties.

OMB Approval Number: Pending OMB approval.

Type of Request: New.

Form Number: None.

Description of the need for the information and proposed use: From the mid-1990s through 2010, HUD either funded or provided technical assistance to encourage the establishment of Neighborhood Networks computer centers in public and assisted housing. HUD is interested in learning about the current status of these computer labs (and others that may have been opened outside of the Neighborhood Networks initiative). In addition, HUD is interested in learning about the ability of these centers to provide digital literacy and other educational training, as well as challenges these centers face in maintaining operations.

Respondents: Public housing authorities and multifamily housing owners.

Estimated Number of Respondents: 3,200 public housing authorities; and 100 Multifamily owners.

Information collection	Number of respondents	Frequency of response	Responses per annum	Burden hour per response	Annual burden hours	Hourly cost per response	Annual cost
Total	1,000	1	1	5.5	5,500	$110.00	$110,000

B. Solicitation of Public Comment

This notice is soliciting comments from members of the public and affected parties concerning the collection of information described in Section A on the following:

(1) 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) The accuracy of the agency'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 those who are to respond; including through the use of appropriate automated collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

HUD encourages interested parties to submit comment in response to these questions.

Authority: Section 3507 of the Paperwork Reduction Act of 1995, 44 U.S.C. Chapter 35.

Dated: December 23, 2014.

Michael Dennis,

Director, Office of Housing Voucher Programs.

[FR Doc. 2015–00107 Filed 1–7–15; 8:45 am]

BILLING CODE 4210–67–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR–5696–N–13]

Third Allocation, Waivers, and Alternative Requirements for Grantees Receiving Community Development Block Grant Disaster Recovery (CDBG–DR) Funds in Response to Disasters Occurring in 2013

AGENCY: Office of the Assistant Secretary for Community Planning and Development, HUD.

ACTION: Notice.

SUMMARY: This Notice advises the public of a third allocation of Community Development Block Grant disaster recovery (CDBG–DR) funds for the purpose of assisting recovery in the most impacted and distressed areas identified in major disaster declarations in calendar year 2013. This is the seventh allocation of CDBG–DR funds under the Disaster Relief Appropriations Act, 2013 (Pub. L. 113–2). In addition to an initial allocation for disasters occurring in 2013, prior allocations addressed the areas most impacted by Hurricane Sandy, as well as the areas most impacted by disasters occurring in 2011 or 2012. In prior **Federal Register** notices, the Department described the allocations, relevant statutory provisions, the grant award process, criteria for Action Plan approval, eligible disaster recovery activities, and applicable waivers and alternative requirements. This Notice builds upon the requirements of those notices, and specifies that funds allocated through this notice are subject to all requirements in the notice published on June 3, 2014 (79 FR 31964).

DATES: *Effective Date:* January 13, 2015.

FOR FURTHER INFORMATION CONTACT: Stan Gimont, Director, Office of Block Grant Assistance, Department of Housing and Urban Development, 451 7th Street SW., Room 7286, Washington, DC 20410, telephone number 202–708–3587. Persons with hearing or speech impairments may access this number via TTY by calling the Federal Relay Service at 800–877–8339. Facsimile inquiries may be sent to 202–401–2044. (Except for the ''800'' number, these telephone numbers are not toll-free.) Email inquiries may be sent to *disaster_recovery@hud.gov*.

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I. Allocation

The Disaster Relief Appropriations Act, 2013 (Pub. L. 113–2, approved January 29, 2013) (Appropriations Act) made available $16 billion in Community Development Block Grant disaster recovery (CDBG–DR) funds for necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from a major disaster declared pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (42 U.S.C. 5121 *et seq.*) (Stafford Act), due to Hurricane Sandy and other eligible events in calendar years 2011, 2012, and 2013.

On March 1, 2013, the President issued a sequestration order pursuant to section 251A of the Balanced Budget and Emergency Deficit Control Act, as amended (2 U.S.C. 901a), and reduced funding for CDBG–DR grants under the Appropriations Act to $15.18 billion. To date, a total of $15.1 billion has been allocated or set aside: $13 billion in response to Hurricane Sandy, $514 million in response to disasters occurring in 2011 or 2012, $565 million in response to 2013 disasters, and $1 billion set aside for the National Disaster Resilience Competition. This Notice advises the public of a third allocation for 2013 disasters—$89.8 million is provided for the purpose of assisting recovery in the most impacted and distressed areas in Colorado, the city of Chicago, Illinois, Cook County, Illinois, and Du Page County, Illinois. As the Appropriations Act requires funds to be awarded directly to a state or unit of general local government (hereinafter, local government), the term ''grantee'' refers to any jurisdiction receiving a direct award from HUD under this Notice.

To comply with statutory direction that funds be used for disaster-related expenses in the most impacted and distressed areas, HUD computes allocations based on the best available data that cover all the eligible affected areas. Based on further review of the impacts from Presidentially-declared disasters that occurred in 2013, and estimates of remaining unmet need, this Notice provides the following awards:

TABLE 1—ALLOCATIONS FOR DISASTERS OCCURRING IN 2013

Grantee	This allocation	Second allocation	First allocation	Total
State of Colorado	$58,246,000	$199,300,000	$62,800,000	$320,346,000

TABLE 1—ALLOCATIONS FOR DISASTERS OCCURRING IN 2013—Continued

Grantee	This allocation	Second allocation	First allocation	Total
State of Illinois		6,800,000	3,600,000	10,400,000
City of Chicago, IL	11,075,000	47,700,000	4,300,000	63,075,000
Cook County, IL	14,816,000	54,900,000	13,900,000	83,616,000
Du Page County, IL	5,626,000	18,900,000	7,000,000	31,526,000
State of Oklahoma		83,100,000	10,600,000	93,700,000
City of Moore, OK		25,900,000	26,300,000	52,200,000
Total	89,763,000	436,600,000	128,500,000	654,863,000

As outlined in Table 2, to ensure funds provided under this Notice address unmet needs within the ''most impacted and distressed'' counties, each local government receiving a direct award under this Notice must expend its entire CDBG–DR award within its jurisdiction (*e.g.,* Cook County must expend all funds within Cook County, excluding the city of Chicago; the city of Chicago must expend all funds in the city of Chicago, including the portions of Cook and Du Page counties located within the city's jurisdiction). The State of Colorado must expend at least 80 percent of its funds in the most impacted counties of Boulder, Weld, and Larimer but may expend 20 percent (approximately $64 million from the combined first, second, and third allocations) in other State-identified most impacted and distressed area within counties having a declared major disaster in 2011, 2012 or 2013. The following link provides access to maps showing declared disasters in each state, by year: *http://www.fema.gov/disasters/grid/state-tribal-government.* The opportunity for certain grantees to expend a portion of their allocations outside the most impacted and distressed counties identified by HUD enables those grantees to respond to highly localized distress identified via their own data. A detailed explanation of HUD's allocation methodology is provided at Appendix A.

TABLE 2—MOST IMPACTED AND DISTRESSED COUNTIES WITHIN WHICH FUNDS MAY BE EXPENDED

Grantee	Most impacted and distressed counties	Minimum percentage that must be expended in most impacted and distressed counties
State of Colorado	Boulder, Weld and Larimer	80
City of Chicago	City of Chicago; portions of the city in Cook and Du Page	100
Cook County	Cook	100
Du Page County	Du Page	100

II. Use of Funds

This Notice builds upon the requirements of the **Federal Register** Notices published by the Department on March 5, 2013 (78 FR 14329), April 19, 2013 (78 FR 23578), December 16, 2013 (76 FR 76154), June 3, 2014 (79 FR 31964), and July 11, 2014 (79 FR40133) referred to collectively in this Notice as the ''Prior Notices''. The Prior Notices can be accessed through the HUD Exchange Web site at *https://www.hudexchange.info/cdbg-dr/cdbg-dr-laws-regulations-and-federal-register-notices/*. In addition, the following links provide direct access to the Prior Notices: *http://www.gpo.gov/fdsys/pkg/FR-2013-03-05/pdf/2013-05170.pdf, http://www.gpo.gov/fdsys/pkg/FR-2013-04-19/pdf/2013-09228.pdf, http://www.gpo.gov/fdsys/pkg/FR-2013-12-16/pdf/2013-29834.pdf, http://www.gpo.gov/fdsys/pkg/FR-2014-06-03/pdf/2014-12709.pdf,* and *http://www.gpo.gov/fdsys/pkg/FR-2014-07-11/pdf/2014-16316.pdf.*

The requirements of this Notice parallel those established for other grantees receiving funds under the Appropriations Act in a **Federal Register** Notice published by the Department on November 18, 2013 (78 FR 69104) and located at: *http://www.gpo.gov/fdsys/pkg/FR-2013-11-18/pdf/2013-27506.pdf.* Additionally, the funds allocated in this Notice are bound by all of the same requirements as those found in the **Federal Register** Notice published by the Department on June 3, 2014 (79 FR 31964), including the two year expenditure deadline located at: *http://www.gpo.gov/fdsys/pkg/FR-2014-06-03/pdf/2014-12709.pdf.*

As a reminder, the Appropriations Act requires funds to be used only for specific disaster-recovery related purposes. This allocation provides additional funds to areas impacted by disasters in 2013 for recovery, including mitigation and resilience as part of the recovery effort and directs grantees to undertake comprehensive planning to promote resilience as part of that effort. The law also requires that prior to the obligation of CDBG–DR funds, a grantee shall submit a plan detailing the proposed use of funds, including criteria for eligibility and how the use of these funds will address disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas. To access funds provided by the prior allocations, HUD approved an Action Plan and Action Plan amendments for each of the grantees identified as receiving funds under this Notice. Grantees are now directed to submit a substantial Action Plan Amendment in order to access funds provided in this Notice. For more guidance on requirements for substantial Action Plan Amendments, please see section III of this Notice.

Note that, as provided by the HCD Act, funds may be used as a matching requirement, share, or contribution for any other federal program when used to carry out an eligible CDBG–DR activity.

However, pursuant to the requirements of the Appropriations Act, CDBG–DR funds may not be used for expenses reimbursable by, or for which funds are made available by FEMA or the United States Army Corps of Engineers (USACE).

IV. Grant Amendment Process

To access funds allocated by this Notice grantees must submit a substantial Action Plan Amendment to their approved Action Plan. Any substantial Action Plan Amendment submitted after the effective date of this Notice is subject to the following requirements:

- Grantee consults with affected citizens, stakeholders, local governments and public housing authorities to determine updates to its needs assessment; in addition, grantee prepares a comprehensive risk analysis (see section V.3.d. of the June 3, 2014 Notice);
- Grantee amends its citizen participation plan to reflect the requirements of the June 3, 2014 Notice (*e.g.,* new requirement for a public hearing);
- Grantee publishes a substantial amendment to its previously approved Action Plan for Disaster Recovery on the grantee's official Web site for no less than 30 calendar days and holds at least one public hearing to solicit public comment;
- Grantee responds to public comment and submits its substantial Action Plan Amendment to HUD (with any additional certifications required by this Notice or Prior Notices) no later than 120 days after the effective date of this Notice;
- HUD reviews the substantial Action Plan Amendment within 60 days from date of receipt and approves the Amendment according to criteria identified in the Prior Notices;
- HUD sends an Action Plan Amendment approval letter, revised grant conditions (may not be applicable to all grantees), and an amended unsigned grant agreement to the grantee. If the substantial Amendment is not approved, a letter will be sent identifying its deficiencies; the grantee must then re-submit the Amendment within 45 days of the notification letter;
- Grantee ensures that the HUD-approved substantial Action Plan Amendment (and updated Action Plan) is posted on its official Web site;
- Grantee signs and returns the grant agreement;
- HUD signs the grant agreement and revises the grantee's line of credit amount;
- If it has not already done so, grantee enters the activities from its published Action Plan Amendment into the Disaster Recovery Grant Reporting (DRGR) system and submits it to HUD within the system;
- The grantee may draw down funds from the line of credit after the Responsible Entity completes applicable environmental review(s) pursuant to *24 CFR part 58* (or paragraph A.20 under section VI of the March 5, 2013 Notice) and, as applicable, receives from HUD or the state an approved Request for Release of Funds and certification;
- Grantee amends its published Action Plan to include its projection of expenditures and outcomes within 90 days of the Action Plan Amendment approval as provided for in paragraph 4.f. of section V of the June 3, 2014 Notice; and
- If not already completed, grantee updates its full consolidated plan to reflect disaster-related needs no later than its Fiscal Year 2015 consolidated plan update.

VIII. Catalog of Federal Domestic Assistance

The Catalog of Federal Domestic Assistance number for the disaster recovery grants under this Notice is as follows: 14.269.

Finding of No Significant Impact

A Finding of No Significant Impact (FONSI) with respect to the environment has been made in accordance with HUD regulations at *24 CFR part 50,* which implement section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)). The FONSI is available for public inspection between 8 a.m. and 5 p.m. weekdays in the Regulations Division, Office of General Counsel, Department of Housing and Urban Development, 451 7th Street SW., Room 10276, Washington, DC 20410–0500. Due to security measures at the HUD Headquarters building, an advance appointment to review the docket file must be scheduled by calling the Regulations Division at 202–708–3055 (this is not a toll-free number). Hearing or speech-impaired individuals may access this number through TTY by calling the toll-free Federal Relay Service at 800–877–8339.

Dated: December 31, 2014.

Clifford Taffett,

General Deputy Assistant Secretary for Community Planning and Development.

CDBG–DR Allocation Methodology—2013 Disasters Third Tranche

HUD calculates the cost to rebuild the most impacted and distressed homes, businesses, and infrastructure back to pre-disaster conditions. From this base calculation, HUD calculates both the amount not covered by insurance and other federal sources to rebuild back to pre-disaster conditions as well as a ''resiliency'' amount which is calculated at 30 percent of the total basic cost to rebuild back the most distressed flooded homes, businesses, and infrastructure to pre-disaster conditions; 10 percent for other disaster types (*ie.* tornadoes, severe storms, fires). The estimated cost to repair unmet needs are combined with the resiliency needs to calculate the total severe unmet needs estimated to achieve long-term recovery. This calculation of housing, business, and infrastructure needs is used to determine the relative share of funding among eligible disasters.

Statutory Language for the Allocation

Public Law 113–2 (January 29, 2013) provides the following language on how the Secretary shall allocate the funds: ''For an additional amount for ''Community Development Fund'', $16,000,000,000,[1] to remain available until September 30, 2017, for necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from a major disaster declared pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 *et seq.*) due to Hurricane Sandy and other eligible events in calendar years 2011, 2012, and 2013, for activities authorized under title I of the Housing and Community Development Act of 1974 (42 U.S.C. 5301 *et seq.*): *Provided,* That funds shall be awarded directly to the State or unit of general local government as a grantee at the discretion of the Secretary of Housing and Urban Development: *Provided further,* That the Secretary shall allocate to grantees not less than 33 percent of the funds provided under this heading within 60 days after the enactment of this division based on the best available data:''

Available Data

The ''best available'' data HUD staff have identified as being available to calculate unmet needs at this time for all disasters in 2011, 2012, and 2013 meeting HUD's Most Impacted and Distressed threshold comes from the following data sources:

- FEMA Individual Assistance program data on housing unit damage;

[1] $15.2 billion after sequestration.

• SBA for management of its disaster assistance loan program for housing repair and replacement;

• SBA for management of its disaster assistance loan program for business real estate repair and replacement as well as content loss; and

• FEMA Public Assistance, Department of Transportation Federal Transit Administration and Federal Highway Administration, Corps of Engineers, and US Department of Agriculture Emergency Watershed Restoration data on infrastructure.

These funds are only allocated toward disasters in 2011, 2012, and 2013 determined by HUD to be most impacted and distressed disasters.[2]

Calculating Unmet Housing Needs

The core data on housing damage for both the unmet housing needs calculation and the concentrated damage are based on home inspection data for FEMA's Individual Assistance program (extracted January 2014). For unmet housing needs, the FEMA data are supplemented by Small Business Administration data from its Disaster Loan Program (extracted January 2014). HUD calculates ''unmet housing needs'' as the number of housing units with unmet needs times the estimated cost to repair those units less repair funds already provided by FEMA, where:

• Each of the FEMA inspected owner units are categorized by HUD into one of five categories:

○ Minor-Low: Less than $3,000 of FEMA inspected real property damage.

○ Minor-High: $3,000 to $7,999 of FEMA inspected real property damage.

○ Major-Low: $8,000 to $14,999 of FEMA inspected real property damage (if basement flooding only, damage categorization is capped at major-low).

○ Major-High: $15,000 to $28,800 of FEMA inspected real property damage and/or 4 to 6 feet of flooding on the first floor.

○ Severe: Greater than $28,800 of FEMA inspected real property damage or determined destroyed and/or 6 or more feet of flooding on the first floor.

To meet the statutory requirement of ''most impacted and distressed'' in this legislative language, homes are determined to have a high level of damage if they have damage of ''major-low'' or higher. That is, they have a real property FEMA inspected damage of $8,000 or flooding over 4 foot. Furthermore, a homeowner is determined to have unmet needs if they have received a FEMA grant to make home repairs. For homeowners with a FEMA grant and insurance for the covered event, HUD assumes that the unmet need ''gap'' is 20 percent of the difference between total damage and the FEMA grant.

• FEMA does not inspect rental units for real property damage so personal property damage is used as a proxy for unit damage. Each of the FEMA inspected renter units are categorized by HUD into one of five categories:

○ Minor-Low: Less than $1,000 of FEMA inspected personal property damage.

○ Minor-High: $1,000 to $1,999 of FEMA inspected personal property damage.

○ Major-Low: $2,000 to $3,499 of FEMA inspected personal property damage (if basement flooding only, damage categorization is capped at major-low).

○ Major-High: $3,500 to $7,499 of FEMA inspected personal property damage or 4 to 6 feet of flooding on the first floor.

○ Severe: Greater than $7,500 of FEMA inspected personal property damage or determined destroyed and/or 6 or more feet of flooding on the first floor.

For rental properties, to meet the statutory requirement of ''most impacted and distressed'' in this legislative language, homes are determined to have a high level of damage if they have damage of ''major-low'' or higher. That is, they have a FEMA personal property damage assessment of $2,000 or greater or flooding over 4 foot. Furthermore, landlords are presumed to have adequate insurance coverage unless the unit is occupied by a renter with income of $30,000 or less. Units are occupied by a tenant with income less than $30,000 are used to calculate likely unmet needs for affordable rental housing. For those units occupied by tenants with incomes under $30,000, HUD estimates unmet needs as 75 percent of the estimated repair cost.

• The median cost to fully repair a home for a specific disaster to code within each of the damage categories noted above is calculated using the average real property damage repair costs determined by the Small Business Administration for its disaster loan program for the subset of homes inspected by both SBA and FEMA. Because SBA is inspecting for full repair costs, it is presumed to reflect the full cost to repair the home, which is generally more than the FEMA estimates on the cost to make the home habitable. If fewer than 100 SBA inspections are made for homes within a FEMA damage category, the estimated damage amount in the category for that disaster has a cap applied at the 75th percentile of all damaged units for that category for all disasters and has a floor applied at the 25th percentile.

Calculating Unmet Infrastructure Needs

• To proxy unmet infrastructure needs, HUD uses data from FEMA's Public Assistance program on the state match requirement (extracted January 2014). This allocation uses only a subset of the Public Assistance damage estimates reflecting the categories of activities most likely to require CDBG–DR funding above the Public Assistance and state match requirement. Those activities are categories: C—Roads and Bridges; D—Water Control Facilities; E—Public Buildings; F—Public Utilities; and G—Recreational-Other. Categories A (Debris Removal) and B (Protective Measures) are largely expended immediately after a disaster and reflect interim recovery measures rather than the long-term recovery measures for which CDBG–DR funds are generally used.

For the third round of CDBG–DR funding for Sandy recovery, HUD also includes data from the USDA Emergency Watershed Repair Program (extracted May 2014). For most impacted disasters in 2011, 2012, and 2013 that have not received supplemental funding to address watershed repairs, HUD includes the estimated unmet repair costs calculated by USDA in the unmet repair needs calculation.

Calculating Economic Revitalization (Small Business) Needs

• Based on SBA disaster loans to businesses (extracted January 2014), HUD used the sum of real property and real content loss of small businesses not receiving an SBA disaster loan. This is adjusted upward by the proportion of applications that were received for a disaster that content and real property loss were not calculated because the applicant had inadequate credit or income. For example, if a state had 160 applications for assistance, 150 had calculated needs and 10 were denied in the pre-processing stage for not enough income or poor credit, the estimated unmet need calculation would be increased as (1 + 10/160) * calculated unmet real content loss.

• Because applications denied for poor credit or income are the most likely measure of needs requiring the type of assistance available with CDBG–

[2] A Most Impacted disaster for non-Sandy disasters is a disaster where the severe housing and business unmet needs (excluding resiliency) exceed $25 million from counties with greater than $10 million in unmet housing and business severe needs (excluding resiliency and area construction cost adjustment).

DR funds, the calculated unmet business needs for each state are adjusted upwards by the proportion of total applications that were denied at the pre-process stage because of poor credit or inability to show repayment ability. Similar to housing, estimated damage is used to determine what unmet needs will be counted as severe unmet needs. Only properties with total real estate and content loss in excess of $30,000 are considered severe damage for purposes of identifying the most impacted and distressed areas.

- Category 1: real estate + content loss = below $12,000
- Category 2: real estate + content loss = $12,000 to $30,000
- Category 3: real estate + content loss = $30,000 to $65,000
- Category 4: real estate + content loss = $65,000 to $150,000
- Category 5: real estate + content loss = above $150,000

To obtain unmet business needs, the amount for approved SBA loans is subtracted out of the total estimated damage.

Resiliency Needs

CDBG DR funds are often used to not only support rebuilding to pre-storm conditions, but also to build back much stronger. For the disasters covered by this Notice, HUD has required that grantees use their funds in a way that results in rebuilding back stronger so that future disasters do less damage and recovery can happen faster. To calculate these resiliency costs, HUD multiplied its estimates of total repair costs for seriously damaged homes, small businesses, and infrastructure by 30 percent for flooding disasters and 10 percent for other disasters.[3] Total repair costs are the repair costs including costs covered by insurance, SBA, FEMA, and other federal agencies. The resiliency estimate is intended to reflect some of the unmet needs associated with building to higher standards such as elevating homes, voluntary buyouts, hardening, and other costs in excess of normal repair costs.

Housing and Small Business Construction Cost Adjustment

For grantees with housing construction costs above the national average, HUD increases their estimated housing and business construction costs using the same Marshall & Swift regional cost adjustment multipliers as used for HUD's annual calculation of Total Development Costs developed for HUD's public housing repair programs. No estimate of damage is reduced by the multiplier (*ie.* if the Marshall & Swift adjustment is less than 1, the adjustment is set at 1).

[3] The 30 percent multiplier for flooding disasters is the approximate additional cost to elevate a newly constructed home; the 10 percent multiplier is the approximate additional cost to add a safe room.

[FR Doc. 2015–00109 Filed 1–7–15; 8:45 am]

BILLING CODE 4210–67–P

DEPARTMENT OF THE INTERIOR

Office of the Secretary

[DT20400000 DST000000.T7AC00 15XD0120AF]

Privacy Act of 1974, as Amended; Notice To Amend an Existing System of Records

AGENCY: Office of the Special Trustee for American Indians, Interior.

ACTION: Notice of amendment to an existing system of records.

SUMMARY: Pursuant to the provisions of the Privacy Act of 1974, as amended, the Department of the Interior is issuing a public notice of its intent to amend the Office of the Special Trustee for American Indians Privacy Act system of records, ''Individual Indian Money (IIM) Trust Funds–Interior, OS–02,'' to combine the existing system of records with the OST Privacy Act system of records, ''Accounting Reconciliation Tool (ART)—Interior, OS–11'' into one system of records for efficiency purposes and to promote the overall streamlining and management of Department of the Interior Privacy Act systems of records. This amendment will also update the system location, categories of individuals covered by the system, categories of records in the system, authority for maintenance of the system, storage, safeguards, retention and disposal, system manager and address, notification procedures, records access and contesting procedures, records source categories, and the routine uses to include activities related to land consolidation of fractionated lands.

DATES: Comments must be received by February 17, 2015. The amendments to the system will be effective February 17, 2015.

ADDRESSES: Any person interested in commenting on this notice may do so by: submitting comments in writing to Veronica Herkshan, Office of the Special Trustee for American Indians Privacy Act Officer, 4400 Masthead Street NE., Albuquerque, New Mexico 87109; hand-delivering comments to Veronica Herkshan, Office of the Special Trustee for American Indians Privacy Act Officer, 4400 Masthead Street NE., Albuquerque, New Mexico, 87109; or emailing comments to veronica _ *herkshan@ost.doi.gov.*

FOR FURTHER INFORMATION CONTACT: Chief of Staff, Office of the Special Trustee for American Indians, 1849 C Street NW., Room 3254, Washington, DC 20240, or by telephone at 202–208–4866.

SUPPLEMENTARY INFORMATION

I. Background

The Department of the Interior (DOI), Office of the Special Trustee for American Indians (OST), maintains the ''Individual Indian Money (IIM) Trust Funds—Interior, OS–02,'' system of records. Due to a recent reorganization of OST and the Office of Historical Accounting, DOI is proposing to combine the OST Privacy Act system of records, ''Individual Indian Money (IIM) Trust Funds—Interior, OS–02,'' with the OST Privacy Act system of records, ''Accounting Reconciliation Tool (ART)—Interior, OS–11,'' for efficiency purposes and to promote the overall streamlining and management of DOI Privacy Act systems of records. The two systems have the same authorities and purpose, to manage the collection, distribution, and disbursement of Indian Trust land income; are managed by the same system manager within OST; and have the same or similar categories of records, categories of individuals, and routine uses.

The IIM system will assist OST in meeting the fiduciary responsibilities set forth in the American Indian Trust Fund Management Reform Act of 1994 including management of the receipt, investment, disbursement and administration of money held in trust for individual Indians and Alaskan Natives (or their heirs), and Indian Tribes; and ensure timely, accurate, and consistent responses to beneficiary inquiries. The system also assists the OST in providing litigation support in analyzing and reconciling the historical collection, distribution, and disbursement of income from IIM accounts, Indian trust land, and other revenue sources. The amendments to this system includes updating the system locations, categories of individuals covered by the system, categories of records in the system, authority for maintenance of the system, storage, safeguards, retention and disposal, system manager and address, notification procedures, records access and contesting procedures, records source categories, and updating the routine uses to include activities related to land consolidation of fractionated

lands. The Individual Indian Money (IIM) Trust Funds—Interior, OS–02 system notice was last published in the **Federal Register** on December 19, 2008, 73 FR 77824. The Accounting Reconciliation Tool (ART)—Interior, OS–11 system notice was last published in the **Federal Register** on July 31, 2008, 73 FR 44759. Upon final publication of the amended Individual Indian Money (IIM) Trust Funds—Interior, OS–02 system notice, DOI will publish a deletion notice for the Accounting Reconciliation Tool (ART)—Interior, OS–11 system notice to remove it from DOI's inventory of systems of records notices.

The amendments to the system will be effective as proposed at the end of the comment period (the comment period will end 40 days after the publication of this notice in the **Federal Register**), unless comments are received which would require a contrary determination. DOI will publish a revised notice if changes are made based upon a review of the comments received.

II. Privacy Act

The Privacy Act of 1974, as amended (5 U.S.C. 552a), embodies fair information practice principles in a statutory framework governing the means by which Federal agencies collect, maintain, use, and disseminate individuals' personal information. The Privacy Act applies to records about individuals that is maintained in a ''system of records.'' A ''system of records'' is a group of any records under the control of an agency for which information about an individual is retrieved by the name or by some identifying number, symbol, or other identifying particular assigned to the individual. The Privacy Act defines an individual as a U.S. citizen or lawful permanent resident. As a matter of policy, DOI extends administrative Privacy Act protections to all individuals. Individuals may request access to their own records that are maintained in a system of records in the possession or under the control of the DOI by complying with DOI Privacy Act regulations at 43 CFR part 2, subpart K.

The Privacy Act requires each agency to publish in the **Federal Register** a description denoting the type and character of each system of records that the agency maintains, the routine uses that are contained in each system in order to make agency record keeping practices transparent, to notify individuals regarding the uses of their records, and to assist individuals to more easily find such records within the agency. The amended system notice for the ''Individual Indian Money (IIM) Trust Funds—Interior, OS–02,'' is published in its entirety below.

In accordance with 5 U.S.C. 552a(r), DOI has provided a report of this system of records to the Office of Management and Budget and to Congress.

III. Public Disclosure

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.

Date: December 29, 2014.

Veronica J. Herkshan,

Privacy Act Officer, Office of the Special Trustee for American Indians.

System Name:

Individual Indian Money (IIM) Trust Funds—Interior, OS–02.

Security Classification:

Unclassified.

System Locations:

The system is located and centrally managed at OST, U.S. Department of the Interior, 4400 Masthead Street, NE., Albuquerque, New Mexico 87109. Records are also located at the American Indian Records Repository, 17501 West 98th Street, Lenexa, Kansas 66219; SEI, One Freedom Valley Drive, Oaks, Pennsylvania 19456; the Bureau of Indian Affairs, Southwest Region, Albuquerque Data Center, 1001 Indian School Road, Albuquerque, New Mexico 87109; the OST, U.S. Department of the Interior, 1849 C Street NW., Washington, DC 20240; other DOI and Office of the Secretary program offices; OST regional and field offices; offices of contractors; and offices of Indian Tribes that administer the IIM account program under Indian Self-Determination or Self-Governance contracts or compacts.

Categories of Individuals Covered by the System:

Individuals covered by the system include individual Indians and Alaskan Natives (or their heirs), Indian Tribes, current and former Federal employees and contractors who receive IIM account information or are IIM account holders, owners of land held in trust or restricted status by the Federal Government, and DOI employees, contractors, and officials acting in their official capacity to administer program activities. Additionally, this system contains information regarding individuals owning purchasable fractional interests in land or who may be interested in participating in the Land Buy-Back Program; members of the public, including individuals who make inquiries about the Cobell Settlement payments, acquaintances of IIM account holders, depositors into and claimants against IIM accounts, individuals who lease, contract, or who are permit holders on Indian lands, and individuals with whom OST conducts business.

The system contains information about private organizations that provide contact information about individual Indian account holders whose whereabouts are unknown to OST, and records concerning corporations and other business entities, which are not subject to the Privacy Act. However, records pertaining to individuals acting on behalf of corporations and other business entities may reflect personal information.

Categories of Records in the System:

Records in this system include IIM account and Tribal trust fund account records such as financial documents, account reconciliation information, disbursements, investments, bonds, transfers, and historical statements of account, which contain the following information: Names, aliases, addresses, gender, dates of birth, dates of death, telephone numbers, email addresses and other contact information, Social Security numbers, IIM account numbers, Tribal affiliation (membership), Tribal enrollment numbers, blood quantum, bank routing numbers, bank account numbers, taxpayer identification numbers, guardianship information, and Tribal trust account codes. Records also include documents related to financial and investment activity, custodianship of investments for IIM accounts and Tribal trust fund accounts. Financial documents, transaction data regarding receipts, disbursements, investments and transfers, and contact information for individuals who may know the whereabouts of unknown locations of beneficiaries is also included in this system.

Records also include data regarding IIM accounts that may be obtained from the OST Accounting Reconciliation Tool system, Trust Funds Accounting System (TFAS), and the Bureau of Indian Affairs (BIA) Trust Asset and Accounting Management System (TAAMS). These records help reconcile IIM accounts and may include land

ownership, official correspondence, appraisals, maps, purchase offers, and other documents related to land consolidation efforts and program activities that may include name, address, email address, phone number, date of birth, age, Social Security number, Tribal enrollment number, land ownership interests in restricted or fractioned lands, and other information related to these program activities.

Authority for Maintenance of the System:

American Indian Trust Fund Management Reform Act of 1994, Public Law 103–412, 108 Stat. 4239; 25 U.S.C. 42, American Indian Trust Fund Management Reform; 25 U.S.C. 116, 117(a)(b)(c), 118, 119, 120, 121, 151, 159, 161(a), 162(a), 4011, 4043(b)(2)(B).

Routine Uses of Records Maintained in the System, Including Categories of Users and the Purposes of Such Uses:

The IIM Trust Funds system of records is used to manage the collection, investment, distribution, and disbursement of IIM account and Tribal trust fund income; comply with the American Indian Trust Fund Management Reform Act of 1994 (Pub. L. 103–412, 108 Stat. 4239); improve accountability and management of Indian funds held in trust by the Government; provide trust services and information for Indian trust funds program management; manage beneficiary contact including inquiries and requests regarding their trust assets; provide IIM account status to IIM account holders; locate IIM account holders whose whereabouts are currently unknown; document trust account transaction history and quarterly statements; and transfer electronic data to the Department of the Treasury for the processing of IIM account and Tribal trust fund account payments. It also supports DOI land consolidation activities and provides an interface to TAAMS, a system of record for title and land resource management of Indian trust land within DOI and the Bureau of Indian Affairs (BIA).

In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, all or a portion of the records or information contained in this system may be disclosed outside DOI as a routine use pursuant to 5 U.S.C. 552a(b)(3) as follows:

(1) (a) To any of the following entities or individuals, when the circumstances set forth in paragraph (b) are met:

(i) The U.S. Department of Justice (DOJ);

(ii) A court or an adjudicative or other administrative body;

(iii) A party in litigation before a court or an adjudicative or other administrative body; or

(iv) Any DOI employee acting in his or her individual capacity if DOI or DOJ has agreed to represent that employee or pay for private representation of the employee;

(b) When:

(i) One of the following is a party to the proceeding or has an interest in the proceeding:

(A) DOI or any component of DOI;

(B) Any other Federal agency appearing before the Office of Hearings and Appeals;

(C) Any DOI employee acting in his or her official capacity;

(D) Any DOI employee acting in his or her individual capacity if DOI or DOJ has agreed to represent that employee or pay for private representation of the employee;

(E) The United States, when DOJ determines that DOI is likely to be affected by the proceeding; and

(ii) DOI deems the disclosure to be:

(A) Relevant and necessary to the proceeding; and

(B) Compatible with the purpose for which the records were compiled.

(2) To a congressional office in response to a written inquiry that an individual covered by the system, or the heir of such individual if the covered individual is deceased, has made to the office.

(3) To any criminal, civil, or regulatory law enforcement authority (whether Federal, state, territorial, local, Tribal or foreign) when a record, either alone or in conjunction with other information, indicates a violation or potential violation of law—criminal, civil, or regulatory in nature, and the disclosure is compatible with the purpose for which the records were compiled.

(4) To an official of another Federal agency to provide information needed in the performance of official duties related to reconciling or reconstructing data files or to enable that agency to respond to an inquiry by the individual to whom the record pertains.

(5) To Federal, state, territorial, local, Tribal, or foreign agencies that have requested information relevant or necessary to the hiring, firing or retention of an employee or contractor, or the issuance of a security clearance, license, contract, grant or other benefit, when the disclosure is compatible with the purpose for which the records were compiled.

(6) To representatives of the National Archives and Records Administration to conduct records management inspections under the authority of 44 U.S.C. 2904 and 2906.

(7) To state and local governments and Tribal organizations to provide information needed in response to court order and/or discovery purposes related to litigation, when the disclosure is compatible with the purpose for which the records were compiled.

(8) To an expert, consultant, or contractor (including employees of the contractor) of DOI that performs services requiring access to these records on DOI's behalf to carry out the purposes of the system.

(9) To appropriate agencies, entities, and persons when:

(a) It is suspected or confirmed that the security or confidentiality of information in the system of records has been compromised; and

(b) The Department has determined that as a result of the suspected or confirmed compromise there is a risk of harm to economic or property interest, identity theft or fraud, or harm to the security or integrity of this system or other systems or programs (whether maintained by the Department or another agency or entity) that rely upon the compromised information; and

(c) The disclosure is made to such agencies, entities and persons who are reasonably necessary to assist in connection with the Department's efforts to respond to the suspected or confirmed compromise and prevent, minimize, or remedy such harm.

(10) To the Office of Management and Budget during the coordination and clearance process in connection with legislative affairs as mandated by OMB Circular A–19.

(11) To the Department of the Treasury, as needed, in the performance of their official duties to disburse trust funds and to issue disbursements, Explanation of Payment reports (EOPs), Statements of Performance (including Assets), IRS Form 1099s, Osage Headright Owner's Share of Income, Deductions, etc., and BIA invoices for the use or sale of Indian trust lands and resources, as well as, to recover debts owed to the United States.

(12) To agency contractors who have been engaged to assist the Government in the performance of a contract, grant, cooperative agreement, or other activity related to this system of records and who need to have access to the records in order to perform the activity.

(13) To Indian Tribes entering into a contract or compacts of the trust funds management functions under the Indian Self-Determination and Education Assistance Act, as amended.

(14) To any of the following entities or individuals, when the entity or individual makes a written request for information of owners of any interest in

trust or restricted lands, location of the parcel, and the percentage of undivided interest owner by each individual:

(i) To other owners of interests in trust or restricted lands within the same Indian Reservation;

(ii) To Tribes that exercise jurisdiction over the land where the parcel is located or any person who is eligible for membership in a Tribe; and

(iii) To any person that is leasing, using or consolidating, or is applying to lease, use or consolidate trust or restricted land or the interest in trust or restricted lands.

(15) To Indian Tribes entering into a contract or compacts of real estate or title functions under the Indian Self-Determination and Education Assistance Act, as amended.

(16) To Indian Tribes (including employees) who (1) operate, or are eligible to operate, land consolidation activities on behalf of DOI, (2) agree to non-disclosure, and (3) submit a request in writing, upon a determination by DOI that such activities shall occur on the Tribe's Reservation within 6 months or less and when the information relates to owners of fractionated land. Information disclosed may include, but not limited to, the following:

(a) Contact information (telephone number, email address);

(b) Relevant personal characteristics of the owner (age, Tribal membership, living/deceased);

(c) Type of ownership, *i.e.,* type of interest, if interest is purchasable;

(d) Transaction status, *i.e.,* has an offer been sent, accepted or rejected, is the owner a willing seller.

(17) To the lineal descendant, heir, or devisee of a deceased individual covered by the system or to any other person entitled to the deceased's trust assets.

(18) To IIM account owners, their heirs, guardians, or agents.

(19) To members of the public, the names of IIM account holders whose whereabouts are unknown and OST is seeking a current address.

(18) To the news media and the public, with the approval of the Public Affairs Officer in consultation with Counsel and the Senior Agency Official for Privacy, where there exists a legitimate public interest in the disclosure of the information, except to the extent it is determined that release of the specific information in the context of a particular case would constitute an unwarranted invasion of personal privacy.

Disclosure to Consumer Reporting Agencies:

Pursuant to 5 U.S.C. 552a(b)(12), disclosures may be made to a consumer reporting agency as defined in the Fair Credit Reporting Act (15 U.S.C. 1681a(f)) or the Federal Claims Collection Act of 1996 (31 U.S.C. 3701(a)(3)).

Policies and Practices for Storing, Retrieving, Accessing, Retaining and Disposing of Records in the System:

STORAGE:

Records maintained in paper form are stored in file folders in file cabinets. Electronic records are maintained in computer servers, computer hard drives, electronic databases, email, and electronic media such as removable drives, compact disc, magnetic disk, diskette, and computer tapes.

RETRIEVABILITY:

Records are retrieved by individual names, Social Security numbers, IIM or Tribal trust fund account numbers, Tribe, Tribal enrollment or census numbers, Tribal codes, electronic ticket numbers, contact names, and call numbers or incident numbers. Identifiers may also be linked to appraisals, parcels, or encumbrances on ownership.

SAFEGUARDS:

The records contained in this system are safeguarded in accordance with 43 CFR 2.226 and other applicable security and privacy policies and standards. During normal hours of operation, paper records are maintained in locked file cabinets under the control of authorized personnel. Computerized records systems follow the National Institute of Standards and Technology standards as developed to comply with the Privacy Act of 1974 (Pub. L. 93–579), Paperwork Reduction Act of 1995 (Pub. L. 104–13), Federal Information Security Management Act of 2002 (Pub. L. 107–347), and the Federal Information Processing Standards 199, Standards for Security Categorization of Federal Information and Information Systems. Computer servers in which electronic records are stored are located in secured DOI and contractor facilities. Access to records in the system is limited to authorized personnel who have a need to access the records in the performance of their official duties. Electronic data is protected through user identification, passwords, database permissions and software controls. Such security measures establish different access levels for different types of users associated with pre-defined groups and/or bureaus. Each user's access is restricted to only the functions and data necessary to perform that person's job responsibilities. Access can be restricted to specific functions (create, update, delete, view, assign permissions) and is restricted utilizing role-based access. Authorized users are trained and required to follow established internal security protocols and must complete all security, privacy, and records management training and sign the DOI Rules of Behavior. Contract employees with access to the system are monitored by their Contracting Officer's Technical Representative and agency Security Manager. A Privacy Impact Assessment was conducted to ensure that Privacy Act safeguard requirements are met and appropriate privacy controls and safeguards are in place.

RETENTION AND DISPOSAL:

Records in this system are covered by the Indian Affairs Records Schedule records series 6100 and 9000 approved on June 28, 2006, by the National Archives and Records Administration (NARA) Job No. N1–075–04–7 and Job. No. N1–075–06–8. The Indian Fiduciary Financial Trust records are cut off at the end of the fiscal year, maintained in the office two years after cut off, and then retired to the American Indian Records Repository (AIRR), Federal Records Center, Lenexa, Kansas. Subsequent legal transfer of the records to the National Archives of the United States will be in accordance with the signed Standard Form 258, Agreement to Transfer Records to the National Archives of the United States. Historical Trust Accounting records are cut off at fiscal year-end, maintained in the office of records for a maximum of 5 years after cut off, and then retired to the AIRR, Federal Records Center, Lenexa, Kansas. Subsequent legal transfer of the records to the National Archives of the United States will be as jointly agreed to between the U.S. Department of the Interior and NARA. Temporary records are maintained and disposed of in accordance with the General Records Schedule for the appropriate record type (including data backup tapes or copies).

System Manager and Address:

Chief of Staff, Office of the Special Trustee for American Indians, 1849 C Street NW., Room 3254, Washington, DC 20240.

Notification Procedures:

An individual requesting notification of the existence of records on himself or herself should send a signed, written inquiry to the System Manager identified above. The request envelope and letter should both be clearly marked

''PRIVACY ACT INQUIRY.'' A request for notification must meet the requirements of 43 CFR 2.235. Provide the following information with your request:

(a) Proof of your identity;

(b) List of all of the names by which you have been known, such as maiden name or alias(es);

(c) Social Security number;

(d) Mailing address;

(e) Tribe, IIM account number, Tribal enrollment, or census number;

(f) BIA home agency; and

(g) Time period(s) during which the records may have been created or maintained, to the extent known by you.

Record Access Procedures:

An individual requesting records on himself or herself should send a signed written request to the System Manager identified above. The request should describe the records sought as specifically as possible. The request envelope and letter should both be clearly marked ''PRIVACY ACT REQUEST FOR ACCESS.'' A request for access must meet the requirements of 43 CFR 2.238. Provide the following information with your request:

(a) Proof of your identity;

(b) List of all of the names by which you have been known, such as maiden name or alias(es);

(c) Social Security number;

(d) Mailing address;

(e) Tribe, IIM account number, Tribal enrollment, or census number;

(f) BIA home agency;

(g) Time period(s) during which the records may have been created or maintained, to the extent known by you; and

(h) Description or identification of the records you are requesting (including whether you are asking for a copy of all of your records or only a specific part of them) and the maximum amount of money that you are willing to pay for duplication.

Contesting Record Procedures:

An individual requesting corrections or the removal of material from his or her records should send a signed, written request to the System Manager identified above. A request for corrections or removal must meet the requirements of 43 CFR 2.246. Provide the following information with your request:

(a) Proof of your identity;

(b) List of all of the names by which you have been known, such as maiden name or alias(es);

(c) Social Security number;

(d) Mailing address;

(e) Tribe, IIM account number, Tribal enrollment, or census number;

(f) BIA home agency;

(g) Time period(s) during which the records may have been created or maintained, to the extent known by you;

(h) Specific description or identification of the record(s) you are contesting and the reason(s) why you believe the record(s) are not accurate, relevant, timely, or complete; and

(i) Copy of documents or evidence in support of (h) above.

Records Source Categories:

Sources of information in the system include individual Indians and Alaskan Natives (or their heirs), Indian Tribes, current and former Federal employees and contractors who receive IIM account information or are IIM account holders. Records and financial data in this system are also obtained from the OST ART and TFAS, other DOI Bureaus and Offices including BIA, Office of Natural Resources and Revenue, Bureau of Land Management, Office of Hearings and Appeals, and the Office of the Secretary. Information may also be obtained from the DOJ, Department of the Treasury, and other Federal, state and local agencies, and Tribes; Courts of competent jurisdiction, including Tribal courts; and private, financial and business institutions and entities.

Additionally, this system contains information received from members of the public, including individuals who make inquiries about Cobell Settlement payments, acquaintances of IIM account holders, depositors into and claimants against IIM accounts, individuals who lease, contract, or who are permit holders on Indian lands, and individuals with whom OST conducts business. The system also contains information received from private organizations about individual Indian account holders whose whereabouts are unknown to OST; and correspondents, participants, beneficiaries, land owners, and members of the public who participate or are interested in land consolidation or related program activities.

Exemptions Claimed for the System:

None.

[FR Doc. 2015–00038 Filed 1–7–15; 8:45 am]

BILLING CODE 4334–12–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLWO301000.L13400000.PQ 0000.LXSIGEOT0000.15X]

Renewal of Approved Information Collection; Control Number 1004–0034

AGENCY: Bureau of Land Management, Interior.

ACTION: 60-Day notice and request for comments.

SUMMARY: In compliance with the Paperwork Reduction Act, the Bureau of Land Management (BLM) invites public comments on, and plans to request approval to continue, the collection of information about transfers and assignments of leases for oil, gas, and geothermal resources. The Office of Management and Budget (OMB) has assigned control number 1004–0034 to this information collection.

DATES: Please submit comments on the proposed information collection by March 9, 2015.

ADDRESSES: Comments may be submitted by mail, fax, or electronic mail. Mail: U.S. Department of the Interior, Bureau of Land Management, 1849 C Street NW., Room 2134LM, Attention: Jean Sonneman, Washington, DC 20240. Fax: to Jean Sonneman at 202–245–0050. Electronic mail: *Jean_Sonneman@blm.gov.* Please indicate ''Attn: 1004–0034'' regardless of the form of your comments.

FOR FURTHER INFORMATION CONTACT: Jennifer Spencer at 202–912–7146 (oil and gas) or Lorenzo Trimble at 775–861–6567 (geothermal resources). Persons who use a telecommunication device for the deaf may call the Federal Information Relay Service at 1–800–877–8339, to leave a message for Ms. Spencer or Mr. Trimble.

SUPPLEMENTARY INFORMATION: OMB regulations at 5 CFR part 1320, which implement provisions of the Paperwork Reduction Act, 44 U.S.C. 3501–3521, require that interested members of the public and affected agencies be given an opportunity to comment on information collection and recordkeeping activities (see 5 CFR 1320.8 (d) and 1320.12(a)). This notice identifies an information collection that the BLM plans to submit to OMB for approval. The Paperwork Reduction Act provides that an agency may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number. Until OMB approves a collection of information, you are not obligated to respond.

The BLM will request a 3-year term of approval for this information collection

activity. 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 the use of automated means of collection of the information. A summary of the public comments will accompany our submission of the information collection requests 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.

The following information pertains to this request:

Title: Oil, Gas, and Geothermal Resources: Transfers and Assignments.

OMB Control Number: 1004–0034.

Summary: When a holder of a Federal lease for oil, gas, or geothermal resources assigns the lease or transfers the operating rights, the BLM must collect information about that transaction. Each assignment or transfer is a contract between private parties but must be approved by the BLM under the relevant statutory authority.

Frequency of Collection: On occasion.

Forms:

- Form 3000–3, Assignment of Record Title Interest in a Lease for Oil and Gas or Geothermal Resources; and
- Form 3000–3a, Transfer of Operating Rights (Sublease) in a Lease for Oil and Gas or Geothermal Resources.

Description of Respondents: Lessees who want to assign record title interest or transfer operating rights in a Federal lease for oil and gas or geothermal resources.

Estimated Annual Responses: 14,041.

Estimated Annual Burden Hours: 7,020.5.

Estimated Annual Non-Hour Costs: $1,263,690.

The estimated annual burdens are itemized in the following table:

A. Type of response	B. Number of responses	C. Time per response	D. Total time (column B × column C)
Assignment of Record Title Interest/Oil and Gas Leases 43 CFR 3106.4–1 Form 3000–3.	6,316	30 minutes	3,158 hours
Assignment of Record Title Interest/Geothermal Resources 43 CFR 3216.14 Form 3000–3.	28	30 minutes	14 hours
Transfer of Operating Rights/Oil and Gas Leases 43 CFR 3106.4–1 Form 3000–3a.	7,696	30 minutes	3,848 hours
Transfer of Operating Rights/Geothermal Resources 43 CFR 3216.14 Form 3000–3a.	1	30 minutes	30 minutes
Totals	14,041		7,020.5 hours

Jean Sonneman,

Bureau of Land Management, Information Collection Clearance Officer.

[FR Doc. 2015–00070 Filed 1–7–15; 8:45 am]

BILLING CODE 4310– 84–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–SERO–GUIS–16740; PPSESEROC3, PMP00UP05.YP0000]

Record of Decision for the General Management Plan: Gulf Islands National Seashore, Florida and Mississippi

AGENCY: National Park Service, Interior.

ACTION: Notice of availability.

SUMMARY: The National Park Service (NPS) announces the availability of the Record of Decision (ROD) for the General Management Plan (GMP) for Gulf Islands National Seashore (National Seashore). On September 11, 2014, the Regional Director, Southeast Region, approved the ROD for the project.

FOR FURTHER INFORMATION CONTACT: Superintendent Dan Brown, Gulf Islands National Seashore, 1801 Gulf Breeze Parkway, Gulf Breeze, FL 32563; or via telephone at (850) 934–2600.

SUPPLEMENTARY INFORMATION: The NPS evaluated four alternatives for managing use and development of the national seashore in the GMP Final Environmental Impact Statement:

Alternative 1—no action.

Alternative 2—The National Seashore would be managed to adapt to the wild and dynamic processes of the northern Gulf Coast while providing seashore recreational and educational opportunities. The level of infrastructure to support visitor services on barrier island areas would be adapted or removed as the environment changes over time.

Alternative 3 (NPS preferred alternative)—the National Seashore would be managed as an outdoor classroom for exploring the natural and human history of the northern Gulf Coast while providing seashore recreational opportunities. Collaboration and cooperation between a consortium of academia, visiting scientists, conservation organizations, and other agencies would be actively pursued to enhance resource management, stewardship, and understanding of the northern gulf coastal environment.

Alternative 4—The NPS would seek to collaborate and expand partnerships with educational and cultural institutions, nonprofit organizations, and commercial service providers to promote a greater array of National Seashore recreational and educational opportunities among a variety of coastal settings.

The ROD announces that the NPS has selected alternative 3, and the NPS will immediately begin to implement that alternative as the GMP. The GMP will guide the management of the national monument over the next 20+ years.

The responsible official for this FEIS/GMP is the Regional Director, NPS Southeast Region, 100 Alabama Street SW., 1924 Building, Atlanta, Georgia 30303.

Dated: December 22, 2014.

Sherri L. Fields,

Acting Regional Director, Southeast Region.

[FR Doc. 2015–00047 Filed 1–7–15; 8:45 am]

BILLING CODE 4310–JD–P

INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 701–TA–512 and 731–TA–1248 (Final)]

Carbon and Certain Alloy Steel Wire Rod From China; Determinations

On the basis of the record [1] developed in the subject investigations, the United States International Trade Commission (''Commission'') determines, pursuant to sections 705(b) and 735(b) of the Tariff Act of 1930 (19 U.S.C. 1671d(b)) and (19 U.S.C. 1673d(b)) (''the Act''), that an industry in the United States is materially injured by reason of imports of carbon and certain alloy steel wire rod from China, provided for in subheadings 7213.91, 7213.99, 7227.20, and 7227.90 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce (''Commerce'') to be to be subsidized by the government of China, and to be sold in the United States at less than fair value (''LTFV'').[2]

Background

The Commission instituted these investigations effective January 31, 2014, following receipt of a petition filed with the Commission and Commerce by ArcelorMittal USA LLC, Chicago, Illinois; Charter Steel, Saukville, Wisconsin; Evraz Pueblo, Pueblo, Colorado; Gerdau Ameristeel US Inc., Tampa, Florida; Keystone Consolidated Industries, Inc., Dallas, Texas; and Nucor Corporation, Charlotte, North Carolina. The final phase of the investigations was scheduled by the Commission following notification of a preliminary determination by Commerce that imports of carbon and certain alloy steel wire rod from China were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(b)) and dumped within the meaning of 733(b) of the Act (19 U.S.C. 1673b(b)). Notice of the scheduling of the final phase of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the **Federal Register** on September 23, 2014 (79 FR 56827). The hearing was held in Washington, DC, on November 12, 2014, and all persons who requested the opportunity were permitted to appear in person or by counsel.

The Commission completed and filed its determination in these investigations on January 2, 2015. The views of the Commission are contained in USITC Publication 4509 (January 2015), entitled *Carbon and Certain Alloy Steel Wire Rod from China: Investigation Nos. 701–TA–512 and 731–TA–1248 (Final).*

Issued: January 2, 2015.

By order of the Commission.

Jennifer Rohrbach,

Supervisory Attorney.

[FR Doc. 2015–00039 Filed 1–7–15; 8:45 am]

BILLING CODE 7020–02–P

[1] The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

[2] Additionally, the Commission finds that: (1) Imports subject to Commerce's affirmative critical circumstances determination are not likely to undermine seriously the remedial effect of the countervailing duty order on carbon and certain alloy steel wire rod from China, and (2) imports subject to Commerce's affirmative critical circumstances determination are not likely to undermine seriously the remedial effect of the antidumping duty order on carbon and certain alloy steel wire rod from China.

JUDICIAL CONFERENCE OF THE UNITED STATES

Hearings of the Judicial Conference Advisory Committee on Rules of Criminal Procedure

AGENCY: Judicial Conference of the United States, Advisory Committee on Rules of Criminal Procedure.

ACTION: Notice of cancellation of public hearing.

SUMMARY: The following public hearing on proposed amendments to the Federal Rules of Criminal Procedure has been canceled: Criminal Rules Hearing, January 30, 2015, in Nashville, Tennessee. Announcements for this meeting were previously published in 79 FR 48250 and 79 FR 72702.

FOR FURTHER INFORMATION CONTACT: Jonathan C. Rose, Secretary and Chief Rules Officer, Rules Committee Support Office, Administrative Office of the United States Courts, Washington, DC 20544, telephone (202) 502–1820.

Dated: January 5, 2015.

Jonathan C. Rose,

Secretary and Chief Rules Officer.

[FR Doc. 2015–00103 Filed 1–7–15; 8:45 am]

BILLING CODE 2210–55–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Proposed Consent Decree Under the Clean Water Act

On January 2, 2015, the Department of Justice lodged a proposed Consent Decree in *United States and the State of Arkansas* v. *The City of Fort Smith, Arkansas,* Civil Action No. 14–cv–02266–PKH in the United States District Court for the Western District of Arkansas. Notice is hereby given that, for a period of 30 days, the United States will receive public comments on the proposed Consent Decree.

The United States and the State filed an amended complaint against Fort Smith on the same date. The amended complaint alleges that Fort Smith discharged untreated wastewater from Fort Smith's sanitary sewer collection system to waters of the United States and the State on numerous occasions, and that Fort Smith failed to comply with certain terms and conditions of its National Pollutant Discharge Elimination System permits, in violation of Sections 301 and 402 of the Clean Water Act, 33 U.S.C. 1311 and 1342.

Under the settlement, Fort Smith will implement various injunctive measures to achieve full compliance with the Clean Water Act and eliminate sanitary system overflows. The injunctive measures to be undertaken by Fort Smith include conducting a comprehensive inspection of its collection system for condition defects, increasing capacity of sewer lines, where needed, repairing, rehabilitating or replacing sewer lines with significant defects, upgrading of pump stations, and developing and implementing a ''capacity, management, operation and maintenance system'' to further reduce the incidence of sanitary sewer overflows. The estimated cost of implementing these measures, over an anticipated 12 year period, is approximately $205,000,000 in current dollars. Fort Smith will also implement a Supplemental Environmental Project aimed at assisting qualified low income residential property owners to repair or replace defective private service lines which connection to its collection system, valued at $400,000. Fort Smith will also pay a civil penalty of to the United States of $300,000.

The publication of this notice opens a period for public comment on the proposed Consent Decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and should refer to *United States and the State of Arkansas* v. *The City of Fort Smith, Arkansas,* (Civil Action No. 14–cv–02266), D.J. Ref. No. 90–5–1–1–08677. All comments must be submitted no later than thirty (30) days after the publication date of this notice. Comments may be submitted either by email or by mail:

To submit comments:	*Send them to:*
By email	*pubcomment-ees.enrd@usdoj.gov.*
By mail	Assistant Attorney General, U.S. DOJ–ENRD, P.O. Box 7611, Washington, DC 20044–7611.

During the public comment period, the proposed Consent Decree may be examined and downloaded at this Justice Department Web site: *http://www.usdoj.gov/enrd/Consent_Decrees.html.* We will provide a paper copy of the Consent Decree upon written request and payment of reproduction costs. Please mail your request and payment to: Consent Decree Library, U.S. DOJ–ENRD, P.O. Box 7611, Washington, DC 20044–7611. Please enclose a check or money order for $30.25 (25 cents per page reproduction cost) payable to the United States Treasury.

Maureen Katz,

Assistant Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 2015–00076 Filed 1–7–15; 8:45 am]

BILLING CODE 4410–15–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Proposed Consent Decree under the Comprehensive Environmental Response, Compensation and Liabilty Act (''CERCLA'')

On January 2, 2015, the Department of Justice lodged a proposed consent decree (''proposed Decree'') with the United States District Court for the Western District of Pennsylvania in the lawsuit entitled *United States and the Commonwealth of Pennsylvania Department of Environmental Protection* v. *American Iron and Metal Company, Inc., et al.,* Civil Action No. 2:14–cv–01734–MRH.

The United States filed this lawsuit under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the complaint names American Iron and Metal Company, Inc.; Garfield Alloys, Inc.; Pace Industries on behalf of Leggett and Platt, Inc.; Magnesium Products of America, Inc.; Spartan Light Metals Products, LLC; and SPX Corporation as defendants. The complaint requests recovery of costs that the United States incurred responding to releases of hazardous substances at the Remacor Site in West Pittsburg, Lawrence County, Pennsylvania. All defendants signed the consent decree, and collectively agree to pay $5,920,000 of the United States' past response costs. In return, the United States agrees not to sue the defendants under section 107(a) of CERCLA, 42 U.S.C. 9607(a).

The publication of this notice opens a period for public comment on the proposed Decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and should refer to *United States and the Commonwealth of Pennsylvania Department of Environmental Protection* v. *American Iron and Metal Company, Inc., et al.,* D.J. Ref. No. 90–11–3–09682/2. All comments must be submitted no later than thirty (30) days after the publication date of this notice. Comments may be submitted either by email or by mail:

To submit comments:	*Send them to:*
By email	*pubcomment-ees.enrd@usdoj.gov.*
By mail	Assistant Attorney General, U.S. DOJ–ENRD, P.O. Box 7611, Washington, DC 20044–7611.

During the public comment period, the consent decree may be examined and downloaded at this Justice Department Web site: *http://www.usdoj.gov/enrd/Consent_Decrees.html.* We will provide a paper copy of the consent decree upon written request and payment of reproduction costs. Please mail your request and payment to: Consent Decree Library, U.S. DOJ–ENRD, P.O. Box 7611, Washington, DC 20044–7611.

Please enclose a check or money order for $7.00 (25 cents per page reproduction cost) payable to the United States Treasury.

Maureen Katz,

Assistant Section Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 2015–00069 Filed 1–7–15; 8:45 am]

BILLING CODE 4410–15–P

DEPARTMENT OF LABOR

Office of the Secretary

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Telephone Point of Purchase Survey

ACTION: Notice.

SUMMARY: The Department of Labor (DOL) is submitting the Bureau of Labor Statistics (BLS) sponsored information collection request (ICR) revision titled, ''Telephone Point of Purchase Survey,'' to the Office of Management and Budget (OMB) for review and approval for use in accordance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501 *et seq.*). Public comments on the ICR are invited.

DATES: The OMB will consider all written comments that agency receives on or before February 9, 2015.

ADDRESSES: A copy of this ICR with applicable supporting documentation; including a description of the likely respondents, proposed frequency of response, and estimated total burden may be obtained free of charge from the *RegInfo.gov* Web site at *http://www.reginfo.gov/public/do/PRAViewICR?ref_nbr201409-1220-003* (this link will only become active on the day following publication of this notice) or by contacting Michel Smyth by telephone at 202–693–4129, TTY 202–693–8064, (these are not toll-free numbers) or sending an email to *DOL_PRA_PUBLIC@dol.gov.*

Submit comments about this request by mail or courier to the Office of Information and Regulatory Affairs, Attn: OMB Desk Officer for DOL–BLS, Office of Management and Budget, Room 10235, 725 17th Street NW., Washington, DC 20503; by Fax: 202–395–5806 (this is not a toll-free number); or by email: *OIRA_submission@omb.eop.gov.* Commenters are encouraged, but not required, to send a courtesy copy of any comments by mail or courier to the U.S. Department of Labor-OASAM, Office of the Chief Information Officer, Attn: Departmental Information Compliance Management Program, Room N1301, 200 Constitution Avenue NW., Washington, DC 20210; or by email: *DOL_PRA_PUBLIC@dol.gov.*

FOR FURTHER INFORMATION CONTACT: Contact Michel Smyth by telephone at 202–693–4129, TTY 202–693–8064, (these are not toll-free numbers) or sending an email to *DOL_PRA_PUBLIC@dol.gov.*

Authority: 44 U.S.C. 3507(a)(1)(D).

SUPPLEMENTARY INFORMATION: This ICR seeks approval under the PRA for revisions to the Telephone Point of Purchase Survey (TPOPS) information collection. The BLS administers the survey quarterly via a computer-assisted-telephone-interview. This survey is flexible and creates the possibility of introducing new products into the Consumer Price Index (CPI) in a timely manner. The data collected in this survey are necessary for the continuing construction of a current outlet universe from which locations are

selected for the price collection needed for calculating the CPI. Furthermore, the TPOPS provides the weights used in selecting the items that are priced at these establishments. This sample design produces an overall CPI market basket that is more reflective of the prices faced and the establishments visited by urban consumers. This information collection has been classified as a revision, because in 2016 the total respondent burden is expected to increase slightly during the transition to a new 8-panel design. The Appropriations Bill for the Departments of Labor, and Health, Education, and Welfare; BLS Authorizing Statute; and United States Code Title 13 authorize this information collection. *See* Public Law 94–439 (H.R. 14232), 29 U.S.C. 2, and 13 U.S.C. 8.

This information collection is subject to the PRA. A Federal agency generally cannot conduct or sponsor a collection of information, and the public is generally not required to respond to an information collection, unless it is approved by the OMB under the PRA and displays a currently valid OMB Control Number. In addition, notwithstanding any other provisions of law, no person shall generally be subject to penalty for failing to comply with a collection of information that does not display a valid Control Number. *See* 5 CFR 1320.5(a) and 1320.6. The DOL obtains OMB approval for this information collection under Control Number 1220–0044. The current approval is scheduled to expire on February 28, 2017; however, the DOL notes that existing information collection requirements submitted to the OMB receive a month-to-month extension while they undergo review. New requirements would only take effect upon OMB approval. For additional substantive information about this ICR, see the related notice published in the **Federal Register** on September 15, 2014 (79 FR 55016).

Interested parties are encouraged to send comments to the OMB, Office of Information and Regulatory Affairs at the address shown in the **ADDRESSES** section within thirty (30) days of publication of this notice in the **Federal Register**. In order to help ensure appropriate consideration, comments should mention OMB Control Number 1220–0044. The OMB is particularly interested in comments that:

- 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.

Agency: DOL–BLS.

Title of Collection: Telephone Point of Purchase Survey.

OMB Control Number: 1220–0044.

Affected Public: Individuals or households.

Total Estimated Number of Respondents: 21,827.

Total Estimated Number of Responses: 55,571.

Total Estimated Annual Time Burden: 11,818 hours.

Total Estimated Annual Other Costs Burden: $0.

Dated: January 2, 2015.

Michel Smyth,

Departmental Clearance Officer.

[FR Doc. 2015–00078 Filed 1–7–15; 8:45 am]

BILLING CODE 4510–24–P

NATIONAL LABOR RELATIONS BOARD

Sunshine Act Meetings: January 2015

TIME AND DATES: All meetings are held at 2:00 p.m., Wednesday, January 7; Tuesday, January 13; Wednesday, January 14; Thursday, January 15; Tuesday, January 20; Wednesday, January 21; Thursday, January 22; Tuesday, January 27; Wednesday, January 28; Thursday, January 29.

PLACE: Board Agenda Room, No. 11820, 1099 14th St. NW., Washington, DC 20570.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Pursuant to § 102.139(a) of the Board's Rules and Regulations, the Board or a panel thereof will consider ''the issuance of a subpoena, the Board's participation in a civil action or proceeding or an arbitration, or the initiation, conduct, or disposition . . . of particular representation or unfair labor practice proceedings under section 8, 9, or 10 of the [National Labor Relations] Act, or any court proceedings collateral or ancillary thereto.'' See also 5 U.S.C. 552b(c)(10).

CONTACT PERSON FOR MORE INFORMATION: Henry Breiteneicher, Associate Executive Secretary, (202) 273–2917.

Dated: January 6, 2015.

William B. Cowen,

Solicitor.

[FR Doc. 2015–00131 Filed 1–6–15; 11:15 am]

BILLING CODE 7545–01–P

NUCLEAR REGULATORY COMMISSION

[NRC–2014–0272]

Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of pending NRC action to submit an information collection request to the Office of Management and Budget (OMB) and solicitation of public comment.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) invites public comment about our intention to request the OMB's approval for renewal of an existing information collection that is summarized below. We are required to publish this notice in the **Federal Register** under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 35).

Information pertaining to the requirement to be submitted:

1. *The title of the information collection:* Requests to Non-Agreement States for Information.

2. *Current OMB approval number:* 3150–0200.

3. *How often the collection is required:* On occasion.

4. *Who is required or asked to report:* The 15 Non-Agreement States (13 States, the District of Columbia, and the Commonwealth of Puerto Rico that have not signed section 274(b) Agreements with the NRC).

5. *The number of annual respondents:* 15.

6. *The number of hours needed annually to complete the requirement or request:* 1,089.

7. *Abstract:* The NRC is seeking to revise this information collection to be a plan for a generic collection of information. The need and practicality of the collection can be evaluated, but the details of the specific individual collections will not be known until a later time. Requests may be made of Non-Agreement States that are similar to those of Agreement States to provide a

more complete overview of the national program for regulating radioactive materials. This information would be used in the decision-making of the Commission. With Agreement States and as part of the NRC's cooperative post-agreement program with the States pursuant to section 274(b), information on licensing and inspection practices, and/or incidents, and other technical and statistical information are exchanged. Therefore, information requests sought may take the form of surveys, *e.g.,* telephonic and electronic surveys/polls and facsimiles.

Submit, by March 9, 2015, comments that address the following questions:

1. Is the proposed collection of information necessary for the NRC to properly perform its functions? Does the information have practical utility?
2. Is the burden estimate accurate?
3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?
4. How can the burden of the information collection be minimized, including the use of automated collection techniques or other forms of information technology?

The public may examine and have copied for a fee publicly-available documents, including the draft supporting statement, at the NRC's Public Document Room, Room O–1F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852. The OMB clearance requests are available at the NRC's Web site: *http://www.nrc.gov/public-involve/doc-comment/omb/*.

The document will be available on the NRC's home page site for 60 days after the signature date of this notice.

Comments submitted in writing or in electronic form will be made available for public inspection. Because your comments will not be edited to remove any identifying or contact information, the NRC cautions you against including any information in your submission that you do not want to be publicly disclosed. Comments submitted should reference Docket No. NRC–2014–0272. You may submit your comments by any of the following methods: Electronic comments go to *http://www.regulations.gov* and search for Docket No. NRC–2014–0272. Mail comments to NRC Clearance Officer, Tremaine Donnell (T–5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

Questions about the information collection requirements may be directed to the NRC Clearance Officer, Tremaine Donnell (T–5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, by telephone at 301–415–6258, or by email to *INFOCOLLECTS.Resource@NRC.GOV*.

Dated at Rockville, Maryland, this 2nd day of January, 2015.

For the Nuclear Regulatory Commission.

Tremaine Donnell,

NRC Clearance Officer, Office of Information Services.

[FR Doc. 2015–00083 Filed 1–7–15; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[NRC–2015–0001]

Sunshine Act Meeting

DATES: January 12, 19, 26, February 2, 9, 16, 2015.

PLACE: Commissioners' Conference Room, 11555 Rockville Pike, Rockville, Maryland.

STATUS: Public and Closed.

Week of January 12, 2015

Tuesday, January 13, 2015

9:30 a.m. Discussion of Management Issues (Closed—Ex. 2).

Week of January 19, 2015—Tentative

There are no meetings scheduled for the week of January 19, 2015.

Week of January 26, 2015—Tentative

Thursday, January 29, 2015

9:00 a.m. Briefing on Foreign Ownership, Control, and Domination (Public Meeting); (Contact: Shawn Harwell, 301–415–1309).

This meeting will be webcast live at the Web address—*http://www.nrc.gov/*.

Week of February 2, 2015—Tentative

Monday, February 2, 2015

1:00 p.m. Discussion of International Activities (Closed—Ex. 9).

Wednesday, February 4, 2015

8:30 a.m. Hearing on Combined License for Fermi, Unit 3 (Public Meeting); (Contact: Adrian Muniz, 301–415–4093).

This meeting will be webcast live at the Web address—*http://www.nrc.gov/*.

Week of February 9, 2015—Tentative

There are no meetings scheduled for the week of February 9, 2015

Week of February 16, 2015—Tentative

Wednesday, February 18, 2015

9:30 a.m. Briefing on International Activities (Closed—Ex. 9)

* * * * *

The schedule for Commission meetings is subject to change on short notice. For more information or to verify the status of meetings, contact Glenn Ellmers at (301) 415–0442 or via email at *Glenn.Ellmers@nrc.gov*.

* * * * *

The NRC Commission Meeting Schedule can be found on the Internet at: *http://www.nrc.gov/public-involve/public-meetings/schedule.html*.

* * * * *

The NRC provides reasonable accommodation to individuals with disabilities where appropriate. If you need a reasonable accommodation to participate in these public meetings, or need this meeting notice or the transcript or other information from the public meetings in another format (*e.g.* braille, large print), please notify Kimberly Meyer, NRC Disability Program Manager, at 301–287–0727, by videophone at 240–428–3217, or by email at *Kimberly.Meyer-Chambers@nrc.gov*. Determinations on requests for reasonable accommodation will be made on a case-by-case basis.

* * * * *

Members of the public may request to receive this information electronically. If you would like to be added to the distribution, please contact the Office of the Secretary, Washington, DC 20555 (301–415–1969), or send an email to *Patricia.Jimenez@nrc.gov* or *Brenda.Akstulewicz@nrc.gov*.

Dated: January 6, 2015.

Glenn Ellmers,

Policy Coordinator, Office of the Secretary.

[FR Doc. 2015–00201 Filed 1–6–15; 4:15 pm]

BILLING CODE 7590–01–P

SECURITIES AND EXCHANGE COMMISSION

Submission for OMB Review; Comment Request

Upon Written Request, Copies Available From: Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE., Washington, DC 20549–2736.

Extension:

Regulation AC—SEC File No. 270–517, OMB Control No. 3235–0575.

Notice is hereby given that pursuant to the Paperwork Reduction Act of 1995 (''PRA'') (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') has submitted to the Office of Management and Budget (''OMB'') a request for approval of extension of the existing collection of information provided for in Regulation

Analyst Certification (AC) (17 CFR 242.500–505), under the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*).

Regulation AC requires that research reports published, circulated, or provided by a broker or dealer or covered person contain a statement attesting that the views expressed in each research report accurately reflect the analyst's personal views and whether or not the research analyst received or will receive any compensation in connection with the views or recommendations expressed in the research report. Regulation AC also requires broker-dealers to, on a quarterly basis, make, keep, and maintain records of research analyst statements regarding whether the views expressed in public appearances accurately reflected the analyst's personal views, and whether any part of the analyst's compensation is related to the specific recommendations or views expressed in the public appearance. Regulation AC also requires that research prepared by foreign persons be presented to U.S. persons pursuant to Securities Exchange Act Rule 15a–6 and that broker-dealers notify associated persons if they would be covered by the regulation. Regulation AC excludes the news media from its coverage.

The collections of information under Regulation AC are necessary to provide investors with information with which to determine the value of the research available to them. It is important for an investor to know whether an analyst may be biased with respect to securities or issuers that are the subject of a research report. Further, in evaluating a research report, it is reasonable for an investor to want to know about an analyst's compensation. Without the information collection, the purposes of Regulation AC could not be met.

The Commission estimates that Regulation AC imposes an aggregate annual time burden of approximately 25,395 hours on 5,186 respondents, or approximately 5 hours per respondent. The Commission estimates that the total annual internal cost of compliance attributable to the 25,395 hours is approximately $11,616,150.00, or approximately $2,239.90 per respondent, annually.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information under the PRA unless it displays a currently valid OMB control number.

The public may view background documentation for this collection at the following Web site: *www.reginfo.gov.* Comments should be directed to (i) Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Office of Management and Budget, Room 10102, New Executive Office Building, Washington, DC 20503 or by sending an email to: *Shagufta_Ahmed@omb.eop.gov;* and (ii) Pamela Dyson, Acting Director/Chief Information Officer, Securities and Exchange Commission, c/o Remi Pavlik-Simon, 100 F Street NE., Washington, DC 20549, or send an email to: *PRA_Mailbox@sec.gov.* Comments must be submitted within 30 days of this notice.

Dated: January 2, 2015.

Brent J. Fields,

Secretary.

[FR Doc. 2015–00056 Filed 1–7–15; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

Proposed Collection; Comment Request

Upon Written Request, Copies Available From: U.S. Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE., Washington, DC 20549–2736.

Extension:

Rule 24b–1; SEC File No. 270–205; OMB Control No. 3235–0194.

Notice is hereby given that pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') is soliciting comments on the collection of information summarized below. The Commission plans to submit this existing collection of information to the Office of Management and Budget (''OMB'') for extension and approval, Rule 24b–1 (17 CFR 240.24b–1)—Documents to be Kept Public by Exchanges.

Rule 24b–1 under the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*) requires a national securities exchange to keep and make available for public inspection a copy of its registration statement and exhibits filed with the Commission, along with any amendments thereto.

There are 18 national securities exchanges that spend approximately one half hour each complying with this rule, for an aggregate total compliance burden of 9 hours per year. The staff estimates that the average cost per respondent is $65.18 per year, calculated as the costs of copying ($13.97) plus storage ($51.21), resulting in a total cost of compliance for the respondents of $1,173.24.

Written 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 Commission's estimate of the burden of the proposed collection of information; (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 respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given to comments and suggestions submitted in writing within 60 days of this publication.

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.

Please direct your written comments to: Pamela Dyson, Acting Director/Chief Information Officer, Securities and Exchange Commission, c/o Remi Pavlik-Simon, 100 F Street NE., Washington, DC 20549, or send an email to: *PRA_Mailbox@sec.gov.*

Dated: January 2, 2015.

Brent J. Fields,

Secretary.

[FR Doc. 2015–00055 Filed 1–7–15; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

Proposed Collection; Comment Request

Upon Written Request, Copies Available From: Securities and Exchange Commission, Office of FOIA Services, Washington, DC 20549–2736.

Extension:

Rule 15g–4, SEC File No. 270–347, OMB Control No. 3235–0393.

Notice is hereby given that pursuant to the Paperwork Reduction Act of 1995 (''PRA'') (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') is soliciting comments on the existing collection of information provided for in Rule 15g–4—Disclosure of compensation to brokers or dealers (17 CRF 240.15g–4) under the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*). The Commission plans to submit this existing collection of information to the Office of Management and Budget (''OMB'') for extension and approval.

Rule 15g–4 requires brokers and dealers effecting transactions in penny

stocks for or with customers to disclose the amount of compensation received by the broker-dealer in connection with the transaction. The purpose of the rule is to increase the level of disclosure to investors concerning penny stocks generally and specific penny stock transactions.

The Commission estimates that approximately 221 broker-dealers will spend an average of 87 hours annually to comply with this rule. Thus, the total compliance burden is approximately 19,245 burden-hours per year.

Written 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 estimates of the burden of the proposed collection of information; (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 respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given to comments and suggestions submitted in writing within 60 days of this publication.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information under the PRA unless it displays a currently valid OMB control number.

Please direct your written comments to: Pamela Dyson, Acting Director/Chief Information Officer, Securities and Exchange Commission, c/o Remi Pavlik-Simon, 100 F Street NE., Washington, DC 20549 or send an email to *PRA_Mailbox@sec.gov*.

Dated: January 2, 2015.

Brent J. Fields,

Secretary.

[FR Doc. 2015–00054 Filed 1–7–15; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

Proposed Collection; Comment Request

Upon Written Request, Copies Available From: Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE., Washington, DC 20549–2736.

Extension:

Rule 17a–5(c), SEC File No. 270–199, OMB Control No. 3235–0199.

Notice is hereby given that pursuant to the Paperwork Reduction Act of 1995 (''PRA'') (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') is soliciting comments on the existing collection of information provided for in Rule 17a–5(c) (17 CFR 240.17a–5(c)), under the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*). The Commission plans to submit this existing collection of information to the Office of Management and Budget (''OMB'') for extension and approval.

Rule 17a–5(c) generally requires broker-dealers who carry customer accounts to provide statements of the broker-dealer's financial condition to their customers. Paragraph (5) of Rule 17a–5(c) provides a conditional exemption from this requirement. A broker-dealer that elects to take advantage of the exemption must publish its statements on its Web site in a prescribed manner, and must maintain a toll-free number that customers can call to request a copy of the statements.

The purpose of the Rule is to ensure that customers of broker-dealers are provided with information concerning the financial condition of the firm that may be holding the customers' cash and securities. The Commission, when adopting the Rule in 1972, stated that the goal was to ''directly'' send a customer essential information so that the customer could ''judge whether his broker or dealer is financially sound.'' The Commission adopted the Rule in response to the failure of several broker-dealers holding customer funds and securities in the period between 1968 and 1971.

The Commission estimates that approximately 213 broker-dealer respondents carrying approximately 115 million public customer accounts incur an average burden of 142,424 hours per year to comply with the Rule.

Written comments are invited on: (a) 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; (b) the accuracy of the Commission's estimates of the burden of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given to comments and suggestions submitted in writing within 60 days of this publication.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information under the PRA unless it displays a currently valid OMB control number.

Please direct your written comments to: Pamela Dyson, Acting Director/Chief Information Officer, Securities and Exchange Commission, c/o Remi Pavlik-Simon, 100 F Street NE., Washington, DC 20549, or send an email to: *PRA_Mailbox@sec.gov.*

Dated: January 2, 2015.

Brent J. Fields,

Secretary.

[FR Doc. 2015–00057 Filed 1–7–15; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

Submission for OMB Review; Comment Request

Upon Written Request, Copies Available From: Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE., Washington, DC 20549–2736.

Extension:

Rule 9b–1, SEC File No. 270–429—OMB Control No. 3235–0480.

Notice is hereby given that pursuant to the Paperwork Reduction Act of 1995 (''PRA'') (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') has submitted to the Office of Management and Budget (''OMB'') a request for approval of extension of the previously approved collection of information provided for in Rule 9b–1 (17 CFR 240.9b–1), under the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*).

Rule 9b–1 (17 CFR 240.9b–1) sets forth the categories of information required to be disclosed in an options disclosure document (''ODD'') and requires the options markets to file an ODD with the Commission 60 days prior to the date it is distributed to investors. In addition, Rule 9b–1 provides that the ODD must be amended if the information in the document becomes materially inaccurate or incomplete and that amendments must be filed with the Commission 30 days prior to the distribution to customers. Finally, Rule 9b–1 requires a broker-dealer to furnish to each customer an ODD and any amendments, prior to accepting an order to purchase or sell an option on behalf of that customer.

There are 12 options markets that must comply with Rule 9b–1. These respondents work together to prepare a single ODD covering options traded on

each market, as well as amendments to the ODD. These respondents file approximately 3 amendments per year. The staff calculates that the preparation and filing of amendments should take no more than eight hours per options market. Thus, the total time burden for options markets per year is 288 hours (12 options markets × 8 hours per amendment × 3 amendments). The estimated cost for an in-house attorney is $380 per hour,[1] resulting in a total internal cost of compliance for these respondents of $109,440 per year (288 hours at $380 per hour).

In addition, approximately 1,500 broker-dealers must comply with Rule 9b–1. Each of these respondents will process an average of 3 new customers for options each week and, therefore, will have to furnish approximately 156 ODDs per year. The postal mailing or electronic delivery of the ODD takes respondents no more than 30 seconds to complete for an annual compliance burden for each of these respondents of 78 minutes or 1.3 hours. Thus, the total time burden per year for broker-dealers is 1,950 hours (1,500 broker-dealers × 1.3 hours). The estimated cost for a general clerk of a broker-dealer is $57 per hour,[2] resulting in a total internal cost of compliance for these respondents of $111,150 per year (1,950 hours at $57 per hour).

The total time burden for all respondents under this rule (both options markets and broker-dealers) is 2,238 hours per year (288 + 1,950), and the total internal cost of compliance is $220,590 ($109,440 + $111,150).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information under the PRA unless it displays a currently valid OMB control number.

The public may view background documentation for this information collection at the following Web site: *www.reginfo.gov*. Comments should be directed to (i) Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Office of Management and Budget, Room 10102, New Executive Office Building, Washington, DC 20503, or by sending an email to: *Shagufta_Ahmed@omb.eop.gov*; and (ii) Pamela Dyson, Acting Director/Chief Information Officer, Securities and Exchange Commission, c/o Remi Pavlik-Simon, 100 F Street NE., Washington, DC 20549, or by sending an email to: *PRA_Mailbox@sec.gov*. Comments must be submitted to OMB within 30 days of this notice.

Dated: January 2, 2015.

Brent J. Fields,

Secretary.

[FR Doc. 2015–00053 Filed 1–7–15; 8:45 am]

BILLING CODE 8011–01–P

[1] The $380 per hour figure for an Attorney is from SIFMA's *Management & Professional Earnings in the Securities Industry 2013,* modified by Commission staff to account for an 1800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead.

[2] The $57 per hour figure for a General Clerk is from SIFMA's *Office Salaries in the Securities Industry 2013,* modified by Commission staff to account for an 1800-hour work-year and multiplied by 2.93 to account for bonuses, firm size, employee benefits and overhead. The staff believes that the ODD would be mailed or electronically delivered to customers by a general clerk of the broker-dealer or some other equivalent position.

SECURITIES AND EXCHANGE COMMISSION

Sunshine Act Meeting

Notice is hereby given, pursuant to the provisions of the Government in the Sunshine Act, Public Law 94–409, that the Securities and Exchange Commission will hold a Closed Meeting on Thursday, January 8, 2015 at 2:00 p.m.

Commissioners, Counsel to the Commissioners, the Secretary to the Commission, and recording secretaries will attend the Closed Meeting. Certain staff members who have an interest in the matters also may be present.

The General Counsel of the Commission, or her designee, has certified that, in her opinion, one or more of the exemptions set forth in 5 U.S.C. 552b(c)(3), (5), (7), 9(B) and (10) and 17 CFR 200.402(a)(3), (5), (7), 9(ii) and (10), permit consideration of the scheduled matter at the Closed Meeting.

Commissioner Gallagher, as duty officer, voted to consider the items listed for the Closed Meeting in closed session, and determined that no earlier notice thereof was possible.

The subject matter of the Closed Meeting will be:

Institution and settlement of injunctive actions;

Institution and settlement of administrative proceedings;

Adjudicatory matter; and

Other matters relating to enforcement proceedings.

At times, changes in Commission priorities require alterations in the scheduling of meeting items.

For further information and to ascertain what, if any, matters have been added, deleted or postponed, please contact the Office of the Secretary at (202) 551–5400.

Dated: January 5, 2015.

Brent J. Fields,

Secretary.

[FR Doc. 2015–00161 Filed 1–6–15; 4:15 pm]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–73976; File No. SR–NYSEMKT–2014–117]

Self-Regulatory Organizations; NYSE MKT LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Extending Its Program That Allows Transactions To Take Place at a Price That Is Below $1 per Option Contract Until January 5, 2016

January 2, 2015.

Pursuant to Section 19(b)(1)[1] of the Securities Exchange Act of 1934 (the ''Act'')[2] and Rule 19b–4 thereunder,[3] notice is hereby given that on December 30, 2014, NYSE MKT LLC (the ''Exchange'' or ''NYSE MKT'') filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the self-regulatory organization. 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 Substance of the Proposed Rule Change

The Exchange proposes to extend its program that allows transactions to take place at a price that is below $1 per option contract until January 5, 2016. The text of the proposed rule change is available on the Exchange's Web site at *www.nyse.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 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 those 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,

[1] 15 U.S.C. 78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of this filing is to extend the Pilot Program [4] under Rule 968NY to allow accommodation transactions (''Cabinet Trades'') to take place at a price that is below $1 per option contract for one additional year. The Exchange proposes to extend the program, which is due to expire on January 5, 2015, until January 5, 2016.

An ''accommodation'' or ''cabinet'' trade refers to trades in listed options on the Exchange that are worthless and typically not actively traded. Cabinet trading is generally conducted in accordance with the Exchange Rules, except as provided in Exchange Rule 968NY Accommodation Transactions (Cabinet Trades), which sets forth specific procedures for engaging in cabinet trades. Rule 968NY currently provides for cabinet transactions to occur via open outcry at a cabinet price of a $1 per option contract in any options series open for trading in the Exchange, except that the Rule is not applicable to trading in option classes participating in the Penny Pilot Program. Under the procedures, bids and offers (whether opening or closing a position) at a price of $1 per option contract may be represented in the trading crowd by a Floor Broker or by a Market Maker or provided in response to a request by a Trading Official, a Floor Broker or a Market Maker, but must yield priority to all resting orders in the Cabinet (those orders held by the Trading Official, and which resting cabinet orders may be closing only). So long as both the buyer and the seller yield to orders resting in the cabinet book, opening cabinet bids can trade with opening cabinet offers at $1 per option contract.

The Exchange has temporarily amended the procedures through January 5, 2015 to allow transactions to take place in open outcry at a price of at least $0 but less than $1 per option contract. These lower-priced transactions are permitted to be traded pursuant to the same procedures applicable to $1 cabinet trades, except that (i) bids and offers for opening transactions are only permitted to accommodate closing transactions in order to limit use of the procedure to liquidations of existing positions, and (ii) the procedures are also made available for trading in option classes participating in the Penny Pilot Program.[5] The Exchange believes that allowing a price of at least $0 but less than $1 better accommodates the closing of options positions in series that are worthless or not actively traded, particularly in the event where there has been a significant move in the price of the underlying security that results in a large number of series being out-of-the-money. For example, a market participant might have a long position in a put series with a strike price of $30 and the underlying stock might be trading at $100. In such an instance, there might not otherwise be a market for that person to close-out the position even at the $1 cabinet price (*e.g.,* the series might be quoted no bid).

As with other accommodation liquidations under Rule 968NY, transactions that occur for less than $1 will not be disseminated to the public on the consolidated tape. In addition, as with other accommodation liquidations under Rule 968NY the transactions will be exempt from the Consolidated Options Audit Trail (''COATS'') requirements of Exchange Rule 955NY Order Format and System Entry Requirements. However, the Exchange will maintain quotation, order and transaction information for the transactions in the same format as the COATS data is maintained. In this regard, all transactions for less than $1 must be reported to the Exchange following the close of each business day.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with Section 6(b) [6] of the Securities Exchange Act of 1934 (the ''Act''), in general, and furthers the objectives of Section 6(b)(5) [7] in particular in that it is designed to promote just and equitable principles of trade, to prevent fraudulent and manipulative acts, to remove impediments to and to perfect the mechanism for a free and open market and a national market system and, in general, to protect investors and the public interest. The Exchange believes that allowing for liquidations at a price less than $1 per option contract will better facilitate the closing of options positions that are worthless or not actively trading, especially in Penny Pilot issues where Cabinet Trades are not otherwise permitted.

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 that is not necessary or appropriate in furtherance of the purposes of the Act. The proposed rule change is to extend an established pilot program for one additional year and continue to facilitate ATP Holders ability to close positions in worthless or not actively traded series.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing rule 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 if consistent with the protection of investors and the public interest, provided that the self-regulatory organization has given the Commission written notice of its intent to file 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,[8] the proposed rule change has become effective pursuant to Section 19(b)(3)(A) of the Act [9] and Rule 19b–4(f)(6) thereunder.[10]

Under Rule 19b–4(f)(6) of the Act,[11] the proposal does not become operative for 30 days after the date of its filing, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest. The Exchange has requested that the Commission waive the 30-day

[4] *See* Securities Exchange Act Release No. 63475 (December 8, 2010), 75 FR 77932 (December 14, 2010) (SR–NYSE Amex–2010–114).

[5] Currently the $1 cabinet trading procedures are limited to options classes traded in $0.05 or $0.10 standard increment. The $1 cabinet trading procedures are not available in Penny Pilot Program classes because in those classes an option series can trade in a standard increment as low as $0.01 per share (or $1.00 per option contract with a 100 share multiplier). Because the temporary procedures allow trading below $0.01 per share (or $1.00 per option contract with a 100 share multiplier), the procedures are available for all classes, including those classes participating in the Penny Pilot Program.

[6] 15 U.S.C. 78f(b).

[7] 15 U.S.C. 78f(b)(5).

[8] The Exchange has satisfied this requirement.

[9] 15 U.S.C. 78s(b)(3)(A).

[10] 17 CFR 240.19b–4(f)(6).

[11] *Id.*

operative delay period after which a proposed rule change under Rule 19b–4(f)(6) becomes operative so that the pilot may continue without interruption. The Commission believes that waiver of the 30-day operative delay is consistent with the protection of investors and the public interest because it will allow the pilot to continue uninterrupted, thereby avoiding any potential investor confusion that could result from a temporary interruption in the pilot and allowing members to continue to benefit from the program. Based on the foregoing, the Commission hereby waives the 30-day operative delay and designates the proposal operative upon filing.[12]

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 will institute proceedings to determine whether the proposed rule change 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–NYSEMKT–2014–117 on the subject line.

Paper Comments

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSEMKT–2014–117. 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 will also be available for inspection and copying at the NYSE's principal office and on its Internet Web site at *www.nyse.com.* 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–NYSEMKT–2014–117 and should be submitted on or before January 29, 2015.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[13]

Brent J. Fields,

Secretary.

[FR Doc. 2015–00049 Filed 1–7–15; 8:45 am]

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[12] For purposes only of waiving the operative delay, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[13] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–73978; File No. SR–NASDAQ–2014–125]

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Impose a Minimum Fee for Execution Venues Operating a Trading Platform or Multiple Platforms That Utilize NASDAQ Proprietary Depth Data on a Non-Displayed Basis

January 2, 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 2, 2015, The NASDAQ Stock Market LLC (''Nasdaq'' or ''Exchange'') filed with the Securities and Exchange Commission (''SEC'' or ''Commission'') the proposed rule change as described in Items I, II, and III, below, which Items have been prepared by the Exchange. 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 Substance of the Proposed Rule Change

The Exchange proposes to impose a minimum fee for execution venues operating a trading platform or multiple platforms that utilize NASDAQ proprietary depth data on a non-displayed basis and that pay monthly aggregate NASDAQ market proprietary Depth-of-Book Data fees of less than $15,000.

The text of the proposed rule change is below; proposed new language is in italics; proposed deletions are in brackets.

* * * * *

7023. NASDAQ Depth-of-Book Data

(a) Definitions applicable to this rule.

(1)–(6) No Change.

(7) The term ''Trading Platform'' shall mean any execution platform operated as or by a registered National Securities Exchange (as defined in Section 3(a)(1) of the Exchange Act), an Alternative Trading System (as defined in Rule 300(a) of Regulation ATS), or an Electronic Communications Network (as defined by Rule 600(b)(23) of Regulation NMS).

(b) No Change.

(c) No Change.

(d) Trading Platform Fee. There shall be a minimum monthly fee for entities that operate Trading Platforms that utilize NASDAQ Depth-of-Book Data on a non-display basis and that pay less than $15,000 per month in aggregate fees for Depth-of-Book Data. The fee shall be $5,000 per month per Trading Platform up to a maximum of three Trading Platforms.

(e) [(d)] 30-Day Free-Trial Offer: NASDAQ shall offer all new individual Subscribers and potential new individual Subscribers a 30-day waiver of the Subscriber fees for NASDAQ TotalView. This waiver shall not include the incremental fees assessed for the NASDAQ Level 2-only service[, which are $30 for Professional Subscribers and $9 for Non-Professional Subscribers per month]. This fee waiver period shall be applied on a rolling basis, determined by the date on which a new individual Subscriber or potential individual Subscriber is first entitled by a Distributor to receive access to NASDAQ TotalView. A Distributor may only provide this waiver to a specific

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

individual Subscriber once. [For the period of the offer, the NASDAQ TotalView fee of $40 per Professional Subscriber and $5 per Non-Professional Subscriber per month shall be waived.]

(f) [(e)] Historical ModelView Information: NASDAQ will make historical ModelView information available via NASDAQTrader.com. ModelView contains historical information regarding aggregate displayed and reserve liquidity at each price level directly from the NASDAQ Market Center. ModelView is available for a subscription fee of $2,000 per month.

* * * * *

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 aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

NASDAQ is proposing to amend NASDAQ Rule 7023 (NASDAQ Depth-of-Book Data) to modify the fees governing the use of NASDAQ TotalView, NASDAQ OpenView and NASDAQ Level 2 Information (collectively, ''NASDAQ Depth-of-Book Data'') to increase the fairness and equity of the current fee schedule. Specifically, NASDAQ is amending Rule 7023(d) to establish a minimum level of fees for operators of Trading Platforms that utilize NASDAQ Depth-of-Book Data and that pay less than $15,000 per month for such usage. The Trading Platform Fee shall be $5,000 per month per Trading Platform up to a maximum of $15,000 per month, with such fees being offset once the total NASDAQ Depth-of-Book Data fees paid by such Trading Platform operator exceed $15,000 per month.

Effective January 1, 2015, NASDAQ will impose a fee for operators of Trading Platforms that currently utilize NASDAQ Depth-of-Book Data and that pay less than $15,000 per month for such usage. Trading Platforms include registered National Securities Exchanges, Alternative Trading Systems (''ATSs''), and Electronic Communications Networks (''ECNS'') as those terms are defined in the Exchange Act and regulations and rules thereunder. The fee will be $5,000 per month per Trading Platform up to a maximum of three platforms operated by the same entity or affiliated entities.

The fee will be assessed in addition to existing Distributor and Subscriber fees paid, but will be offset when the entity reaches the level of $15,000 per month. For example, if a Distributor already pays $15,000 or more in total monthly Distributor and Subscriber fees, the Trading Platform fee does not apply. Also, if a firm accrues $10,000 in Platform fees, and already pays $75,000 in Subscriber fees, the Distributor is responsible for the $75,000 fee and the Trading Platform fee does not apply. Additional scenarios are shown below:

Number of trading platforms	Trading platform fee	Nasdaq depth non-display fee per subscriber	Nasdaq depth total fee
1	$5,000	$3,300	$8,300
1	5,000	9,000	14,000
1	5,000	15,000	15,000
2	10,000	9,000	19,000
2	10,000	15,000	15,000
3	15,000	9,000	24,000
4	15,000	9,000	24,000
3	15,000	15,000	15,000
4	15,000	75,000	75,000

Vendors offering Managed Data Solutions (''MDS'') to downstream Recipients pursuant to NASDAQ Rule 7026 are responsible for the payment of fees associated with this program. Furthermore, the MDS Vendor must count each Trading Platform operator separately; an MDS Vendor cannot avoid the three Trading Platform maximum by commingling multiple firms' Trading Platforms. For example, the MDS Vendor below has five customers that collectively operate 10 Trading Platforms:

Firm	Number of trading platform(s)	Trading platform fee (owed by MDS vendor)
a	0	$0
b	1	5000
c	2	10,000
d	3	15,000
e	4	15,000
Total		45,000

The Exchange believes that this proposal is reasonable, proper, and desirable. NASDAQ attempts to more equitably allocate fees among users with varying business models. As trading has become more electronic and automated, displayed and non-displayed usage has shifted dramatically. Use by individuals versus use by algorithms has shifted as well. NASDAQ attempts to ensure that its fee schedule tracks these shifts and that no category of users pays a disproportionately high or low amount relative to other categories of users.

To accommodate new subparagraph (d), NASDAQ is renumbering current subparagraphs (d) and (e) to become new subparagraphs (e) and (f). Additionally, NASDAQ is eliminating pricing details from re-numbered paragraph (e) to eliminate specific information which is extraneous and subject to change.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Act and the rules and regulations thereunder, including the requirements of Section 6(b) of the Act.[3] In particular, the Exchange believes the proposed rule change is consistent with the Section

[3] 15 U.S.C. 78f(b).

6(b)(5)[4] requirements that the rules of an exchange be designed to promote just and equitable principles of trade, to prevent fraudulent and manipulative acts, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments to and to perfect the mechanism for a free and open market and a national market system, and, in general, to protect investors and the public interest.

NASDAQ believes that this proposal represents an equitable allocation of reasonable dues and fees, consistent with the requirements of the Act. The MDS Fee, which has been available as an option for four years, has reduced costs for Distributors and Subscriber firms that voluntarily opt for this service. The fee currently includes a bas [sic] Distributor fee plus a fee per subscriber, which has been found to be consistent with the Act in multiple contexts due to the economic efficiencies attributable to providing the same data elements to an increasing population of subscribers.

The Trading Platform fee is equitable and reasonable in that it ensures that heavy users of the NASDAQ Depth Information pay an equitable share of the total NASDAQ Depth Information fees. Currently, Professional Subscribers pay higher fees than Non-Professional Subscribers based on the calculated assumption of higher usage. Similarly, External Distributors pay higher fees than Internal Distributors, also based upon their assumed higher usage levels. NASDAQ believes that Trading Platforms are generally high users of the data, using it to power a matching engine for millions or even billions of trading messages per day. Additionally, the vast majority of operators of Trading Platforms that use NASDAQ Depth-of-Book Data already pay $15,000 per month or close to it. Those operators will pay no or little in additional fees.

In adopting Regulation NMS, the Commission granted self-regulatory organizations and broker-dealers increased authority and flexibility to offer new and unique market data to the public. It was believed that this authority would expand the amount of data available to consumers, and also spur innovation and competition for the provision of market data.

The Commission concluded that Regulation NMS—by deregulating the market in proprietary data—would itself further the Act's goals of facilitating efficiency and competition:

> [E]fficiency is promoted when broker-dealers who do not need the data beyond the prices, sizes, market center identifications of the NBBO and consolidated last sale information are not required to receive (and pay for) such data. The Commission also believes that efficiency is promoted when broker-dealers may choose to receive (and pay for) additional market data based on their own internal analysis of the need for such data.[5]

By removing ''unnecessary regulatory restrictions'' on the ability of exchanges to sell their own data, Regulation NMS advanced the goals of the Act and the principles reflected in its legislative history. If the free market should determine whether proprietary data is sold to broker-dealers at all, it follows that the price at which such data is sold should be set by the market as well.

On July 21, 2010, President Barack Obama signed into law H.R. 4173, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (''Dodd-Frank Act''), which amended Section 19 of the Act. Among other things, Section 916 of the Dodd-Frank Act amended paragraph (A) of Section 19(b)(3) of the Act by inserting the phrase ''on any person, whether or not the person is a member of the self-regulatory organization'' after ''due, fee or other charge imposed by the self-regulatory organization.'' As a result, all SRO rule proposals establishing or changing dues, fees, or other charges are immediately effective upon filing regardless of whether such dues, fees, or other charges are imposed on members of the SRO, non-members, or both. Section 916 further amended paragraph (C) of Section 19(b)(3) of the Exchange Act to read, in pertinent part, ''At any time within the 60-day period beginning on the date of filing of such a proposed rule change in accordance with the provisions of paragraph (1) [of Section 19(b)], the Commission summarily may temporarily suspend the change in the rules of the self-regulatory organization made thereby, 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 this title. If the Commission takes such action, the Commission shall institute proceedings under paragraph (2)(B) [of Section 19(b)] to determine whether the proposed rule should be approved or disapproved.''

NASDAQ believes that these amendments to Section 19 of the Act reflect Congress's intent to allow the Commission to rely upon the forces of competition to ensure that fees for market data are reasonable and equitably allocated. Although Section 19(b) had formerly authorized immediate effectiveness for a ''due, fee or other charge imposed by the self-regulatory organization,'' the Commission adopted a policy and subsequently a rule stipulating that fees for data and other products available to persons that are not members of the self-regulatory organization must be approved by the Commission after first being published for comment. At the time, the Commission supported the adoption of the policy and the rule by pointing out that unlike members, whose representation in self-regulatory organization governance was mandated by the Act, non-members should be given the opportunity to comment on fees before being required to pay them, and that the Commission should specifically approve all such fees. NASDAQ believes that the amendment to Section 19 reflects Congress's conclusion that the evolution of self-regulatory organization governance and competitive market structure have rendered the Commission's prior policy on non-member fees obsolete. Specifically, many exchanges have evolved from member-owned not-for-profit corporations into for-profit investor-owned corporations (or subsidiaries of investor-owned corporations). Accordingly, exchanges no longer have narrow incentives to manage their affairs for the exclusive benefit of their members, but rather have incentives to maximize the appeal of their products to all customers, whether members or non-members, so as to broaden distribution and grow revenues. Moreover, we believe that the change also reflects an endorsement of the Commission's determinations that reliance on competitive markets is an appropriate means to ensure equitable and reasonable prices. Simply put, the change reflects a presumption that all fee changes should be permitted to take effect immediately, since the level of all fees are constrained by competitive forces.

The recent decision of the United States Court of Appeals for the District of Columbia Circuit in *NetCoaliton* v. *SEC,* No. 09–1042 (D.C. Cir. 2010), although reviewing a Commission decision made prior to the effective date of the Dodd-Frank Act, upheld the Commission's reliance upon competitive markets to set reasonable and equitably allocated fees for market data. ''In fact, the legislative history indicates that the Congress intended that the market system 'evolve through the interplay of competitive forces as unnecessary regulatory restrictions are

[4] 15 U.S.C. 78f(b)(5).

[5] Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005).

removed' and that the SEC wield its regulatory power 'in those situations where competition may not be sufficient,' such as in the creation of a 'consolidated transactional reporting system.' *NetCoaltion,* at 15 (quoting H.R. Rep. No. 94–229, at 92 (1975), *as reprinted in* 1975 U.S.C.C.A.N. 321, 323). The court's conclusions about Congressional intent are therefore reinforced by the Dodd-Frank Act amendments, which create a presumption that exchange fees, including market data fees, may take effect immediately, without prior Commission approval, and that the Commission should take action to suspend a fee change and institute a proceeding to determine whether the fee change should be approved or disapproved only where the Commission has concerns that the change may not be consistent with the Act.

B. Self-Regulatory Organization's Statement on Burden on Competition

NASDAQ 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. Notwithstanding its determination that the Commission may rely upon competition to establish fair and equitably allocated fees for market data, the *NetCoaltion* court found that the Commission had not, in that case, compiled a record that adequately supported its conclusion that the market for the data at issue in the case was competitive. For the reasons discussed above, NASDAQ believes that the Dodd-Frank Act amendments to Section 19 materially alter the scope of the Commission's review of future market data filings, by creating a presumption that all fees may take effect immediately, without prior analysis by the Commission of the competitive environment. Even in the absence of this important statutory change, however, NASDAQ believes that a record may readily be established to demonstrate the competitive nature of the market in question.

There is intense competition between trading platforms that provide transaction execution and routing services and proprietary data products. Transaction execution and proprietary data products are complementary in that market data is both an input and a byproduct of the execution service. In fact, market data and trade execution are a paradigmatic example of joint products with joint costs. The decision whether and on which platform to post an order will depend on the attributes of the platform where the order can be posted, including the execution fees, data quality and price and distribution of its data products. Without the prospect of a taking order seeing and reacting to a posted order on a particular platform, the posting of the order would accomplish little. Without trade executions, exchange data products cannot exist. Data products are valuable to many end users only insofar as they provide information that end users expect will assist them or their customers in making trading decisions.

The costs of producing market data include not only the costs of the data distribution infrastructure, but also the costs of designing, maintaining, and operating the exchange's transaction execution platform and the cost of regulating the exchange to ensure its fair operation and maintain investor confidence. The total return that a trading platform earns reflects the revenues it receives from both products and the joint costs it incurs. Moreover, an exchange's customers view the costs of transaction executions and of data as a unified cost of doing business with the exchange. A broker-dealer will direct orders to a particular exchange only if the expected revenues from executing trades on the exchange exceed net transaction execution costs and the cost of data that the broker-dealer chooses to buy to support its trading decisions (or those of its customers). The choice of data products is, in turn, a product of the value of the products in making profitable trading decisions. If the cost of the product exceeds its expected value, the broker-dealer will choose not to buy it. Moreover, as a broker-dealer chooses to direct fewer orders to a particular exchange, the value of the product to that broker-dealer decreases, for two reasons. First, the product will contain less information, because executions of the broker-dealer's orders will not be reflected in it. Second, and perhaps more important, the product will be less valuable to that broker-dealer because it does not provide information about the venue to which it is directing its orders. Data from the competing venue to which the broker-dealer is directing orders will become correspondingly more valuable.

Thus, a super-competitive increase in the fees charged for either transactions or data has the potential to impair revenues from both products. ''No one disputes that competition for order flow is 'fierce'.'' *NetCoalition* at 24. However, the existence of fierce competition for order flow implies a high degree of price sensitivity on the part of broker-dealers with order flow, since they may readily reduce costs by directing orders toward the lowest-cost trading venues. A broker-dealer that shifted its order flow from one platform to another in response to order execution price differentials would both reduce the value of that platform's market data and reduce its own need to consume data from the disfavored platform. Similarly, if a platform increases its market data fees, the change will affect the overall cost of doing business with the platform, and affected broker-dealers will assess whether they can lower their trading costs by directing orders elsewhere and thereby lessening the need for the more expensive data.

Analyzing the cost of market data distribution in isolation from the cost of all of the inputs supporting the creation of market data will inevitably underestimate the cost of the data. Thus, because it is impossible to create data without a fast, technologically robust, and well-regulated execution system, system costs and regulatory costs affect the price of market data. It would be equally misleading, however, to attribute all of the exchange's costs to the market data portion of an exchange's joint product. Rather, all of the exchange's costs are incurred for the unified purposes of attracting order flow, executing and/or routing orders, and generating and selling data about market activity. The total return that an exchange earns reflects the revenues it receives from the joint products and the total costs of the joint products.

Competition among trading platforms can be expected to constrain the aggregate return each platform earns from the sale of its joint products, but different platforms may choose from a range of possible, and equally reasonable, pricing strategies as the means of recovering total costs. For example, some platform may choose to pay rebates to attract orders, charge relatively low prices for market information (or provide information free of charge) and charge relatively high prices for accessing posted liquidity. Other platforms may choose a strategy of paying lower rebates (or no rebates) to attract orders, setting relatively high prices for market information, and setting relatively low prices for accessing posted liquidity. In this environment, there is no economic basis for regulating maximum prices for one of the joint products in an industry in which suppliers face competitive constraints with regard to the joint offering. This would be akin to strictly regulating the price that an automobile manufacturer can charge for car sound systems despite the existence of a highly competitive market for cars and the

availability of after-market alternatives to the manufacturer-supplied system.

The market for market data products is competitive and inherently contestable because there is fierce competition for the inputs necessary to the creation of proprietary data and strict pricing discipline for the proprietary products themselves. Numerous exchanges compete with each other for listings, trades, and market data itself, providing virtually limitless opportunities for entrepreneurs who wish to produce and distribute their own market data. This proprietary data is produced by each individual exchange, as well as other entities, in a vigorously competitive market.

Broker-dealers currently have numerous alternative venues for their order flow, including ten self-regulatory organization (''SRO'') markets, as well as internalizing broker-dealers (''BDs'') and various forms of alternative trading systems (''ATSs''), including dark pools and electronic communication networks (''ECNs''). Each SRO market competes to produce transaction reports via trade executions, and two FINRA-regulated Trade Reporting Facilities (''TRFs'') compete to attract internalized transaction reports. Competitive markets for order flow, executions, and transaction reports provide pricing discipline for the inputs of proprietary data products.

The large number of SROs, TRFs, BDs, and ATSs that currently produce proprietary data or are currently capable of producing it provides further pricing discipline for proprietary data products. Each SRO, TRF, ATS, and BD is currently permitted to produce proprietary data products, and many currently do or have announced plans to do so, including NASDAQ, NYSE, NYSE Amex, NYSEArca, and BATS.

Any ATS or BD can combine with any other ATS, BD, or multiple ATSs or BDs to produce joint proprietary data products. Additionally, order routers and market data vendors can facilitate single or multiple broker-dealers' production of proprietary data products. The potential sources of proprietary products are virtually limitless.

The fact that proprietary data from ATSs, BDs, and vendors can by-pass SROs is significant in two respects. First, non-SROs can compete directly with SROs for the production and sale of proprietary data products, as BATS and Arca did before registering as exchanges by publishing proprietary book data on the Internet. Second, because a single order or transaction report can appear in an SRO proprietary product, a non-SRO proprietary product, or both, the data available in proprietary products is exponentially greater than the actual number of orders and transaction reports that exist in the marketplace.

Market data vendors provide another form of price discipline for proprietary data products because they control the primary means of access to end users. Vendors impose price restraints based upon their business models. For example, vendors such as Bloomberg and Thomson Reuters that assess a surcharge on data they sell may refuse to offer proprietary products that end users will not purchase in sufficient numbers. Internet portals, such as Google, impose a discipline by providing only data that will enable them to attract ''eyeballs'' that contribute to their advertising revenue. Retail broker-dealers, such as Schwab and Fidelity, offer their customers proprietary data only if it promotes trading and generates sufficient commission revenue. Although the business models may differ, these vendors' pricing discipline is the same: They can simply refuse to purchase any proprietary data product that fails to provide sufficient value. NASDAQ and other producers of proprietary data products must understand and respond to these varying business models and pricing disciplines in order to market proprietary data products successfully.

In addition to the competition and price discipline described above, the market for proprietary data products is also highly contestable because market entry is rapid, inexpensive, and profitable. The history of electronic trading is replete with examples of entrants that swiftly grew into some of the largest electronic trading platforms and proprietary data producers: Archipelago, Bloomberg Tradebook, Island, RediBook, Attain, TracECN, BATS Trading and Direct Edge. A proliferation of dark pools and other ATSs operate profitably with fragmentary shares of consolidated market volume.

Regulation NMS, by deregulating the market for proprietary data, has increased the contestability of that market. While broker-dealers have previously published their proprietary data individually, Regulation NMS encourages market data vendors and broker-dealers to produce proprietary products cooperatively in a manner never before possible. Multiple market data vendors already have the capability to aggregate data and disseminate it on a profitable scale, including Bloomberg, and Thomson Reuters.

The court in *NetCoalition* concluded that the Commission had failed to demonstrate that the market for market data was competitive based on the reasoning of the Commission's *NetCoalition* order because, in the court's view, the Commission had not adequately demonstrated that the depth-of-book data at issue in the case is used to attract order flow. NASDAQ believes, however, that evidence not before the court clearly demonstrates that availability of data attracts order flow. For example, as of July 2010, 92 of the top 100 broker-dealers by shares executed on NASDAQ consumed Level 2/NQDS and 80 of the top 100 broker-dealers consumed TotalView. During that month, the Level 2/NQDS-users were responsible for 94.44% of the orders entered into NASDAQ and TotalView users were responsible for 92.98%.

Competition among platforms has driven NASDAQ continually to improve its platform data offerings and to cater to customers' data needs. For example, NASDAQ has developed and maintained multiple delivery mechanisms (IP, multi-cast, and compression) that enable customers to receive data in the form and manner they prefer and at the lowest cost to them. NASDAQ offers front end applications such as its ''Bookviewer'' to help customers utilize data. NASDAQ has created new products like TotalView Aggregate to complement TotalView ITCH and Level 2/NQDS, because offering data in multiple formatting allows NASDAQ to better fit customer needs. NASDAQ offers data via multiple extranet providers, thereby helping to reduce network and total cost for its data products. NASDAQ has developed an online administrative system to provide customers transparency into their data feed requests and streamline data usage reporting. NASDAQ has also expanded its Enterprise License options that reduce the administrative burden and costs to firms that purchase market data.

Despite these enhancements and a dramatic increase in message traffic, NASDAQ's fees for market data have remained flat. In fact, as a percent of total customer costs, NASDAQ data fees have fallen relative to other data usage costs—including bandwidth, programming, and infrastructure—that have risen. The same holds true for execution services; despite numerous enhancements to NASDAQ's trading platform, absolute and relative trading costs have declined. Platform competition has intensified as new entrants have emerged, constraining prices for both executions and for data.

The vigor of competition for depth information is significant and the Exchange believes that this proposal

clearly evidences such competition. NASDAQ is offering a new pricing model in order to keep pace with changes in the industry and evolving customer needs. It is entirely optional and is geared towards attracting new customers, as well as retaining existing customers.

The Exchange has witnessed competitors creating new products and innovative pricing in this space over the course of the past year. NASDAQ continues to see firms challenge its pricing on the basis of the Exchange's explicit fees being higher than the zero-priced fees from other competitors such as BATS. In all cases, firms make decisions on how much and what types of data to consume on the basis of the total cost of interacting with NASDAQ or other exchanges. Of course, the explicit data fees are but one factor in a total platform analysis. Some competitors have lower transactions fees and higher data fees, and others are vice versa. The market for this depth information is highly competitive and continually evolves as products develop and change.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

No written comments were either solicited or received.

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)(ii) of the Act.[6]

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: (i) necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) 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–NASDAQ–2014–125 on the subject line.

Paper Comments

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NASDAQ–2014–125. 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–NASDAQ–2014–125 and should be submitted on or before January 29, 2015.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[7]

Brent J. Fields,

Secretary.

[FR Doc. 2015–00051 Filed 1–7–15; 8:45 am]

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[6] 15 U.S.C. 78s(b)(3)(A)(ii).

[7] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–73979; File No. SR–OCC–2014–809]

Self-Regulatory Organizations; The Options Clearing Corporation; Notice of No Objection to Advance Notice Concerning the Implementation of a Committed Master Repurchase Agreement Program as Part of OCC's Overall Liquidity Plan

January 2, 2015.

On November 6, 2014, The Options Clearing Corporation (''OCC'') filed with the Securities and Exchange Commission (''Commission'') advance notice SR–OCC–2014–809 (''Advance Notice'') pursuant to Section 806(e)(1) of the Payment, Clearing, and Settlement Supervision Act of 2010 (''Clearing Supervision Act'' or ''Title VIII'')[1] and Rule 19b–4(n)(1)(i) under the Securities Exchange Act of 1934 (''Exchange Act'').[2] The Advance Notice was published for comment in the **Federal Register** on December 9, 2014.[3] The Commission did not receive any comments on the Advance Notice publication. This publication serves as a notice of no objection to the Advance Notice.

I. Description of the Advance Notice

a. Background

The purpose of the proposed change is to allow OCC to implement a committed master repurchase agreement program (''MRA Program'') in order to access an additional committed source of liquidity to meet its settlement obligations in a manner that does not increase the concentration of OCC's counterparty exposure, given OCC's existing affiliations between a number of commercial banking institutions and OCC's clearing members. According to OCC, the MRA Program will take the form of OCC entering into a committed master repurchase agreement and related confirmations (together, the ''Master Repurchase Agreement'') with one or more non-bank, non-clearing

[1] 12 U.S.C. 5465(e)(1). The Financial Stability Oversight Council designated OCC a systemically important financial market utility on July 18, 2012. *See* Financial Stability Oversight Council 2012 Annual Report, Appendix A, *http://www.treasury.gov/initiatives/fsoc/Documents/2012%20Annual%20Report.pdf.* Therefore, OCC is required to comply with the Clearing Supervision Act and file advance notices with the Commission. *See* 12 U.S.C. 5465(e).

[2] 17 CFR 240.19b–4(n)(1)(i).

[3] Securities Exchange Act Release No. 73726 (December 3, 2014), 79 FR 73116 (December 9, 2014) (SR–OCC–2014–809).

member institutional investors.[4] The program will be part of OCC's overall liquidity plan that is meant to provide OCC with access to diverse sources of liquidity, which includes committed credit facilities, securities lending and securities repurchase arrangements, and clearing member funding requirements that, under certain conditions, allow OCC to obtain funds from clearing members.[5]

Although the Master Repurchase Agreement would be based on the standard form of master repurchase agreement[6] so that it will be more familiar to potential institutional investors, OCC would require the Master Repurchase Agreement to contain certain additional provisions tailored to ensure a reduction in concentration risk, certainty of funding, and operational effectiveness.

b. The Proposed MRA Program

i. Standard Repurchase Agreement Terms

According to OCC, the Master Repurchase Agreement generally will be structured like a typical repurchase arrangement, in order to help OCC attract interest from potential institutional investors willing to be counterparties to OCC. Under the Master Repurchase Agreement, the buyer (*i.e.,* the institutional investor) on occasion would purchase from OCC United States government securities (''Eligible Securities'').[7] OCC, as the seller, will transfer Eligible Securities to the buyer in exchange for a payment by the buyer to OCC in immediately available funds (''Purchase Price''). The buyer will simultaneously agree to transfer the purchased securities back to OCC at a specified later date or on OCC's demand (''Repurchase Date'') against the transfer of funds by OCC to the buyer in an amount equal to the outstanding Purchase Price plus the accrued and unpaid price differential (together, the ''Repurchase Price''), which is the interest component of the Repurchase Price.

At all times while a transaction is outstanding, OCC will be required to maintain a specified amount of securities or cash margin with the buyer.[8] The market value of the securities supporting each transaction will be determined daily, typically based on a price obtained from a generally recognized pricing source. If the market value of the purchased securities is determined to have fallen below OCC's required margin, OCC will be required to transfer to the buyer sufficient cash or additional securities reasonably acceptable to the buyer so that OCC's margin requirement is satisfied.[9] If the market value of the purchased securities is determined to have risen to above OCC's required margin, OCC will be permitted to require the return of excess purchased securities from the buyer.

As in a typical master repurchase agreement, an event of default will occur with respect to the buyer if the buyer fails to purchase securities on a purchase date, fails to transfer purchased securities on any applicable Repurchase Date, or fails to transfer any interest, dividends or distributions on purchased securities to OCC within a specified period after receiving notice of such failure. An event of default will occur with respect to OCC if OCC fails to transfer purchased securities on a purchase date or fails to repurchase purchased securities on an applicable Repurchase Date. The Master Repurchase Agreement also will provide for standard events of default for either party, including a party's failure to maintain required margin or an insolvency event with respect to one of the parties.

Upon the occurrence of an event of default, the non-defaulting party, at its option, will have the right, among others, to accelerate the Repurchase Date of all outstanding transactions between the defaulting party and the non-defaulting party. For example, if OCC were the defaulting party with respect to a transaction and the buyer chose to terminate the transaction, OCC will be required to immediately transfer the Repurchase Price to the buyer. If the buyer were the defaulting party with respect to a transaction and OCC chose to terminate the transaction, the buyer will be required to deliver all purchased securities to OCC. If OCC or the buyer does not perform in a timely manner, the non-defaulting party will be permitted to buy or sell, or deem itself to have bought or sold, securities as needed to be made whole and the defaulting party will be required to pay the costs related to any covering transactions. Additionally, if OCC is required to obtain replacement securities as a result of an event of default, the buyer will be required to pay the excess of the price paid by OCC to obtain replacement securities over the Repurchase Price.

ii. Customized Features

As part of the Master Repurchase Agreement, OCC will enter into an individualized master confirmation with each buyer and its agent which will set forth certain terms and conditions applicable to all transactions entered into under the Master Repurchase Agreement by that buyer. According to OCC, these required terms and conditions will be designed to promote OCC's goals of reduced concentration risk, certainty of funding and operational effectiveness. The terms of the master confirmations under each Master Repurchase Agreement may vary from one another, because a separate master confirmation will be negotiated for a given buyer at the time that buyer becomes a party to the Master Repurchase Agreement. OCC has identified the following as key standards that will need to be incorporated into each repurchase arrangement entered into under the program.[10]

[4] OCC states that it will conduct a due diligence review with respect to each counterparty before entering into a master repurchase arrangement with it. Because the appropriate due diligence activities and financial criteria will vary for each type of counterparty, OCC will determine on a case-by-case basis the specific due diligence criteria it would implement. However, as the principal purpose of due diligence will be to obtain assurance that each counterparty has the financial ability to satisfy its obligations under the program, the review will encompass an assessment of the counterparty's financial statements (including external auditor reports thereon) and, as applicable, ratings and/or investment reports. Furthermore, OCC will identify key criteria relative to monitoring the financial stability of the counterparty on a going forward basis.

[5] *See, e.g.,* Securities Exchange Act Release No. 72752 (August 4, 2014), 79 FR 46490 (August 8, 2014) (SR–OCC–2014–17), Securities Exchange Act Release No. 71549 (February 12, 2014), 79 FR 03574 (February 19, 2014) (SR–OCC–2014–801) and Securities Exchange Act Release No. 73257 (September 30, 2014), 79 FR 23698 (October 3, 2014) (SR–OCC–2014–806).

[6] The standard form master repurchase agreement is published by the Securities Industry and Financial Markets Association and is commonly used in the repurchase market by institutional investors.

[7] OCC would use U.S. government securities that are included in clearing fund contributions by clearing members and margin deposits of any clearing member that has been suspended by OCC for the repurchase arrangements. Article VIII, Section 5(e) of OCC's By-Laws and OCC Rule 1104(b) authorize OCC to obtain funds from third parties through securities repurchases using these sources. The officers who may exercise this authority include the Executive Chairman and the President.

[8] OCC expects that it would be required to maintain margin equal to 102% of the Repurchase Price which, according to OCC, is a standard rate for arrangements involving U.S. government securities.

[9] OCC expects that it would use clearing fund securities and securities posted as margin by defaulting clearing members.

[10] OCC expects that the Master Repurchase Agreement also will include other, more routine, provisions such as the method for giving notices and basic due authorization representations by the parties.

Counterparties

OCC only will enter into repurchase arrangements with non-bank institutional investors, such as pension funds or insurance companies that are not OCC clearing members or banks affiliated with any OCC clearing member. OCC believes this requirement will allow OCC to access stable, reliable sources of funding, without increasing the concentration of its exposure to counterparties that are affiliated banks, broker/dealers and futures commission merchants. OCC believes that this reduction in concentration risk is a key advantage of this proposed program.

Commitment to Fund and Funding Accounts

OCC will seek funding commitments from one or more potential counterparties that will equal $1 billion in the aggregate,[11] with each commitment extending for 364 days or more. Each counterparty will be obligated to enter into transactions under the Master Repurchase Agreement up to its committed amount so long as no default had occurred and OCC transferred sufficient Eligible Securities. Each counterparty will be obligated to enter into transactions even if OCC had experienced a material adverse change, such as the failure of a clearing member. According to OCC, this commitment to provide funding will be a key departure from ordinary repurchase arrangements and a key requirement for OCC. Each commitment will be supported by an agreement by the counterparty to maintain cash and investments acceptable to OCC that must be readily converted into cash in a designated account into which OCC has visibility. OCC believes that the creation of a funding account is important because it will help OCC ensure that the committed funds will be available each day. OCC also believes that it will facilitate prompt funding by counterparties that are not commercial banks and therefore are not in the business of daily funding.

Funding Mechanics

According to OCC, funding mechanics will be targeted so that OCC will receive the Purchase Price in immediately available funds within 60 minutes of its request for funds and delivery of Eligible Securities and, if needed, prior to OCC's regular daily settlement time.[12] OCC believes that these targeted funding mechanics will allow OCC to receive needed liquidity in time to satisfy settlement obligations, even in the event of a default by a clearing member or a market disruption. The funding mechanism may be, for example, delivery versus payment/receive versus payment or another method acceptable to OCC that both satisfies the objectives of the MRA Program and presents limited operational risks.

No Rehypothecation

Under the terms of each master confirmation, the buyer would not be permitted to grant any third party an interest in purchased securities, the custody account at the custodian where purchased securities are held, or any cash held in OCC's account. As a result, OCC states that the buyer would be prohibited from rehypothecating purchased securities, the purchased securities should never leave the account, and there should be no third-party claims against the purchased securities. OCC believes that the prohibition on rehypothecation also would reduce the risk that a third party could interfere with the buyer's transfer of the purchased securities on the Repurchase Date. Further, according to OCC, the custodian would agree to provide OCC with daily information about each buyer's account. OCC believes that this visibility would allow OCC to act quickly in the event a buyer violates any requirements.

Early Termination Rights

Under the Master Repurchase Agreement, OCC would have the ability to terminate any transaction upon written notice to the buyer, but a buyer only would be able to terminate a transaction upon the occurrence of an event of default with respect to OCC.[13] OCC has stated that this optional early termination right is important because its liquidity needs may change unexpectedly over time and as a result OCC may not want to keep a transaction outstanding as long as originally planned.

Substitution

Under the Master Repurchase Agreement, OCC would have the ability to substitute any Eligible Securities for purchased securities in its discretion by a specified time, so long as the Eligible Securities satisfy any applicable criteria contained in the Master Repurchase Agreement and the transfer of the Eligible Securities would not create a margin deficit, as described above.[14] OCC believes that this substitution right is important because it must be able to manage clearing member requests to return excess or substitute Eligible Securities in accordance with established operational procedures.

Events of Default

In addition to the standard events of default for a failure to purchase or transfer securities on the applicable Purchase Date or Repurchase Date, OCC would require that the Master Repurchase Agreement not contain any additional events of default that would restrict OCC's access to funding and that it contain an additional default remedy. OCC would require that it would not be an event of default if OCC suffers a ''material adverse change.'' [15] According to OCC, this provision provides it with certainty of funding, even in difficult market conditions.

Upon the occurrence of an event of default, in addition to the non-defaulting party's right to accelerate the Repurchase Date of all outstanding transactions or to buy or sell securities as needed to be made whole, the non-defaulting party may elect to take the actions specified in the ''mini close-out'' provision of the Master Repurchase Agreement, rather than declaring an event of default.[16] Therefore, if the buyer fails to deliver purchased securities on any Repurchase Date, OCC believes that it would have remedies that allow it to mitigate risk with respect to a particular transaction, without declaring an event of default with

[11] The $1 billion in commitments could be spread across multiple counterparties, but $1 billion represents the proposed aggregate size of the program.

[12] According to OCC, this would include OCC's regular daily settlement time and any extended settlement time implemented by OCC in an emergency situation under OCC Rule 505.

[13] According to OCC, a notice of termination by OCC would specify a new Repurchase Date prior to the originally agreed upon Repurchase Date. Upon the early termination of a transaction, the buyer would be required to return all purchased securities to OCC, and OCC would be required to pay the Repurchase Price.

[14] In addition to its substitution rights, OCC could cause the return of purchased securities by exercising its optional early termination rights under the Master Repurchase Agreement. If OCC were to terminate part or all of a transaction, the buyer would be required to return purchased securities to OCC against payment of the corresponding Repurchase Price.

[15] According to OCC, a ''material adverse change'' is typically defined as a change that would have a materially adverse effect on the business or financial condition of a company.

[16] For example, if the buyer fails to transfer purchased securities on the applicable Repurchase Date, rather than declaring an event of default, OCC may (1) if OCC has already paid the Repurchase Price, require the buyer to repay the Repurchase Price, (2) if there is a margin excess, require the buyer to pay cash or delivered purchased securities in an amount equal to the margin excess, or (3) declare that the applicable transaction, and only that transaction, will be immediately terminated, and apply default remedies under the Master Repurchase Agreement to only that transaction.

respect to all transactions under the Master Repurchase Agreement.

II. Discussion and Commission Findings

Although Title VIII does not specify a standard of review for an advance notice, the Commission believes that the stated purpose of Title VIII is instructive.[17] The stated purpose of Title VIII is to mitigate systemic risk in the financial system and promote financial stability by, among other things, promoting uniform risk management standards for systemically-important financial market utilities (''FMUs'') and strengthening the liquidity of systemically important FMUs.[18]

Section 805(a)(2) of the Clearing Supervision Act[19] authorizes the Commission to prescribe risk management standards for the payment, clearing, and settlement activities of designated clearing entities and financial institutions engaged in designated activities for which it is the supervisory agency or the appropriate financial regulator. Section 805(b) of the Clearing Supervision Act[20] states that the objectives and principles for the risk management standards prescribed under Section 805(a) shall be to:

- Promote robust risk management;
- promote safety and soundness;
- reduce systemic risks; and
- support the stability of the broader financial system.

The Commission has adopted risk management standards under Section 805(a)(2) of the Clearing Supervision Act (''Clearing Agency Standards'').[21] The Clearing Agency Standards became effective on January 2, 2013, and require registered clearing agencies that perform central counterparty (''CCP'') services to establish, implement, maintain, and enforce written policies and procedures that are reasonably designed to meet certain minimum requirements for their operations and risk management practices on an ongoing basis.[22] As such, it is appropriate for the Commission to review advance notices against these Clearing Agency Standards, and the objectives and principles of these risk management standards as described in Section 805(b) of the Clearing Supervision Act.[23]

The Commission believes that the proposal in this Advance Notice is designed to further the objectives and principles of Section 805(b) of the Clearing Supervision Act.[24] As a systemically-important FMU, it is imperative that OCC have adequate resources to be able to satisfy its counterparty settlement obligations. The MRA Program provides OCC with a committed liquidity resource that does not increase the concentration of OCC's counterparty exposure because the counterparties will not include OCC's clearing members nor affiliated commercial banking institutions. Accordingly, the Commission believes that the proposal should promote robust risk management, promote safety and soundness in the marketplace, reduce systemic risks, and support the stability of the broader financial system by giving OCC access to additional committed liquidity that will help OCC meet its settlement obligations in a timely manner, while also limiting the exposure that OCC has to its counterparties.

Exchange Act Rule 17Ad–22(b)(3),[25] adopted as part of the Clearing Agency Standards, requires that a non-security-based swap registered clearing agency that performs CCP services establish, implement, maintain, and enforce written policies and procedures reasonably designed to withstand, at a minimum, a default by the participant family to which it has the largest exposure in extreme but plausible market conditions. As a part of OCC's overall liquidity plan, the Commission believes that the MRA Program will contribute additional liquid financial resources that should enhance OCC's ability to meet any potential settlement demands arising out of a default of a clearing member or clearing member family, including one to which it has the largest exposure.

III. Conclusion

It is therefore noticed, pursuant to Section 806(e)(1)(I) of the Clearing Supervision Act,[26] that the Commission does not object to advance notice proposal (SR–OCC–2014–809) and that OCC is authorized to implement the proposal as of the date of this notice.

By the Commission.

Brent J. Fields,

Secretary.

[FR Doc. 2015–00052 Filed 1–7–15; 8:45 am]

BILLING CODE 8011–01–P

[17] *See* 12 U.S.C. 5461(b).

[18] *Id.*

[19] 12 U.S.C. 5464(a)(2).

[20] 12 U.S.C. 5464(b).

[21] 17 CFR 240.17Ad–22.

[22] The Clearing Agency Standards are substantially similar to the risk management standards established by the Board of Governors of the Federal Reserve System governing the operations of designated FMUs that are not clearing entities and financial institutions engaged in designated activities for which the Commission or the Commodity Futures Trading Commission is the Supervisory Agency. *See* Financial Market Utilities, 77 FR 45907 (August 2, 2012).

[23] 12 U.S.C. 5464(b).

[24] 12 U.S.C 5464(b).

[25] 17 CFR 240.17Ad–22(b)(3).

[26] 12 U.S.C. 5465(e)(1)(I).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–73977; File No. SR–NYSEARCA–2014–152]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Extending Its Program That Allows Transactions To Take Place at a Price That Is Below $1 Per Option Contract Until January 5, 2016

January 2, 2015.

Pursuant to Section 19(b)(1)[1] of the Securities Exchange Act of 1934 (the ''Act'')[2] and Rule 19b–4 thereunder,[3] notice is hereby given that, on December 30, 2014, NYSE Arca, Inc. (the ''Exchange'' or ''NYSE Arca'') filed with the Securities and Exchange Commission (the ''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 change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to extend its program that allows transactions to take place at a price that is below $1 per option contract until January 5, 2016. The text of the proposed rule change is available on the Exchange's Web site at *www.nyse.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 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 those 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,

[1] 15 U.S.C. 78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of this filing is to extend the Pilot Program [4] under Rule 6.80 to allow accommodation transactions (''Cabinet Trades'') to take place at a price that is below $1 per option contract for one additional year. The Exchange proposes to extend the program, which is due to expire on January 5, 2015 until January 5, 2016.

An ''accommodation'' or ''cabinet'' trade refers to trades in listed options on the Exchange that are worthless or not actively traded. Cabinet trading is generally conducted in accordance with the Exchange Rules, except as provided in Exchange Rule 6.80 Accommodation Transactions (Cabinet Trades), which sets forth specific procedures for engaging in cabinet trades. Rule 6.80 currently provides for cabinet transactions to occur via open outcry at a cabinet price of a $1 per option contract in any options series open for trading in the Exchange, except that the Rule is not applicable to trading in option classes participating in the Penny Pilot Program. Under the procedures, bids and offers (whether opening or closing a position) at a price of $1 per option contract may be represented in the trading crowd by a Floor Broker or by a Market Maker or provided in response to a request by a Trading Official, a Floor Broker or a Market Maker, but must yield priority to all resting orders in the Cabinet (those orders held by the Trading Official, and which resting cabinet orders may be closing only). So long as both the buyer and the seller yield to orders resting in the cabinet book, opening cabinet bids can trade with opening cabinet offers at $1 per option contract.

The Exchange has temporarily amended the procedures through January 5, 2015 to allow transactions to take place in open outcry at a price of at least $0 but less than $1 per option contract. These lower-priced transactions are permitted to be traded pursuant to the same procedures applicable to $1 cabinet trades, except that (i) bids and offers for opening transactions are only permitted to accommodate closing transactions in order to limit use of the procedure to liquidations of existing positions, and (ii) the procedures are also made available for trading in option classes participating in the Penny Pilot Program.[5] The Exchange believes that allowing a price of at least $0 but less than $1 better accommodates the closing of options positions in series that are worthless or not actively traded, particularly in the event where there has been a significant movement in the price of the underlying security that results in a large number of series being out-of-the-money. For example, a market participant might have a long position in a put series with a strike price of $30 and the underlying stock might be trading at $100. In such an instance, there might not otherwise be a market for that person to close-out the position even at the $1 cabinet price (*e.g.,* the series might be quoted no bid).

As with other accommodation liquidations under Rule 6.80, transactions that occur for less than $1 will not be disseminated to the public on the consolidated tape. In addition, as with other accommodation liquidations under Rule 6.80, the transactions will be exempt from the Consolidated Options Audit Trail (''COATS'') requirements of Exchange Rule 6.67 Order Format and System Entry Requirements. However, the Exchange will maintain quotation, order and transaction information for the transactions in the same format as the COATS data is maintained. In this regard, all transactions for less than $1 must be reported to the Exchange following the close of each business day.

2. Statutory Basis

The Exchange believes that this proposed rule change is consistent with Section 6(b) of the Securities Exchange Act of 1934 (''Act''),[6] in general, and furthers the objectives of Section 6(b)(5) of the Act [7] in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, promote just and equitable principles of trade, 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. The Exchange believes that allowing for liquidations at a price less than $1 per option contract will better facilitate the closing of options positions that are worthless or not actively trading, especially in Penny Pilot issues where Cabinet Trades are not otherwise permitted.

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 that is not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing rule 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 if consistent with the protection of investors and the public interest, provided that the self-regulatory organization has given the Commission written notice of its intent to file 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,[8] the proposed rule change has become effective pursuant to Section 19(b)(3)(A) of the Act [9] and Rule 19b–4(f)(6) thereunder.[10]

Under Rule 19b–4(f)(6) of the Act,[11] the proposal does not become operative for 30 days after the date of its filing, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest. The Exchange has requested that the Commission waive the 30-day operative delay period after which a proposed rule change under Rule 19b–4(f)(6) becomes operative so that the pilot may continue without interruption. The Commission believes that waiver of the 30-day operative delay is consistent with the protection

[4] *See* Securities Exchange Act Release No. 63476 (December 8, 2010), 75 FR 77930 (December 14, 2010) (SR–NYSE Arca–2010–109).

[5] Currently the $1 cabinet trading procedures are limited to options classes traded in $0.05 or $0.10 standard increment. The $1 cabinet trading procedures are not available in Penny Pilot Program classes because in those classes an option series can trade in a standard increment as low as $0.01 per share (or $1.00 per option contract with a 100 share multiplier). Because the temporary procedures allow trading below $0.01 per share (or $1.00 per option contract with a 100 share multiplier), the procedures are available for all classes, including those classes participating in the Penny Pilot Program.

[6] 15 U.S.C. 78f(b).

[7] 15 U.S.C. 78f(b)(5).

[8] The Exchange has satisfied this requirement.

[9] 15 U.S.C. 78s(b)(3)(A).

[10] 17 CFR 240.19b–4(f)(6).

[11] *Id.*

of investors and the public interest because it will allow the pilot to continue uninterrupted, thereby avoiding any potential investor confusion that could result from a temporary interruption in the pilot and allowing members to continue to benefit from the program. Based on the foregoing, the Commission hereby waives the 30-day operative delay and designates the proposal operative upon filing.[12]

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 will institute proceedings to determine whether the proposed rule change 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–NYSEARCA–2014–152 on the subject line.

Paper Comments

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSEARCA–2014–152. 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 will also be available for inspection and copying at the NYSE's principal office and on its Internet Web site at *www.nyse.com.* 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–NYSEARCA–2014–152 and should be submitted on or before January 29, 2015.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[13]

Brent J. Fields,

Secretary.

[FR Doc. 2015–00050 Filed 1–7–15; 8:45 am]

BILLING CODE 8011–01–P

[12] For purposes only of waiving the operative delay, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[13] 17 CFR 200.30–3(a)(12).

DEPARTMENT OF STATE

[Public Notice 8997]

Culturally Significant Objects Imported for Exhibition Determinations: ''Ink and Gold: Art of the Kano'' 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 objects to be included in the exhibition ''**Ink and Gold: Art of the Kano**,'' 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 **Philadelphia Museum of Art**, Philadelphia, PA, from on or about February 12, 2015, until on or about May 10, 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 lists of the exhibit 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: January 5, 2015.

Kelly Keiderling,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2015–00105 Filed 1–7–15; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Summary Notice No. 2014–148]

Petition for Exemption; Summary of Petition Received; Brandau, Jerry

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice.

SUMMARY: This notice contains a summary of a petition seeking relief from specified requirements of Title 14 of the Code of Federal Regulations. The purpose of this notice is to improve the public's awareness of, and participation in, the FAA's exemption process. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of the petition or its final disposition.

DATES: Comments on this petition must identify the petition docket number and must be received on or before January 28, 2015.

ADDRESSES: Send comments identified by docket number FAA–2014–1016 using any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov* and follow the online instructions for sending your comments electronically.
- *Mail:* Send comments to Docket Operations, M–30; U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.
- *Hand Delivery or Courier:* Take comments to Docket Operations in

Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

• *Fax:* Fax comments to Docket Operations at 202–493–2251.

Privacy: 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 *http://www.regulations.gov*, as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at *http://www.dot.gov/privacy*.

Docket: Background documents or comments received may be read at *http://www.regulations.gov* at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Jake Troutman, (202) 267–9521. 800 Independence Avenue SW., Washington, DC 20591.

This notice is published pursuant to 14 CFR 11.85.

Issued in Washington, DC, on January 2, 2015.

Lirio Liu,

Director, Office of Rulemaking.

Petition for Exemption

Docket No.: FAA–2014–1016.

Petitioner: Brandau, Jerry.

Section(s) of 14 CFR Affected: §§ 103.1(a) and (b), and 103.21.

Description of Relief Sought: The petitioner is requesting relief to commercially operate its Phantom 2 Vision plus, small lightweight unmanned aircraft system (UAS), as an ultralight vehicle, for aerial photography, agriculture field inspection, and aerial property monitoring.

[FR Doc. 2015–00045 Filed 1–7–15; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Summary Notice No. 2014–149]

Petition for Exemption; Summary of Petition Received; Kansas State University

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice.

SUMMARY: This notice contains a summary of a petition seeking relief from specified requirements of Title 14 of the Code of Federal Regulations. The purpose of this notice is to improve the public's awareness of, and participation in, the FAA's exemption process. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of the petition or its final disposition.

DATES: Comments on this petition must identify the petition docket number and must be received on or before January 28, 2015.

ADDRESSES: Send comments identified by docket number FAA–2014–1088 using any of the following methods:

• *Federal eRulemaking Portal:* Go to *http://www.regulations.gov* and follow the online instructions for sending your comments electronically.

• *Mail:* Send comments to Docket Operations, M–30; U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.

• *Hand Delivery or Courier:* Take comments to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

• *Fax:* Fax comments to Docket Operations at 202–493–2251.

Privacy: 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 *http://www.regulations.gov*, as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at *http://www.dot.gov/privacy*.

Docket: Background documents or comments received may be read at *http://www.regulations.gov* at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Jake Troutman, (202) 267–9521. 800 Independence Avenue SW., Washington, DC 20591.

This notice is published pursuant to 14 CFR 11.85.

Issued in Washington, DC, on January 2, 2015.

Lirio Liu,

Director, Office of Rulemaking.

Petition for Exemption

Docket No.: FAA–2014–1088.

Petitioner: Kansas State University.

Section(s) of 14 CFR Affected: part 21; §§ 61.113(a) and (b), 61.3(d)(2)(iii), 91.7(a), 91.9(b)(2), 91.109, 91.119, 91.121, 91.151(a), 91.203(a) and (b), 91.405(a), 91.407(a)(1), 91.409(a)(2) and 91.417(a) and (b).

Description of Relief Sought: The petitioner is requesting relief to commercially operate its fixed wing small unmanned aircraft systems (sUAS), including the gas powered Penguin B at and below 1,200 feet above ground level, under controlled conditions in the National Airspace System for the purposes of flight training.

[FR Doc. 2015–00048 Filed 1–7–15; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Summary Notice No. 2014–150]

Petition for Exemption; Summary of Petition Received; Altavian, Inc.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice.

SUMMARY: This notice contains a summary of a petition seeking relief from specified requirements of Title 14 of the Code of Federal Regulations. The purpose of this notice is to improve the public's awareness of, and participation in, the FAA's exemption process. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of the petition or its final disposition.

DATES: Comments on this petition must identify the petition docket number and must be received on or before January 28, 2015.

ADDRESSES: Send comments identified by docket number FAA–2014–1054 using any of the following methods:

• *Federal eRulemaking Portal:* Go to *http://www.regulations.gov* and follow the online instructions for sending your comments electronically.

• *Mail:* Send comments to Docket Operations, M–30; U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.

• *Hand Delivery or Courier:* Take comments to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

• *Fax:* Fax comments to Docket Operations at 202–493–2251.

Privacy: 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 *http://www.regulations.gov,* as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at *http://www.dot.gov/privacy.*

Docket: Background documents or comments received may be read at *http://www.regulations.gov* at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: For technical questions concerning this action, contact Nia Daniels, Office of Rulemaking, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267–9677.

This notice is published pursuant to 14 CFR 11.85.

Issued in Washington, DC, on January 2, 2015.

Lirio Liu,

Director, Office of Rulemaking.

Petition for Exemption

Docket No.: FAA–2014–1054

Petitioner: Altavian, Inc.

Section(s) of 14 CFR Affected: 91.151(a)(1); 91.405(a); 91.407(a)(1); 91.409(a)(1) and (a)(2); and 91.417(a) and (b)

Description of Relief Sought: Altavian, Inc. seeks an exemption to commercially operate the Altavian Nova F6500 unmanned aircraft system for data collection, inspection, and monitoring, while having a maximum operating altitude of 1,200 feet above ground level.

[FR Doc. 2015–00046 Filed 1–7–15; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Summary Notice No. 2014–151]

Petition for Exemption; Summary of Petition Received; Bowhead Mission Solutions, LLC

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice.

SUMMARY: This notice contains a summary of a petition seeking relief from specified requirements of Title 14 of the Code of Federal Regulations. The purpose of this notice is to improve the public's awareness of, and participation in, the FAA's exemption process. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of the petition or its final disposition.

DATES: Comments on this petition must identify the petition docket number and must be received on or before January 28, 2015.

ADDRESSES: Send comments identified by docket number FAA–2014–0916 using any of the following methods:

• *Federal eRulemaking Portal:* Go to *http://www.regulations.gov* and follow the online instructions for sending your comments electronically.

• *Mail:* Send comments to Docket Operations, M–30; U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.

• *Hand Delivery or Courier:* Take comments to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

• *Fax:* Fax comments to Docket Operations at 202–493–2251.

Privacy: 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 *http://www.regulations.gov*, as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at *http://www.dot.gov/privacy*.

Docket: Background documents or comments received may be read at *http://www.regulations.gov* at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: For technical questions concerning this action, contact Nia Daniels, Office of Rulemaking, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267–9677.

This notice is published pursuant to 14 CFR 11.85.

Issued in Washington, DC, on January 2, 2015.

Lirio Liu,

Director, Office of Rulemaking.

Petition for Exemption

Docket No.: FAA–2014–0916.

Petitioner: Bowhead Mission Solutions, LLC.

Sections of 14 CFR Affected: 45.23(b); part 21; 61.113(a) and (b); 91.7(a); 91.9(b)(2); 91.103(b); 91.109; 91.119; 91.121; 91.151(a); 91.203(a) and (b); 91.405(a); 91.407(a)(1); 91.409(a)(2); 91.417(a) and (b).

Description of Relief Sought: Bowhead Mission Solutions, LLC, operator of the small unmanned aircraft system Cinestar 8 Okto XL, would like an exemption to conduct aerial photography for the University of Nevada—Las Vegas' athletic department for activities at the Sam Boyd Stadium for major sporting events.

[FR Doc. 2015–00044 Filed 1–7–15; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2014–0445]

Hours of Service of Drivers; California Farm Bureau Federation; Application for Exemption

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice of application for exemption; request for comments.

SUMMARY: FMCSA announces that it has received an application from the California Farm Bureau Federation (CFBF) on behalf of its members and other agricultural organizations for an exemption from the 30-minute rest break provision of the Agency's hours-of-service regulations for certain commercial motor vehicle (CMV) drivers transporting bees. The exemption would enable CMV drivers transporting bees to operate without taking a 30-minute break during the

workday. FMCSA considers the request to be on behalf of all motor carriers and drivers when transporting bees.

DATES: Comments must be received on or before February 9, 2015.

ADDRESSES: You may submit comments identified by Federal Docket Management System Number FMCSA–2014–0445 by any of the following methods:

- *Federal eRulemaking Portal: www.regulations.gov.* Follow the online instructions for submitting comments.
- *Fax:* 1–202–493–2251.
- *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 or Courier:* West Building, Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., between 9 a.m. and 5 p.m. E.T., Monday through Friday, except Federal holidays.

Instructions: All submissions must include the Agency name and docket number. For detailed instructions on submitting comments and additional information on the exemption process, see the *Public Participation* heading below. Note that all comments received will be posted without change to *www.regulations.gov,* including any personal information provided. Please also see the *Privacy Act* heading below.

Docket: For access to the docket to read background documents or comments received, go to *www.regulations.gov,* and follow the online instructions for accessing the dockets, or go to the street address listed above.

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.*

Public participation: The Federal eRulemaking Portal is available 24 hours each day, 365 days each year. You can obtain electronic submission and retrieval help and guidelines under the ''help'' section of the Federal eRulemaking Portal Web site. If you want us to notify you that we received your comments, please include a self-addressed, stamped envelope or postcard, or print the acknowledgement page that appears after submitting comments online. Comments received after the comment closing date will be included in the docket and will be considered to the extent practicable.

FOR FURTHER INFORMATION CONTACT: Mr. Robert F. Schultz, Jr., FMCSA Driver and Carrier Operations Division; Office of Carrier, Driver and Vehicle Safety Standards; Telephone: 202–366–4325. Email: *MCPSD@dot.gov.*

SUPPLEMENTARY INFORMATION:

Background

FMCSA has authority under 49 U.S.C. 31136(e) and 31315 to grant exemptions from certain parts of the Federal Motor Carrier Safety Regulations. Before doing so, the Agency must provide an opportunity for public comment. The Agency is required to publish a notice of each exemption request in the **Federal Register** (49 CFR 381.315(a)), providing the public an opportunity to inspect the information relevant to the application, including any safety analyses that have been conducted, and to comment on the request. FMCSA must review the safety analyses and public comments submitted and determine whether granting the exemption would likely achieve a level of safety equivalent to, or greater than, the level that would be achieved by the current regulation (49 CFR 381.305). The Agency must publish its decision in the **Federal Register** (49 CFR 381.315(b)) and state the reasons for denying or granting the application. If the exemption is granted, the notice must include the name of the person or entity, or class of persons, receiving the exemption, and the regulation from which the exemption is granted. The notice must also specify the effective period of the exemption and state the terms and conditions of the exemption, if any. The exemption may be renewed (49 CFR 381.300(b)).

On December 27, 2011, FMCSA published a final rule establishing mandatory rest breaks for CMV drivers (76 FR 81133). Effective July 1, 2013, drivers were barred from operating a CMV if 8 hours or more had elapsed since the end of their last off-duty or sleeper-berth period of at least 30 minutes [49 CFR 395.3(a)(3)(ii)]. FMCSA did not specify when drivers must take the 30-minute break.

Request for Exemption

CFBF is a trade organization representing various stakeholders in the beekeeping industry, including those who provide bee-pollination services and those who benefit from these services. Many crops in the U.S. require bee pollination, including almonds, apples, lettuce, and several varieties of berries. There is no substitute for the pollination provided by bees. CFBF cites a report in *Scientific American* concluding that in the absence of bee pollination, the United States could lose one third of its crops. CFBF states that the number of bee colonies has been declining for several decades. Recently, the Obama administration established the Pollinator Health Task Force chaired by the Secretaries of Agriculture and Environmental Protection to address problems related to this decline.

Because of the reduced number of colonies available to pollinate, bees are transported long distances to provide crop pollination. CFBF states that the CMVs transporting bees must maintain a flow of cool, fresh air to the hives on board and that excessive heat in the CMV interior can jeopardize the health and welfare of the bees. CFBF maintains that if CMVs transporting hives were stopped for 30 minutes, particularly in warm weather, the risk of harm to the bees would be significant, and possibly fatal. A copy of the application for exemption is available for review in the docket for this notice.

Request for Comments

In accordance with 49 U.S.C. 31136(e) and 31315(b)(4), FMCSA requests public comment on CFBF's application for an exemption from the rest-break requirement of 49 CFR 395.3(a)(3)(ii). The Agency will consider all comments received by close of business on February 9, 2015. Comments will be available for examination in the docket at the location listed under the **ADDRESSES** section of this notice. The Agency will consider to the extent practicable comments received in the public docket after the closing date of the comment period.

Issued on: December 31, 2014.

Larry W. Minor,

Associate Administrator for Policy.

[FR Doc. 2015–00101 Filed 1–7–15; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[FMCSA Docket No. FMCSA–2014–0307]

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 32 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 November 22, 2014. The exemptions expire on November 22, 2016.

FOR FURTHER INFORMATION CONTACT: Elaine M. Papp, R.N., Chief, Medical Programs Division, (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 October 22, 2014, FMCSA published a notice of receipt of Federal diabetes exemption applications from 32 individuals and requested comments from the public (79 FR 63214). The public comment period closed on November 21, 2014, and no comments were received.

FMCSA has evaluated the eligibility of the 32 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).

III. 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 32 applicants have had ITDM over a range of 1 to 34 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 October 22, 2014, **Federal Register** notice and they will not be repeated in this notice.

IV. Discussion of Comments

FMCSA received no comments in this proceeding.

V. 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.

VI. 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.

VII. Conclusion

Based upon its evaluation of the 32 exemption applications, FMCSA exempts the following drivers from the diabetes requirement in 49 CFR 391.41(b)(10), subject to the requirements cited above 949 CFR 391.64(b)):

Jeffrey S. Argabright (OH)
Darrell G. Brave (WA)
Domingo Cantu (WA)
Nicholas M. Cooper (FL)
James L. Crane (MS)
Bobby O. Devaney (AL)
Donald L. Feltman (MN)
Benjamin T. Filip (ND)
Harold L. Gomez (LA)
Arthur Gonzalez (TX)
Charles W. Guillory (LA)
Bernard Heffern (NJ)

John W. Hurlbert (NJ)
Roosevelt Isaiah (SC)
William T. Jensen (NJ)
Robert W. Johnson, Sr. (NY)
Joseph H. Karas (NJ)
Randy C. Lee (NY)
Gerald R. Lewis (TN)
John R. Miller, II (OR)
Robert A. Nicolai (MO)
William P. Pearson, II (WI)
Alan M. Primus (IA)
Otto E. Reimer (MT)
Danny L. Reimers (NM)
Michael L. Reynolds (NC)
Samuel H. Schmidt (MN)
Timothy W. Selk (AK)
Dennis J. Stanley (IL)
Howard J. Steinberg (MA)
Steven M. Weimer (PA)
Michael L. Westbury (SC)

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.

Issued on: December 30, 2014.

Larry W. Minor,

Associate Administrator for Policy.

[FR Doc. 2015–00097 Filed 1–7–15; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2012–0154]

Qualification of Drivers; Exemption Applications; Hearing

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice of renewal of exemptions; request for comments.

SUMMARY: FMCSA announces its decision to renew the exemptions from the hearing requirement in the Federal Motor Carrier Safety Regulations for 15 individuals. FMCSA has statutory authority to exempt individuals from the hearing requirement if the exemptions granted will not compromise safety. The Agency has concluded that granting these exemption renewals will provide a level of safety that is equivalent to or greater than the level of safety maintained without the exemptions for these commercial motor vehicle (CMV) drivers.

DATES: This decision is effective January 12, 2015. Comments must be received on or before February 9, 2015.

ADDRESSES: You may submit comments bearing the Federal Docket Management System (FDMS) numbers: Docket No. [Docket No. FMCSA–2012–0154], 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 or Courier:* 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.
- *Fax:* 1–202–493–2251.

Instructions: Each submission must include the Agency name and the docket number for this notice. Note that DOT posts all comments received without change to *http://www.regulations.gov,* including any personal information included in a comment. Please see the Privacy Act heading below.

Docket: For access to the docket to read background documents or comments, go to *http://www.regulations.gov* at any time 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. The Federal Docket Management System (FDMS) is available 24 hours each day, 365 days each year. If you want acknowledgment that we received your comments, please include a self-addressed, stamped envelope or postcard or print the acknowledgement page that appears after submitting comments on-line.

C. 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*.

FOR FURTHER INFORMATION CONTACT: Elaine M. Papp, Chief, Medical Programs Division, 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:

Background

Under 49 U.S.C. 31136(e) and 31315, FMCSA may renew an exemption from the hearing requirement in 49 CFR 391.41(b)(11), which applies to drivers of CMVs in interstate commerce, for a two-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 procedures for requesting an exemption (including renewals) are set out in 49 CFR part 381.

Exemption Decision

This notice addresses 15 individuals who have requested renewal of their exemptions in accordance with FMCSA procedures. FMCSA has evaluated these applications for renewal on their merits and decided to extend each exemption for a renewable two-year period. They are:

David W. Bateman (MN)
William B. Britt, Jr. (TN)
Tyjuan M. Davis (FL)
Randall R. Doane (TX)
Alvin L. Johnson (GA)
Jerry D. Jones (TX)
Christopher Kuller (PA)
Kathy K. Miller (IA)
Larry J. Moss (CA)
Jeremy R. Reams (KY)
Daniel Schoultz (PA)
James M. Skinner (FL)
Justin J. Tretheway (WI)
Mark Valimont (IA)
Holly Cameron Wright, Jr. (NC)

The exemption will be rescinded 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(e) and 31315.

Basis for Renewing Exemptions

Under 49 U.S.C. 31315(b)(1), an exemption may be granted for no longer than two years from its approval date and may be renewed upon application for additional two year periods. In

accordance with 49 U.S.C. 31136(e) and 31315, each of the 15 applicants has satisfied the entry conditions for obtaining an exemption from the hearing requirement (77 FR 31427). Each of these 15 applicants has requested renewal of the exemption and CDLIS and MCMIS were searched for crash and violation data on the 15 applicants. For non-CDL holders, the Agency reviewed the driving records from the State licensing agency. These factors provide an adequate basis for predicting each driver's ability to continue to drive safely in interstate commerce. Therefore, FMCSA concludes that extending the exemption for each renewal applicant for a period of two years is likely to achieve a level of safety equal to that existing without the exemption.

Request for Comments

FMCSA will review comments received at any time concerning a particular driver's safety record and determine if the continuation of the exemption is consistent with the requirements at 49 U.S.C. 31136(e) and 31315. However, FMCSA requests that interested parties with specific data concerning the safety records of these drivers submit comments by February 9, 2015.

FMCSA believes that the requirements for a renewal of an exemption under 49 U.S.C. 31136(e) and 31315 can be satisfied by initially granting the renewal and then requesting and evaluating, if needed, subsequent comments submitted by interested parties. As indicated above, the Agency previously published notices of final disposition announcing its decision to exempt these 15 individuals from the hearing requirement in 49 CFR 391.41(b)(11). The final decision to grant an exemption to each of these individuals was made on the merits of each case and made only after careful consideration of the comments received to its notices of applications. That information is available by consulting the above cited **Federal Register** publications.

Interested parties or organizations possessing information that would otherwise show that any, or all, of these drivers are not currently achieving the statutory level of safety should immediately notify FMCSA. The Agency will evaluate any adverse evidence submitted and, if safety is being compromised or if continuation of the exemption would not be consistent with the goals and objectives of 49 U.S.C. 31136(e) and 31315, FMCSA will take immediate steps to revoke the exemption of a driver.

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–2012–0154 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 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.

Viewing Comments and Documents

To view comments, as well as any documents mentioned in this notice, or to submit your comment online, go to *http://www.regulations.gov* and in the search box insert the docket number FMCSA–2012–0154 and click ''Search.'' Next, click ''Open Docket Folder'' and you will find all documents and comments related to this document.

Issued on: December 31, 2014.

Larry W. Minor,

Associate Administrator for Policy.

[FR Doc. 2015–00093 Filed 1–7–15; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA–2014–0133]

Public Meeting Concerning Test Device for Human Occupant Restraint

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Meeting announcement.

SUMMARY: This notice announces a public meeting on Tuesday, January 20, 2015 concerning the development of the Test Device for Human Occupant Restraint (THOR). NHTSA has been developing the THOR anthropomorphic test device (ATD) in order to better understand the causal mechanisms for injury and develop countermeasures to prevent injuries and fatalities in motor vehicle crashes. The purpose of this public meeting is to provide a forum for open communication and data sharing on the THOR ATD towards the common goal of improving the safety of passenger vehicle occupants. This notice announces the date and location of the meeting and explains how those who wish to attend can register for the meeting.

DATES: The public meeting is scheduled from 9 a.m. to 3 p.m. on Tuesday, January 20, 2015. If you would like to attend the public meeting (either in person or via teleconference), you must register no later than Thursday, January 15, 2015. For further information about registration, please see the information provided under **FOR FURTHER INFORMATION CONTACT**. Please submit all written comments no later than March 15, 2015.

ADDRESSES: The meeting will be held at: Department of Transportation, 1200 New Jersey Ave SE., Washington, DC 20590. This facility is accessible to individuals with disabilities.

Written comments. You may submit comments to the docket number NHTSA–2014–0133 by any of the following methods:

- Federal eRulemaking Portal: Go to *http://www.regulations.gov.* Follow the online 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 or Courier: 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12–140, between 9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.
- Fax: 202–493–2251.

Instructions: All submissions must include the agency name and docket number. Note that all comments received will be posted without change to *http://www.regulations.gov,* including any personal information provided. Please see the Privacy Act discussion below.

Docket: For access to the docket, go to *http://www.regulations.gov* at any time or to 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12–140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday,

except Federal Holidays. Telephone: (202) 366–9826.

Privacy Act: 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.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000, (Volume 65, Number 70; Pages 19477–78) or you may visit *http://www.dot.gov/privacy.html.*

Confidential Business Information: If you wish to submit information under a claim of confidentiality, you should submit two copies of your complete submission and one copy of the submission containing only the portions for which no claim of confidential treatment is made and from which those portions for which confidential treatment is claimed have been redacted, to the Office of Chief Counsel (NCC–111), National Highway Traffic Safety Administration, Room W41–227, 1200 New Jersey Avenue SE., Washington, DC 20590. You should include a cover letter setting forth the information specified in our confidential business information regulation (49 CFR part 512). In addition, you should submit two copies from which you have redacted the claimed confidential business information to Docket Management at the address given above.

FOR FURTHER INFORMATION CONTACT: To register for the public meeting, please send your name, affiliation, phone number, email address, and whether you will attend in person or over teleconference to *Dan.Parent@dot.gov* by the date stated under **DATES**. Teleconference information will be distributed to the pre-registered remote participants. For questions about registering for, or general questions about, the public meeting, please contact Dan Parent (202) 366–1724 or Stephen Ridella (202) 366–4703.

SUPPLEMENTARY INFORMATION: The Test Device for Human Occupant Restraint (THOR) is an advanced anthropomorphic test device (ATD, or test dummy). It is designed to better represent the automotive occupants in the sophisticated restraint systems developed since the advent of the Hybrid III test dummy, such as force-limited three-point belts and air bags. NHTSA has been researching the application of the THOR 50th percentile adult male ATD in frontal and frontal oblique crash test modes. The purpose of this public meeting is to provide a forum for open communication and data sharing on the THOR ATD towards the common goal of improving the safety of passenger vehicle occupants. Potential topics for discussion at the meeting include qualification procedures, repeatability and reproducibility, biofidelity evaluation, injury criteria, and computational models.

Registration is necessary for all attendees. Please see registration instructions under **DATES** and **FOR FURTHER INFORMATION CONTACT**. Should it be necessary to cancel the meeting due to inclement weather or any other emergencies, a decision to cancel will be made as soon as possible and emailed to the registered attendees. If you do not have access to email, you may call the contacts listed in this announcement and leave your telephone number and/or email address. You will be contacted only if the meeting is postponed or canceled.

Written comments can be submitted to the docket. See information under **DATES** and **FOR FURTHER INFORMATION CONTACT**. The final agenda, as well as material presented at the public meeting, will be posted to the NHTSA Web site at *http://www.nhtsa.gov/Research/Biomechanics+&+Trauma/THOR+50th+Male+ATD.* The agenda will be posted one week prior to the meeting. A teleconference will be arranged for those who cannot attend the meeting in person.

Tim Johnson,

Acting Associate Administrator for Vehicle Safety Research.

[FR Doc. 2015–00150 Filed 1–7–15; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[Docket No. FD 35893]

Pennsylvania & Southern Railway, LLC—Operation Exemption—Franklin County General Authority

Pennsylvania & Southern Railway, LLC (PSCC), a Class III carrier, has filed a verified notice of exemption under 49 CFR 1150.41 to acquire extended operating rights over approximately 25 miles of track and associated right-of-way within the Cumberland Valley Business Park and the Letterkenny Army Depot near Chambersburg, Franklin County, Pa. (the Rail Lines), pursuant to an amended agreement between PSCC and the Franklin County General Authority (FCGA).

PSCC states that it currently operates over the Rail Lines pursuant to an operation exemption issued in *Pennsylvania & Southern Railway—Operation Exemption—Franklin County General Authority,* FD 34461 (STB served Feb. 12, 2004). PSCC and FCGA have entered into an amended rail operating agreement that extends the term of the current agreement until October 31, 2039, and makes other minor changes to the existing agreement. PSCC states that the amended terms will promote stability for the rail operations and justify further investment in the operations.

PSCC also states that it will continue to interchange with CSXT and certifies that no interchange commitments will be required as part of this transaction.

PSCC certifies that its projected revenues as a result of the transaction will not result in the creation of a Class I or Class II rail carrier.

PSCC states that it intends to begin operations under the amended rail operating agreement on or after the effective date of the exemption, which is January 22, 2015 (30 days after the verified notice was filed).

If the verified notice contains false or misleading information, the exemption is void *ab initio.* Petitions to revoke the exemption under 49 U.S.C. 10502(d) may be filed at any time. The filing of a petition to revoke will not automatically stay the effectiveness of the exemption. Petitions to stay must be filed no later than January 15, 2015 (at least seven days before the exemption becomes effective).

An original and ten copies of all pleadings, referring to Docket No. FD 35893, must be filed with the Surface Transportation Board, 395 E Street SW., Washington, DC 20423–0001. In addition, a copy of each pleading must be served on Eric M. Hocky, Clark Hill PLC, One Commerce Square, 2005 Market Street, Suite 1000, Philadelphia, PA 19103.

Board decisions and notices are available on our Web site at *www.stb.dot.gov.*

Decided: January 5, 2015.

By the Board, Rachel D. Campbell, Director, Office of Proceedings.

Jeffrey Herzig,

Clearance Clerk.

[FR Doc. 2015–00075 Filed 1–7–15; 8:45 am]

BILLING CODE 4915–01–P

FEDERAL REGISTER

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Part II

Department of Transportation

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 171, 172, 173, et al.

Hazardous Materials: Harmonization With International Standards (RRR); Final Rule

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 171, 172, 173, 175, 176, 178 and 180

[Docket Nos. PHMSA–2013–0260 (HM–215M)]

RIN 2137–AF05

Hazardous Materials: Harmonization With International Standards (RRR)

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.

ACTION: Final rule.

SUMMARY: PHMSA is amending the Hazardous Materials Regulations to maintain alignment with international standards by incorporating various amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations, and vessel stowage requirements. These revisions are necessary to harmonize the Hazardous Materials Regulations with recent changes made to the International Maritime Dangerous Goods (IMDG) Code, the International Civil Aviation Organization's Technical Instructions (ICAO TI) for the Safe Transport of Dangerous Goods by Air, the United Nations Recommendations on the Transport of Dangerous Goods (UN Model Regulations) and subsequently address three petitions for rulemaking.

DATES: *Effective Date:* January 1, 2015.

Voluntary compliance date: PHMSA is authorizing voluntary compliance beginning January 1, 2015.

Delayed compliance date: Unless otherwise specified, compliance with the amendments adopted in this final rule is required beginning January 1, 2016.

Incorporation by reference date: The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of January 1, 2015.

FOR FURTHER INFORMATION CONTACT: Steven Webb, Office of Hazardous Materials Standards or Vincent Babich, International Standards, telephone (202) 366–8553, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue SE., 2nd Floor, Washington, DC 20590–0001.

SUPPLEMENTARY INFORMATION:

I. Executive Summary
II. Background
III. Incorporation by Reference Discussion Under 1 CFR Part 51
IV. Comment Discussion
V. Section-by-Section Review
VI. Regulatory Analyses and Notices
A. Statutory/Legal Authority for the Rulemaking
B. Executive Orders 12866 and 13563 and DOT Regulatory Policies and Procedures
C. Executive Order 13132
D. Executive Order 13175
E. Regulatory Flexibility Act, Executive Order 13272, and DOT Policies and Procedures
F. Paperwork Reduction Act
G. Regulatory Identifier Number (RIN)
H. Unfunded Mandates Reform Act
I. Environment Assessment
J. Privacy Act
K. Executive Order 13609 and International Trade Analysis

I. Executive Summary

In this final rule, PHMSA is amending the Hazardous Materials Regulations (HMR; 49 CFR parts 171–180) to incorporate changes adopted in the IMDG Code, the ICAO Technical Instructions, and the UN Model Regulations, effective January 1, 2015. These changes ensure the domestic hazard classification, hazard communication and packaging requirements are consistent with those employed throughout the world.

Federal law and policy strongly favor the harmonization of domestic and international standards for hazardous materials transportation. The Federal hazardous materials transportation law (Federal hazmat law; 49 U.S.C. 5101 *et seq.*) directs PHMSA to participate in relevant international standard-setting bodies and encourages alignment of the HMR with international transport standards to the extent practicable while recognizing that deviations may at times be necessary to be consistent with the public interest (see 49 U.S.C. 5120). Harmonization facilitates international trade by minimizing the costs and other burdens of complying with multiple or inconsistent safety requirements for transportation of hazardous materials. Harmonization has also become increasingly important as the volume of hazardous materials transported in international commerce grows. Safety is often enhanced by creating a uniform framework for compliance. PHMSA actively participates in relevant international standard-setting bodies and promotes the adoption of standards consistent with the high safety standards set by the HMR.

The foreign trade of chemicals is a large segment of the United States economy. In 2000, U.S. foreign trade in chemicals totaled $154 billion and generated a $6 billion positive trade balance. The consistency of regulations reduces regulatory compliance costs and helps to avoid costly frustrations of international shipments. PHMSA's continued leadership in maintaining consistency with international regulations enhances the hazardous materials safety program and assists in maintaining a favorable trade balance.

II. Background

PHMSA published a notice of proposed rulemaking (NPRM) under Docket HM–215M (79 FR 50741, August 25, 2014) to incorporate various amendments to harmonize the HMR with recent changes to the UN Model Regulations, the IMDG Code, and the ICAO Technical Instructions. When considering alignment of the HMR with international standards, we review and evaluate each amendment on its own merit, on the basis of its overall impact on transportation safety, and on the basis of the economic implications associated with its adoption into the HMR. Our goal is to harmonize without diminishing the level of safety currently provided by the HMR or imposing undue burdens on the regulated community.

Based on this review and evaluation, in this final rule, PHMSA is amending the HMR to incorporate changes from the 18th Revised Edition of the UN Model Regulations, Amendment 37–14 to the IMDG Code, and the 2015–2016 ICAO Technical Instructions, which become effective January 1, 2015 (The IMDG Code is effective January 1, 2015; however, Amendment 36–12 may continue to be used until January 1, 2016). Notable amendments to the HMR in this final rule include the following:

- Updating references to international regulations including the ICAO Technical Instructions, the IMDG Code, the UN Model Regulations, the UN Manual of Tests and Criteria the Canadian Transportation of Dangerous Goods Regulations and various technical standards.
- Adding, revising, or removing certain proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, bulk packaging requirements, and passenger and cargo aircraft maximum quantity limits from the Hazardous Materials Table (HMT).
- Adopting an exception from the HMR for marine pollutants up to 5 L (1.3 gal) for liquids or 5 kg (11 lbs.) for solids when these materials are packaged in accordance with the general packaging requirements of §§ 173.24 and 173.24a. These exceptions are consistent with the UN Model Regulations, the IMDG Code, and the ICAO TI.

• Modifying the list of marine pollutants in Appendix B to § 172.101.
• Adding minimum sizes for the OVERPACK and SALVAGE markings.
• Revising and adding vessel stowage codes listed in column 10B of the HMT and segregation requirements in § 176.83 consistent with the IMDG Code.
• Adsorbed gases: Adopting new entries into the HMR; adding a definition; authorizing packagings; and adding safety requirements including quantity limitations and filling limits.
• Harmonizing with the latest version of the ICAO TI to ensure that the information currently authorized by the HMR to be provided by means of an alternative document be included on a shipping paper for batteries transported under the provisions of § 173.185(c)(4)(v) equivalent to Section IB of ICAO TI Packing Instructions 965 and 968. PHMSA is also harmonizing with the latest version of the ICAO TI by requiring a ''CARGO AIRCRAFT ONLY'' label on packages containing small lithium metal batteries not packed in or with equipment.
• Amending the HMR definition of non-bulk packaging by adding a new paragraph (4) to include bags and boxes conforming to the applicable requirements for specification packagings in subpart L of part 178 of this subchapter, if they have a maximum net mass of 400 kg (882 pounds) or less.

III. Incorporation by Reference Discussion Under 1 CFR Part 51

The United Nations Recommendations on the Transport of Dangerous Goods—Model Regulations, Manual of Tests and Criteria, all of the Transport Canada Clear Language Amendments, and the IAEA Regulations are all free and easily accessible for the public to access on the internet, with access provided via Web sites provided by the parent organization. The International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air, International Maritime Organization International Maritime Dangerous Goods Code, and all of the International Organization for Standardization references are available for interested parties to purchase in either print or electronic versions through the parent organization Web sites. The price charged for these standards not freely available to interested parties helps to cover the cost of developing, maintaining, hosting, and accessing these standards. The specific standards are discussed in greater detail in the following analysis.

IV. Comment Discussion

In response to PHMSA's August 25, 2014 NPRM (79 FR 50741), PHMSA received comments from the following organizations and individuals:
• Aaron Adamczyk
• Alaska Airlines
• American Chemistry Council (ACC)
• American Society of Travel Agents
• Anonymous
• Autoliv
• Carla Clark
• The Council on Safe Transportation of Hazardous Articles, Inc. (COSTHA)
• The Dangerous Goods Advisory Council (DGAC)
• Dow Chemical
• Edward Altemos
• Entegris
• Gregory Sutherland
• The Institute of Makers of Explosives (IME)
• International Vessel Operators Dangerous Goods Association (IVODGA)
• James Lynch
• Jeffery Richmond
• Katherine Whelan
• Key Safety Systems
• Paul Rankin/RIPA
• Sally Mitchell
• Shondra Hector
• TK Holdings Inc. (Takata)
• TRW Automotive
• Veolia ES Technical Solutions, L.L.C. (Veolia)
• United Parcel Service (UPS)

Below is a listing of major amendments to the international transportation regulations that we proposed for adoption into the HMR, a brief synopsis of the comments we received regarding those proposals, and PHMSA's position regarding the comments. Additional comments are addressed in the section-by-section analysis section.[1]

Incorporation by Reference

In the NPRM, PHMSA proposed to incorporate by reference the latest editions of various international transport standards including the 2015–2016 ICAO TI, Amendment 37–14 of the IMDG Code, the 18th Revised Edition of the UN Model Regulations, the International Atomic Energy Agency Safety Standards for Protecting People and the Environment; Regulations for the Safe Transport of Radioactive Material, No. SSR–6, and the Canadian Transportation of Dangerous Goods Regulations. Finally, PHMSA proposed the incorporation by reference of new and updated standards published by the International Organization for Standardization (ISO). PHMSA received general support from the commenters on the principle of harmonizing the U.S. regulations with international transport and technical standards. We did not receive any comments that opposed our proposals to incorporate these standards and will adopt them in this final rule.

Exceptions for Marine Pollutants

In the NPRM, PHMSA proposed to add a new exception from the HMR to § 171.4 for marine pollutants up to 5 L (1.3 gallons) for liquids or 5 kg (11 lbs) for solids when these materials are packaged in accordance with the general packaging requirements of §§ 173.24 and 173.24a.

PHMSA received comments from Gregory Sutherland, DGAC, IVODGA, and COSTHA concerning our proposed amendments to this section. General support for the harmonization effort was provided by COSTHA, IVODGA, and DGAC.

Mr. Sutherland asks if the intent of the proposal was to eliminate limited quantity and excepted quantity shipments of marine pollutants, and further asks why anyone would offer a marine pollutant as a limited or excepted quantity with the new exception in place. PHMSA is not proposing to remove the ability to offer marine pollutants as limited or excepted quantities, but does agree with the commenter that the vast majority of shippers of limited or excepted quantity amounts of marine pollutants will choose to utilize the new exception instead of existing limited or excepted quantity provisions. Mr. Sutherland notes that as proposed there would be no restriction on the number of 5 L containers that are permitted in a combination package, so a package containing four 5 L bottles would contain 20 L of non-regulated marine pollutants, but a 10 L jerrican would be fully regulated. Mr. Sutherland is correct. There is no limit to the number of up to 5 L or 5 kg single or inner packagings that may be placed inside of a package under the conditions of the exception. Lastly, Mr. Sutherland notes that as proposed there would be no requirement to mark a freight container with the large marine pollutant marking even if that freight container contains nothing but packages of excepted marine pollutants. Mr. Sutherland is correct. If the shipments of marine pollutants are below the provided quantity thresholds per inner or single packaging and meet the applicable general packaging provisions no marking would be required on a cargo transport unit, regardless of the number of packages being offered under the exception.

[1] Comments which were outside the scope of this rulemaking are not addressed in this final rule.

DGAC noted that they believe the language in the proposed paragraph (c)(l) could be clarified, as a partial reading could imply that single or inner packagings of 5 L or 5 kg of any material are excepted from the HMR. PHMSA agrees. The wording of the proposed exception is not clear enough to indicate that all shipments of marine pollutants meeting the quantity thresholds and general packaging provisions can utilize the exception assuming they are not also hazardous substances or hazardous wastes. The use of the exception for single or inner packagings of 5 L or 5 kg or less is not limited to materials offered under the UN identification numbers UN 3077 and UN 3082, but would also apply to marine pollutants that meet the definition of other hazard classes (*i.e.* paints or n.o.s. entries that meet the definition of more than one hazard class). PHMSA is amending the exception in 171.4 for clarification.

IVODGA, while providing general support for harmonization on this issue, notes the reporting requirements under the International Convention for the Prevention of Pollution from Ships (MARPOL) and the Environmental Protection Agency (EPA) Vessel's General Permit (VGP) Plan requirements and has some concern regarding the vessel operator's ability to identify these marine pollutants. Vessel owners or operators may be caught in a situation where they are transporting materials which may be excepted from various transport requirements, but still require reporting under domestic and international mandates. IVODGA states that some consideration of these reporting requirements should be addressed since these substances in small packages still represent a hazard if spilled from or on a vessel during operational phases especially when transported in container load quantities.

PHMSA asserts that excepting up to 5 L for liquids and 5 kg for solids provides significant benefit to the shipper and aligns with requirements of other modes of transportation and international regulations. EPA's VGP Plan regulates discharges incidental to normal operations. Reporting requirements under the VGP Plan are for reportable quantities of substances as listed in Appendix A in 49 CFR 172.101, and does not cover marine pollutants. PHMSA data over the past 10 years contains just one record of a marine pollutant released on a vessel.[2] Furthermore, that one incident involved a 55 gallon drum which would not be impacted by the proposed amendment. National Response Center (NRC) incident reporting since 2009 shows 415 initial reports to the NRC involving containership during that period. 78 of those reports involved leaking containers on deck, with 5 of the leaks reaching the water. Thirteen of those reports involved the loss of containers or pallets over the side. None of the incidents over the time period involved marine pollutants that would be excepted as a result of this final rule.

Modification of Marine Pollutant List in Appendix B to § 172.101

In the NPRM, PHMSA proposed the addition of 62 new entries consistent with the IMDG Code and removing the entry ''Chlorotoluenes (meta-;para-)'' based on its removal from the IMDG Code.

PHMSA received two comments from the ACC regarding our proposed addition of dodecene, to the list of marine pollutants. In its first comment, the ACC requests a 30 day extension of the comment period to better understand ''dodecene's place on other lists referenced in the proposed rule.'' ACC notes that it would use the time to coordinate with industry to better understand the information contained in the dodecene Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) dossiers. PHMSA is denying the ACC's request for a 30 day extension of the comment period for this rulemaking as the revision to include dodecene in the Marine Pollutant List is consistent with our standard practice of aligning Appendix B with the indicative list of marine pollutants found in the IMDG Code. In its second comment, the ACC notes that the use of the name ''dodecene'' in both the IMDG Code and PHMSA's proposed rule makes it unclear exactly what substance is being regulated. When manufactured, dodecene may represent a number of Chemical Abstracts Service (CAS) numbers and different chemical properties. In other words, this single description of dodecene may not reflect what ACC panel members currently manufacture and ship. The ACC also notes that the REACH registration of a close analog of dodecene, 1-dodecene/dodec-1-ene, indicates that dodecene would not meet the criteria of a Marine Pollutant, as set forth in the PHMSA list, based on aquatic toxicity data. The REACH dossier indicates ''conclusive but not sufficient for classification'' on both acute and chronic environmental categories associated with this compound. The inclusion of all entries proposed for addition in the NPRM was thoroughly vetted by several sub-committees of the International Maritime Organization prior to adoption into amendment 37–14 of the IMDG Code. The Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) data assigns all dodecene isomers a B1 numerical rating of 4. This rating of 4 indicates acute aquatic toxicity, and thus merits inclusion of dodecene (all isomers) to the list of marine pollutants in Appendix B to § 172.101.

Adsorbed Gas HMT Entries

In the NPRM, PHMSA proposed to revise the Hazardous Materials Table (HMT) in § 172.101 to include seventeen new entries for adsorbed gases consistent with amendments adopted into the UN Model Regulations. We also proposed to add into the HMR a definition, authorized packagings, and safety requirements including quantity limitations and filling limits.

PHMSA received three comments from COSTHA, DGAC, and Entegris noting that the entry for ''Arsine, adsorbed'' was not added to the HMT in the NPRM as intended. As a result, PHMSA is adding the entry ''UN3522, Arsine, adsorbed'' to the HMT. Entegris also provided comment suggesting that § 173.302c cannot be referenced in the HMT as a packaging instruction for bulk shipments of adsorbed gases, as there is no internationally accepted standard or authorization for bulk receptacles containing such gases. PHMSA agrees with the Entegris comment that bulk packagings for adsorbed gases are not presently authorized. As a result, PHMSA is revising Column (8C) of the HMT for the Adsorbed gas entries to indicate ''None.''

In addition, Entegris and COSTHA requested that PHMSA incorporate provisions for the use of DOT specification cylinders to transport adsorbed gasses. PHMSA agrees with the commenters that appropriate provisions for the use of DOT cylinders should be considered. However this action was not proposed in the NPRM. Continued transportation of adsorbed gases is provided for under the provisions of Special Permit 14237 and PHMSA will consider inclusion of DOT specification cylinder authorizations under a future rulemaking.

Lithium Battery Harmonization Proposals

In the NPRM, PHMSA proposed harmonization with the latest version of the ICAO TI to ensure that the information currently authorized by the HMR, to be provided by means of an alternative document, be included on a shipping paper for batteries transported

[2] Incident data can be accessed at *https://hazmatonline.phmsa.dot.gov/IncidentReportsSearch/.*

under the provisions of § 173.185(c)(4)(v) which is equivalent to Section IB of ICAO TI Packing Instructions 965 and 968. PHMSA specifically requested input as to the costs and benefits of harmonizing the provisions of the HMR with the provisions of the ICAO TI by requiring shipping papers as opposed to alternative documentation. PHMSA received comments from UPS and Alaska Airlines concerning removal of the alternative document. UPS supported our proposed change to the documentation requirement for packages containing smaller lithium batteries transported in accordance with § 173.185(c)(4)(v). UPS also commented that the proposal to introduce a shipping paper requirement for shipments offered under § 173.185(c)(4)(v) could be interpreted to conflict with the statement in the preceding paragraph § 173.185(c) in that such shipments are excepted from the requirements in subparts C through H of part 172. UPS suggests that § 173.185(c) should be clarified in this regard. We agree clarification is warranted. Alaska Airlines commented that it would like to see increased harmonization between the HMR and the ICAO TI with regard to the documentation required while stating there is no reason to deviate from the ICAO TI. We agree, and note that the amendments proposed do provide for such consistency.

Taking into account the comments from Alaska Airlines, PHMSA confirmed that the proposed amendments align with the requirements of the ICAO TI with regard to documentation. However, based on the comment from UPS, in this final rule PHMSA is revising § 173.185(c)(4)(v) as suggested by UPS for clarity. This editorial amendment will clarify that packages offered in accordance with § 173.185(c)(4)(v) are subject to the shipping paper requirements of subpart C of Part 172.

In the NPRM, PHMSA proposed revision of § 173.185(c)(1)(iii) to harmonize with the latest version of the ICAO TI by providing the option to use a ''CARGO AIRCRAFT ONLY'' label or the existing HMR marking requirement on packages containing small lithium metal batteries excluding those packed with or contained in equipment. PHMSA received comments from UPS and COSTHA in support of the proposal. UPS commented that the provision in this paragraph excepting lithium metal cells or batteries packed with or contained in equipment in quantities ''less than 5 kg net weight'' from the § 173.185(c)(1)(iii) marking requirement differs slightly in wording from the current ICAO TI and previous requirements of the HMR. In this final rule, PHMSA is revising § 173.185(c)(1)(iii) as proposed in the NPRM with an additional editorial revision to clarify that lithium metal cells or batteries packed with or contained in equipment in quantities ''not exceeding'' as opposed to ''less than'' 5 kg net weight are not subject to the marking or ''CARGO AIRCRAFT ONLY'' label requirement. This provides editorial consistency with the provisions of the ICAO TI.

In the NPRM, PHMSA proposed to amend the lithium battery requirements by authorizing use of a large packaging for a single large lithium battery or batteries contained in equipment. PHMSA received one comment from COSTHA in support of this proposal.

Definition of Non-Bulk Packaging

To harmonize with the 18th Revised Edition of the UN Model Regulations, in the NPRM, PHMSA proposed to amend the definition of non-bulk packaging in § 171.8 to include a bag or box having a capacity of greater than 450 liters (119 gallons) provided the net mass of the bag or box is 400 kg (882 pounds) or less. PHMSA received comments from Key Safety Systems, RIPA, TK Holdings Inc., and TRW Automotive in support of this proposal. However, RIPA conditioned their support on the presumption that the references to ''bag'' and ''box'' in the definition do limit users to all the conditions stipulated in subpart L of part 178. For example, the standard for each of the different bags provided in subpart L of part 178 imposes a maximum net mass limitation of 50 kg (110 pounds). PHMSA agrees that the text proposed in the revised definition of non-bulk packaging requiring the bag or box to conform to all applicable requirements for the specification packagings in subpart L of part 178 should be clarified and has revised the definition to include that the packaging may not exceed the maximum net mass limitation provided in subpart L of part 178.

Vessel Stowage and Segregation Changes

In the NPRM, PHMSA proposed to revise and add vessel stowage codes listed in column 10B of the HMT and segregation requirements in § 176.83 consistent with the IMDG Code. These changes harmonize the HMR with the IMDG Code and provide additional guidance on the loading and stowage of various materials. Additionally, we proposed to increase the required segregation distances between Division 4.3 dangerous when wet material (*i.e.* materials liable to give off a flammable or toxic gas in contact with water) and Class 3 flammable liquids and Division 2.1 flammable gases. PHMSA received a comment from IVODGA providing general support for this harmonization effort.

V. Section-by-Section Review

The following is a section-by-section review of the amendments adopted in this final rule:

Part 171

Section 171.4

Section 171.4 prohibits the transportation of materials meeting the definition of a marine pollutant except in accordance with HMR requirements. Paragraph (c) provides that marine pollutants transported in non-bulk packagings are excepted from the HMR unless the transportation is by vessel. PHMSA is adding a new exception from the HMR for marine pollutants up to 5 L (1.3 gallons) for liquids or 5 kg (11 pounds) for solids when these materials are packaged in accordance with the general packaging requirements of §§ 173.24 and 173.24a. This amendment, applicable to all modes, exempts small packages of hazardous material from the HMR that are regulated only because of the presence of one or more marine pollutants.

Comments received on this issue are discussed in detail in the Section IV ''Comment Discussion'' portion of this final rule. As a result of comments from DGAC, PHMSA is amending the exception in 171.4 to indicate that the use of the exception for single or inner packagings of 5 L or 5 kg or less is not limited to materials offered under the UN identification numbers UN 3077 and UN 3082, but also applies to marine pollutants that meet the definition of other hazard classes (*i.e.* paints or N.O.S. entries that meet the definition of more than one hazard class).

Section 171.7

Section 171.7 provides a listing of all standards incorporated by reference into the HMR. For this rulemaking, we evaluated updated international consensus standards pertaining to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations, and vessel stowage requirements and determined that the revised standards provide an enhanced level of safety without imposing significant compliance burdens. These standards have a well-established and documented safety history and their adoption will maintain the high safety

standard currently achieved under the HMR. Therefore, we are adding and revising the incorporation by reference materials under the following organizations:

Paragraph (s)(1) which incorporates the *International Atomic Energy Agency (IAEA)* Regulations for the Safe Transport of Radioactive Material 1996 edition is revised to incorporate the SSR–6 2012 Edition. The SSR–6 2012 Edition is replacing TS–R–1 (ST–1, Revised) 1996 Edition to address concerns over domestic and international differences in the transport conditions applicable to shipments of excepted fissile materials, PHMSA is adding additional requirements to § 171.23 to ensure domestic concerns are addressed. Please see the discussion in the Section-by-Section Review under § 171.23 for a summary of changes.

Paragraph (t)(1) which incorporates the *International Civil Aviation Organization* Technical Instructions for the Safe Transport of Dangerous Goods by Air, 2013–2014 Edition is revised to incorporate the 2015–2016 Edition.

Paragraph (v)(2), which incorporates the *International Maritime Organization* International Maritime Dangerous Goods Code, 2012 Edition, Incorporating Amendment 36–12, English Edition, Volumes 1 and 2, is revised to incorporate the 2014 Edition, Amendment 37–14.

In paragraph (w) various *International Organization for Standardization (ISO)* entries which contain standards for the specifications, design, construction, testing and use of gas cylinders are incorporated by reference. ISO 9809–1:2010 (E), ISO 9809–2:2010 (E), ISO 9809–3:2010 (E), ISO 10297:1999 (E), ISO 11114–1:2012 (E), ISO 11117:1998(E), and ISO 11513:2011(E) are added.

In paragraph (bb)(1), the *Transport Canada,* Transportation of Dangerous Goods Regulations, including Clear Language Amendments 1 through 7 sub-paragraphs (ix), (x), (xi), and (xii), are added to include Amendment 8 (SOR/2011–239) which was published on November 9, 2011; Amendment 9 (SOR/2011–60) published March 16, 2011; Amendment 10 (SOR/2011–210) published October 12, 2011; and Amendment 11 (SOR/2012–245) published December 5, 2012 respectively. In the preamble of our January 7, 2013 final rule (HM215–L [78 FR 987]) we indicated we were adopting Amendments 8, 9 and 10 of the Transportation of Dangerous Goods Regulations, however this adoption inadvertently did not appear in the published regulatory text. To correct this oversight, we are again including the adoption of Amendments 8, 9 and 10, along with the adoption of the most recent, Amendment 11.

Paragraph (dd)(1), the *United Nations* Recommendations on the Transport of Dangerous Goods— Model Regulations, 17th Revised Edition (2011), Volumes I and II, is revised to incorporate the 18th Revised Edition (2013), Volumes I and II.

Paragraph (dd)(2), the *United Nations* Recommendations on the Transport of Dangerous Goods—Manual of Tests and Criteria, Fifth Revised Edition (2009), including Amendment 1 (2011), is revised to reference § 171.24, and sub-paragraph (iii) is added to incorporate Amendment 2 (2013).

Section 171.8

This section defines terms generally used throughout the HMR that have broad or multi-modal applicability. PHMSA is adding the following defined terms:

Adsorbed gas: The adoption of this term directs the reader to § 173.115 for the definition. See the § 173.115 entry of the Section-by-Section Review for a complete discussion of the adoption of the definition of adsorbed gas.

Bundle of cylinders: Consistent with the ICAO TI, PHMSA is amending this definition to clarify that a ''bundle of cylinders'' is not permitted for air transport.

Large salvage packaging: Consistent with the UN Model Regulations, PHMSA is defining a large salvage packaging. A large salvage packaging is a special packaging into which damaged, defective or leaking hazardous materials packages, or hazardous materials that have spilled or leaked are placed for the purpose of transport for recovery or disposal. The general requirements for a large salvage packaging are consistent with the existing requirements for a ''large packaging.'' Large salvage packagings are not authorized for air transport. PHMSA received a comment from RIPA providing general support for the addition of this definition.

Neutron radiation detector: Consistent with the UN Model Regulations, PHMSA is defining a neutron radiation detector. A neutron radiation detector is a device that detects neutron radiation. In such a device, a gas may be contained in a hermetically sealed electron tube transducer that converts neutron radiation into a measurable electric signal.

Non-bulk packaging: Part 6 of the UN Model regulations was revised to remove the volumetric limit for certain packaging types that would be considered non-bulk packagings under the HMR. This was based on recognition by the UN Transport of Dangerous Goods Sub-Committee that there are packagings suitable for the transportation of high volume, low mass materials (*e.g.,* airbags) where the capacity of a box may exceed 450 liters (119 gallons) while the net mass of the box is less than 400 kg (882 pounds). Absent a corresponding amendment to the HMR, U.S. manufacturers and shippers would be placed at a competitive disadvantage by not being authorized to use the same packaging configurations other than as authorized for use by Part 171 Subpart C (use of international transport standards and regulations). Therefore, to maintain consistency with the UN Model Regulations, and to authorize the use of these packaging configurations for domestic transport, PHMSA is revising the HMR definition of non-bulk packaging by adding a new paragraph (4) to include bags and boxes conforming to the applicable requirements for specification packagings in subpart L of part 178 of this subchapter, if they have a maximum net mass of 400 kg (882 pounds) or less. Based on our review of the UN Model Regulations, these are the only packagings affected by the UN amendment, as only bags and boxes do not have specified volumetric limitations.

PHMSA received comments from Key Safety Systems, RIPA, TK Holdings Inc., and TRW Automotive in support of this proposal. However, RIPA conditioned their support on the presumption that the references to ''bag'' and ''box'' in the definition do limit users to all the conditions stipulated in subpart L of part 178. For example, the standard for each of the different bags provided in subpart L of part 178 imposes a maximum net mass limitation of 50 kg (110 pounds). PHMSA believes that the text proposed in the revised definition of non-bulk packaging requiring the bag or box to conform to all applicable requirements for the specification packagings in subpart L or part 178 is clear in requiring the bags and boxes to completely conform to the specification, including the questioned maximum net mass limitation of 50 kg (110 pounds) for bags.

Radiation Detection System: Consistent with the UN Model Regulations, PHMSA is defining a radiation detection system. A radiation detection system is an apparatus that contains radiation detectors as components.

Section 171.23

Section 171.23 prescribes requirements for specific materials and packagings transported under various international standards. Section 171.22(b)(2) requires shipments made in accordance with an authorized international standard or regulation to conform to all applicable requirements of Subpart C of Part 171 which includes any requirements found in § 171.23.

Paragraph (b)(2) of this section requires the shipping paper description of items such as air bag inflators, air bag modules, and seat-belt pretensioners to conform to the requirements in § 173.166(c). Consistent with the UN Model Regulations, PHMSA is revising the proper shipping name of these items to read ''Safety device,'' with the addition of the term ''pyromechanical device'' being included as a ''Safety device.'' Paragraph (b)(2) is being revised to reference the new proper shipping name, ''Safety device'' and the new term ''pyromechanical device.'' As a consequence of the addition of the proper shipping name ''Safety devices, pyrotechnic,'' and special provision 161 being removed, paragraph (b)(2)(ii) is removed.

PHMSA received one comment from DGAC concerning paragraph (b)(2)(i). Paragraph (b)(2)(i) states that an EX number or product code number must be included as part of the shipping description. DGAC notes that safety devices tested and certified as Class 9 in accordance with § 173.166(b) do not require EX numbers and that the wording in this paragraph is confusing as it conveys that all safety devices require either an EX number or product code in association with the basic description on a shipping paper. We agree with DGAC that the EX number or product code shipping paper requirements when offering under international standards in accordance with § 171.23(b) may be confusing when compared to the corresponding domestic requirements in § 173.166(c) that only require the EX number or product code on a shipping paper for safety devices classed as Class 1, but excepts Class 9 safety devices from this requirement. Taking into account the comments from DGAC, in this final rule, PHMSA is removing § 171.23(b)(2)(i) as the preceding paragraph (b)(2) requires that for each safety device, the shipping paper description must conform to the requirements in § 173.166(c). By removing (b)(2)(i) and directing readers to the EX number and product code requirements prescribed in § 173.166(c), any potential conflict between the two sections is removed.

Paragraph (b)(11) of this section prescribes additional requirements for shipments of radioactive materials made under authorized international standards or regulations. PHMSA is incorporating by reference the 2012 IAEA SSR–6 regulations to replace the TS–R–1 (ST–1, Revised) 1996 Edition to allow shipments to be offered for transportation or transported under the most recent IAEA regulations. Several changes to the definition of excepted fissile materials and the requirements for its transport were adopted by the IAEA. Under their respective statutory authorities, DOT and the Nuclear Regulatory Commission (NRC) jointly regulate the transportation of radioactive materials to, from, and within the United States. The NRC has not initiated any rulemaking activities to address changes made by the IAEA regarding the transportation of excepted fissile materials. In order to maintain uniform treatment for shippers of excepted fissile materials, PHMSA is amending § 171.23 to require that shipments of excepted fissile materials offered in accordance with the IAEA SSR–6 regulations must also conform to the requirements of § 173.453.

Section 171.24

Section 171.24 details additional requirements for the use of the ICAO TI. PHMSA is amending the marking requirement for packages containing primary lithium batteries and cells that meet the exceptions in paragraph (d)(1)(ii). Packages meeting these exceptions currently are required to be marked with an indication that they contain lithium batteries, and that these lithium batteries are forbidden for transport aboard passenger aircraft. PHMSA is making this change to allow the message that these batteries are forbidden for transport aboard passenger aircraft to be expressed through the current marking or by using a CARGO AIRCRAFT ONLY label as shown in § 172.448.

Section 171.25

Section 171.25 details additional requirements for the use of the IMDG Code. PHMSA is amending the marking requirement for packages containing primary lithium batteries and cells that meet the exceptions in § 173.185(c) in paragraph (b)(3). Packages meeting these exceptions currently are required to be marked with an indication that they contain lithium batteries, and that these lithium batteries are forbidden for transport aboard passenger aircraft. PHMSA is proposing to allow the message that these batteries are forbidden for transport aboard passenger aircraft to be expressed through the current marking or by using a CARGO AIRCRAFT ONLY label as shown in § 172.448.

Part 172

Section 172.101

Section 172.101 provides instructions for using the Hazardous Materials Table (HMT) and the HMT itself. In this final rule, PHMSA is revising the instructional text that precedes the HMT for paragraph (k) of this section.

Paragraph (k) of § 172.101 explains the purpose of column (10) of the HMT and prescribes the vessel stowage and segregation requirements for specific entries in the HMT. Column (10) is divided into two columns: column (10A) [Vessel stowage] specifies the authorized stowage locations on board cargo and passenger vessels and column (10B) [Other provisions] specifies special stowage and segregation provisions. PHMSA is amending this instructional text to note that the codes in column 10B address not only codes for stowage requirements, but also, in certain instances, handling requirements that need to be observed during loading of the hazardous materials. The IMO, in amendment 37–14 of the IMDG Code, has split their stowage and segregation column (16) in the dangerous goods list into two columns and assigned codes to the existing stowage, handling, and segregation text. The new first column (16a) in the IMDG Code is entitled stowage and handling, and the second column (16b) is titled segregation. PHMSA is maintaining the HMR's current column 10A and 10B system, with text in this section and § 176.84 indicating that handling/loading of hazardous materials is also covered by certain codes in column 10B. See *Section 176.84 other requirements for stowage, cargo handling, and segregation for cargo vessels and passenger vessels* for a detailed discussion of changes.

Hazardous Materials Table (HMT)

In this final rule, PHMSA is proposing to amend the HMT. Readers should review all changes for a complete understanding of the amendments. For purposes of the Government Printing Office's typesetting procedures, changes to the HMT appear under three sections of the Table, ''remove,'' ''add,'' and ''revise.'' Certain entries in the HMT, such as those with revisions to the proper shipping names, appear as a ''remove'' and ''add.'' Amendments to the HMT include the following:

New HMT Entries

UN3507—Uranium hexafluoride, radioactive material, excepted package, *less than 0.1 kg per package, non-fissile or fissile-excepted*

This new HMT entry addresses small quantities of uranium hexafluoride having corrosive properties by assigning the material to Class 8 with a subsidiary risk of Class 7, since this is more consistent with the general rule of classification of radioactive material in limited quantities possessing other hazards per § 173.423. Shipments must comply with new special provision 369 and requirements found in § 173.420(d).

PHMSA received one comment from Veolia requesting that the proper shipping name be amended to read ''Radioactive material, uranium hexafluoride, excepted package, *less than 0.1 kg per package, non-fissile or fissile excepted''* in order to maintain the listing of all radioactive material proper shipping names in a manner that they appear in succession in the HMT. PHMSA is maintaining the proper shipping name as proposed for the purpose of international harmonization of shipping descriptions. It is important to note that the primary hazard indicated in the HMT and all applicable international dangerous goods lists is a Class 8 hazard. As such, there is no need to amend the proper shipping name to maintain a sequential list of all entries having a Class 7 primary hazard.

UN3508—Capacitor, asymmetric *with an energy storage capacity greater than 0.3Wh*

This new HMT entry covers asymmetric capacitors with an energy storage capacity greater than 0.3 Wh. Asymmetric capacitors are assigned as a Class 9 miscellaneous hazardous material.

UN3510—Adsorbed gas, flammable, n.o.s.
UN3511—Adsorbed gas, n.o.s.
UN3512—Adsorbed gas, toxic, n.o.s.
UN3513—Adsorbed gas, oxidizing, n.o.s.
UN3514—Adsorbed gas, toxic, flammable, n.o.s.
UN3515—Adsorbed gas, toxic, oxidizing, n.o.s.
UN3516—Adsorbed gas, toxic, corrosive, n.o.s.
UN3517—Adsorbed gas, toxic, flammable, corrosive, n.o.s.
UN3518—Adsorbed gas, toxic, oxidizing, corrosive, n.o.s.
UN3519—Boron trifluoride, adsorbed
UN3520—Chlorine, adsorbed
UN3521—Silicon tetrafluoride, adsorbed
UN3522—Arsine, adsorbed
UN3523—Germane, adsorbed
UN3524—Phosphorus pentafluoride, adsorbed
UN3525—Phosphine, adsorbed
UN3526—Hydrogen selenide, adsorbed

The ''Adsorbed gas'' HMT entries are added to address shipments of gas, which when packaged for transport, are adsorbed onto a solid porous material in a pressure receptacle. Entries classified as Division 2.3 gases are forbidden for transport by aircraft. PHMSA received three comments from COSTHA, DGAC, and Entegris noting that the entry for ''Arsine, adsorbed'' was not added to the HMT in the NPRM as intended. As a result, in this final rule PHMSA is adding the entry ''UN3522, Arsine, adsorbed'' to the HMT. Entegris also provided a comment suggesting that § 173.302c cannot be referenced in the HMT as a packaging instruction for bulk shipments of adsorbed gases, as there is no internationally accepted standard or authorization for bulk receptacles containing such gases. PHMSA agrees with the Entegris comment that bulk packagings for adsorbed gases are not presently authorized. As a result, in this final rule, PHMSA is revising Column (8C) of the HMT for the Adsorbed gas entries to indicate ''None.'' .

Duplicate entries for UN0214 Trinitrobenzene, *dry or wetted with less than 30 percent water, by mass* currently exist in the HMT; while the UN1354 entry has been inadvertently overwritten by one of these UN0214 entries in an unidentified previous rulemaking. PHMSA is removing one of the duplicate UN0214 entries, and reinserting the correct UN1354 entry.

Amendments to the Column (1) Symbols

Section 172.101(b) describes column (1) of the HMT and the associated symbols that may be indicated in the column. In accordance with § 172.101(b), the symbol ''G'' identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses in association with the basic description on a shipping paper. The symbol ''I'' indicates these proper shipping names are appropriate for describing materials in international transportation, but that an alternate proper shipping name may be selected when only domestic transportation is involved. The letter ''A'' denotes a material that is subject to the requirements of this subchapter only when offered or intended for transportation by aircraft, unless the material is a hazardous substance or a hazardous waste.

In this final rule, PHMSA is adding international proper shipping names for ''Asbestos, amphibole (amosite, tremolite, actinolite, anthophyllite, crocidolite)'' and ''Asbestos, chrysotile,'' and removing shipping descriptions for Blue, Brown, and White Asbestos. These new international proper shipping names for ''Asbestos, amphibole'' and ''Asbestos, chrysotile'' have an ''I'' assigned in column one. PHMSA is also assigning a ''G'' to the ''Asbestos, amphibole'' entry. The ''G'' indicates that the technical name(s) of the hazardous material must be entered in parentheses, in association with the basic description. In the case of this proper shipping name, the technical name shown should be selected from the list of five different minerals (amosite, tremolite, actinolite, anthophyllite, crocidolite) indicated in italics after the proper shipping name. See the amendments to column (2) of the HMT for additional discussion regarding the revision of the proper shipping names for these entries.

In this final rule PHMSA is assigning an ''A'' to column 1 for ''Fish meal, stabilized *or* Fish scrap, stabilized'' consistent with changes made to the ICAO TI. PHMSA received one comment from Alaska Airlines supporting the assignment of an ''A'' to column one for this material.

Amendments to the Column (2) Hazardous Materials Descriptions and Proper Shipping Names

Section 172.101(c) describes column (2) of the HMT and the requirements for hazardous materials descriptions and proper shipping names.

In the NPRM, the proper shipping name for ''UN0222, Ammonium nitrate, *with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance''* was proposed to be amended by removing the italicized text and placing the text into the new special provision 370. PHMSA received one comment from IME stating that the NPRM did not provide an adequate explanation to justify why the UN Sub-Committee of Experts on the Transport of Dangerous Goods (UNSCETDG) recommends this change. IME provides several reasons that this amendment should not be adopted. IME notes that while the italicized text is not ''lost'' when placed in the new special provision 370, the absence of the text from the proper shipping name will add to confusion about this form of ammonium nitrate as UN0222 is one of six classifications of solid ammonium nitrate. Of the six, only UN0222 and NA0331 are Class 1 entries and all of these entries have been distinguished from each other by italicized text. IME

further notes there was no proposal to remove clarifying italicized text from other entries.

A review of the change to the UN Model Regulations revealed that the italicized text assigned to the proper shipping name for UN0222 was removed to resolve a potential contradiction with the new special provision 370 assigned to UN0222. The qualifying italicized text associated with this entry applies to materials *with more than 0.2 percent combustible substances;* however, special provision 370 provides that Ammonium nitrate with not more than 0.2% combustible substances that give a positive result when tested in accordance with Test Series 2 of the UN Manual of Tests and Criteria must also be assigned to UN0222. In this scenario, a user of the HMT with a material containing less than 0.2 percent combustible substances (see UN1942) may not be immediately aware that UN0222 should be used if the material simultaneously gives a positive result when tested in accordance with Test Series 2. By moving the italicized text from the proper shipping name to the special provision this contradiction is avoided by providing instruction for Ammonium nitrate containing both more than, and less than 0.2 percent combustible substances. Following the review PHMSA determined that any minor contradiction that may exist between maintaining the qualifying text as part of the proper shipping name or in the special provision is negligible. We agree with the comment submitted by IME that retaining the italicized text in association with the proper shipping name does have a benefit, and as such, we are retaining the italicized text ''*with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance''* as part of the proper shipping name.

The proper shipping name for ''UN1942, Ammonium nitrate, *with not more than 0.2% combustible materials, including any organic substance, calculated as carbon to the exclusion of any other added substance''* is amended by replacing the word ''materials'' in italicized text with ''substances'' and the comma following ''substance'' is placed after the word ''carbon.'' Due to the present placement of the comma in the description for the two ammonium nitrate entries, the 0.2% combustible materials/substances are measured differently. This amendment ensures that the 0.2% combustible level is calculated as carbon in the case of organic substances. PHMSA received one comment from DGAC noting that the entry in the proposed HMT contained italicized text inconsistent with the amendment discussed in the NPRM (79 FR 50750). We agree and are correcting the italicized text as part of the proper shipping name consistent with the NPRM preamble discussion.

Two new proper shipping names ''Asbestos, amphibole (amosite, tremolite, actinolite, anthophyllite, crocidolite)'' and ''Asbestos, chrysotile'' are assigned to identification numbers UN2212 and UN2590, respectively. These new proper shipping names more appropriately describe the material than the present ''UN2212, Blue asbestos (Crocidolite) or Brown asbestos (amosite, mysorite)'' and ''UN2590, White asbestos (chrysotile, actinolite, anthophyllite, tremolite).'' In the scientific community, Asbestos is divided into two chemical group names, ''Amphiboles'' and ''Chrysotile''. The amphibole group includes five different minerals (amosite, tremolite, actinolite, anthophyllite, crocidolite). The chrysotile group includes only the mineral chrysotile.

The proper shipping name for ''UN3499, Capacitor, *electric double layer (with an energy storage capacity greater than 0.3 Wh)''* is amended by placing the phrase ''electric double layer'' in Roman type. This amendment is necessary to differentiate this HMT entry from the new HMT entry, Capacitor, asymmetric.

A new proper shipping name ''Safety devices, *electrically initiated''* is assigned to identification number UN3268. Current proper shipping names assigned to UN3268 are ''Air bag inflators, *or* Air bag modules, *or* Seat-belt pretensioners.'' The adopted proper shipping name more appropriately describes materials authorized under this HMT entry in conjunction with the revision to special provision 160 to include a number of automotive industry life-saving appliances that are actuated by the electric signal of the crash sensor.

A new proper shipping name of ''Safety devices, pyrotechnic'' is assigned to identification number UN0503. The current proper shipping names assigned to UN0503 are ''Air bag inflators, *or* Air bag modules, *or* Seat-belt pretensioners.'' The adopted proper shipping name more appropriately describes Class 1 materials authorized under this HMT entry.

PHMSA received a comment from COSTHA noting that stocks of these materials are well into the millions, and therefore they requested that PHMSA identify a transition period during which the previous proper shipping names may continue to be used in association with the relevant UN number. COSTHA believes a 1-year transition (until January 1, 2016) would be sufficient to re-mark packages already in the supply chain. PHMSA notes that this final rule provides for a one year delayed compliance date from the date of publication. It is also important to note that § 172.101(l)(ii) provides for the ability to use preprinted shipping papers and package markings, until depleted or for a one year period, subsequent to the effective date of a rulemaking change, whichever is less.

The proper shipping name for ''UN1082, Trifluorochloroethylene, stabilized'' is amended by adding ''Refrigerant gas R 1113'' as an alternative proper shipping name for consistency with the dangerous goods lists of the various international standards and the HMT of the HMR. The adopted proper shipping name for UN1082 is ''Trifluorochloroethylene, stabilized *or* Refrigerant gas R 1113''. PHMSA received one comment from DGAC noting that this entry is not listed in the proposed HMT under the ''REMOVE'' instruction; however, the new entry is listed under the ''ADD'' instruction. As a result, in this final rule, PHMSA is adding ''UN1082, Trifluorochloroethylene, stabilized'' to the entries under ''REMOVE'' in the instructions to amend the HMT. This will correct the regulatory instruction for amending the proper shipping name.

Amendments to Column (5) Packing Group

Section 172.101(f) describes Column (5) of the HMT and the designation of the packing group(s) assigned to each proper shipping name.

For the entries ''UN3316, Chemical kits'' and ''UN3316, First aid kits'' the Packing Groups II and III designations are adopted. The assignment of packing groups to these entries are not a new requirement; however, including packing group assignments in the HMT will ensure that shippers are aware that the most stringent packing group must be assigned to any individual substance in the kit in accordance with § 173.161(b)(2).

PHMSA received one comment from DGAC noting that the Packing Group III designation for ''UN3316, First aid kits'' was not added to the HMT. In this final rule, we are adding the Packing Group III entry to the HMT accordingly.

The HMT entries for several articles are revised to remove packing group assignments. For articles, the packing group does not relate to the degree of hazard posed by the material but rather is assigned generically to the article.

There is limited value in requiring an indication of the packing group in association with the shipment. Currently and without specific rationale, some articles are assigned packing groups while others are not. This change provides a level of consistency for all articles specifically listed in the HMT. In this final rule, PHMSA is removing packing group assignments from the following HMT entries:

Proper shipping name	UN No.
Ammunition, tear-producing, non-explosive, without burster or expelling charge, non-fuzed	UN2017
Ammunition, toxic, non-explosive, without burster or expelling charge, non-fuzed	UN2016
Batteries, containing sodium	UN3292
Batteries, wet, filled with acid, *electric storage*	UN2794
Batteries, wet, filled with alkali, *electric storage*	UN2795
Batteries, wet, non-spillable, *electric storage*	UN2800
Lithium ion batteries *including lithium ion polymer batteries*	UN3480
Lithium ion batteries contained in equipment *including lithium ion polymer batteries*	UN3481
Lithium ion batteries packed with equipment *including lithium ion polymer batteries*	UN3481
Lithium metal batteries *including lithium alloy batteries*	UN3090
Lithium metal batteries contained in equipment *including lithium alloy batteries*	UN3091
Lithium metal batteries packed with equipment *including lithium alloy batteries*	UN3091
Mercury contained in manufactured articles	UN3506
Oxygen generator, chemical *(including when contained in associated equipment, e.g., passenger service units (PSUs), portable breathing equipment (PBE), etc)*	UN3356
Safety devices, *electrically initiated* *	UN3268
Tear gas candles	UN1700

* See amendments to Column 2

PHMSA received comment from DGAC noting that for UN2794, UN2795, and UN2800, the Column (5) packing group assignments were removed in the HMT but not discussed in the NPRM preamble. The entries for these articles have been added to the above table for clarity.

Amendments to the Column (7) Special Provisions

Section 172.101(h) describes Column (7) of the HMT and § 172.102(c) the special provisions assigned to specific entries in the HMT. The particular modifications to the entries in the HMT are discussed below. See *Section 172.102 special provisions* for a detailed discussion of the additions, revisions, and deletions to the special provisions addressed in this final rule.

In this final rule, special provision 134 is added to the HMT entry ''UN3072, Life-saving appliances, not self-inflating *containing dangerous goods as equipment.''* The addition of this special provision will clarify that equipment containing only lithium batteries must be consigned under the entries ''Lithium batteries contained in equipment'' or ''Lithium batteries packed with equipment,'' as appropriate.

PHMSA received one comment from DGAC noting for the entry ''UN2990, Life-Saving Appliances, Self Inflating,'' that ''Special Provision 338 is missing from Column 7 in the proposed HMT.'' This was an inadvertent omission. Special provision 338 has been reestablished.

Several HMT entries are revised to include new special provision 367. Special provision 367 authorizes the use of the ''Paint related material'' entries for consignments of packages containing ''Paint'' and ''Paint related material'' in the same package. This special provision also authorizes the proper shipping name ''Printing ink related material'' for consignments of packages containing ''Printing Ink'' and ''Printing ink related material'' in the same package.

In this final rule, new special provision 367 is assigned to the following entries:

Proper shipping name	UN No.
Paint *including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base*	UN1263
Paint *or* Paint related material	UN3066
Paint, corrosive, flammable *(including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base)*	UN3470
Paint, flammable, corrosive, *(including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)*	UN3469
Paint related material including paint thinning, drying, removing, or reducing compound	UN1263
Paint related material corrosive, flammable *(including paint thinning or reducing compound)*	UN3470
Paint related material, flammable, corrosive *(including paint thinning or reducing compound)*	UN3469
Printing ink, flammable or Printing ink related material *(including printing ink thinning or reducing compound), flammable*	UN1210

PHMSA received one comment from DGAC regarding the UN1210 PG II entry in the proposed HMT. DGAC noted that 367 inserted before 149 in Column (7) and is in non-sequential order. We agree and have amended the entry accordingly.

In this final rule, we are adding new special provision 368 to the HMT entry ''UN2910, Radioactive material, excepted package-limited quantity of material.''

In this final rule, new special provision 369 is assigned to the new HMT entry ''UN3507, Uranium hexafluoride, radioactive material, excepted package, *less than 0.1 kg per package, non-fissile or fissile-excepted.''*

In this final rule, new special provision 370 is assigned to the HMT entry ''UN0222, Ammonium nitrate.'' This special provision addresses a situation where Ammonium Nitrate, with not more than 0.2% carbon, does not satisfy Test Series 2 and therefore cannot be accommodated under the entry for ''UN1942, Ammonium nitrate.''

In this final rule, new special provision 371 is assigned to the HMT entry ''UN3164, Articles, pressurized

pneumatic or hydraulic *containing non-flammable gas.''*

In this final rule, special provision IB6 is replaced with IB8 and special provisions IP2, and IP4 are added for the HMT Packing Group III entry ''UN3089, Metal powders, flammable, n.o.s.'' IB8 is presently assigned to the Packing Group II entry, therefore, fiberboard, wooden and flexible IBCs are allowed for the Packing Group II materials, but are forbidden for the less dangerous Packing Group III substance. These revisions will correct the inconsistency.

In this final rule, new special provision A61 is assigned to the HMT entries ''UN 3107, Organic peroxide type E, liquid'' and ''UN 3109, Organic peroxide type F, liquid''

Several HMT entries are revised to include new portable tank special provision TP47. Special provision TP47 indicates that the 2.5 year internal portable tank examination may be waived or substituted by other test methods or inspection procedures specified by the competent authority or its authorized body, provided that the portable tank is dedicated to the transport of the organometallic. However, this examination is required when the conditions of § 180.605(f) are met.

In this NPRM, new special provision TP47 is assigned to the following entries:

Proper shipping name	UN No.
Organometallic substance, liquid, pyrophoric, water-reactive	UN3394
Organometallic substance, liquid, water-reactive	UN3398
Organometallic substance, liquid, water-reactive, flammable	UN3399
Organometallic substance, solid, pyrophoric, water-reactive	UN3393
Organometallic substance, solid, water-reactive	UN3395
Organometallic substance, solid, water-reactive, flammable	UN3396
Organometallic substance, solid, water-reactive, self-heating	UN3397

PHMSA received one comment from DGAC noting that for the entry ''UN3375, Ammonium nitrate emulsion,'' IB2 and TP32 are listed in Column (7) in the changes to the proposed HMR. DGAC notes that ''these special provisions are not present in Column (7) in the 10–1–13 version of the HMR.'' Although the addition of IB2 to Column (7) was not described in the amendments to Column (7) of the NPRM, this revision was intentional. PHMSA is aligning with international standards to add IBCs as an authorized packaging for UN3375. In the NPRM, portable tank special provision TP32 was inadvertently added to this HMT entry in error. While this portable tank special provision was assigned to UN3375 in the UN Model Regulations and the IMDG Code, the HMR do not authorize UN3375 in portable tanks and therefore a portable tank special provision is not appropriate. In this final rule, for the entry UN3375, Ammonium nitrate emulsion,'' PHMSA is adding special provisions IB2, IP16, and removing TP32 as proposed in the NPRM. New special provision IP16 is described in the *Section 172.102 special provisions discussion for IBC Codes and IP Codes.*

Amendments to Column (8B) Non-Bulk Packaging Authorizations.

PHMSA received one comment from DGAC noting that for the entry ''UN3375, Ammonium nitrate emulsion,'' 231 is listed in is listed in Column (8B) in the changes to the proposed HMT. DGAC notes that packaging authorization 214 is present in Column (8B) in the 10–1–13 version of 49 CFR. Although this revision was not described in the amendments to Column (8B) of the NPRM, the revision from 231 to 214 was intentional as discussed in the section-by-section review of § 173.231 (79 FR 50764).

Amendments to Column (8C) Bulk Packaging Authorizations.

PHMSA received one comment from DGAC noting that for the entry ''UN 3375, Ammonium nitrate emulsion,'' 231 is listed in Column (8C) in the changes to the proposed HMT. The UN Sub-Committee of Experts on the Transportation of Dangerous Goods added authorizations for certain IBCs in the UN Model regulations for UN 3375. This authorization necessitates the incorporation of a bulk packaging authorization for this HMT entry. In this final rule PHMSA is creating a new § 173.251 and assigning it to column (8C) for this entry to authorize the use of IBC's.

Amendments to the Column (9) Quantity Limitations.

Section 172.101(j) describes Column (9) of the HMT and the quantity limitations for specific entries in the HMT. Furthermore, Columns (9A) and (9B) specify the maximum quantities that may be offered for transportation in one package by passenger-carrying aircraft or passenger-carrying rail car (Column (9A) or by cargo-only aircraft (Column (9B). The indication of ''forbidden'' means the material may not be offered for transportation or transported in the applicable mode of transport.

For the entry ''UN3497, Krill meal'' quantity limits of 15 kg and 50 kg for PG II, and 25 kg and 100 kg for PG III, are adopted for columns (9A) and (9B) respectively. Previously, there was no limit to the amount authorized to be shipped in one package. These new quantity limits are consistent with authorized quantity limits found in the ICAO TI.

At the 24th meeting the ICAO DGP, it was agreed to incorporate certain UN numbers contained in the UN Model Regulations, but not currently listed in the ICAO TI. For the entries ''UN2216, Fish meal, stabilized or Fish scrap, stabilized,'' and ''UN1374 Fish meal, unstabilized or Fish scrap, unstabilized'' the panel determined that they should be forbidden for transport on both cargo and passenger aircraft. In this final rule, PHMSA is aligning with the ICAO TI by revising columns (9A) and (9B) to ''Forbidden.'' PHMSA received one comment from Alaska Airlines in support of this revision.

DGAC commented that for the HMT entry ''UN3221, Self-reactive liquid type B,'' columns (9A) and (9B) in the current HMT contain a (2) footnote, and that in the NPRM, PHMSA proposed revising these limitations to indicate ''Forbidden'' without any preamble discussion. This entry was revised in a **Federal Register** correction document (78 FR 17874), but due to a publication error was not transitioned into the printed or electronic versions of the CFR. In this rulemaking PHMSA is reinstating the correct quantity limitation notation of ''Forbidden'' in columns 9A and 9B for this entry.

Amendments to the Column (10) Vessel Stowage Requirements.

Section 172.101(k) explains the purpose of column (10) of the HMT and

prescribes the vessel stowage and segregation requirements for specific entries in the HMT. Column (10) is divided into two columns: column (10A) [Vessel stowage] specifies the authorized stowage locations on board cargo and passenger vessels and column (10B) [Other provisions] specifies special stowage and segregation provisions.

The IMO, in amendment 37–14 of the IMDG Code, split their stowage and segregation column (16) in the dangerous goods list into two columns and assigned codes to the existing stowage, handling, and segregation text. The new first column (16a) in the IMDG Code is titled stowage and handling, and the second column (16b) is titled segregation. PHMSA is maintaining the HMT's current column (10A) and (10B), while also harmonizing our vessel stowage codes in columns (10A) and (10B) as closely as possible with those in amendment 37–14 of the IMDG Code. There are several instances where PHMSA is maintaining additional codes (see UN numbers 0019, 0020, 0021, 0301, 0303, 1017, 1131, 1389, 1392, 1420, 1422, 1780, 1942, 1950, 2679, 2912, 3015, 3071, 3101–3106, 3108–3110, 3242, 3323, and 3497) that vary from IMDG Code stowage and segregation requirements. These additional stowage and segregation provisions vary by UN number, but are considered additional precautions deemed necessary to ensure the safe transport of these commodities during transportation by vessel.

During the preparation of the NPRM and final rule, PHMSA and the United States Coast Guard conducted an extensive review of all HMT entries to verify that domestic entries correspond as closely as possible with the provisions found in the IMDG Code. PHMSA is making numerous changes to the codes found in the HMT's column (10B) [Other provisions] as a result of this review. The majority of the changes are a result of work done at the IMO to eliminate duplicate and unnecessary provisions. Some of the proposed changes to column (10B) are adopted to harmonize existing differences in stowage, handling, and segregation provisions between the HMR and the IMDG Code. A table of changes, listed in alphabetical order, showing the proper shipping name, UN identification number, any stowage codes adopted for removal, and any stowage codes adopted for addition is provided below. If a column is blank, no changes were adopted. The meaning of the codes in column (10B) can be found either in § 176.84 or are listed in the § 176.84 Section-by-Section change portion of this final rule.

Proper shipping name	UN ID No.	Proposed removals	Proposed additions
Aircraft hydraulic power unit fuel tank	UN3165		21, 40, 49, 100
Acrylamide, solid	UN2074		25
Acrylamide solution	UN3426		25
Aldol	UN2839		25
Alkali metal alloys, liquid, n.o.s.	UN1421		13, 148
Alkali metal amalgam, liquid	UN1389		13, 148
Alkali metal amalgam, solid	UN3401		13, 148
Alkali metal amides	UN1390		13, 148
Alkali metal dispersions, flammable *or* Alkaline earth metal dispersions, flammable	UN3482		13, 148
Alkali metal dispersions, *or* Alkaline earth metal dispersions	UN1391		13, 148
Alkaline earth metal alloys, n.o.s.	UN1393		13, 148
Alkaline earth metal amalgams, liquid	UN1392		13, 148
Alkaline earth metal amalgams, solid	UN3402		13, 148
Allyl chloroformate	UN1722		21, 100
Aluminum borohydride *or* Aluminum borohydride in devices	UN2870		13, 148
Aluminum carbide	UN1394		13, 148
Aluminum ferrosilicon powder (PG II and III)	UN1395		13, 148
Aluminum hydride	UN2463		13, 148
Aluminum phosphide	UN1397		13, 148
Aluminum powder, coated (PG II and III)	UN1309		147, 148
Aluminum powder, uncoated (PG II and III)	UN1396		13, 148
Aluminum silicon powder, uncoated	UN1398		13, 148
Aluminum smelting by-products *or* Aluminum remelting by-products (PG II and III)	UN3170		13, 148
N-Aminoethylpiperazine	UN2815		25
Aminopyridines *(o-; m-; p-)*	UN2671		25
Ammonium nitrate based fertilizer	UN2067		124
Ammonium nitrate, liquid	UN2426		124
Ammonium nitrate	UN1942		66, 124
Ammonium polysulfide, solution (PG II and III)	UN2818		25
Ammonium sulfide solution	UN2683		25
Anisoyl chloride	UN1729		40
Antimony pentafluoride	UN1732		40
Arsenic bromide	UN1555		25
Barium	UN1400		13, 148
Barium alloys, pyrophoric	UN1854		13, 148
Barium azide, wetted	UN1571		36
Barium peroxide	UN1449	56	66, 148
Batteries, containing sodium	UN3292		13, 148
Beryllium, powder	UN1567		13, 147, 148
Boron tribromide	UN2692		25
Boron trifluoride dihydrate	UN2851		25
Boron trifluoride dimethyl etherate	UN2965		25
Bromoform	UN2515		25
Bromine	UN1744		25
Bromine solutions (both PG I entries)	UN1744		25
Bromobenzyl cyanides, liquid	UN1694		25

Proper shipping name	UN ID No.	Proposed removals	Proposed additions
Bromobenzyl cyanides, solid	UN3449		25
tert-Butyl hypochlorite	UN3255		40
Butyl mercaptan	UN2347		102
5-tert-Butyl-2,4,6-trinitro-m-xylene *or* Musk xylene	UN2956		40
Butyric acid	UN2820		25
Calcium	UN1401		13, 148
Calcium carbide (PG I and II)	UN1402		13, 148
Calcium cyanamide *with more than 0.1 percent of calcium carbide*	UN1403		13, 148
Calcium hydride	UN1404		13, 148
Calcium manganese silicon	UN2844		13, 148
Calcium peroxide	UN1457	56	66, 148
Calcium phosphide	UN1360		13, 148
Calcium, pyrophoric *or* Calcium alloys, pyrophoric	UN1855		13, 148
Calcium silicide (PG II and III	UN1405		13, 148
Carbon, activated	UN1362		25
Carbon (PG II and III)	UN1361		25
Castor beans *or* Castor meal *or* Castor pomace *or* Castor flake	UN2969		44, 122
Cerium, *slabs, ingots, or rods*	UN1333		13, 147, 148
Cerium, *turnings or gritty powder*	UN3078		13, 148
Cesium *or* Caesium	UN1407		13, 148
Chloroacetonitrile	UN2668		25
Chloroacetophenone, liquid, *(CN)*	UN3416		25
Chloroacetophenone, solid, *(CN)*	UN1697		25
Chlorocresols solution (PG II and III)	UN2669		25
Chloromethyl chloroformate	UN2745	21, 100	
Chloronitrobenzenes, liquid	UN3409		44, 89, 100, 141
Chlorosilanes, water-reactive, flammable, corrosive, n.o.s	UN2988		13, 147, 148
Corrosive liquids, water-reactive, n.o.s. (PG I and II)	UN3094		13, 148
Corrosive solids, toxic, n.o.s. (PG III)	UN2923	95	
Corrosive solids, water-reactive, n.o.s. (PG I and II)	UN3096		13, 148
Crotonic acid, liquid	UN3472		25
Crotonic acid, solid	UN2823		25
Cyanogen bromide	UN1889		52
Cyanuric chloride	UN2670		25
Cyclohexyl mercaptan	UN3054		102
1,1-Dichloro-1-nitroethane	UN2650		25
1,3-Dichloroacetone	UN2649		25
1,3-Dichloropropanol-2	UN2750		25
Diethylthiophosphoryl chloride	UN2751		25
Dipicryl sulfide, wetted	UN2852		36
2-Ethylhexyl chloroformate	UN2748	21, 100	
Ferrocerium	UN1323		13, 147, 148
Ferrosilicon *with 30 percent or more but less than 90 percent silicon*	UN1408		148
Ferrous metal borings *or* Ferrous metal shavings *or* Ferrous metal turnings *or* Ferrous metal cuttings *in a form liable to self-heating*	UN2793		13, 148
Fuel cell cartridges *or* Fuel cell cartridges contained in equipment *or* Fuel cell cartridges packed with equipment, *containing water-reactive substances*	UN3476		13, 148
Hafnium powder, dry (PG I, II, and III)	UN2545		13, 148
Hexachlorocyclopentadiene	UN2646		25
Hexamethylenediamine, solid	UN2280		25
Hydrofluoric acid, *with more than 60 percent strength*	UN1790		25
Hydrofluoric acid, *with not more than 60 percent strength*	UN1790		25
Hydrogen, refrigerated liquid *(cryogenic liquid)*	UN1966		57
Hypochlorites, inorganic, n.o.s	UN3212	106	
Iron oxide, spent, *or* Iron sponge, spent *obtained from coal gas purification*	UN1376		13, 148
Isopropyl chloroformate	UN2407		21, 100
Life-saving appliances, not self inflating	UN3072		122
Life-saving appliances	UN2990		122
Lithium	UN1415		13, 148
Lithium aluminum hydride	UN1410		13, 148
Lithium aluminum hydride, ethereal	UN1411		13, 148
Lithium borohydride	UN1413		13, 148
Lithium ferrosilicon	UN2830		13, 148
Lithium hydride	UN1414		13, 148
Lithium hydride, fused solid	UN2805		13, 148
Lithium peroxide	UN1472		148
Lithium silicon	UN1417		13, 148
Magnesium aluminum phosphide	UN1419		13, 148
Magnesium diamide	UN2004		13, 148
Magnesium granules, coated, *particle size not less than 149 microns*	UN2950		13, 148
Magnesium hydride	UN2010		13, 148
Magnesium *or* Magnesium alloys *with more than 50 percent magnesium in pellets, turnings or ribbons*	UN1869		13, 147, 148

Proper shipping name	UN ID No.	Proposed removals	Proposed additions
Magnesium peroxide	UN1476		148
Magnesium phosphide	UN2011		13, 148
Magnesium, powder *or* Magnesium alloys, powder (PG I, II, and III)	UN1418		13, 148
Magnesium silicide	UN2624		13, 148
Maleic anhydride	UN2215		95, 102
Maleic anhydride, molten	UN2215		95, 102
Malononitrile	UN2647		25
Maneb *or* Maneb preparations *with not less than 60 percent maneb*	UN2210		13. 148
Maneb stabilized *or* Maneb preparations, stabilized *against self-heating*	UN2968		13, 148
Mercaptans, liquid, flammable, n.o.s. *or* Mercaptan mixture, liquid, flammable, n.o.s (PG I, II, and III)	UN3336		102
Mercaptans, liquid, flammable, toxic, n.o.s. *or* Mercaptan mixtures, liquid, flammable, toxic, n.o.s. (PG II and III)	UN1228		102
Mercaptans, liquid, toxic, flammable, n.o.s. *or* Mercaptan mixtures, liquid, toxic, flammable, n.o.s., *flash point not less than 23 degrees C*	UN3071		102
Metal catalyst, dry (PG I, II, and III)	UN2881		13, 147, 148
Metal hydrides, water reactive, n.o.s.(PG I and II)	UN1409		13, 148
Metal powder, self-heating, n.o.s. (PG II and III)	UN3189		13, 148
Metal powders, flammable, n.o.s. (PG II and III)	UN3089		13, 74, 147, 148
Metallic substance, water-reactive, n.o.s. (PG I, II, and III)	UN3208		13, 148
Metallic substance, water-reactive, self-heating, n.o.s. (PG I, II, and III)	UN3209		13, 148
Methyl iodide	UN2644		25
Methyl magnesium bromide, in ethyl ether	UN1928		13, 148
Methyl vinyl ketone, stabilized			21, 100
Organic peroxide type B, liquid	UN3101	40	25
Organic peroxide type B, liquid, temperature controlled	UN3111	40	25
Organic peroxide type B, solid	UN3102	40	25
Organic peroxide type B, solid, temperature controlled	UN3112	40	25
Organic peroxide type C, liquid	UN3103	40	25
Organic per0oxide type C, liquid, temperature controlled	UN3113	40	25
Organic peroxide type C, solid	UN3104	40	25
Organic peroxide type C, solid, temperature controlled	UN3114	40	25
Organic peroxide type D, liquid	UN3105	40	25
Organic peroxide type D, liquid, temperature controlled	UN3115	40	25
Organic peroxide type D, solid	UN3106	40	25
Organic peroxide type D, solid, temperature controlled	UN3116	40	25
Organic peroxide type E, liquid	UN3107	40	25
Organic peroxide type E, liquid, temperature controlled	UN3117	40	25
Organic peroxide type E, solid	UN3108	40	25
Organic peroxide type E, solid, temperature controlled	UN3118	40	25
Organic peroxide type F, liquid	UN3109	40	25
Organic peroxide type F, liquid, temperature controlled	UN3119	40	25
Organic peroxide type F, solid	UN3110	40	25
Organic peroxide type F, solid, temperature controlled	UN3120		25
Organometallic substance, liquid, pyrophoric	UN3392		13, 148
Organometallic substance, liquid, pyrophoric, water-reactive	UN3394		13, 52, 148
Organometallic substance, liquid, water-reactive (PG I, II, and III)	UN3398		13, 148
Organometallic substance, liquid, water-reactive, flammable (PG I, II, and III)	UN3399		13, 148
Organometallic substance, solid, pyrophoric	UN3391		13, 148
Organometallic substance, solid, pyrophoric, water-reactive	UN3393		13, 148
Organometallic substance, solid, water-reactive (PG I, II, and III)	UN3395		13, 148
Organometallic substance, solid, water-reactive, flammable (PG I, II, and III)	UN3396		13, 148
Organometallic substance, solid, water-reactive, self-heating (PG I, II, and III)	UN3397		13, 148
Oxidizing liquid, corrosive, n.o.s. (PG I)	UN3098	106	
Oxidizing liquid, corrosive, n.o.s. (PG II and III)	UN3098	106, 34	
Oxidizing liquid, n.o.s. (PG I, II, and III)	UN3139	106	
Oxidizing liquid, toxic, n.o.s (PG I, II, and III)	UN3099	106	
Oxidizing solid, corrosive, n.o.s (PG I, II, and III)	UN3085	106	
Oxidizing solid, flammable, n.o.s.	UN3137		13, 147, 148
Oxidizing solid, toxic, n.o.s. (PG I)	UN3087	106	
Oxidizing solid, toxic, n.o.s. (PG II and III)	UN3087	95, 106	
Oxidizing solid, water reactive, n.o.s.	UN3121		13, 148
Pentaborane	UN1380		13, 148
Peroxides, inorganic, n.o.s. (PG II and III)	UN1483		148
Persulfates, inorganic, aqueous solution, n.o.s.	UN3216		58
Pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C* (PG I and II)	UN3021		40
Phenyl chloroformate	UN2746	21, 100	
Phosphorus heptasulfide, *free from yellow or white phosphorus*	UN1339		13, 147, 148
Phosphorus pentasulfide, *free from yellow or white phosphorus*	UN1340		13, 148
Phosphorus oxybromide	UN1939		25
Phosphorus pentabromide	UN2691		25
Phosphorus trioxide	UN2578		25
Phosphorus trisulfide, *free from yellow or white phosphorus*	UN1343		13, 147, 148

Proper shipping name	UN ID No.	Proposed removals	Proposed additions
Piperazine	UN2579		25
Potassium	UN2257		13, 148
Potassium borohydride	UN1870		13, 148
Potassium, metal alloys, liquid	UN1420		13, 148
Potassium, metal alloys, solid	UN3403		13, 52, 148
Potassium peroxide	UN1491		148
Potassium phosphide	UN2012		13, 148
Potassium sodium alloys, liquid	UN1422		13, 148
Potassium sodium alloys, solid	UN3404		13, 148
Potassium superoxide	UN2466		148
Pyrophoric liquid, inorganic, n.o.s	UN3194		13, 148
Pyrophoric liquids, organic, n.o.s	UN2845		13, 148
Pyrophoric metals, n.o.s., *or* Pyrophoric alloys, n.o.s.	UN1383		13, 148
Pyrophoric solid, inorganic, n.o.s.	UN3200		13, 148
Pyrophoric solids, organic, n.o.s.	UN2846		13, 148
Quinoline	UN2656		25
Rubidium	UN1423		13, 148
Seed cake *with not more than 1.5 percent oil and not more than 11 percent moisture*	UN2217		120
Self-reactive liquid type B	UN3221		25, 127
Self-reactive liquid type B, temperature controlled	UN3231		25
Self-reactive liquid type C	UN3223		25
Self-reactive liquid type C, temperature controlled	UN3233		25
Self-reactive liquid type D	UN3225		25
Self-reactive liquid type D, temperature controlled	UN3235		25
Self-reactive liquid type E	UN3227		25
Self-reactive liquid type E, temperature controlled	UN3237		25
Self-reactive liquid type F	UN3229		25
Self-reactive liquid type F, temperature controlled	UN3239		25
Self-reactive solid type B	UN3222		25, 127
Self-reactive solid type B, temperature controlled	UN3232		25
Self-reactive solid type C	UN3224		25
Self-reactive solid type C, temperature controlled	UN3234		25
Self-reactive solid type D	UN3226		25
Self-reactive solid type D, temperature controlled	UN3236		25
Self-reactive solid type E	UN3228		25
Self-reactive solid type E, temperature controlled	UN3238		25
Self-reactive solid type F	UN3230		25
Self-reactive solid type F, temperature controlled	UN3240		25
Sodium	UN1428		13, 148
Sodium aluminum hydride	UN2835		13, 148
Sodium borohydride	UN1426		13, 148
Sodium dinitro-o-cresolate, wetted	UN3369		28
Sodium hydride	UN1427		13, 148
Sodium peroxide	UN1504		148
Sodium phosphide	UN1432		13, 148
Stannic phosphide	UN1433		13, 148
Strontium peroxide	UN1509		148
Strontium phosphide	UN2013		13, 148
Sodium superoxide	UN2547		148
Titanium powder, dry (PG I, II, and III)	UN2546		13, 148
Titanium sponge granules *or* Titanium sponge powders	UN2878		13, 147, 148
Titanium trichloride, pyrophoric *or* Titanium trichloride mixtures, pyrophoric	UN2441		13, 148
Toxic by inhalation liquid, water-reactive, n.o.s. *with an LC50 lower than or equal to 200 ml/m³ and saturated vapor concentration greater than or equal to 500 LC50*	UN3385		13, 148
Toxic by inhalation liquid, water-reactive, n.o.s. *with an LC50 lower than or equal to 1000 ml/m³ and saturated vapor concentration greater than or equal to 10 LC50*	UN3386		13, 148
Toxic by inhalation liquid, water-reactive, flammable, n.o.s. *with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50*	UN3490		13, 148
Toxic by inhalation liquid, water-reactive, flammable, n.o.s. *with an LC50 lower or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50*	UN3491		13, 148
Toxic liquid, corrosive, inorganic, n.o.s. (PG I and II)	UN3289		40
Toxic liquid, inorganic, n.o.s (PG I, II, and III)	UN3287		40
Toxic liquids, water-reactive, n.o.s. (PG I and II)	UN3123		13, 148
Toxic solid, corrosive, inorganic, n.o.s. (PG I and II	UN3290		40
Toxic solid, inorganic, n.o.s. (PG I, II, and III)	UN3288		40
Toxic solids, water-reactive, n.o.s. (PG I and II)	UN3125		13, 148
Trifluoroacetic acid	UN2699		25
Trimethylacetyl chloride	UN2438		21, 100
Trinitrobenzene, wetted, *with not less than 10% water, by mass*	UN3367		28
Trinitrobenzoic acid, wetted *with not less than 10% water by mass*	UN3368		28
Trinitrobenzoic acid, wetted *with not less than 30 percent water, by mass*	UN1355		28
Trinitrochlorobenzene (picryl chloride), wetted, *with not less than 10% water by mass*	UN3365		28

Proper shipping name	UN ID No.	Proposed removals	Proposed additions
Trinitrophenol (picric acid), wetted, *with not less than 10 percent water by mass*	UN3364		28
Trinitrotoluene (TNT), wetted, *with not less than 10 percent water by mass*	UN3366		28
Urea nitrate, wetted, *with not less than 10 percent water by mass*	UN3370		28
Vinylpyridines, stabilized	UN3073		100
Water-reactive liquid, corrosive, n.o.s. (PG I, II, and III)	UN3129		13, 148
Water-reactive liquid, n.o.s. (PG I, II, and III)	UN3148		13, 148
Water-reactive liquid, toxic, n.o.s. (PG I, II, and III)	UN3130		13, 148
Water-reactive solid, corrosive, n.o.s. (PG I, II, and III)	UN3131		13, 148
Water-reactive solid, flammable, n.o.s. (PG I, II, and III)	UN3132		13, 148
Water-reactive solid, n.o.s. (PG I, II, and III)	UN2813		13, 148
Water-reactive, solid, oxidizing, n.o.s. (PG II and III)	UN3133		13, 148
Water-reactive solid, self-heating, n.o.s. (PG I, II, and III)	UN3135		13, 148
Water-reactive solid, toxic, n.o.s. (PG I, II, and III)	UN3134		13, 148
Zinc ashes	UN1435		13, 148
Zinc dithionite *or* Zinc hydrosulfite	UN1931	49	13, 26, 123
Zinc peroxide	UN1516		148
Zinc phosphide	UN1714		13, 148
Zinc powder *or* Zinc dust (PG I, II, and III)	UN1436		13, 148
Zirconium, dry, *coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)*	UN2858		13, 147, 148
Zirconium, dry, *finished sheets, strip or coiled wire*	UN2009		13, 148
Zirconium powder, dry (PG I, II, and III)	UN2008		13, 148
Zirconium powder, wetted *with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns*	UN1358		13, 147, 148
Zirconium scrap	UN1932		13, 148

PHMSA received two comments concerning amendments to column (10B) of the HMT. IVODGA commented providing full support for the changes as proposed in the NPRM. DGAC provided multiple editorial comments related to the assignment of various vessel stowage codes primarily based on the codes indicated in the above table when compared to what was proposed in the NPRM. The DGAC comments are as follows:

''Aluminum Ferrosilicon Powder (UN1395) The PG III entry is missing Vessel Stowage Code 148 in column 10B in the Docket HMT . . .'' PHMSA agrees and has amended column (10B) accordingly.

''Aluminum Powder Coated (UN1309) Per the table of 176.84 changes, 13, 147, and 148 are to be added in column 10B for this entry (PG II and III) . . . The addition of 13 is not necessary as this entry (PG II and III) already lists a Vessel Stowage Code 13 in column 10B per the 10–1–13 version of 49 CFR.'' PHMSA agrees and code 13 is removed from the table of changes.

''Ammonium Sulfide Solution (UN2683) The vessel stowage codes listed in column 10B in the proposed HMT for this entry are not in numerical order . . . The vessel stowage codes are listed as 12, 25, 22, 52, 100 versus 12, 22, 25, 52, 100.'' PHMSA agrees and the codes are reordered.

''Barium Peroxide (UN1449) The Vessel Stowage Location listed in column 10A in the proposed HMT is C . . . In the 10–1–13 Version of 49 CFR, the Vessel Stowage Location listed in Column 10A is A.'' Although not specifically identified in the preamble to the NPRM the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the IMDG Code. As a result PHMSA is revising column (10A) to read C.

''Batteries, Dry, Containing Potassium Hydroxide Solid (UN3028) Vessel stowage code 52 is removed in column 10B in the proposed HMT for this entry . . . There is no entry in the Table of 176.84 Changes . . .'' Code 52 should not have been proposed for removal in association with this entry and is reinserted in the HMT.

''Batteries, Wet, Filled With Acid (UN2794) Vessel Stowage Code 146 is removed in column 10B in the proposed HMT for this entry . . . There is no entry in the table of 176.84 changes . . .'' Code 146 should not have been proposed for removal in association with this entry and it has been reinserted in the HMT.

''Batteries, Wet, Filled With Alkali (UN2795) Vessel stowage codes 52 and 146 are removed in column 10B in the proposed HMT for this entry . . . There is no entry in the table of 176.84 changes . . .'' Codes 52 and 146 should not have been proposed for removal in association with this entry and they have been reinserted in the HMT.

Boron Trifluoride Dihydrate (UN2851) This entry is incorrectly identified in the table of 176.84 changes as Boron Trifluoride Dehydrate. PHMSA agrees and has modified the table accordingly.

''Boron Trifluoride Dimethyl Etherate (UN2965) This entry is listing Vessel Stowage Codes 13, 21, 25, 28, 40, 49, 100, 147, 148 in column 10B in the proposed HMT . . . Vessel Stowage Codes 21, 28, 40, 49, 100 are present in the 10–1–13 version of 49 CFR. Per the Table of 176.84 changes, only 25 was to be added for this entry. [There is no mention of adding 13, 147, 148] . . .'' Codes 13, 147, and 148 should not have been proposed for addition in association with this entry and the HMT has been amended accordingly.

''Bromine (UN1744) This entry is listing Vessel Stowage Codes 12, 25, 40, 66, 74 in column 10B in the proposed HMT . . . Vessel stowage codes 12, 40, 66, 74, 89, 90 are present in the 10–1–13 version of 49 CFR. Per the table of 176.84 changes, only 25 was to be added for this entry. [There is no mention of removing 89 and 90] . . .'' DGAC is correct and codes 89 and 90 are reinserted in the HMT.

Bromoform (UN2515) There is no UN number shown in the table of 176.84 changes. The appropriate UN number has been added to the table.

''Calcium Peroxide (UN1457) The Vessel Stowage Location listed in column 10A in the proposed HMT is C . . . In the 10–1–13 version of 49 CFR, the Vessel Stowage Location listed in column 10A is A.'' Although not specifically identified in the preamble to the NPRM, the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the

IMDG Code. As a result PHMSA is revising column (10A) to read C.

''Cerium (UN1333) This entry is listing Vessel Stowage Codes 13, 66, 74, 91, 147, 148 in column 10B in the proposed HMT . . . Vessel stowage codes 74 and 91 are present in the 10–1–13 version of 49 CFR. Per the table of 176.84 changes, only 13, 147, and 148 are to be added for this entry and there is no mention of adding 66 . . .'' Code 66 should not have been proposed for addition in association with this entry and has been removed from the HMT.

''Chlorocresols, Solid (UN3437) This entry is listing Vessel Stowage Codes 12 and 25 in column 10B in the proposed HMT . . . Vessel Stowage Code 12 is present in the 10–1–13 version of 49 CFR. There is no entry in the table of 176.84 changes for Chlorocresols, Solid . . .'' This proposed change was noted in the NPRM table of proposed changes. No action needed.

Chlorocresols Solution (UN2669) This entry is incorrectly identified in the table of 176.84 changes as having the UN number UN3437 assigned instead of UN2669. PHMSA agrees and has modified the table accordingly.

''Chloromethyl Chloroformate (UN2745) Per the table of 176.84 changes, Vessel Stowage Code 12 is proposed to be added for this entry . . . The addition of 12 is not necessary as this entry already lists a Vessel Stowage Code 12 in column 10B per the 10–1–13 version of 49 CFR.'' Code 12 should not have been listed in the table of changes in association with this entry and has been removed from the table of changes.

''Corrosive Solids, Water-Reactive, N.O.S. (UN3096) Per the table of 176.84 changes, Vessel Stowage Codes 13 and 148 are proposed to be added for this entry (PG I, II, and III) . . . There is no PG III entry for this PSN per the 10–1–13 version of 49 CFR. In addition, the text listed for the PG II and III entries in the proposed HMT is actually the same as the above HMT entry for UN2923—Corrosive Solids, Toxic, N.O.S. . . .'' The commenter is correct. The PG III entry has been removed from the HMT and the PG II entry has been updated to include codes 13 and 148.

''Ferrosilicon (UN1408) Per the table of 176.84 changes, Vessel Stowage Codes 13 and 148 are proposed to be added for this entry . . . The addition of 13 is not necessary as this entry already lists a Vessel Stowage Code 13 in column 10B per the 10–1–13 version of 49 CFR . . .'' Code 13 should not have been listed in the table of changes in association with this entry and has been removed from the table of changes.

''Lithium Peroxide (UN1472) Per the Table of 176.84 Changes, Vessel Stowage Codes 13 and 148 are proposed to be added for this entry . . . The addition of 13 is not necessary as this entry already lists a Vessel Stowage Code 13 in Column 10B per the 10–1–13 Version of 49 CFR. The Vessel Stowage Location listed in Column 10A in the Docket HMT is C . . . In the 10–1–13 Version of 49 CFR, the Vessel Stowage Location listed in Column 10A is A.'' Code 13 has been removed from the table of changes. Although not specifically identified in the preamble to the NPRM, the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the IMDG Code. As a result PHMSA is revising column (10A) to read C.

''Magnesium Peroxide (UN1476) Per the table of 176.84 changes, Vessel Stowage Codes 13 and 148 are proposed to be added for this entry . . . The addition of 13 is not necessary as this entry already lists a Vessel Stowage Code 13 in column 10B per the 10–1–13 Version of 49 CFR. The Vessel Stowage Location listed in column 10A in the Docket HMT is C . . . In the 10–1–13 Version of 49 CFR, the Vessel Stowage Location listed in column 10A is A.'' Code 13 has been removed from the table of changes. Although not specifically identified in the preamble to the NPRM the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the IMDG Code. As a result PHMSA is revising column (10A) to read C.

''Metal Powder, Self-Heating, N.O.S. (UN3189) Per the table of 176.84 changes, Vessel Stowage Codes 13, 147, and 148 are proposed to be added for this entry (PG II and III) . . . This entry (PG II and III) is only listing Vessel Stowage Codes 13 and 148 in Column 10B in the Docket HMT . . .'' Only codes 13 and 148 are assigned to this entry, and the table of changes has been updated accordingly.

''Metal Powders, Flammable, N.O.S. (UN3089) This entry (PG II and III) is listing Vessel Stowage Codes 13, 74, 147, and 148 in column 10B in the proposed HMT . . . In the 10–1–13 version of 49 CFR, there are no entries for Vessel Stowage Codes in column 10B. Per the Table of 176.84 Changes (1st entry), Vessel Stowage Code 74 is proposed to be added for this entry . . . Per the table of 176.84 changes (2nd entry), Vessel Stowage Codes 13, 74, 147, and 148 are proposed to be added for this entry . . .'' The table of changes has been updated to reflect only one HMT entry changing.

''Organic Peroxide Type E liquid (UN3107) Vessel Stowage Code 40 is listed in Column 10B in the proposed HMT for this entry. Vessel Stowage Code 25 is not listed in Column 10B in the proposed HMT for this entry . . . Per the Table of 176.84 Changes, 40 was to be removed and 25 was to be added for this entry . . .'' The commenter is correct. Code 40 has been removed from the HMT.

''Organic Peroxide Type F, Solid, Temperature Controlled (UN3120) Per the table of 176.84 changes, Vessel Stowage Code 40 was to be removed and 25 was to be added for this entry . . . The removal of 40 is not necessary as this entry does not list a Vessel Stowage Code 40 in Column 10B per the 10–1–13 version of 49 CFR.'' Code 40 has been removed from the table of changes.

''Organometallic Substance, Liquid, Water-Reactive (UN3398) The PG II entry for this entry is listing IP2 as a Special Provision in Column 7 and D versus E in Column 10A . . . These changes are not present in the 10–1–13 version of 49 CFR.'' The commenter is correct. Special provision IP2 has been removed from column 7 of the HMT and the correct stowage category for this entry is E.

''Organometallic Substance, Solid, Pyrophoric (UN3391) This entry is listing Vessel Stowage Codes 13 and 148 in column 10B in the proposed HMT . . . In the 10–1–13 version of 49 CFR, there are no entries for Vessel Stowage Codes in Column 10B. There is no entry in the table of 176.84 changes . . . for this PSN.'' DGAC is correct. Codes 13 and 148 have been added to the table of changes.

''Oxidizing Liquid, Toxic, N.O.S. (UN3099) Per the table of 176.84 changes, Vessel Stowage Code 106 was to be removed for this entry (PG I, II, and III) . . . This entry is not listing a Vessel Stowage Code of 95 in Column 10B for the PG II and PG III entries in the proposed HMT . . . In the 10–1–13 version of 49 CFR, Vessel Stowage Code 95 is listed for the PG II and PG III entries for this entry.'' DGAC is correct and code 95 has been placed in column (10B) for these entries.

''Oxidizing Solid, Corrosive, N.O.S. (UN3085) Per the table of 176.84 changes, Vessel Stowage Code 106 was to be removed for this entry (PG I, II, and III) . . . This entry is not listing a Vessel Stowage Code of 34 in column 10B for the PG II and PG III entries in the proposed HMT . . . In the 10–1–13 version of 49 CFR, Vessel Stowage Code 34 is listed for the PG II and PG III listings for this entry.'' DGAC is correct and code 34 has been placed in column (10B) for these entries.

''Peroxides, Inorganic, N.O.S. (UN1483) The Vessel Stowage Location

listed in Column 10A in the proposed HMT is C . . . In the 10–1–13 Version of 49 CFR, the Vessel Stowage Location listed in column 10A is A.'' Although not specifically identified in the preamble to the NPRM, the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the IMDG Code. As a result PHMSA is revising column (10A) to read C.

''Phenyl Chloroformate (UN2746) Per the table of 176.84 Changes, Vessel Stowage Codes 21 and 10 are to be removed for this entry . . . Per the 10–1–13 version of 49 CFR, this entry does not list a Vessel Stowage Code 10 in Column 10B. In the 10–1–13 version of 49 CFR, this entry does however list a Vessel Stowage Code 100 in Column 10B.'' DGAC is correct. Code 100 is removed from the HMT.

''Phosphorus Pentasulfide (UN1340) This entry is listing Vessel Stowage Codes 13 and 148 in Column 10B in the proposed HMT . . . There is no entry in the Table of 176.84 Changes . . . for this PSN.'' DGAC is correct in that codes 13 and 148 were added by the IMO and have been added to the table of changes.

''Potassium Peroxide (UN1491) The Vessel Stowage Location listed in column 10A in the proposed HMT is C . . . In the 10–1–13 Version of 49 CFR, the Vessel Stowage Location listed in Column 10A is B.'' Although not specifically identified in the preamble to the NPRM, the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the IMDG Code. As a result PHMSA is revising column (10A) to read C.

''Potassium, Metal Alloys, Solid (UN3403) This entry is listed in proposed HMT with Vessel Stowage Codes 13, 52, and 148 in Column 10B . . . Per the 10–1–13 version of 49 CFR, this entry does not list any Vessel Stowage Codes in column 10B. Per the Table of 176.84 changes (1st entry), Vessel Stowage Codes 13 and 148 are to be added for this entry . . . Per the Table of 176.84 changes (2nd entry), Vessel Stowage Codes 13, 52, and 148 are to be added for this entry . . .'' There should have only been one entry for the PSN in the table of changes. The entries are consolidated and codes 13, 52, and 148 are added.

''Potassium Superoxide (UN2466) Per the Table of 176.84 Changes, Vessel Stowage Codes 13 and 148 are to be added for this entry . . . The addition of 13 is not necessary as this entry already lists a Vessel Stowage Code 13 in Column 10B per the 10–1–13 Version of 49 CFR. The Vessel Stowage Location listed in Column 10A in the proposed HMT is D . . . In the 10–1–13 Version of 49 CFR, the Vessel Stowage Location listed in Column 10A is B.'' Code 13 is removed from the table of changes. Although not specifically identified in the preamble to the NPRM, the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the IMDG Code. Further review of the change made at IMO indicates the correct stowage category to be E. As a result PHMSA is revising column 10A to read E.

''Self-Reactive Liquid Type B, Temperature Controlled (UN3231) Vessel Stowage Code 25 is added in Column 10B in the proposed HMT . . . There is no entry in the Table of 176.84 Changes . . . for this PSN.'' DGAC is correct and an entry for this PSN has been added to the table of changes.

''Sodium Peroxide (UN1504) Per the Table of 176.84 changes, Vessel Stowage Codes 13 and 148 are proposed to be added for this entry . . . The addition of 13 is not necessary as this entry already lists a Vessel Stowage Code 13 in Column 10B per the 10–1–13 version of 49 CFR. The Vessel Stowage Location listed in Column 10A in the Docket HMT is C . . . In the 10–1–13 Version of 49 CFR, the Vessel Stowage Location listed in Column 10A is B.'' Code 13 is removed from the table of changes. Although not specifically identified in the preamble to the NPRM, the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the IMDG Code. As a result PHMSA is revising column (10A) to read C.

''Sodium Superoxide (UN2547) In the proposed HMT, Vessel Stowage Codes 13, 52, 66, 75, and 148 are listed in Column 10B. Per the 10–1–13 version of 49 CFR, 13, 52, 66, and 75 are listed as Vessel Stowage Codes in Column 10B. This entry is not listed in the Table of 176.84 Changes . . . The Vessel Stowage Location listed in Column 10A is D . . . In the 10–1–13 Version of 49 CFR, the Vessel Stowage Location listed in column 10A is E.'' DGAC is correct that code 148 was added by the IMO and thus, has been added to the table of changes. Although not specifically identified in the preamble to the NPRM, the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the IMDG Code. As a result PHMSA is revising column (10A) to read D.

''Strontium Peroxide (UN1509) Per the Table of 176.84 Changes, Vessel Stowage Codes 13 and 148 are proposed to be added for this entry . . . The addition of 13 is not necessary as this entry already lists a Vessel Stowage Code 13 in Column 10B per the 10–1–13 Version of 49 CFR. The Vessel Stowage Location listed in Column 10A in the Docket HMT is C . . . In the 10–1–13 Version of 49 CFR, the Vessel Stowage Location listed in Column 10A is A.'' Code 13 has been removed from the table of changes. Although not specifically identified in the preamble to the NPRM, the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the IMDG Code. As a result PHMSA is revising column (10A) to read C.

''Zinc Peroxide (UN1516) Per the Table of 176.84 Changes, Vessel Stowage Codes 13 and 148 are proposed to be added for this entry. The addition of 13 is not necessary as this entry already lists a Vessel Stowage Code 13 in Column 10B per the 10–1–13 Version of 49 CFR. The Vessel Stowage Location listed in column 10A in the Docket HMT is C . . . In the 10–1–13 version of 49 CFR, the Vessel Stowage Location listed in Column 10A is A.'' Code 13 has been removed from the table of changes. Although not specifically identified in the preamble to the NPRM, the stowage category for this UN number has been amended by the IMO in amendment 37–14 of the IMDG Code. As a result PHMSA is revising column (10A) to read C.

Appendix B to § 172.101

Appendix B to § 172.101 lists Marine Pollutants regulated under the HMR. In this final rule, PHMSA is revising the List of Marine Pollutants by adding sixty-two new entries consistent with the IMDG Code. These changes include those substances that, by virtue of meeting the Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) defining criteria for marine pollutants, were either assigned a ''P'' in the dangerous goods list or identified in the alphabetical index to amendment 37–14 of the IMDG Code. The entry ''Chlorotoluenes (meta-;para-)'' is removed based on its removal from the IMDG Code.

PHMSA received two comments from the ACC regarding our proposed addition of one specific material, dodecene, to the list of marine pollutants. In its first comment, the ACC requests a 30 day extension of the comment period to better understand ''dodecene's place on other lists referenced in the proposed rule.'' ACC notes that it would use the time to coordinate with industry to better understand the information contained in the dodecene Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) dossiers. PHMSA is denying the ACC's request for a 30 day extension of the

comment period for this rulemaking as the revision to include dodecene in the Marine Pollutant List is consistent with our standard practice of aligning Appendix B with the indicative list of marine pollutants found in the IMDG Code. In its second comment, the ACC notes that the use of the name ''dodecene'' in both the IMDG Code and PHMSA proposed rule makes it unclear exactly what substance is being regulated. When manufactured, ''dodecene'' may represent a number of Chemical Abstracts Service (CAS) numbers and different chemical properties. In other words, this single description of dodecene may not reflect what the Panel members currently manufacture and ship. The ACC also notes that the REACH registration of a close analog of dodecene, 1-dodecene/dodec-1-ene, indicates that dodecene would not meet the criteria of a Marine Pollutant, as set forth in the PHMSA list, based on aquatic toxicity data. The REACH dossier indicates ''conclusive but not sufficient for classification'' on both acute and chronic environmental categories associated with this compound. The inclusion of all entries proposed for addition in the NPRM were thoroughly vetted by several sub-committees of the International Maritime Organization prior to adoption into amendment 37–14 of the IMDG Code. The GESAMP data assigns all dodecene isomers a B1 numerical rating of 4. This rating of 4 indicates acute aquatic toxicity, and thus merits inclusion of dodecene to the list of marine pollutants in Appendix B to § 172.101.

Section 172.102 Special Provisions

Section 172.102 lists special provisions applicable to the transportation of specific hazardous materials. Special provisions contain packaging requirements, prohibitions, and exceptions applicable to particular quantities or forms of hazardous materials. PHMSA is adopting the following revisions to § 172.102, special provisions:

Special Provision 28

Special provision 28 states that the dihydrated sodium salt of dichloroisocyanuric acid is not subject to the requirements of this subchapter. In this final rule, PHMSA is revising special provision 28 to convey that the dihydrated sodium salt of dichloroisocyanuric acid does not meet the definition of a Division 5.1 (oxidizer) and is not subject to the requirements of the subchapter unless it meets the criteria for inclusion in another Class or Division, such as Class 9, environmentally hazardous substance. Some formulations of the dihydrated sodium salt of dichloroisocyanuric acid meet the criteria for classification as an environmentally hazardous substance.

Special Provision 52

Special provision 52 authorizes use of the HMT entry ''UN2067, Ammonium nitrate based fertilizer'' for substances that do not exhibit explosive properties of Class 1 when tested in accordance with Test Series 1 and 2 of the UN Manual of Tests and Criteria, Part I. In this final rule, PHMSA is revising special provision 52 by removing the requirement to test in accordance with Test Series 1 because Test Series 2 determines whether such properties are indeed those of Class 1, not Test Series 1.

Special Provision 147

This special provision describes the composition of the material for which the use of the HMT entry ''UN3375, Ammonium nitrate emulsion *or* Ammonium nitrate suspension *or* Ammonium nitrate gel, *intermediate for blasting explosives''* is authorized and prohibits the material from being classified and transported unless approved by the Associate Administrator. Special provision 147 requires that these substances must satisfactorily pass Test Series 8 of the UN Manual of Tests and Criteria, Part I, Section 18. Test Series 8 contains four test types. Tests 8(a), (b) and (c) are used for classification purposes while Test 8(d) is used to assess suitability for transport in portable tanks. The use of this entry (UN 3375) therefore requires only that Tests 8(a), (b) and (c) are satisfactorily passed. In this final rule, PHMSA is revising special provision 147 by clarifying that Tests 8(a), (b) and (c), not the entire Test Series 8, are required for use in classification and subsequent approval by the Associate Administrator. PHMSA received one comment from IME in support of this revision.

Special Provision 160

Special provision 160 is presently assigned to ''UN3268, Air bag inflators, *or* Air bag modules, *or* Seat-belt pretensioners'' in Class 9. Special provision 160 includes the requirement that air bag inflators and modules must be tested in accordance with Test series 6 (c) of Part I of the UN Manual of Tests and Criteria. In this final rule, PHMSA is revising special provision 160 in conjunction with revising the proper shipping name for UN3268 to ''Safety devices, *electrically initiated.''* The entry is revised to clarify that it applies to safety devices used in vehicles including vessels and aircraft, and pyromechanical devices that are added to the list of authorized devices. The development of safety products has seen significant progress since the introduction of UN3268 and the range of current products extends beyond what can presently be assigned to UN3268. Some of the newer safety products include elements that are actuated by the electrical signal of the crash sensor (*e.g.* pyromechanical devices). Examples include: Devices that interrupt the electrical connection in case of emergency by disconnecting the main power cable in the vehicle from the battery to prevent short circuit and consequentially minimize the risk of fire in the vehicle; and actuators which are used for active headrests or for pedestrian protection to release special hinges of the engine hood. In addition, PHMSA is clarifying that this entry does not apply to life saving appliances described in § 173.219 (UN Nos. 2990 and 3072).

PHMSA received comments from Key Safety Systems, TK Holdings Inc., and TRW Automotive requesting that special provision 160 be revised to note that if the air bag inflator unit and or pyromechanical device satisfactorily passes the series 6(c) test, it is not necessary to repeat the test on the air bag module. PHMSA is not convinced the requested change is necessary. The purpose of the exception from testing in this special provision is to state that air bag modules do not need to be tested if the air bag inflators were tested. Air bag inflators are any article used to inflate a module, which includes inflators that use compressed gas, gas generant tablets, or a hybrid design. Pyromechanical devices are generally piston type devices and would not be used to inflate modules. Therefore the addition of ''pyromechanical devices'' to the sentence in SP160 excepting air bag modules from being re-tested would not be appropriate.

Special Provision 161

Special provision 161 required that for domestic transportation the alternate shipping description ''*Articles, pyrotechnic for technical purposes''* be used to describe air bag inflators, air bag modules and seat-belt pretensioners (UN0503) meeting the criteria for a Division 1.4G explosive. This was done to ensure a different shipping name was used to describe these articles to differentiate them from air bag inflators, air bag modules and seat-belt pretensioners (UN3268) in Class 9. In this final rule, PHMSA, consistent with

the UN Model Regulations, is adopting new proper shipping names for these items, ''Safety devices'' (UN3268) for those articles assigned to Class 9, and ''Safety Devices, pyrotechnic'' (UN0503) for those articles assigned to Division 1.4G. Since the proper shipping names for these items would no longer be the same, there would be no need to use a different proper shipping name for these articles assigned to Division 1.4G. Therefore the need for this special provision would be obsolete and we are deleting it from the regulations and deleting its reference from the UN0503 entry in the HMT. Under this revision, for domestic transportation, air bag inflators, air bag modules and seat-belt pretensioners (UN0503) meeting the criteria for a Division 1.4G explosive, that are currently described as ''*Articles, pyrotechnic for technical purposes''* would be described as ''Safety devices, pyrotechnic'' (UN0503).

Special Provision 238

Special provision 238 addresses the shipment of neutron radiation detectors. In this final rule, PHMSA is revising special provision 238 to align with the UN Model Regulations special provision 373 by expanding the transport conditions for neutron radiation detectors and radiation detection systems containing such detectors. Paragraph a. is restructured into: (a)(1), general transport requirements; (a)(2), requirements for radiation detectors transported as individual components; and (a)(3), requirements for completed neutron radiation detection systems containing detectors. Consistent with the UN Model Regulations, PHMSA is adopting the following revisions to the transport conditions: [1] In (a)(1), increase the total amount of gas authorized per detector from 12.8 grams to 13 grams; clarify that the minimum burst pressure is demonstrated by design type qualification testing; and add a new leaktightness standard; [2] in (a)(2), clarify that in addition to being packed in a strong outer package, that the completed package must be capable of withstanding a drop of 1.8 meters (6-foot) without leakage of gas contents; and increase the total amount of gas from all detectors per outer packaging from 51.2 grams to 52 grams; and [3], in (a)(3), add a new requirement that for completed neutron radiation detection systems, the detectors must be contained in a strong sealed outer casing; and adding a new requirement that the completed system must be capable of withstanding a 1.8 meter (6-foot) drop test without leakage unless a system's outer casing affords equivalent protection.

PHMSA received a comment from James Lynch asking how the 1×10^{-10} cm^3/s leaktightness prior to filling limit was arrived at and proposing an alternative limit amount. The limit, as proposed and adopted, was determined by the UN Committee of Experts on the Transport of Dangerous Goods to provide an appropriate level of safety to ensure essentially no gas will leak from the detector once filled. In the interest harmonization is maintaining the limit as proposed in the NPRM. Mr. Lynch also commented that in paragraph (a)(1)(iii) that the 1800 kPa should specify ''gauge.'' While Mr. Lynch is correct that paragraph (a)(1)(iii) is applicable pressure at the ''gauge,'' in the interest of harmonization PHMSA is maintaining the revisions as proposed in the NPRM.

PHMSA received a comment from Bechtel Plant Machinery Inc. requesting a 90 day extension of the final rule comment period to further review the logistical and technical impact of these proposed regulation changes for the transportation of neutron radiation detectors. PHMSA is denying Bechtel Plant Machinery Inc.'s request for an extension of the comment period for this final rule. We are revising the HMR to maintain alignment with international standards by incorporating various amendments, including revision of the transport conditions for neutron radiation detectors in special provision 238. In addition, the revisions to special provision 238 do not invalidate existing special permits or de minimis interpretations issued by PHMSA. Further, for reasons mentioned elsewhere in this rulemaking, it is imperative that a harmonization rulemaking be published on or near January 1st, 2015 to facilitate unencumbered commerce. It is important to note that the transport provisions for these detectors in the ICAO TI, which this final rule harmonizes with, will become effective January 1st, 2015.

Special Provision 342

This special provision, assigned to ''UN1040, Ethylene oxide *or* Ethylene oxide with nitrogen'' allows sterilization devices containing ethylene oxide, conforming to the conditions in the special provision, and packaged in accordance with § 173.4a of the HMR to be offered for transportation and transported by all modes even though Column (9A) of the § 172.101 HMT lists the material as forbidden by passenger aircraft.

Consistent with the ICAO TI, in this final rule PHMSA is further clarifying that irrespective of both Columns (9A) and (9B) of the § 172.101 HMT listing the material as forbidden, ethylene oxide conforming to the conditions in the special provision is eligible for air transport. Specifically, we are supplementing the language in this special provision ''irrespective of the restriction of § 173.4a(b)'' with ''and the indication of ''forbidden'' in columns (9A) and (9B) of the § 172.101 table.''

Special Provision 362

Special provision 362 specifies when a material can be considered a chemical under pressure. Specifically, the special provision states that classification of these materials is to be based on hazard characteristics of the components in the propellant, the liquid, or the solid forms. In this final rule, PHMSA is revising special provision 362 by adding a new paragraph (f) to clarify that chemicals under pressure containing components forbidden for transport on both passenger and cargo aircraft must not be transported by air. PHMSA received one comment from DGAC noting that as proposed special provision 362 has two paragraph d's. PHMSA has amended the final rule text to ensure proper paragraph sequencing.

Special Provision 367

A new special provision 367 is added to clarify that the proper shipping name ''Paint related material'' or ''Printing ink related material'' may be used for consignments of packages containing both ''Paint'' and ''Paint related material'' or ''Printing Ink'' and ''Printing ink related material'' in the same package and sharing the same identification number (UN 1210, UN 1263, UN 3066, UN 3469, or UN 3470). For example, ''UN1263, Paint *including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base''* and ''UN1263, Paint related material'' contained in the same package, may be consigned under the entry ''UN1263, Paint related material *including paint thinning, drying, removing, or reducing compound.''* Paint mainly consists of resin, pigment and solvent. Thinning compounds consist primarily of solvent as well. Thus, under the same UN entry, there is no difference between ''Paint'' and ''Paint related material'' with regard to transport requirements. PHMSA received one comment from COSTHA providing support for this new provision. COSTHA noted that this provision will greatly enhance the efficiencies of businesses transporting these materials.

Special Provision 368

In this final rule, PHMSA is adding new special provision 368 and assigning it to ''UN2910, Radioactive material, excepted package-limited quantity of material'' to clarify that in the case of non-fissile or fissile-excepted uranium hexafluoride, the material must be classified under UN3507 or UN2978.

Special Provision 369

The 18th Revised Edition of the UN Model Regulations has adopted a new proper shipping name of ''UN3507, Uranium hexafluoride, radioactive material, excepted package, *less than 0.1 kg per package, non-fissile or fissile-excepted'',* to address small quantities of uranium hexafluoride containing corrosive properties, thus a new special provision is necessary in the HMR. In this final rule, PHMSA assigns special provision 369 to UN3507 to specify a primary hazard of Class 8 with subsidiary risk of Class 7, subject to certain conditions.

Special Provision 370

In this final rule, PHMSA is adding new special provision 370 and assigning it to the revised HMT entry ''UN0222, Ammonium Nitrate.'' In the NPRM, PHMSA proposed revising the proper shipping name for UN0222 by removing the qualifying italicized text assigned to UN0222 and including it in this special provision. Based on a comment submitted by IME and discussed in the section-by-section review of amendments to Column (2) of the HMT, we are not moving the qualifying italicized text from the proper shipping name to the special provision in this final rule. In this final rule, we are maintaining paragraph b. of special provision 370 as proposed in the NPRM to clarify that ammonium nitrate with not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any added substance, that gives a positive result when tested in accordance with Test Series 2 of the UN Manual of Tests and Criteria, Part I must be assigned to UN0222.

Special Provision 371

In this final rule, PHMSA is adding a new special provision 371 and assigning it to ''UN3164, Articles, pressurized pneumatic *or* hydraulic *containing non-flammable gas.*'' This special provision sets forth the requirements for confetti-shooters pressurized with gas instead of pyrotechnics. The shooter consists in principle, of a jacket of cardboard, the pressurized receptacle filled with compressed air or nitrogen, a lock mechanism made of plastics, a plug of rubber and a metal cap for closing the receptacle, and different types of confetti. By turning a ring, or the bottom part of the shooter, a mechanism is unlocked and the pressurized gas is discharged so that the confetti is shot away for a few meters. This type of shooter does not contain any amount of explosives and therefore cannot be assigned to Class 1, and does not meet the requirements for gas cartridges or small pressure receptacles. The requirements set forth in the special provision ensure the same level of safety as for confetti-shooters with pyrotechnics.

Special Provision 372

In this final rule, PHMSA is adding a new special provision 372 and assigning it to the new HMT entry ''UN3508, Capacitor, asymmetric.'' This special provision states that this entry applies to asymmetric capacitors with an energy storage capacity greater than 0.3 watt hours (Wh) and that asymmetric capacitors with an energy storage capacity of 0.3 Wh or less are not subject to the requirements of this subchapter. This special provision also provides that nickel-carbon asymmetric capacitors containing Class 8 alkaline electrolytes must be transported as UN 2795, Batteries, wet, filled with alkali, electric storage. PHMSA received one comment from COSTHA supporting the amendment as proposed noting that this provision now gives clear guidance on how manufacturers are to ship these articles.

Special Provision A60

Special provision A60 permits ''UN2014, Hydrogen peroxide, aqueous solution,'' to be transported in excepted quantities. The special provision authorizes packagings to include a vent to permit the slow escape of gas (*i.e.* not more than 0.1 mL/hour per 30 mL inner packaging at 20 °C (68 °F) produced from gradual decomposition. As venting is permitted, the requirements of §§ 173.24(g)(1) and 173.27(c) are impracticable and should not apply. To address the issue, the ICAO DGP adopted a proposal to clarify that these general requirements prohibiting venting should not be applicable. In this final rule, we are harmonizing with the ICAO TI and waiving the general requirements of §§ 173.24(g)(1) and 173.27(c). Special provision A60 is revised accordingly.

Special Provision A61

In this final rule, PHMSA is adding a new special provision A61 and assigning it to the HMT entries ''UN 3107, Organic peroxide type E, liquid'' and ''UN 3109, Organic peroxide type F, liquid.'' PHMSA is aligning with Packing Instruction 570 of the ICAO TI to allow for limited venting of oxygen in the case of specialized peroxyacetic acid packagings when transported by cargo aircraft, provided the packaging requirements of this special provision are met. It was reported to the ICAO DGP that peroxyacetic acid was commonly used as a sterilizer for health care purposes and that there is a need to transport the material by air for use in sterilizing medical equipment using custom packagings. The basis for the requirements that these specialized packagings must meet originated from exemptions to permit the transport of this substance in small containers approved by several national authorities. The inclusion of this new special provision will eliminate the need for these exemptions and facilitate international transport.

IBC Codes and IP Codes

Section 172.102(c)(4) prescribes situations where Large Packagings are authorized. In this final rule, PHMSA is authorizing the use of large packagings for lithium batteries without assigning IB3 or IB8 to the corresponding entries in the § 172.101 Table by adding a reference to § 173.185 before the reference to § 173.225(e). See *Section 173.185 Lithium batteries* for a detailed discussion of the proposed a use of rigid large packagings for lithium batteries. In this final rule, PHMSA is authorizing the use of large packagings for lithium batteries without assigning IB3 or IB8 to the corresponding entries in the § 172.101 Table by revising by adding a reference to § 173.185 before the reference to § 173.225(e). See *Section 173.185 Lithium batteries* for a detailed discussion of the proposed a use of rigid large packagings for lithium batteries.

In two final rules published in the **Federal Register** on January 19, 2011 (76 FR 3308; HM–215K) and January 7, 2013 (78 FR 988; HM–215L) the Table 1 (IBC Codes) in paragraph (c)(4) were editorially revised to remove UN Specifications 31A, 31B, 31N, 31H1, 31H2, 31HZ1, and 31HZ2 from IBC Codes IB4 through IB8. The revisions were consistent with amendments to the UN Model Regulations that removed the specifications from the indicated codes in the table because IBC Codes IB4 through IB8 are assigned to solids, whereas, UN Specifications 31A, 31B, 31N, 31H1, 31H2, 31HZ1, and 31HZ2 are authorized for transportation of liquids and IBC Codes IB1 through IB3 and are assigned to liquid materials only. Information presented to the UN Committee of Experts on the Transport

of Dangerous Goods (UNCOE) in this last biennium indicated that the removal of the above UN Specifications from IBC Codes IB4 through IB8 has created a problem. Prior to implementation of these revisions, certain liquid IBC types were used to transport powdery solids and solids that become liquid under conditions of transport. These solids may be loaded and unloaded from the IBC in liquid form raising the question of whether the remaining IBCs, which are intended for gravity or pressure discharge, are appropriate. The UN sub-committee adopted a proposal to reinstate the IBCs that were previously authorized. In this final rule, we are harmonizing with the UN Model Regulations by revising the IBC Codes IB4 through IB8 in paragraph (c)(4), Table 1 (IBC Codes) to reinstate IBC's previously authorized.

A new IP Code 16 is added and assigned to UN3375. Consistent with international regulations, this special provision would authorize require IBCs of type 31A and 31N if approved by the Associate Administrator.

Special Provision TP47

In this final rule, PHMSA is adding a new special provision TP47 and assigning it to the organometallic substance HMT entries UN3393 through UN3399. The special provision waives the 2.5 year internal inspection for portable tanks used for the transport of liquid and solid organometallic substances provided that the portable tank remains in the dedicated service of transporting organometallic substances. However, all other required 2.5 year inspections and tests would still be performed, as well as the full 5 year periodic test and inspection, which would include an internal inspection.

Before an internal inspection can be performed, the tank must be cleaned and purged. In this process, it is difficult to ensure that water, impurities, or contaminants introduced during cleaning are fully removed before organometallic substances are again introduced into the tank, which could potentially result in a dangerous reaction or have an effect on the purity of the product. Since these organometallic substances are fully compatible with and are not corrosive to the materials of construction used in such tanks, the likelihood that an internal inspection will reveal any corrosion, pitting or other deterioration of the tank is unlikely. To increase safety and avoid the risk of a dangerous reaction or product contamination the 2.5 year internal inspection is waived, provided the portable tank remains in the dedicated service of transporting organometallic substances and the tank does exhibit damaged or corroded areas, leakage, or other conditions that indicate a deficiency in accordance with § 180.605(f). PHMSA received one comment from Dow Chemical in support of this special provision.

Section 172.204

This section describes the text that must be contained within the shipper's certification on a shipping paper. PHMSA received a comment from Gregory Sutherland noting that PHMSA did not propose in the NPRM to align the text with the requirements of the UN Model Regulations and the IMDG Code in Section 172.204(a)(2) to allow the shipper's certification to be either below or above the required elements of a shipping paper. PHMSA agrees that harmonizing provisions for shipper's certification placement and language, by providing the allowance to place the certification either below or above other required elements, is necessary to facilitate international commerce. As a result, PHMSA is adding a note following § 172.204(a)(2) to allow substitution of the word ''below'' for the currently authorized ''above'' if appropriate.

Section 172.315

In this final rule, PHMSA is revising the specifications for the limited quantity markings prescribed in § 172.315(a)(2) and (b)(2) to be consistent with the revised specifications in the UN Model Regulations. To promote uniformity and consistency with the UN Model Regulations we are allowing manufacturers and printers necessary time to produce markings that conform to the revised specifications, and to deplete supplies of existing markings. PHMSA is adding a transitional period to authorize a limited quantity marking that is in conformance with the requirements of the regulations in effect on December 31, 2014, to be used until December 31, 2016. PHMSA received one comment from DGAC noting that many packages, especially those containing consumer products, may be permanently marked with the limited quantity marking and remain in the distribution cycle for an extended period of time. DGAC recommended that a provision be added which authorizes limited quantity markings conforming to the current requirements and permanently affixed to a package to be authorized for the useful life of the package. PHMSA agrees that there may be packages or packagings marked for an indefinite period of time and is adding a new paragraph (a)(2)(ii) and (b)(2)(ii) to § 172.315 to read ''For domestic transportation, a packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.''

Section 172.317

To promote the uniformity of the ''Keep Away From Heat'' handling mark throughout the international transportation community, the ICAO Technical Instructions have adopted revisions to clarify and standardize the specifications for this hazard communications element. In this final rule, PHMSA is revising the specifications in § 172.317(b) to be consistent with the revised specifications in the ICAO TI. Thus, we are adopting provisions to allow manufacturers and printers necessary time to produce markings that conform to the revised specifications, and to deplete supplies of existing markings. We are also adopting a transitional period to authorize a ''Keep Away From Heat'' handling mark that is in conformance with the requirements of the regulations in effect on December 31, 2014, to be used until December 31, 2016. For domestic transportation, we are authorizing a packaging marked with a ''Keep Away From Heat'' handling mark prior to January 1, 2017 and in conformance with the requirements of the regulations in effect on December 31, 2014, to continue in service until the end of its useful life.

Section 172.322

In this final rule, PHMSA is clarifying in § 172.322(a)(2) and (b), that the marking requirements for marine pollutants are required unless otherwise provided for in the regulations.

In § 172.322(e), PHMSA is deleting the obsolete date of January 14, 2010 for the requirements for the marine pollutant mark.

To promote the uniformity of the marine pollutant mark throughout the international transportation community, the UN Model Regulations have adopted revisions to clarify and standardize the specifications for this hazard communications element. In this final rule, PHMSA is revising § 172.322(e) to be consistent with the revised specifications for this marking in the UN Model Regulations. We are also adopting a transitional period to authorize a marine pollutant mark that is in conformance with the requirements of the regulations in effect on December 31, 2014, to be used until December 31, 2016, so that manufacturers and printers will have the necessary time to deplete

existing supply and to produce markings that conform to the revised specifications. For domestic transportation, we are authorizing a packaging marked with a marine pollutant mark prior to January 1, 2017 and in conformance with the requirements of the regulations in effect on December 31, 2014, to continue in service until the end of its useful life.

Section 172.326

Section 172.326 prescribes marking requirements for portable tanks. PHMSA received a comment from Edward Altemos noting that in the NPRM PHMSA did not propose to harmonize this section with recent changes adopted into Amendment 37–14 of the IMDG Code. Amendment 37–14 of the IMDG Code adopted a reduced size proper shipping name exception for portable tanks having a capacity of less than 3,000 L (792.52 gallons). Prior to this amendment proper shipping name markings on all portable tanks were required to be at least 65 mm (2.5 inches) high. Mr. Atlemos requests PHMSA harmonize with the IMDG Code on this issue. PHMSA agrees and is amending paragraph (a) accordingly.

Section 172.327

To promote the uniformity of markings, in this final rule, PHMSA is revising and clarifying the specifications for the ''petroleum sour crude oil'' mark prescribed in § 172.327(a) to be consistent with the revised specifications for markings in the UN Model Regulations. Also, to allow manufacturers and printers necessary time to produce markings that conform to the revised specifications, and to allow for the depletion of supplies of existing markings, we are adopting a transitional period to authorize a ''petroleum sour crude oil'' mark that is in conformance with the requirements of the regulations in effect on December 31, 2014, to be used until December 31, 2016. For domestic transportation, we are authorizing a packaging marked with a ''petroleum sour crude oil mark'' prior to January 1, 2017 and in conformance with the requirements of the regulations in effect on December 31, 2014, to continue in service until the end of its useful life.

Section 172.407

The UN Model Regulations have adopted revisions to clarify and standardize the specifications for labels to promote the uniformity of hazard communications labels throughout the international transportation community. In this final rule, PHMSA is revising § 172.407(c) to be consistent with UN Model Regulations. In addition, PHMSA is revising (d)(2)(iii) that provides a color alternative for the symbol on the ORGANIC PEROXIDE LABEL to be consistent with the UN Model Regulations. Also to be consistent with the UN Model Regulations, and to allow manufacturers and printers necessary time to produce labels that conform to the revised specifications, and to allow for the depletion of supplies of existing labels, we are adopting a transitional period to authorize a label that is in conformance with the requirements of the regulations in effect on December 31, 2014, to be used until December 31, 2016.

PHMSA received one comment from DGAC noting that many packages may be permanently labeled and remain in service for an extended period of time. DGAC recommended that a provision be added which authorizes labels conforming to the current requirements and permanently affixed to a package to be authorized for the life of the package. PHMSA agrees that there may be packages or packagings labeled for an indefinite period of time and in response is adding a new paragraph (c)(1)(iv) to § 172.407 to read ''For domestic transportation, a packaging labeled prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.''

Finally, PHMSA is adding paragraph (d)(2)(iv) to permit, consistent with the UN Model Regulations, a FLAMMABLE GAS label to be displayed on cylinders and gas cartridges for liquefied petroleum gases, where the symbol may be shown in the background color of the receptacle if adequate contrast is provided.

Section 172.512

The placarding requirements for freight containers and aircraft unit load devices are described in § 172.512. The reference in § 172.512(a)(3) to part 7; chapter 2, section 2.7 of the ICAO TI in this paragraph is inaccurate. This reference became inaccurate because part 7; chapter 2, section 2.7 of the ICAO TI now refers to replacement of labels, whereas section 2.8 refers to identification of unit load devices containing dangerous goods. PHMSA is revising this paragraph for the correct reference to cite part 7; chapter 2, section 2.8.

Section 172.519

The UN Model Regulations have adopted revisions to clarify and standardize the specifications for placards. In this final rule, PHMSA is revising the specifications for placards prescribed in § 172.519(c) to be consistent with the UN Model Regulations. Additionally, to allow manufacturers and printers necessary time to produce placards that conform to the revised specifications, and to allow for the depletion of supplies of existing placards, we are providing a transitional period. This transitional period authorizes a placard that is in conformance with the requirements of the regulations in effect on December 31, 2014, to be used until December 31, 2016. Finally, PHMSA realizes that in domestic transportation, numerous placards of a semi-permanent nature are in service. PHMSA is allowing, that for domestic transportation, a placard manufactured prior to January 1, 2017, in conformance with the requirements of the regulations in effect on December 31, 2014, may continue in domestic service until the end of its useful life provided the color tolerances are maintained and are in accordance with the display requirements of the subchapter.

Part 173

Section 173.2a

Section 173.2a outlines classification requirements for materials having more than one hazard. In this final rule, PHMSA is amending paragraph (a)(1) to note that shipments of ''UN3507, Uranium hexafluoride, radioactive material, excepted package, less than 0.1 kg per package'' are not required to apply the radioactive hazard as the primary hazard. This change is adopted to incorporate the transportation provisions for excepted packages of uranium hexafluoride adopted in the 18th Revised Edition of the UN Model Regulations, the IMDG Code and the ICAO TI.

Section 173.3

The UN Model Regulations have adopted revisions to clarify and standardize the specifications for markings. In this final rule, PHMSA is revising the specifications for markings for salvage packagings prescribed in § 173.3(c)(3); salvage cylinders prescribed in § 173.3(d)(3); and prescribing requirements for the marking of the proposed large salvage packaging in § 173.3(f) to be consistent with the revised specifications for salvage packaging markings in the UN Model Regulations. Also, to be consistent with the UN Model Regulations, and to allow shippers necessary time to implement the new marking requirements, we are adopting a transitional period to authorize a

marking that is in conformance with the requirements of the regulations in effect on December 31, 2014, to be used until December 31, 2016. PHMSA also realizes that salvage packagings and salvage cylinders are typically marked in a durable manner. PHMSA is authorizing, for domestic transportation, a salvage packaging or a salvage cylinder that is marked prior to January 1, 2017 in conformance with the requirements of the regulations in effect on December 31, 2014, to continue in service until the end of its useful life. PHMSA received one comment from RIPA supporting the transition period for ''already fabricated and durably marked salvage packagings,'' but requesting an additional transition year for embossed packagings. PHMSA notes however, that as is being adopted in this final rule a salvage cylinder that is marked prior to January 1, 2017 in conformance with the requirements of the regulations in effect on December 31, 2014, may continue in service until the end of its useful life.

Also PHMSA is adding a new paragraph (f) to § 173.3 authorizing and prescribing the use of large salvage packaging for all modes of transportation other than air. PHMSA received one comment from RIPA providing general support for the amendments as proposed.

Section 173.4a

The UN Model Regulations have been revised to clarify and standardize the specifications for the marking of excepted quantities of packaged hazardous materials. In this final rule, PHMSA is revising § 173.4a(g)(2) to be consistent with the revised specifications for these markings in the UN Model Regulations. We are adding a transition period so that manufacturers and printers can produce markings that conform to the revised specifications, and deplete existing supplies. An excepted quantities marking that is in conformance with the requirements of the regulations in effect on December 31, 2014, can be used until December 31, 2016. For domestic transportation, we are authorizing a packaging marked with an excepted quantities marking prior to January 1, 2017 and in conformance with the requirements of the regulations in effect on December 31, 2014, to continue in service until the end of its useful life.

Section 173.9

In this final rule, PHMSA is revising the specifications for the fumigant marking prescribed in § 173.9(e) to be consistent with the revised specifications for these markings in the UN Model Regulations. Also consistent with the UN Model Regulations, to allow manufacturers and printers necessary time to produce markings that conform to the revised specifications, and to allow for the depletion of supplies of existing markings, we are authorizing a transitional period to authorize a fumigant marking that is in conformance with the requirements of the regulations in effect on December 31, 2014, to be used until December 31, 2016.

Section 173.11

In this final rule, PHMSA is adding a new § 173.11 that provides exceptions to the regulations for certain light bulbs containing hazardous materials based on their transport conditions, the quantity of hazardous materials contained in each light bulb or package, and the type of packaging. This new section is consistent with newly adopted provisions in the UN Model Regulations. In the NPRM, PHMSA proposed using the term ''lamp'' in this section for consistency with the language contained in the UN Model Regulations. However, a reference to ''light bulbs'' remained in § 173.307(a)(6). PHMSA received one comment from Alaska Airlines noting that this may be confusing for shippers and suggested defining the terms lamp and light bulb. We agree that using both of these terms may be confusing; however we do not believe there is a need for defining these two terms as they apply to the same commodity. Therefore, in this final rule, PHMSA is revising the language in § 173.11 and § 173.307 to include the term ''lamp'' in association with ''light bulb.''

Section 173.24

In this final rule, PHMSA is revising § 173.24 to authorize the use of supplementary packagings within an outer packaging (*e.g.,* an intermediate packaging or a receptacle inside a required inner packaging) in addition to what is required by the regulations provided all applicable requirements are met and, if appropriate, suitable cushioning is used to prevent movement within the packaging. This revision is consistent with newly adopted provisions in the UN Model Regulations. PHMSA received one comment from Veolia requesting clarification that the newly proposed requirement under § 173.24(c)(2) for the use of ''appropriate suitable cushioning'' is only required when movement of the inner receptacles within the outer packaging would result in breakage of the inner receptacles during transportation. PHMSA has revised § 173.24(c)(2) to clarify that appropriate suitable cushioning is only required when necessary.

Section 173.25

To promote the uniformity of markings, the UN Model Regulations have been revised to clarify and standardize the specifications for the overpack marking. In this final rule, PHMSA is revising § 173.25(a)(4) to be consistent with the revised specifications for these markings in the UN Model Regulations. Also consistent with the UN Model Regulations, to allow manufacturers and printers necessary time to produce markings that conform to the revised specifications, and to allow for the depletion of supplies of existing markings, we are adopting a transitional period to authorize an overpack marking that is in conformance with the requirements of the regulations in effect on December 31, 2014, to be used until December 31, 2016. For domestic transportation, we are authorizing an overpack marked with an overpack marking prior to January 1, 2017 and in conformance with the requirements of the regulations in effect on December 31, 2014, to continue in service until the end of its useful life. PHMSA received one comment from RIPA providing general support for this amendment.

Section 173.62

Consistent with the UN Model Regulations, in this final rule, PHMSA is revising § 173.62 relating to specific packaging requirements for explosives as follows:

In paragraph (b), in the Explosives Table, the entry for UN0222 is revised to expand the packaging authorizations to include Packing Instruction 117 in addition to the existing Packaging Instructions 112(b) and 112(c).

In paragraph (c), in the Table of Packing Methods, Packing Instruction 116 is revised to delete provision 5, which states that woven plastic bags (5H2 or 5H3) must be used only for UN 0082, 0241, 0331 and 0332. Packing Instruction 117 is revised to add provision 5 which states, ''For UN0222, when other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.''; and provision 6 which states, ''For UN0222, flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.'' Packing Instructions 131 and 137 are revised to expand the authorization for outer packagings to include solid plastic boxes (4H2).

Section 173.115

Section 173.115 prescribes the definitions for Class 2 materials. In this final rule a new paragraph (m) is added to define the term ''Adsorbed gas.'' The term means a gas which when packaged for transport is adsorbed onto a solid porous material resulting in an internal receptacle pressure of less than 101.3 kPa at 20 °C and less than 300 kPa at 50 °C.

Currently the HMR do not prescribe requirements for the transport of adsorbed gases. In this final rule, PHMSA is adopting various transportation requirements for adsorbed gases. Therefore in this final rule we are adopting the above definition of an adsorbed gas based on the definition found in the 18th Revised Edition of the UN Model Regulations, the IMDG Code and the ICAO TI.

Section 173.121

Section 173.121 prescribes the requirements for the selection of packing groups for Class 3 flammable liquids. Paragraph (b) of this section describes the criteria for inclusion of viscous Class 3 materials in Packing Group III. Paragraph (b)(1)(ii) currently states that the mixture cannot contain any substances with a primary or subsidiary risk of Division 6.1 or Class 8. In this final rule, PHMSA is revising paragraph (b)(1)(ii) to clarify that a mixture or any separated solvent cannot contain any substances with a primary or subsidiary risk of Division 6.1 or Class 8. This change is consistent with the current language in the 18th Revised Edition of the UN Model Regulations, the IMDG Code and the ICAO TI.

Section 173.127

In this final rule, PHMSA is revising § 173.127(a) to authorize an alternative test for assigning packing groups to Division 5.1 oxidizing solids. The test is in addition to the currently authorized test using potassium bromate/cellulose mixture. The alternative test uses calcium peroxide as a reference substance which is neither carcinogenic nor as acutely toxic as potassium bromate. In addition, the alternative test replaces the highly subjective visual determination of the burning time with a gravimetric determination of the burning rate. This change is consistent with the test adopted into the UN Model Regulations.

Section 173.151

Section 173.151 provides exceptions for Class 4 hazardous materials. In this final rule, PHMSA is revising paragraph (b) to replace a pre-existing paragraph (b)(2) relating to exceptions for charcoal briquettes (NA1361) that was inadvertently deleted in the final rule dated January 7, 2013 (HM–215K; 78 FR 1101).

Section 173.161

Section 173.161 prescribes packaging requirements for chemical kits and first aid kits that contain small amounts of hazardous materials. Paragraph (b)(2) contains the requirement that ''The packing group assigned to the chemical kit and first aid kit as a whole must be the most stringent packing group assigned to any individual substance in the kit . . .'' This requirement creates problems for shippers and air transport acceptance personnel because it does not specify what must be shown for the packing group on the shipping paper, or what packaging standard must be applied to kits containing hazardous materials to which no packing group is assigned. In this final rule, PHMSA is revising paragraph (b)(2) to require that for kits containing only hazardous materials to which no packing group is assigned, a packing group need not be indicated on the shipping paper although such packagings shall meet the Packing Group II performance level. PHMSA received one comment from UPS providing full support for the amendments as proposed.

Section 173.164

Section 173.164 prescribes requirements for the transportation of Mercury (metallic and articles containing mercury). In this final rule, PHMSA is eliminating the existing exception for lamps containing mercury in paragraph (a)(5) since this exception will be covered in the new § 173.11 relating to exceptions for shipment of light bulbs containing hazardous materials.

Section 173.166

Section 173.166 prescribes requirements for the transportation of air bag inflators, air bag modules and seat-belt pretensioners, UN3268 and UN0503. Due to technological developments, new safety devices for vehicles are becoming available. The devices include pyromechanical devices that meet the definition of a hazardous material but are not accurately described by the proper shipping names Air bag inflators, Air bag modules, or Seat-belt pretensioners. The proper shipping name for these devices has been revised in the UN Model Regulations to ''Safety devices, *electrically initiated*'' for UN 3268 and ''Safety devices, pyrotechnic'' for UN0503. Consistent with the UN Model Regulations, PHMSA is adopting these revised proper shipping names and revising § 173.166 to adopt the term ''Safety Devices'' for these items. An entry for the existing proper shipping name ''Air bag inflators, or Air bag modules, or Seat-belt pretensioners'' has been left in the § 172.101 Hazardous Materials Table to direct the reader to the new proper shipping names ''Safety devices, *electrically initiated*'' and ''Safety devices, pyrotechnic.'' PHMSA received multiple comments (Takata, Autoliv, TRW Automotive, and COSTHA) supporting the inclusion of new proper shipping names for ''Safety devices.''

The current § 173.166(b)(1)(iv) provides that under certain conditions a Class 9 (UN3268) air bag inflator, air bag module, or seat-belt pretensioner design is not required to be submitted to the Associate Administrator for approval or assigned an EX number. In the NPRM, PHMSA proposed not extending this exception to all Class 9 safety devices and maintaining this exception only for air bag inflators, air bag modules, and seat-belt pretensioners. All other types of safety devices, such as pyromechanical devices, that are candidates for Class 9 must be submitted to the Associate Administrator for approval. Takata, Autoliv, TRW Automotive, and COSTHA provided comments opposing PHMSA's proposal to not extend this exception to all ''Safety, devices.'' A summary of the commenters' positions follows:

- Employees who prepare shipping papers will have a difficult task to determine when an EX number is or is not required to be contained on the shipping paper, and training for this requirement by January 1, 2015 will be difficult to achieve.
- Automated software used to prepare shipping papers for hazardous materials will not be capable of differentiating between air bag inflators, air bag modules, seat-belt pretensioners and all other Class 9 (UN3268) safety devices. Software programs are written to either require an EX number or not require an EX number for UN3268 (Class 9) devices.
- Carriers are not capable of determining when a Class 9, UN3268 ''Safety Device'' does or does not require an EX number on the shipping papers.
- PHMSA approved explosives test labs will witness testing of Safety Devices, other than air bag inflators, air bag modules and seat-belt pretensioners, to determine proper classification. The devices will either pass criteria for classification as Class 9 (UN3268), Class 1.4G (UN0503) or they will fail to obtain classification as a Safety Device. There

will be no increased risk to safety based on the explosives examiner's classification determination.

• The new Safety Devices, other than air bag inflators, air bag modules and seat-belt pretensioners, have already been manufactured and shipped for several years, but with classifications such as Class 1.4S (UN0323) or ''Not regulated as a Class 1 Explosive''. These devices typically contain significantly lower amounts of pyrotechnics, and therefore pose less risk to safety when shipping and handling. The commenters are not aware of any incidents or accidents involving these devices.

• Adding the requirement for certain Safety Devices to be submitted to PHMSA for approval and an EX number will add to PHMSA's approval workload. Current processing time for approvals is 180 to 200 days. This delay in bringing new products to market will hurt U.S. manufacturers and carriers because new products will be sourced to other nations.

As noted in the proposed rule, the three items currently excepted have a long history of safety in their design and manufacture. New devices do not yet have such an established safety history. PHMSA, in the interest of safety, is limiting use of the exception to articles and devices currently authorized under the exception. PHMSA is not opposed to reexamining the exception from Associate Administrator approval for all safety devices, once a sufficient number of these new devices have been evaluated and the data provides assurance that an appropriate level of safety is maintained. PHMSA is however excepting these new types of safety devices classified as Class 9 materials from the requirement to mark the EX number on shipping papers and packages by revising § 173.166(c)(2). This revision addresses the commenters concerns about the ability for carriers and downstream offerors to know when a safety device classified as a Class 9 material does or does not require an EX number to be indicated on documentation or packages.

Additionally, in this final rule, PHMSA is adding a new paragraph (d)(5) to § 173.166 to permit the continued transportation of an air bag inflator, air bag module, or seat-belt pretensioner that was classed and approved for transportation prior to January 1, 2015 under the terms of the existing approval, using the proper shipping name ''Safety Devices'' or ''Safety Devices, Pyrotechnic'' as appropriate.

PHMSA received a comment from COSTHA noting potential logistical problems ensuring that all packages, either currently in transportation or in storage awaiting further offering in transportation, are both marked and described with the new proper shipping names ''Safety devices'' or ''Safety devices, pyrotechnic'' as appropriate. COSTHA notes that while the majority of shippers of these devices are transitioning to the new authorized shipping names for documentation purposes, ensuring proper shipping name markings on packages are consistent with the new shipping names may prove difficult. COSTHA asks for a transitional period for packages containing ''Air bag inflators'', ''Air bag modules'', and ''Seat-belt pretensioners'' allowing them to be marked with previously authorized proper shipping names while shipping papers would indicate the new proper shipping names as proposed in the NPRM.

PHMSA agrees that this situation may occur, and in this final rule PHMSA is adding a new paragraph (d)(6) to § 173.166 to permit until January 1, 2016, the domestic transportation by highway, rail, and vessel of packages containing ''Air bag inflators'', ''Air bag modules'', or ''Seat-belt pretensioners'' that are marked or documented either with a previously authorized proper shipping name (Air bag inflators, Air bag modules, or Seat-belt pretensioners) for these articles; or with the appropriate new proper shipping name authorized under this rulemaking (Safety devices or Safety devices, pyrotechnic). This exception can be applied in part or in whole. Packages may be marked with a previously authorized proper shipping name (*e.g.*, Air bag inflators) and declared on shipping papers with a proper shipping name authorized under this rulemaking (*e.g.*, Safety devices). Conversely, packages may be marked with a proper shipping name authorized under this rulemaking (*e.g.*, Safety devices) and declared on shipping papers with a previously authorized proper shipping name (*e.g.*, Air bag inflators). It is also important to note that in accordance with the January 1, 2016 delayed compliance date of this rulemaking, packages that are both marked and declared using a proper shipping name in effect on December 31, 2014 may continue to be offered for transport and transported until January 1, 2016.

Section 173.167

Section 173.167 prescribes the requirements for consumer commodities intended for air transportation. In this final rule, PHMSA is revising the drop test requirements in (a)(4) by including the criteria for passing the test. A completed consumer commodity package will be considered to have passed the drop test if the outer packaging does not exhibit any damage liable to affect safety during transport and there is no leakage from the inner packaging(s).

Section 173.176

This section addresses capacitors by prescribing the testing, marking, safety, and packaging requirements for electric double layer capacitors with energy storage capacity greater than 0.3 watt hours (Wh). In this final rule, PHMSA is revising § 173.176 to include provisions for asymmetric capacitors in accordance with the new HMT entry ''UN3508, Capacitor, asymmetric *(with an energy storage capacity greater than 0.3Wh)*.'' In addition, paragraph (a)(5) presently requires that capacitors must be marked with the energy storage capacity in Wh. Many pre-existing capacitors do not have Wh marking and are not permitted to be transported even when all other requirements of this section are met. PHMSA is amending paragraph (a)(5) to require that the Wh marking is required for non-asymmetric capacitors manufactured after December 31, 2013 and for asymmetric capacitors manufactured after December 31, 2015.

Section 173.181

This section prescribes the non-bulk packaging requirements applicable to pyrophoric liquids. On January 7, 2013, PHMSA published final rule PHMSA–2012–0027 (HM–215L) [78 FR 987] to maintain alignment with international standards by incorporating various amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations, and vessel stowage requirements. In that final rule, PHMSA revised paragraphs (b) and (c) to add authorized packagings for these materials. Paragraphs (c)1–3 were inadvertently deleted due to an incorrect amendatory instruction and in this final rule, PHMSA is placing paragraphs (c)1–3 back into § 173.181 as they were prior to the publication of HM–215L.

Section 173.185

In this final rule, PHMSA is adding paragraph (b)(6) and revising paragraph(f)(3) to authorize and prescribe the use of a large packaging for a single large lithium battery or a battery contained in equipment. This authorization does not include transportation by aircraft. The addition of this packaging type into this section is consistent with provisions for lithium batteries in the UN Model Regulations.

PHMSA received one comment from COSTHA in support of this proposal.

The ICAO DGP took a decision during the most recent biennium to remove the alternative written documentation option in Section IB of ICAO TI Packing Instructions 965 and 968 and instead require a standard transport document (shipping paper). Section IB is applicable to packages that exceed the number or quantity (mass) limits for smaller lithium batteries in Section II of Packing Instructions 965 and 968, thus excepting such packages from specification packaging requirements when containing no more than 2.5 kg of lithium metal cells or batteries or 10 kg of lithium ion cells or batteries per package. As this revision will appear in the 2015–2016 Edition of the ICAO TI, in this final rule PHMSA is amending paragraph (c)(4)(v) to require a shipping paper for these packages containing no more than 2.5 kg of lithium metal cells or batteries or 10 kg of lithium ion cells or batteries per package. PHMSA sought input as to the costs and benefits of harmonizing the provisions of the HMR with the provisions of the ICAO Technical Instructions by requiring shipping papers as opposed to alternative documentation. PHMSA also solicited comments on the costs and benefits of maintaining a domestic difference within the HMR to continue to allow the use of the alternative documentation in lieu of a shipping paper as required by the ICAO Technical Instructions. PHMSA received comments from UPS and Alaska Airlines concerning removal of the alternative document. UPS supported our proposed change to the documentation requirement for packages containing smaller lithium batteries transported in accordance with § 173.185(c)(4)(v). UPS also commented that the proposal to introduce a shipping paper requirement for shipments offered under § 173.185(c)(4)(v) could be interpreted to conflict with the statement in the preceding paragraph § 173.185(c) that such shipments are excepted from the requirements in subparts C through H of part 172. UPS suggests that § 173.185(c) should be clarified in this regard. We agree clarification is warranted. Alaska Airlines commented that they would like to see increased harmonization between the 49 CFR and ICAO TI with regard to the documentation required while stating there is no reason to deviate from the ICAO TI. We agree, and note that the amendments proposed do provide for such consistency.

Taking into account the comments from Alaska Airlines, PHMSA confirmed that the proposed documentation amendments do align with the requirements of the ICAO TI. However, in this final rule PHMSA is revising § 173.185(c)(4)(v) as suggested by UPS for clarity. This editorial amendment will clarify that packages offered in accordance with § 173.185(c)(4)(v) are subject to the shipping paper requirements of subpart C of Part 172.

At the April 2014 meeting, the ICAO Working Group on Lithium Batteries, forbade the shipment of lithium metal cells and batteries as cargo on passenger aircraft with the exception of lithium metal cells and batteries packed with or contained in equipment not exceeding 5 kg net weight. This prohibition of lithium metal batteries as cargo on passenger aircraft is consistent with current HMR requirements. As a consequence to this prohibition, Section II of Packing Instruction 968 in the ICAO TI was amended to require shipments of small lithium metal cells and batteries to display the ''CARGO AIRCRAFT ONLY'' label where previously only a lithium battery handling marking was required. Presently under the HMR, a package containing such lithium metal cells or batteries as provided in § 173.185(c)(1)(iii), is required to be marked ''PRIMARY LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT'' or ''LITHIUM METAL BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT.'' In this final rule, PHMSA is providing an alternative to the existing marking requirement in § 173.185(c)(1)(iii) with the option to display a ''CARGO AIRCRAFT ONLY'' label. This allowance to either utilize the current marking or the ''CARGO AIRCRAFT ONLY'' label provides shippers with the flexibility to utilize supplies of preprinted markings or packagings, while also allowing shippers to transition to the use of the ''CARGO AIRCRAFT ONLY'' if desired.

PHMSA received comments from UPS and COSTHA in support of the proposal. UPS also commented that the provision in this paragraph excepting lithium metal cells or batteries packed with or contained in equipment in quantities ''less than 5 kg net weight'' from the § 173.185(c)(1)(iii) marking requirement differs slightly in wording from the current ICAO TI and previous requirements of the HMR. In this final rule, PHMSA is revising § 173.185(c)(1)(iii) as proposed in the NPRM with an additional editorial revision to clarify that lithium metal cells or batteries packed with or contained in equipment in quantities ''not exceeding'' as opposed to ''less than'' 5 kg net weight are not subject to the marking or ''CARGO AIRCRAFT ONLY'' label requirement. This provides editorial consistency with the provisions of the ICAO TI.

Section 173.199

In this final rule, PHMSA is revising the specifications for the Category B infectious substance marking in § 173.199(a)(5) to be consistent with the revised specifications for these markings in the UN Model Regulations. Also consistent with the UN Model Regulations, to allow manufacturers and printers necessary time to produce markings that conform to the revised specifications, and to allow for the depletion of supplies of existing markings, we are adopting a transitional period to authorize a Category B infectious substance marking that is in conformance with the requirements of the regulations in effect on December 31, 2014, to be used until December 31, 2016. For domestic transportation, we are authorizing a packaging marked with a Category B infectious substance marking prior to January 1, 2017 and in conformance with the requirements of the regulations in effect on December 31, 2014, to continue in service until the end of its useful life.

Section 173.225

This section prescribes packaging requirements and other provisions for organic peroxides. In this final rule, PHMSA is revising the Organic Peroxide Portable Tank Table in paragraph (g). PHMSA is revising the entry in the second column of the table pertaining to the hazardous material ''Peroxyacetic acid, distilled, stabilized, not more than 41%'' to include a Note 1, that a ''Corrosive'' subsidiary risk placard is required.'' The adoption of this requirement is consistent with the requirements in the UN Model Regulations.

Section 173.231

Currently, the § 172.101 HMT Column (8B) packaging authorization for Ammonium nitrate emulsion, suspension, or gel, UN3375, directs the reader to § 173.214 which requires that packagings and methods of shipment must be approved by the Associate Administrator prior to the first shipment. In this final rule, PHMSA is adding a new § 173.231 titled ''Ammonium nitrate emulsion, suspension, or gel'' and assigning this section to UN3375 to authorize and prescribe the use of non-bulk packagings for this material. The requirements of the new section are

consistent with the requirements in the UN Model Regulations.

Section 173.251

Currently, the § 172.101 HMT Column (8C) packaging authorization for Ammonium nitrate emulsion, suspension, or gel, UN3375, directs the reader to § 173.214 which requires that packagings and method of shipment must be approved by the Associate Administrator prior to the first shipment. In this final rule, PHMSA is adding a new § 173.251 titled ''Bulk packaging for ammonium nitrate emulsion, suspension, or gel'' and assigning this section to UN3375 to authorize and prescribe the use of IBC's for this material. The requirements of the new section are consistent with the requirements in the UN Model Regulations.

Section 173.301b

In this final rule, PHMSA is revising paragraph (c) relating to pressure receptacle valve requirements to include that a valve manufactured on or before December 31, 2008, conforming to the requirements in ISO 10297:1999 is authorized. This proposed revision is consistent with the requirements in the UN Model Regulations. The redesignation of several paragraphs in § 178.71 requires an amendment to paragraph (g) of § 173.301b. The current reference for marking requirements for cylinders manufactured in accordance with the requirements for underwater use direct the user to § 178.71(o)(17). This citation is incorrect prior to the publication of this rule and should have been (p)(18). With the redesignation of § 178.71(p) as paragraph (q), this reference is being changed to § 178.71(q)(18).

Section 173.302

In this final rule, PHMSA is adopting the new UN Model Regulation requirements for the transportation of adsorbed gases in cylinders. This section specifies requirements for the filling of cylinders with non-liquefied (permanent) compressed gases. PHMSA is amending the title of this section and paragraph (a) to include and specify requirements for the transportation of adsorbed gases.

Section 172.302c

In this final rule, PHMSA is adding a new § 173.302c to adopt the new authorization in the UN Model Regulations for the transportation of adsorbed gases in UN pressure receptacles. The adoption of these requirements into this new section is consistent with the requirements in the UN Model Regulations.

Section 173.307

Section 173.307 provides exceptions from the regulations for compressed gases. In this final rule, PHMSA is revising paragraph (a)(5) relating to manufactured articles or apparatuses to clarify that the exception for manufactured articles does not include light bulbs. The exceptions for light bulbs are contained in the new § 173.11 relating to exceptions for shipment of light bulbs containing hazardous materials. Also, we are revising paragraph (a)(6) relating to light bulbs to clarify that the exceptions do not apply to light bulbs as described in the new § 173.11 relating to exceptions for shipment of light bulbs containing hazardous materials.

Section 173.309

Section 173.309 prescribes requirements for fire extinguishers. In this final rule, we are adding a new introductory paragraph describing fire extinguisher types authorized for transport in accordance with this section and covered by the HMT entry ''UN1044, Fire extinguishers.'' PHMSA received one comment from UPS providing general support for the proposed amendments as proposed.

Section 173.403

Consistent with the UN Model regulations, in this final rule, PHMSA is revising two definitions in § 173.403 relating to the transportation of Class 7 (Radioactive Materials). ''Exclusive Use'' is revised to clarify that it also applies to the shipment of the load and that exclusive use only applies when compliance is required by the regulations. ''Freight Container'' is revised to eliminate the requirement that a ''small freight container'' has one outer dimension less than 1.5 m (4.9 feet).

Section 173.415

Section 173.415 authorizes Type A packages for the transport of Class 7 (radioactive) materials. In this final rule, PHMSA is amending paragraph (d) to reflect the incorporation by reference (IBR) of the IAEA Regulations for the Safe Transport of Radioactive Material, SSR–6 2012 Edition. Please see the Section-by-Section Review under § 171.7 for a discussion of the incorporation by reference.

Section 173.416

Section 173.416 authorizes Type B packages for the transport of Class 7 (radioactive) materials. In this final rule, PHMSA is amending paragraph (b) to reflect the incorporation by reference (IBR) of the IAEA Regulations for the Safe Transport of Radioactive Material, SSR–6 2012 Edition. Please see the Section-by-Section Review under § 171.7 for a discussion of the incorporation by reference.

Section 173.417

Section 173.417 authorizes fissile materials packages for the transport of Class 7 (radioactive) materials. In this final rule, PHMSA is amending paragraphs (a)(1)(iii) and (b)(2) to reflect the incorporation by reference (IBR) of the IAEA Regulations for the Safe Transport of Radioactive Material, SSR–6 2012 Edition. Please see the Section-by-Section Review under § 171.7 for a discussion of the incorporation by reference.

Section 173.420

Section 173.420 prescribes the transport conditions for uranium hexafluoride. In this final rule, PHMSA is amending this paragraph to note that fissile-excepted shipments less than 0.1 kg may be offered under UN3507. These requirements align with IAEA SSR–6 requirements, while maintaining general packaging requirements from §§ 173.24 and 173.24a.

Section 173.435

Section 173.435 provides a table of A_1 and A_2 values for radionuclides for Class 7 (radioactive) materials. In this final rule, PHMSA is amending note [a] to the table to reflect the incorporation by reference (IBR) of the IAEA Regulations for the Safe Transport of Radioactive Material, SSR–6 2012 Edition. Please see the Section-by-Section Review under § 171.7 for a discussion of the incorporation by reference.

Section 173.466

Section 173.466 specifies additional tests for Type A packagings designed for liquids and gases. During the review of this section, we found that paragraphs (a)(1) and (a)(2) were inadvertently removed in a final rule published in the **Federal Register** on July 11, 2014 (79 FR 40589; HM–250). As a result, PHMSA is reinstating (a)(1) and (a)(2) as they read prior to publication of the HM–250 final rule.

Section 173.473

Section 173.473 provides the requirements for foreign made packages for the transport of Class 7 (radioactive) materials. In this final rule, PHMSA is amending the introductory paragraph and paragraph (a)(1) to reflect the incorporation by reference (IBR) of the

IAEA Regulations for the Safe Transport of Radioactive Material, SSR–6 2012 Edition. Please see the Section-by-Section Review under § 171.7 for a discussion of the incorporation by reference.

Part 175

Section 175.9

Section 175.9 prescribes the applicability of the HMR to special aircraft and rotocraft operations. This section also prescribes the conditions under which certain operations may be performed in accordance with 14 CFR and 49 CFR (*e.g.,* avalanche and weather control). Consistent with the ICAO TI, in this final rule, PHMSA is revising paragraphs (b)(6) and (b)(6)(v) by including ''ice jam control'' and ''landslide clearance'' for operations where explosives are used in a similar manner to avalanche control.

Section 175.10

Section 175.10 specifies the conditions for which passengers, crew members, or an operator may carry hazardous materials aboard an aircraft. Consistent with revisions to the ICAO TI, in this final rule, PHMSA is making several revisions to this section.

PHMSA is revising paragraph (a)(11), applicable to passenger provisions for self-inflating life jackets, to include different types of self-inflating personal safety devices in order to account for those carried by, but not limited to, motorcycle and horseback riders. In addition, PHMSA is clarifying that a passenger is limited to one self-inflating safety device, in addition to two spare cartridges, and is requiring that both the safety device and spares be packed in such a manner that they cannot be accidently activated.

PHMSA is adding a new subparagraph (a)(18)(iv) to clarify that articles containing lithium metal or lithium ion cells or batteries, with a primary function to provide power to another device, must be carried as spare batteries in accordance with the provisions of this paragraph. Examples of such articles are portable power banks, portable charging stations, portable battery chargers, portable rechargers, back-up battery power stations, battery power packs, and auxiliary power sources containing lithium batteries. During the review of this provision, we found that the preceding paragraph (a)(18)(iii) was inadvertently removed in a final rule published in the **Federal Register** on August 6, 2014 (79 FR 46011; HM–224F). As a result, PHMSA is reinstating (a)(18)(iii).

PHMSA is revising paragraph (a)(24), applicable to small cartridges for other devices, by amending the phrase ''small cylinders'' to ''small cartridges,'' and restricting the carriage of small gas cartridges to only those without a subsidiary risk. The existing operator approval requirement was moved to make it more clearly align with the ICAO TI.

Section 175.25

Section 175.25 prescribes the notification that operators must provide to passengers regarding restrictions on the types of hazardous material they may or may not carry aboard an aircraft on their person or in checked or carry-on baggage. Consistent with revisions to the ICAO TI, in this final rule, PHMSA is revising paragraph (b) as follows: (1) For all ticket purchases, clarify that the hazardous materials notification must be presented at the point of ticket purchase, or if this is not practical, made available to passengers in another manner prior to the check-in process and; (2) for such internet purchases, require that the final ticket purchase cannot be completed until the passenger or a person acting on the passenger's behalf has been presented with this information, in addition to the existing requirement to indicate that they understand the restrictions on hazardous materials in baggage. PHMSA is revising paragraph (c) as follows: (1) Replace the text ''provided'' with ''presented'' to make it clear that passengers must see information on the types of hazardous material forbidden to be transported before proceeding with check-in and; (2) require that the check-in process cannot be completed until the passenger or a person acting on the passenger's behalf has been presented with the hazardous materials information, in addition to the existing requirement to indicate that they understand the restrictions on hazardous materials in baggage. It was reported that some operators published the required information in areas on a Web site that were not always visible to the passenger, believing that this met the requirement of being ''provided.''

In paragraphs (b) and (c) PHMSA is removing the present effective dates of January 1, 2015 and the word ''phone'' used as an example of a ticket purchase or check-in completed remotely. Furthermore, PHMSA is removing the words ''regardless if the process is completed remotely (*e.g.,* via the Internet and Phone) or when completed at the airport, with or without assistance from another person (*e.g.,* automated check in facility)'' in order to bring paragraph (b) into full alignment with 7;5.1.1 of the ICAO TI. By removing the examples in conjunction with other revisions to paragraph (b) it is now clear that passenger notification is required for all ticket purchases; however, for assisted ticket purchase transactions via the telephone, the hazardous materials information may be provided to the passenger using any suitable method prior to the check-in process and passenger acknowledgement is not required. These revisions represent full harmonization with the ICAO TI and additional flexibility in meeting the passenger notification requirements and, therefore, the previous effective date of January 1, 2015 is waived as of publication of the rule.

In addition, the revision is consistent with a petition for rulemaking (P–1623) filed by COSTHA since it provides clarification for ticket purchases made via the telephone, permitting the hazardous materials notification to be made available in another manner to passengers prior to the check-in process.

PHMSA received comments from Jeffery Richmond, COSTHA, and the ASTA on the proposed amendments. Jeffery Richmond and ASTA both provide general support for the amendments. Mr. Richmond notes that the changes as proposed would bring § 175.25(b) into full compliance with the ICAO TI. COSTHA also provided support for the proposed amendments, but would like to note that there is a question of how the Advisory Circular (AC) will be drafted after implementation date of the final rule. COSTHA further asked if the FAA will continue to update the circular after the final rule comes into force or if this guidance information be eliminated. Lastly, COSTHA asked if PHMSA would continue to communicate with the FAA in the future on this issue.

The FAA chartered an Aviation Rulemaking Committee (ARC), which then developed recommendations for an AC on Passenger Notification of Hazardous Materials Regulations. PHMSA notes that the referenced ARC recommendations were submitted to the FAA on November 1, 2013, and a request for comments was issued by the FAA in the **Federal Register** on March 4, 2014 (See 79 FR 12133). The ARC recommendations are considered open pending FAA review and are beyond the scope of this rulemaking. PHMSA will continue to communicate with the FAA on all matters relating to the safe transportation of hazardous materials by aircraft.

Section 175.30

Section 175.30 prescribes inspection procedures for operators. Paragraph

(e)(1) prohibits an overpack from containing a package bearing the ''CARGO AIRCRAFT ONLY'' label unless certain conditions are met and the overpack affords clear visibility of and easy access to the package contained within. In this final rule, PHMSA is removing paragraph (e)(1) consistent with revisions made to the ICAO TI in which current provisions require accessibility to the overpack when loaded aboard an aircraft, not the individual packages contained within, making reference to packages redundant. As the loading requirements in § 175.75(d)(1) require a package bearing the ''CARGO AIRCRAFT ONLY'' label to be accessible once loaded on the aircraft, but do not require that they are visible, the requirements in (e)(1) place an unnecessary burden on offerors without any additional safety function in the loading process.

Paragraph (a)(5) states that no person may accept for transportation aboard an aircraft shipments of lithium batteries described with an alternative written document authorized in § 173.185(c)(4)(v) unless the aircraft operator ensures the hazardous material is described on alternative written documentation when authorized in accordance with § 173.185(c)(4)(v). The removal of the alternative written document from § 173.185(c)(4)(v) necessitates the removal of this paragraph.

PHMSA received comments from COSTHA and UPS addressing our proposed amendments to § 175.30. COSTHA supported the removal of (e)(1) noting that this requirement is not relevant and leads to confusion. COSTHA also supported the removal of (a)(5) as the allowance of an alternate document in the HMR would create significant confusion for air carrier acceptance agents. UPS supports the amendments as proposed in the interest of global consistency.

Section 175.33

Section 175.33 establishes requirements for shipping papers and for the notification of the pilot-in-command when hazardous materials are transported by aircraft.

With the exception of package type, paragraph (a)(1)(i) currently requires any additional shipping paper description requirements provided in §§ 172.202, and 172.203 to be included on the notification of the pilot-in-command. Section 172.203(k) requires the use of technical names for ''n.o.s.'' and generic descriptions for proper shipping names identified by the letter ''G'' in column (1) of the § 172.101 Table. In this final rule, PHMSA is revising paragraph (a)(1)(i) to state that technical names are not required to be provided on the notification of pilot-in-command. This clarification aligns the HMR with changes adopted in the ICAO TI and supports the overall goal of harmonization. Harmonization of the notification of pilot-in-command requirements ensures consistency across all air operators thus reducing impediments in commerce and reducing costs associated with training to two different sets of standards. In addition, the technical name is not referenced in the Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods (Doc 9481) or the North American Emergency Response Guidebook (ERG). The ICAO panel determined that the technical names provided little benefit to safety, particularly during the initial stage of emergency response while the number of materials requiring a technical name is on the rise, thereby increasing the burden on operators to provide this information. In addition, the technical name is not referenced in the Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods (Doc 9481) or the North American Emergency Response Guidebook (ERG).

Paragraphs (a)(12) and (c)(5) both mention the alternative written document authorized in § 173.185(c)(4)(v). The removal of the alternative written document from § 173.185(c)(4)(v) necessitates the removal of these paragraphs. Any information required to be a part of the notification of the pilot-in-command previously under paragraph (a)(12) will be detailed on a shipping paper and be included on the notification of the pilot-in-command.

PHMSA received two comments concerning our proposed amendments to § 175.33. COSTHA and UPS support the removal of the technical name from the notification of pilot-in-command requirements.

Section 175.630

Section 175.630 prescribes special requirements for Division 6.1 (Toxic) and 6.2 (Infectious) materials in the HMT. Consistent with revisions to the ICAO TI, in this final rule, PHMSA is removing paragraph (a) which prescribes segregation requirements for certain Division 6.1 or Division 6.2 materials in the same compartment of an aircraft with material marked as or known to be a foodstuff, feed, or any other edible material intended for consumption by humans or animals. At the time these segregation requirements were initially included in the ICAO TI and the HMR, the packing instructions were much less detailed than they are at present. The UN Model Regulations do not impose segregation requirements for Division 6.2 infectious substances. The segregation requirements for infectious substances under the ICAO TI and HMR only apply to UN2814 and UN2900 which already require robust triple packagings. For Division 6.1, the UN Recommendations allow the segregation requirements to be relaxed for substances in Packing Groups II and III, provided the competent authority is satisfied that the packing and segregation are adequate to prevent contamination. In addition, the inspection procedures prescribed in § 175.30 require a physical check to ensure that the packagings are free from damage. The revisions adopted in this final rule are consistent with a petition for rulemaking (P–1631) filed by UPS, Inc., who voiced strong support for such action.

PHMSA received comments from COSTHA, DGAC, and UPS concerning our proposed removal of the segregation requirement. Both COSTHA and UPS support this proposal. DGAC commented that authorizing materials identified as Division 6.1 or 6.2 to be loaded in the same compartment as materials known to be food or foodstuffs may have a disruptive and underappreciated effect on companies that must operate under Food Safety Management Systems. The possibility of mixed loads of food products and Class 6 materials will require a re-evaluation of Hazard Analysis and Critical Control Point (HACCP) plans for companies shipping food in the air mode. PHMSA has reviewed the removal of the segregation requirement with regard to the effect on HACCP plans and has determined that the removal of § 175.630(a) is suitable for incorporation as proposed. To ensure consumers do not get sick, an HACCP plan requires companies shipping food to identify critical control points and establish safety protocols. These critical control points include transportation and transportation related activities such as temperature control during transit, storage, loading, unloading and physical security. Our review has determined that HACCP plan requirements are not specific to any particular hazardous material class when properly packaged in accordance with the HMR or corresponding international standard.

Section 175.705

Section 175.705 prescribes requirements for aircraft that have been contaminated with radioactive material and the procedures that must be

followed prior to returning the aircraft to service. Consistent with revisions to the ICAO TI, in this final rule, PHMSA is revising paragraph (c) by stating that the dose rate at every accessible surface ''must not exceed'' 0.005 mSv per hour, where it presently states ''is less than.''

Part 176

Section 176.80

Section 176.80 details segregation requirements in addition to any segregation requirements set forth elsewhere in subchapter C. In this final rule, PHMSA is adopting a prohibition on stowing goods of Division 1.4, compatibility group S, in the same compartment, hold, or cargo transport unit with hazardous materials of Class 1 of compatibility groups A and L. Limited quantity shipments are currently excepted from segregation requirements for vessel transport by both the IMDG Code and the HMR. The IMO noted that when creating this exception, a long standing prohibition on stowing limited quantity goods of Division 1.4, compatibility group S, in the same compartment, hold, or cargo transport unit with hazardous materials of Class 1, compatibility groups A and L, was not carried over into amendment 36–12 of the IMDG Code. Amendment 37–14 of the IMDG Code reinstates these segregation provisions, and PHMSA is adopting an equivalent change.

Section 176.83

Section 176.83 details segregation requirements for hazardous materials vessel transport. Paragraph (b) includes a table for users to determine segregation requirements between various Classes (Divisions) of hazardous materials. In this final rule, PHMSA is amending the segregation requirements for vessel transportation between hazardous materials of Class 4.3 (dangerous when wet) and Class 2.1 (flammable gas), and Class 3 (flammable liquid). Changes in the segregation table in paragraph (b) are to change the segregation requirements between goods of Class 4.3 and Class 2.1 from an ''x'' (segregation, if any, is shown in the § 172.101 table) to a ''2'' (separated from), and between goods of Class 4.3 and Class 3 from a ''1'' (away from) to a ''2'' (separated from). The meaning of these terms differs depending on the method of transport onboard a vessel (shipping break-bulk cargo versus segregation of cargo transport units on board container vessels). PHMSA assumes the majority of commodities transported by vessel that will be affected are offered in closed cargo transport units (CTU).

The segregation changes adopted in this final rule are based on amendments adopted by the IMO and are aimed at enhancing efforts to prevent the spread of fire in an emergency situation. Fire extinguishing methods available to vessel crews are often quite limited. Due to these limited fire extinguishing options, the only recommended option to control the consequences of a fire originating from these goods is to let the fire burn and to prevent the spread of fire to other cargo or equipment which is crucial for the safe operation of the ship. These changes are intended to address situations where a fire originates in a shipment of flammable liquids or gases and is likely to spread to goods which cannot be extinguished, or when a fire originates in goods which cannot be extinguished and threatens to spread to highly flammable goods. The new segregation distances will enhance efforts to control the emergency situation.

PHMSA received one comment from IVODGA fully supporting the amendments as proposed.

Section 176.84

Section 176.84 prescribes the meanings and requirements for numbered or alpha-numeric stowage provisions for vessel shipments listed in column 10B of the § 172.101 Hazardous Materials Table. The provisions in § 176.84 are broken down into general stowage provisions whose meanings are defined in the ''table of provisions'' in paragraph (b), and the stowage provisions applicable to vessel shipments of Class 1 explosives, which are defined in the table to paragraph (c)(2).

In this final rule, PHMSA is amending the title of the section to note that the codes in column 10B address not only codes for stowage requirements, but also handling requirements that need to be observed during loading of the hazardous materials. PHMSA is also creating footnote 3 and assigning it to stowage provision 12 and 13. Footnote 3 is added to note that these provisions apply not only to stowage of the cargo transport unit, but also to the loading of hazardous materials into the cargo transport unit.

PHMSA is additionally creating new stowage provisions 147 and 148 consistent with changes adopted in Amendment 37–14 of the IMDG Code. Stowage provision 147 is adopted to read ''Stow ''separated from'' flammable gases and flammable liquids.'' Stowage provision 148 is adopted to read ''In addition: from flammable gases and flammable liquids when stowed on deck of a containership a minimum distance of two container spaces athwartship shall be maintained, when stowed on ro-ro ships a distance of 6 m athwartship shall be maintained.''

Section 176.905

Section 176.905 prescribes specific requirements for motor vehicles or mechanical equipment powered by internal combustion engines that are offered for transportation and transported by vessel. In this final rule, PHMSA is proposing to align our exceptions with those recently adopted by the IMO.

PHMSA is amending paragraphs (i)(1), (i)(2), (i)(4), and (i)(5) to require as a condition of exception from the subchapter that batteries installed in motor vehicles or mechanical equipment powered by internal combustion engines be protected from short circuit. PHMSA is also revising paragraph (i)(2), which provides conditions that must be met for vehicles or mechanical equipment with an internal combustion engine that uses liquid fuel with a flashpoint of 38 °C (100 °F) or higher. Currently up to 418 L (110 gallons) may remain in the equipment or vehicle, and if other noted conditions are met the vehicle is excepted from all other requirements of subchapter C. PHMSA is raising this fuel threshold to 450 L (119 gallons).

PHMSA is adding paragraph (i)(6) to add exceptions for fuel cell powered vehicles or mechanical equipment with an internal combustion engine powered by fuel cells. When the engine is protected from inadvertent operation by closing fuel supply lines or by other means, and the fuel supply reservoir has been drained and sealed, the vehicle or mechanical equipment is excepted from the requirements of subchapter C.

PHMSA received one comment from IVODGA fully supporting the proposed changes to § 176.905 and relevant exceptions as well as the proposed clarifications as presented. IVODGA noted that ''by requiring the batteries to be protected from short circuiting, and to increase the amount of fuel to the maximum of 119 liters would effectively create a uniform standard and eliminate frustrated shipments where prior differences created different requirements.''

Part 178

Section 178.71

Consistent with the UN Model Regulations, in this final rule PHMSA is revising paragraph (a) to clarify that UN pressure receptacles and service equipment constructed according to the standards applicable at the date of

manufacture may continue in use subject to the continuing qualification and maintenance provisions of part 180 of the subchapter.

PHMSA is revising paragraphs (d)(2), (g), and (k) to reflect the adoption of the latest ISO standards for the design, construction, and testing of gas cylinders and their associated service equipment. These paragraphs also contain end dates when cylinders and service equipment are no longer authorized to be manufactured in accordance with the outdated ISO standard. PHMSA received one comment from Sally Mitchell questioning the accuracy of the statement in § 178.71(d)(2), ''Until December 31, 2008, the manufacture of a valve conforming to the requirements in ISO 10297:1999 (IBR, see § 171.7 of this subchapter) is authorized.'' This statement is accurate and consistent with the language contained in the UN Model Regulations to authorize valves that were manufactured prior to January 1, 2009 and conform with the requirements of ISO 10297:1999. Sally Mitchell also suggested revising § 178.71(g)(1), (g)(2) and (g)(3) to permit the continued manufacture of a cylinder conforming to the requirements of the applicable the 1999 publication of ISO 9809–1 and the 2000 publication of ISO 9809–2 and 9809–3 until the later of December 31, 2018 or 10 years from the initial DOT design approval to allow manufacturers to recover their type approval expenses over the 10 year life of the approval instead of just 4 years. PHMSA does not believe this change is necessary, as a design approval is independent of the regulations and is authorized for the valid life of the approval regardless of the limitations imposed by the regulations.

Consistent with the UN Model Regulations PHMSA is adding a new paragraph (n) and redesignating existing paragraphs (n) through (s). The new paragraph (n) adopts design and construction requirements of UN cylinders for the transportation of adsorbed gases, consistent with those adopted into the UN Model Regulations.

Consistent with the UN Model Regulations, PHMSA is revising the redesignated paragraph (o) to adopt the current ISO standards relating to material compatibility.

Paragraphs (r) and (t) are being revised to change references to paragraph (p) to the newly redesignated paragraph (q).

Finally, PHMSA is adding new paragraphs (u) and (v) to adopt the marking requirements for bundles of cylinders that have been adopted in the UN Model regulations.

Section 178.75

Consistent with the UN Model Regulations, PHMSA is revising paragraph (d)(3) to reflect the adoption of the latest ISO standards for the design, construction, and testing of gas cylinders that are part of multiple-element gas containers (MEGCs). This paragraph also contains end dates when the cylinders that are part of MEGCs are no longer authorized to be manufactured in accordance with the outdated ISO standard.

Section 178.703

The UN Model Regulations have adopted revisions to clarify and standardize the specifications for markings, including the marking of IBCs, and to promote the uniformity of markings throughout the international transportation community. In this final rule, PHMSA is revising the specifications for the markings prescribed in § 178.703(b)(7)(iii) to be consistent with the UN Model Regulations. Also consistent with the UN Model Regulations, a transitional period is being proposed to authorize markings in conformance with the requirements of this paragraph in effect on December 31, 2014, to continue to be applied to all IBCs manufactured, repaired or remanufactured between January 1, 2011 and December 31, 2016. For domestic transportation, we are authorizing an IBC marked prior to January 1, 2017 and in conformance with the requirements of the regulations in effect on December 31, 2014, to continue in service until the end of its useful life.

PHMSA received one comment from RIPA providing general support for the amended IBC stacking or not designed for stacking marking specifications. RIPA did however recommend PHMSA extend the requirement to mark IBCs with the stacking or not designed for stacking mark to include IBC's undergoing routine maintenance. Currently the HMR requires this marking to be applied to all IBCs manufactured, repaired, or remanufactured prior to January 1, 2011. The amendments proposed in the NPRM were consistent with those adopted by international standards. Expanding the marking requirement to IBCs undergoing routine maintenance was not the intent of this regulatory amendment and would be inconsistent with the requirements of the international standards.

Section 178.910

In this final rule, PHMSA is revising paragraph (a) relating to the marking of large packagings to include markings for large salvage packagings. Following the large packaging design type identification code on a large packaging, a large salvage packaging conforming to the requirements of subpart P of part 178 is to be marked with the letter ''T.'' This change is consistent with the UN Model Regulations.

In addition, to promote the uniformity of markings throughout the international transportation community, the UN Model Regulations have adopted revisions to clarify and standardize the specifications for markings, including the marking of large packagings and large salvage packaging. In this final rule, PHMSA is revising the specifications for the markings prescribed in § 178.910(b). Also consistent with the UN Model Regulations, we are adopting a transitional period to authorize markings in conformance with the requirements of this paragraph in effect on December 31, 2014, to continue to be applied to all large packagings manufactured, repaired or remanufactured between January 1, 2015 and December 31, 2016. For domestic transportation, we are authorizing a large packaging marked prior to January 1, 2017 and in conformance with the requirements of the regulations in effect on December 31, 2014, to continue in service until the end of its useful life.

Part 180

Section 180.207

Section 180.207 prescribes the requirements for requalification of UN pressure receptacles. Table 1 in paragraph (c) of § 180.207 provides requalification intervals for UN pressure receptacles. In this final rule, PHMSA is adding an additional entry to the end of Table 1 to prescribe a requalification interval of 5 years for UN culinders used for adsorbed gases. This requalification period is consistent with the requalification period adopted in the UN Model Regulations for the use of these cylinders. Section 173.302c relating to authorization for the use of cylinders for adsorbed gases directs the reader to this section for the requalification period for these cylinders.

A new paragraph (d)(5) provides that each UN cylinder used for adsorbed gases must be inspected and tested in accordance with § 173.302c and ISO 11513:2011. Both § 173.302c and ISO 11513:2011 have been addressed in this final rule.

VI. Regulatory Analyses and Notices

A. Statutory/Legal Authority for This Rulemaking

This final rule is published under the following statutory authorities:

1. 49 U.S.C. 5103(b) authorizes the Secretary of Transportation to prescribe regulations for the safe transportation, including security, of hazardous materials in intrastate, interstate, and foreign commerce. This final rule amends regulations to maintain alignment with international standards by incorporating various amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations and vessel stowage requirements. To this end, the final rule amends the HMR to more fully align with the biennial updates of the UN Model Regulations, the IMDG Code and the ICAO TI.

Harmonization serves to facilitate international commerce and promotes the safety of people, property, and the environment by reducing the potential for confusion and misunderstanding that could result if shippers and transporters were required to comply with two or more conflicting sets of regulatory requirements. While the intent of this rulemaking is to align the HMR with international standards, we review and consider each amendment on its own merit based on its overall impact on transportation safety and the economic implications associated with its adoption into the HMR. Our goal is to harmonize without sacrificing the current HMR level of safety and without imposing undue burdens on the regulated community. Thus, as explained in the corresponding sections above, we are not harmonizing with certain specific provisions of the UN Model Regulations, the IMDG Code, and the ICAO TI. Moreover, we are maintaining a number of current exceptions for domestic transportation that should minimize the compliance burden on the regulated community. Additionally, the U.S. Coast Guard, U.S. Department of Energy, and U.S. Department of Interior were consulted in the development of this rule.

2. 49 U.S.C. 5120(b) authorizes the Secretary of Transportation to ensure that, to the extent practicable, regulations governing the transportation of hazardous materials in commerce are consistent with standards adopted by international authorities. This final rule is amending the HMR to maintain alignment with international standards by incorporating various amendments to facilitate the transport of hazardous material in international commerce. As discussed in detail above, PHMSA is incorporating changes into the HMR based on the 18th Revised Edition of the UN Model Regulations, Amendment 37–14 to the IMDG Code, and the 2015–2016 Edition of the ICAO TI, which becomes effective January 1, 2015. The large volume of hazardous materials transported in international commerce warrants the harmonization of domestic and international requirements to the greatest extent possible.

B. Executive Orders 12866 and 13563 and DOT Regulatory Policies and Procedures

This final rule is not considered a significant regulatory action under section 3(f) of Executive Order 12866 (''Regulatory Planning and Review'') and, therefore, was not reviewed by the Office of Management and Budget. This final rule is not considered a significant rule under the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034). Additionally, E.O. 13563 (''Improving Regulation and Regulatory Review'') supplements and reaffirms E.O. 12866, stressing that, to the extent permitted by law, an agency rulemaking action must be based on benefits that justify its costs, impose the least burden, consider cumulative burdens, maximize benefits, use performance objectives, and assess available alternatives.

Benefits to Harmonization

In an earlier regulatory evaluation,[3] we estimated a proxy for benefits of harmonization of the HMR with international standards of $62 million. More specifically, this $62 million was estimated by multiplying a hazard communication cost per dollar of hazardous materials output—$0.001—by the value of hazardous materials involved in international trade, as estimated by the proportion of trade (the total of gross imports and gross exports) in the fuels and lubricants, chemicals, and medicinal/dental/pharmaceutical products industries ($498 billion in 2010)[4] that are hazardous products (*i.e.,* 12.4 percent).[5] [6]

For estimating benefits of this final rule, we follow a nearly identical approach with updated data and using assumptions where possible. 2012 Commodity Flow Survey data on hazardous materials are not yet available as of the date of this regulatory evaluation.

The 12.4 percent proportion of total shipment values classed as hazardous materials estimated in the earlier regulatory evaluation may have had a high-side bias due to the variety of different classes of products classified as hazardous. In actuality, the percentage of shipments properly classified as hazardous is likely lower, particularly for medicinal/dental/pharmaceuticals. Here, we assume a slightly lower proportion to arrive at an estimate of benefits of 10 percent.

We update our estimate of value of hazardous materials involved in international trade by using U.S. Trade in Goods seasonally adjusted, Census-based total gross imports and gross exports in the fuels and lubricants, chemicals, and medicinal/dental/pharmaceutical products industries for the fourth quarter of 2013, the most recent quarter available—

- Gross imports: $134 billion (rounded)
  - Fuels and lubricants: $94.744 billion
  - Chemicals: $18.637 billion
  - Medicinal/dental/pharmaceutical products: $20.613 billion
- Gross exports: $85.8 billion (rounded)
  - Fuels and lubricants: $44.301 billion
  - Chemicals: $30.089 billion
  - Medicinal/dental/pharmaceutical products: $11.416 billion
- Gross imports plus gross exports: $219.8 billion[7]

Multiplying the quarterly estimate of $219.8 billion by 4 gives an annual estimate of gross imports plus gross exports in the three industries of $879.2 billion. Multiplying this figure by 10 percent (the estimated proportion of annual trade in these three industries that are hazardous products) by the average hazard communication cost per dollar of hazardous materials produced in the United States ($0.001) results in an estimate of benefits from adoption and incorporation of international standards of $87.9 million (rounded) annually.

If U.S. regulations are not harmonized with international standards, we estimate that it will cost U.S. companies an additional $87.9 million per year to comply with both the HMR and the

[3] HM–215L: Hazardous Materials: Harmonization with International Standards (RRR), Final Rule, Section V.B., 78 FR 1023 *et seq.,* January 7, 2013.

[4] As reported in the quarterly trade data of the U.S. Bureau of Economic Analysis, available at: *http://www.bea.gov/international/detailed_trade_data.htm.*

[5] U.S. Census Bureau's 2007 Commodity Flow Survey, Table 10.

[6] See Section V.B. for more detailed calculations of these figures.

[7] Bureau of Economic Analysis, U.S. Department of Commerce, U.S. Trade in Goods (IDS–0008), available at: *http://www.bea.gov/international/detailed_trade_data.htm.*

international standards. Harmonizing the HMR with the international standards, however, will avert these $87.9 million in additional costs, and these averted costs are therefore considered the primary benefit attributable to this rulemaking.

Costs of Harmonization. The primary cost of updating references in the U.S. HMR (to incorporate the most recent international hazardous material standards) is the purchase of updated copies of the international standards being incorporated by reference in the HMR. These costs will be borne by offerors and transporters of hazmat if this rulemaking were finalized.

It is unknown how many individuals and firms involved in shipping hazmat will purchase copies of these international standards as a result of finalizing this rulemaking. We take a conservative approach to estimating such a figure by using the number of shippers, carriers, or other offerors or transporters of hazmat in commerce with a PHMSA registration expiring in 2014 as a proxy. Currently, PHMSA's registration database indicates 36,731 registrants as of May 20, 2014.[8] Of these, 29,877 (approximately 81 percent) are small businesses as defined by the U.S. Small Business Administration. Further, 31,598 registrants (approximately 86 percent) indicated that they offer or transport hazmat solely by highway.

For conservative estimation purposes, if we that all registrants will purchase copies of all publications, this indicates an estimated cost of this amendment of $56.68 million (rounded, $1,543 cost of all publications * 36,731 registrants). In reality, all of the ISO standards incorporated will not be purchased by the majority of shippers and carriers, and will likely only impact a small subset of the regulated community. Further, it is likely that many companies will purchase multiple copies of the IMDG Code and ICAO TI, rather than only one copy. We do not believe we have sufficient data to estimate the precise number of registrants. However, we use one copy per registrant as a reasonably conservative estimate on costs of the proposed rulemaking.

However, further assuming that those who indicated that they offer or transport in commerce hazmat only via highway, two publications included in the $1,543 cost will not apply to such registrants (ICAO TI [for air] and IMDG Code [by vessel]). Therefore, costs for the 31,598 highway-only registrants would total $32.99 million ($1,543—$155 [ICAO TI]—$344 [IMDG Code] * 31,598 highway-only registrants). Conservatively (*i.e.,* overestimating costs and underestimating benefits) assuming all other registrants (while acknowledging that, in fact, some will purchase all standards copies and some will purchase none) will purchase updated copies of all standards publications listed here indicates a total cost of this Amendment 1 of $40.91 million, incurred once ($32.99 million + $1,543 * [36,731 total registrants—31,598 highway-only registrants], rounded).

Net Benefit. Based on the discussions of benefits and costs provided above, the estimated net benefit associated with the international harmonization final rule (2137–AF05) is $47 million in the first year after publication and $87.9 million in the second year after publication. Please see the complete regulatory analysis, a copy of which has been placed in the docket for this rulemaking, for a more detailed analysis of the costs and benefits of this final rule.

C. Executive Order 13132

This final rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13132 (''Federalism''). This final rule preempts State, local and Indian tribe requirements but does not propose any regulation that has substantial direct effects on the States, the relationship between the national government and the States, or the distribution of power and responsibilities among the various levels of government. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

The Federal hazardous material transportation law, 49 U.S.C. 5101–5128, contains an express preemption provision (49 U.S.C. 5125(b)) that preempts State, local and Indian tribe requirements on certain covered subjects, as follows:

(1) The designation, description, and classification of hazardous material;

(2) The packing, repacking, handling, labeling, marking, and placarding of hazardous material;

(3) The preparation, execution, and use of shipping documents related to hazardous material and requirements related to the number, contents, and placement of those documents;

(4) The written notification, recording, and reporting of the unintentional release in transportation of hazardous material; and

(5) The design, manufacture, fabrication, inspection, marking, maintenance, recondition, repair, or testing of a packaging or container represented, marked, certified, or sold as qualified for use in transporting hazardous material in commerce.

This final rule addresses covered subject items (1), (2), (3), (4) and (5) above and preempts State, local, and Indian tribe requirements not meeting the ''substantively the same'' standard. This final rule is necessary to incorporate changes adopted in international standards, effective January 1, 2015. If the changes in this final rule are not adopted in the HMR, U.S. companies, including numerous small entities competing in foreign markets, would be at an economic disadvantage. These companies would be forced to comply with a dual system of regulations. The changes in this final rulemaking are intended to avoid this result. Federal hazardous materials transportation law provides at 49 U.S.C. 5125(b)(2) that, if DOT issues a regulation concerning any of the covered subjects, DOT must determine and publish in the **Federal Register** the effective date of Federal preemption. The effective date may not be earlier than the 90th day following the date of issuance of the final rule and not later than two years after the date of issuance. PHMSA is setting the effective date of Federal preemption to be 90 days from publication of this final rule.

D. Executive Order 13175

This final rule was analyzed in accordance with the principles and criteria contained in Executive Order 13175 (''Consultation and Coordination with Indian Tribal Governments''). Because this final rule does not have tribal implications, does not impose substantial direct compliance costs, and is required by statute, the funding and consultation requirements of Executive Order 13175 do not apply.

E. Regulatory Flexibility Act, Executive Order 13272, and DOT Procedures and Policies

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires an agency to review regulations to assess their impact on small entities, unless the agency determines that a rule is not expected to have a significant impact on a substantial number of small entities. This final rule facilitates the transportation of hazardous materials in international commerce by providing consistency with international standards. This final rule applies to offerors and carriers of hazardous materials, some of whom are small entities, such as chemical manufacturers, users and suppliers,

[8] See PHMSA Hazardous Materials Registration Program Registration Data Files, link available at *http://www.phmsa.dot.gov/hazmat/registration*, accessed on May 20, 2014.

packaging manufacturers, distributors, and training companies. As discussed above, under *Executive Order 12866,* the majority of amendments in this final rule should result in cost savings and ease the regulatory compliance burden for shippers engaged in domestic and international commerce, including trans-border shipments within North America.

Many companies will realize economic benefits as a result of these amendments. Additionally, this final rule will relieve U.S. companies, including small entities competing in foreign markets, from the burden of complying with a dual system of regulations. Therefore, we certify that these amendments will not have a significant economic impact on a substantial number of small entities.

This final rule has been developed in accordance with Executive Order 13272 (''Proper Consideration of Small Entities in Agency Rulemaking'') and DOT's procedures and policies to promote compliance with the Regulatory Flexibility Act to ensure that potential impacts of draft rules on small entities are properly considered.

F. Paperwork Reduction Act

PHMSA currently has approved information collection under Office of Management and Budget (OMB) Control Number 2137–0034, ''Hazardous Materials Shipping Papers and Emergency Response Information.'' We anticipate that this final rule will result in an increase in the annual information collection burden due to an increase in the number of shipping papers prepared for packages containing batteries that exceeds the number or quantity (mass) limits in the table shown in § 173.185(c)(4), but containing no more than 2.5 kg of lithium metal cells or batteries or 10 kg of lithium ion cells or batteries per package. Shipments utilizing this allowance currently provide alternative documentation containing the name and address of the offeror and consignee, the UN number, an indication of compliance with this paragraph (c)(4) (or the applicable ICAO Packing Instruction), and the number of packages and the gross mass of each package.

This rulemaking identifies a revised information collection that PHMSA will submit to OMB for approval based on the requirements in this final rule. PHMSA has developed burden estimates to reflect changes in this final rule, and estimates the information collection and recordkeeping burden in this rule are as follows:

OMB Control Number: 2137–0034.

Annual Increase in Number of Respondents: 150.

Annual Increase in Annual Number of Responses: 13,167.

Annual Increase in Annual Burden Hours: 219.

Annual Increase in Annual Burden Costs: $4,380.

PHMSA will submit the revised information collection and recordkeeping requirements to OMB for approval.

G. Regulation Identifier Number (RIN)

A regulation identifier number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN contained in the heading of this document can be used to cross-reference this action with the Unified Agenda.

H. Unfunded Mandates Reform Act

This final rule does not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. It does not result in costs of $141.3 million or more, adjusted for inflation, to either State, local, or tribal governments, in the aggregate, or to the private sector in any one year, and is the least burdensome alternative that achieves the objective of the rule.

I. Environmental Assessment

The National Environmental Policy Act, 42 U.S.C. 4321–4375, requires that federal agencies analyze actions to determine whether the action will have a significant impact on the human environment. The Council on Environmental Quality (CEQ) regulations require federal agencies to conduct an environmental review considering: (1) The need for the action; (2) alternatives to the action; (3) probable environmental impacts of the action and alternatives; and (4) the agencies and persons consulted during the consideration process. 40 CFR 1508.9(b).

Description of Action

Docket No. PHMSA–2013–0260 (HM–215M), Final Rule. The transportation of hazardous materials in commerce is subject to the HMR, issued under authority of Federal hazardous materials transportation law, codified at 49 U.S.C. 5001 *et seq.* To facilitate the safe and efficient transportation of hazardous materials in international commerce, the HMR provides that both domestic and international shipments of hazardous materials may be offered for transportation and transported under provisions of the international regulations.

Purpose and Need

This action is necessary to integrate into the HMR recent changes to the International Maritime Dangerous Goods Code (IMDG Code), the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI), and the United Nations Recommendations on the Transport of Dangerous Goods—Model Regulations (UN Model Regulations) effective January 1, 2015. If the changes in this final rule are not adopted in the HMR by this effective date, U.S. companies, including numerous small entities competing in foreign markets, would be at an economic disadvantage. These companies would be forced to comply with a dual system of transport regulations that could result in shippers and carriers segmenting domestic and international operations to accommodate differing requirements. The changes to the HMR contained in this rulemaking are intended to avoid this result.

The intended effect of this action is to align the HMR with international hazardous material transport standards and requirements to the extent practicable in accordance with Federal Hazardous Materials transportation law (49 U.S.C. 5210). When considering the adoption of international hazardous material standards under the HMR, PHMSA reviews and evaluates each amendment on its own merit, on the basis of its overall impact on transportation safety, and the economic implications associated with its adoption into the HMR. Our goal is to harmonize without diminishing the level of safety currently provided by the HMR and without imposing undue burdens on the regulated public.

In this final rule, PHMSA is amending the HMR to maintain alignment with international standards by incorporating various amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations, and vessel stowage requirements. These revisions are necessary to harmonize and align the HMR with recent amendments adopted in the UN Model Regulations, IMDG Code, and the ICAO TI. The amendments in this final rule are intended to facilitate the safe and efficient transportation of hazardous materials in international commerce, provide clarity to encourage and increase regulatory compliance, and improve the efficacy of emergency

response in the event of a hazardous materials incident.

Alternatives

In developing this rule, we considered the following alternatives:

No Action Alternative

If PHMSA chose this alternative, it would not proceed with any rulemaking on this subject and the current regulatory standards would remain in effect.

Preferred Alternative

This alternative is the current rule as it appears in this final rule, applying to the transportation of hazardous materials by various transport modes (highway, rail, vessel and aircraft). The amendments included in this alternative are more fully addressed in the preamble and regulatory text sections of this final rule. However, they generally include:

(1) Updates to references to various international hazardous materials transport standards;

(2) Amendments to the hazardous materials table to add, revise, or remove certain proper shipping names, packing groups, special provisions, packaging authorizations, bulk packaging requirements and vessel stowage requirements;

(3) Amendments to add and delete various substances to the list of marine pollutants in Appendix B to § 172.101;

(4) Changes throughout the Part 173 packaging requirements to authorize more flexibility when choosing packages for hazardous materials;

(5) An exception from the HMR for marine pollutants up to 5 liters (1.3 gallons) for liquids or 5 kg (11 pounds) for solids when these materials are packaged in accordance with the general packaging requirements of §§ 173.24 and 173.24a;

(6) Minimum sizes for the OVERPACK and SALVAGE markings; and;

(7) Revisions and additions to vessel stowage codes listed in column 10B of the HMT and segregation requirements in § 176.83 consistent with the IMDG Code.

No Action Alternative

If PHMSA had selected the No Action Alternative, current regulations would remain in place, and no new provisions would be added. However, efficiencies gained through harmonization in updates to transport standards, lists of regulated substances, definitions, packagings, stowage requirements/codes, flexibilities allowed, enhanced markings, and segregation requirements would not be realized. Foregone efficiencies in the No Action Alternative include freeing up limited resources to concentrate on vessel transport hazard communication (hazcom) issues of potentially much greater environmental impact.

Additionally, the Preferred Alternative encompasses enhanced and clarified regulatory requirements, which would result in increased compliance and fewer environmental and safety incidents. Not adopting the proposed environmental and safety requirements in the final rule under the No Action Alternative would result in a lost opportunity for reducing environmental and safety-related incidents.

Greenhouse gas emissions would remain the same under the No Action Alternative.

Preferred Alternative

PHMSA selected the preferred alternative. Potential environmental impacts of each proposed amendment in the preferred alternative are discussed below:

1. *Updates to references to various international hazardous materials transport standards, including the 2015–2016 Edition of the ICAO TI; Amendment 37–14 to the IMDG Code; the 18th Revised Edition of the UN Model Regulations; Amendment 2 to the 5th revised edition of the UN Manual of Tests and Criteria; incorporation by reference of the Canadian Transportation of Dangerous Goods Regulations to include amendments through Amendment 11 (SOR/2012–245) December 5, 2012 and; adding two new references standards and update four other references to standards applicable to the manufacture, use, and requalification of pressure vessels published by the International Organization for Standardization:*

The HMR authorize shipments prepared in accordance with the ICAO TI and transported by motor vehicle either before or after being transported by aircraft. Similarly, the HMR authorize shipments prepared in accordance with the IMDG Code if all or part of the transportation is by vessel. The authorizations to use the ICAO TI and the IMDG code are subject to certain conditions and limitations outlined in part 171 subpart C. PHMSA believes that this adopted amendment, which will increase standardization and consistency of regulations, will result in greater protection of human health and the environment. Consistency between U.S. and international regulations enhances the safety and environmental protection of international hazardous materials transportation through better understanding of the regulations, an increased level of industry compliance, the smooth flow of hazardous materials from their points of origin to their points of destination, and consistent emergency response in the event of a hazardous materials incident.

Enhanced environmental protection will also be achieved through more targeted and effective training. This adopted amendment will eliminate inconsistent hazardous materials regulations, which hamper compliance training efforts. For ease of compliance with appropriate regulations, air and vessel carriers engaged in the transportation of hazardous materials generally elect to comply with the ICAO TI and IMDG Code as appropriate. By maintaining consistency between these international regulations and the HMR, shippers and carriers are able to train their hazmat employees in a single set of requirements for classification, packaging, hazard communication, handling, stowage, etc., thereby minimizing the possibility of improperly preparing and transporting a shipment of hazardous materials because of differences between domestic and international regulations.

Greenhouse gas emissions would remain the same under this amendment.

2. *Amendments to the HMT to add, revise, or remove certain proper shipping names, packing groups, special provisions, packaging authorizations, bulk packaging requirements and vessel stowage requirements:*

PHMSA believes that this amendment, which will increase standardization and consistency of regulations, will result in greater protection of human health and the environment. Consistency between U.S. and international regulations enhances the safety and environmental protection of international hazardous materials transportation through better understanding of the regulations, an increased level of industry compliance, the smooth flow of hazardous materials from their points of origin to their points of destination, and consistent emergency response in the event of a hazardous materials incident. New and revised entries to the HMT reflect emerging technologies, and a need to better describe or differentiate between existing entries. These changes mirror changes in the Dangerous Goods list of The 18th Revised Edition of the UN Model Regulations, the 2015–2016 Edition of the ICAO TI and the 37–14 amendments to the IMDG Code. It is extremely important for the domestic HMR to mirror the UN Model Regulations, the ICAO TI, and the IMDG Code with respect to the entries in the

HMT to ensure consistent naming conventions across modes and international borders.

Enhanced environmental protection will also be achieved through more targeted and effective training. This amendment will eliminate inconsistent hazardous materials regulations, which hamper compliance training efforts. For ease of compliance with appropriate regulations, international carriers engaged in the transportation of hazardous materials by vessel generally elect to comply with the IMDG Code. By maintaining consistency between these international regulations and the HMR, shippers and carriers are able to train their hazmat employees in a single set of requirements for classification, packaging, hazard communication, handling, stowage, etc., thereby minimizing the possibility of improperly preparing and transporting a shipment of hazardous materials because of differences between domestic and international regulations.

The packing group assignment reflects a degree of danger associated with a particular material and identifies appropriate packaging. However, assignment of a packing group is not appropriate in all cases (*e.g.* explosives, gases, radioactive material). In such cases the packing group does not indicate a degree of danger and the packaging requirements for those materials are specified in the appropriate section in part 173. Similarly for articles, the packing group only reflects the degree of the danger posed by the hazardous component, but may not reflect danger of the article itself, which may be substantially reduced or changed when compared to shipping the hazardous component alone. Currently and without specific rationale, some articles are assigned packing groups while others are not. The inconsistent application of packing groups to articles can create problems for trainers when trying to explain regulatory structure to students. This change provides a level of consistency for all articles specifically listed in the HMT, without diminishing environmental protection and safety.

For adsorbed gases, PHMSA is adding into the HMR a definition, HMT entries, authorized packagings and safety requirements including but not limited to quantity limitations and filling limits. PHMSA believes that this amendment will result in greater protection of human health and the environment by facilitating the safe and efficient transport of gases adsorbed onto a porous media within cylinders. This technology allows the cylinder to be filled and transported with gas at sub-atmospheric pressure. Sub-atmospheric transport of gas minimizes potential leaks of gas during transportation, thus providing significant safety and environmental improvements over traditional high-pressure cylinders. This method of transporting gas is a proven safe method authorized through a PHMSA special permit for over ten years and recently adopted into the UN Model Regulations, the ICAO TI and the IMDG Code.

Greenhouse gas emissions would remain the same under this amendment.

3. *Additions and deletions of various substances to/from the list of Marine Pollutants in HMR, Appendix B to 172.101:*

As for the above amendments, PHMSA believes that this amendment, which will increase standardization and consistency of regulations, will result in greater protection of human health and the environment. Consistency between U.S. and international regulations enhances the safety and environmental protection of international hazardous materials transportation through better understanding of the regulations, an increased level of industry compliance, the smooth flow of hazardous materials from their points of origin to their points of destination, and consistent emergency response in the event of a hazardous materials incident. The additions and deletions are based on the criteria contained in the IMDG code for substances classified as toxic to the aquatic environment. The HMR maintain a list as the basis for regulating substances toxic to the aquatic environment and allow use of the criteria in the IMDG Code if a listed material does not meet the criteria for a marine pollutant. PHMSA periodically updates its list based on changes to the IMDG code and evaluation of listed materials against the IMDG code criteria. Amending the marine pollutant list facilitates consistent communication of the presence of marine pollutants and safe and efficient transportation without imposing significant burden associated with characterizing mixtures as marine pollutants.

Also similar to the above amendments, enhanced environmental protection will also be achieved through more targeted and effective training. This amendment will eliminate inconsistent hazardous materials regulations, which hamper compliance training efforts. For ease of compliance with appropriate regulations, international carriers engaged in the transportation of hazardous materials by vessel generally elect to comply with the IMDG Code. By maintaining consistency between these international regulations and the HMR, shippers and carriers are able to train their hazmat employees in a single set of requirements for classification, packaging, hazard communication, handling, stowage, etc., thereby minimizing the possibility of improperly preparing and transporting a shipment of hazardous materials because of differences between domestic and international regulations.

Greenhouse gas emissions would remain the same under this amendment.

4. *Adopting changes throughout the HMR Part 173 packaging requirements to authorize more flexibility when choosing packages for hazardous materials:*

These changes adopt manufacturing and performance standards for small gas pressure receptacles without a relief device, clarify the use of the HMT entry ''fire extinguisher'', authorize the use of large salvage packagings and provide a list of authorized packagings for ammonium nitrate emulsions. As for the above amendments, PHMSA believes that these amendments, which increase standardization and consistency of regulations, will result in greater protection of human health and the environment. Consistency between US and international regulations enhances the safety and environmental protection of international hazardous materials transportation through better understanding of the regulations, an increased level of industry compliance, the smooth flow of hazardous materials from their points of origin to their points of destination, and consistent emergency response in the event of a hazardous materials incident. PHMSA is adopting changes throughout the Part 173 packaging requirements to authorize more flexibility when choosing packages for hazardous materials. This action is consistent with amendments adopted into the UN Model Regulations.

These amendments permit additional flexibility for authorized packages without compromising environmental protection or safety. Manufacturing and performance standards for small gas pressure receptacles ensure a safe packaging that is capable of retaining its contents without being overly prescriptive. The clarification for fire extinguishers increases the transparency of the regulations, which will in turn result in increased compliance, reduced incidents of undeclared or misdeclared hazardous material and enhanced environmental protection and safety. Increased flexibility also adds to environmental protection by increasing the ease of regulatory compliance.

Also similar to the above amendments, enhanced environmental

protection will be achieved through more targeted and effective training. This amendment eliminates inconsistent hazardous materials regulations, which hamper compliance training efforts. By maintaining consistency between the UN Model Regulations and the HMR, shippers and carriers are able to train their hazmat employees in a single set of requirements for classification, packaging, hazard communication, handling, stowage, etc., thereby minimizing the possibility of improperly preparing and transporting a shipment of hazardous materials because of differences between domestic and international regulations.

Greenhouse gas emissions would remain the same under this amendment.

5. *Exception from the HMR for marine pollutants up to 5 liters (1.3 gallons) for liquids or 5 kg (11 lbs.) for solids when these materials are packaged in accordance with the general packaging requirements of §§ 173.24 and 173.24a:*

PHMSA believes that this amendment provides for a slight net increase in environmental protection and safety by reducing confusion and simplifying multi-modal hazardous material transportation requirements. Currently, packages containing less than 5 liters (1.3 gallons) for liquids or 5 kg (11 lbs.) of material containing marine pollutants are subject to additional requirements such as shipping papers, Class 9 labeling and UN packaging when offered for transport by air or vessel in accordance with the ICAO TI or the IMDG Code. However, these same materials would not be subject to the HMR when transported by motor vehicle, rail car or aircraft in the US. The presence of these labels in one mode of transport can cause confusion in the US supply chain.

This amendment exempts from the HMR small packages of hazardous material that are regulated because of the presence of one or more marine pollutants. Materials in these quantities pose a low risk in transportation. In addition, these low quantities of materials present even lower risks in transportation because they often contain low concentrations of marine pollutant constituents. Lastly, risks of incidents are very low. In the past 10 years, in tens of thousands of vessel shipments, PHMSA's data contains only one record of marine pollutant released on a vessel that caused environmental damage. In this incident, the material was packaged in a 55-gallon drum and would not be impacted by this amendment, since the package would still be required to display the marine pollutant mark and the shipping documents would still have to communicate the presence of a marine pollutant. By reducing the hazard communication (hazcom) burdens for lower risk commodities, industry, shippers, and transporters can focus hazcom resources on areas with potentially greater environmental and safety consequences.

This action is consistent with recent revisions to the IMDG Code. PHMSA believes that this amendment will increase standardization and consistency of regulations, may also result in greater protection of human health and the environment. Consistency between US and international regulations enhances the safety and environmental protection of international hazardous materials transportation through better understanding of the regulations, an increased level of industry compliance, the smooth flow of hazardous materials from their points of origin to their points of destination, and consistent emergency response in the event of a hazardous materials incident. Excepting these quantities of marine pollutants from the HMR will facilitate consistent communication of the presence of marine pollutants and facilitate safe and efficient transportation without imposing significant burden associated with characterizing mixtures as marine pollutants.

Also similar to the above amendments, enhanced environmental protection will also be achieved through more targeted and effective training. This amendment will eliminate inconsistent hazardous materials regulations, which hamper compliance training efforts. For ease of compliance with appropriate regulations, international carriers engaged in the transportation of hazardous materials by vessel generally elect to comply with the IMDG Code. By maintaining consistency between these international regulations and the HMR, shippers and carriers are able to train their hazmat employees in a single set of requirements for classification, packaging, hazard communication, handling, stowage, etc., thereby minimizing the possibility of improperly preparing and transporting a shipment of hazardous materials because of differences between domestic and international regulations.

Greenhouse gas emissions would remain the same under this amendment.

6. *Amendments to add minimum sizes for the OVERPACK and SALVAGE markings. These markings would be characters at least 12 mm (.47 inches) high:*

PHMSA believes that this amendment, which will provide for enhanced hazard communication, will result in greater protection of human health and the environment. An overpack is an enclosure to provide protection or convenience of handling for one or more packages such as pallets and crates. A salvage package is used to contain a damaged, leaking or non-conforming package. The HMR require these packages to be marked OVERPACK or SALVAGE, as appropriate. This communicates the nature of these specialized packaging configurations to package handlers and emergency responders. However, because there is currently no minimum size requirement for these marks, this information is not always readily visible. This amendment would ensure that these hazard markings are visible, thus resulting in decreased incidents with impacts to the environment and safety.

Greenhouse gas emissions would remain the same under this amendment.

7. *Amendments to revise and add vessel stowage codes listed in column 10B of the HMT and segregation requirements in HMR § 176.83 consistent with the IMDG Code. These changes are designed to harmonize with the IMDG Code and would provide additional guidance on the loading and stowage of various materials. Additionally, proposed amendments to increase the required segregation distances between Division 4.3 dangerous when wet material (i.e. materials liable to give off a flammable or toxic gas in contact with water) and Class 3 flammable liquids and Division 2.1 flammable gases:*

As discussed for previous amendments herein, PHMSA believes that this amendment, which will increase standardization and consistency of regulations, will result in greater protection of human health and the environment. Consistency between US and international regulations enhances the safety and environmental protection of international hazardous materials transportation through better understanding of the regulations, an increased level of industry compliance, the smooth flow of hazardous materials from their points of origin to their points of destination, and consistent emergency response in the event of a hazardous materials incident. New and revised entries to the HMT reflect emerging technologies, and a need to better describe or differentiate between existing entries. These proposed changes mirror the IMDG Code. It is extremely important for the domestic HMR and HMT to mirror the IMDG

Code to ensure consistent naming conventions across modes and international borders.

Enhanced environmental protection will also be achieved through more targeted and effective training. This amendment will eliminate inconsistent hazardous materials regulations, which hamper compliance training efforts. For ease of compliance with appropriate regulations, international carriers engaged in the transportation of hazardous materials by vessel generally elect to comply with the IMDG Code. By maintaining consistency between these international regulations and the HMR, shippers and carriers are able to train their hazmat employees in a single set of requirements for classification, packaging, hazard communication, handling, stowage, etc., thereby minimizing the possibility of improperly preparing and transporting a shipment of hazardous materials because of differences between domestic and international regulations.

PHMSA also believes that this group of amendments will increase environmental protection and safety through its increased segregation distance requirements and enhanced guidance, which will better prevent materials from contacting each other and/or water in transportation. Increased segregation distances prevent the mixing of incompatible material and the subsequent evolution of flammable or toxic gases, along with attendant fires and explosions. Together, stowage and segregation help manage the risks associated with the transport of hazardous materials by water. While the risk associated with the transport of these materials is relatively low, these measures would further reduce that risk and prevent the spread of a fire between flammable materials and materials that react dangerously with water.

Greenhouse gas emissions would remain the same under this amendment.

Agencies Consulted

This final rule represents PHMSA's first action in the US for this program area. PHMSA has coordinated with the US Federal Aviation Administration and the US Coast Guard, in the development of this final rule. PHMSA has considered the views expressed in comments to the NPRM submitted by members of the public, state and local governments, and industry.

Conclusion

The provisions of this final rule build on current regulatory requirements to enhance the transportation safety and security of shipments of hazardous materials transported by highway, rail, aircraft and vessel, thereby reducing the risks of an accidental or intentional release of hazardous materials and consequent environmental damage. PHMSA believes the net environmental impact will be positive. PHMSA believes that there are no significant environmental impacts associated with this final rule.

J. 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*.

K. Executive Order 13609 and International Trade Analysis

Under E.O. 13609, agencies must consider whether the impacts associated with significant variations between domestic and international regulatory approaches are unnecessary or may impair the ability of American business to export and compete internationally. In meeting shared challenges involving health, safety, labor, security, environmental, and other issues, international regulatory cooperation can identify approaches that are at least as protective as those that are or would be adopted in the absence of such cooperation. International regulatory cooperation can also reduce, eliminate, or prevent unnecessary differences in regulatory requirements.

Similarly, the Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465), prohibits Federal agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. For purposes of these requirements, Federal agencies may participate in the establishment of international standards, so long as the standards have a legitimate domestic objective, such as providing for safety, and do not operate to exclude imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards.

PHMSA participates in the establishment of international standards to protect the safety of the American public, and we have assessed the effects of the proposed rule to ensure that it does not cause unnecessary obstacles to foreign trade. In fact, the rule is designed to facilitate international trade. Accordingly, this rulemaking is consistent with E.O. 13609 and PHMSA's obligations under the Trade Agreement Act, as amended.

List of Subjects

49 CFR Part 171

Exports, Hazardous materials transportation, Hazardous waste, Imports, Incorporation by reference, Reporting and recordkeeping requirements.

49 CFR Part 172

Education, Hazardous materials transportation, Hazardous waste, Incorporation by reference, Labeling, Markings, Packaging and containers, Reporting and recordkeeping requirements.

49 CFR Part 173

Hazardous materials transportation, Incorporation by reference, Packaging and containers, Radioactive materials, Reporting and recordkeeping requirements, Uranium.

49 CFR Part 175

Air carriers, Hazardous materials transportation, Incorporation by reference, Radioactive materials, Reporting and recordkeeping requirements.

49 CFR Part 176

Maritime carriers, Hazardous materials transportation, Incorporation by reference, Radioactive materials, Reporting and recordkeeping requirements.

49 CFR Part 178

Hazardous materials transportation, Incorporation by reference, Motor vehicle safety, Packaging and containers, Reporting and recordkeeping requirements.

49 CFR Part 180

Hazardous materials transportation, Incorporation by reference, Motor carriers, Motor vehicle safety, Packaging and containers, Railroad safety, Reporting and recordkeeping requirements.

In consideration of the foregoing, PHMSA is amending 49 CFR Chapter I as follows:

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

■ 1. The authority citation for part 171 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; Pub. L. 101–410 section 4 (28 U.S.C. 2461 note); Pub. L. 104–134, section 31001; 49 CFR 1.81 and 1.97.

■ 2. In § 171.4, paragraph (c) is revised to read as follows:

§ 171.4 Marine pollutants.

* * * * *

(c) *Exceptions.* (1) Except when all or part of the transportation is by vessel, the requirements of this subchapter specific to marine pollutants do not apply to non-bulk packagings transported by motor vehicle, rail car or aircraft.

(2) Single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other requirements of this subchapter provided the packagings meet the general requirements in §§ 173.24 and 173.24a. This exception does not apply to marine pollutants that are a hazardous waste or a hazardous substance. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class, all provisions of this subchapter relevant to any additional hazards continue to apply.

* * * * *

■ 3. In § 171.7

■ a. Revise paragraphs (a)(1), (s)(1), (t)(1), (v)(2), (w)(1) through (52), and (dd)(1) and (dd)(2) introductory text.

■ b. Add paragraphs (w)(53) through (w)(58), (bb)(1)(ix), (bb)(1)(x), (bb)(1)(xi), (bb)(1)(xii), and (dd)(2)(iii).

The revisions and additions are to read as follows:

§ 171.7 Reference material.

(a) *Matter incorporated by reference*—(1) *General.* There is incorporated, by reference in parts 170 through 189 of this subchapter, matter referred to that is not specifically set forth. This matter is hereby made a part of the regulations in parts 170 through 189 of this subchapter. The matter subject to change is incorporated only as it is in effect on the date of issuance of the regulation referring to that matter. The materials listed in paragraphs (b) through (ee) of this section have been approved for incorporation by reference by the Director of the **Federal Register** in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Material is incorporated as it exists on the date of the approval and a notice of any change in the material will be published in the **Federal Register.** Matters referenced by footnote are included as part of the regulations of this subchapter.

* * * * *

(s) * * *

(1) IAEA Safety Standards for Protecting People and the Environment; Regulations for the Safe Transport of Radioactive Material, No. SSR–6, (IAEA Regulations), 2012 Edition, into §§ 171.22; 171.23; 171.26; 173.415; 173.416; 173.417; 173.435; 173.473.

* * * * *

(t) * * *

(1) Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions), 2015–2016 Edition, copyright 2014, into §§ 171.8; 171.22; 171.23; 171.24; 172.101; 172.202; 172.401; 172.512; 172.519; 172.602; 173.56; 173.320; 175.10, 175.33; 178.3.

* * * * *

(v) * * *

(2) International Maritime Dangerous Goods Code (IMDG Code), Incorporating Amendment 37–14 (English Edition), 2014 Edition, into §§ 171.22; 171.23; 171.25; 172.101; 172.202; 172.203 172.401; 172.502; 172.519; 172.602; 173.21; 173.56; 176.2; 176.5; 176.11; 176.27; 176.30; 176.83; 176.84; 176.140; 176.720; 178.3; 178.274.

* * * * *

(w) * * *

(1) ISO 535–1991(E) Paper and board—Determination of water absorptiveness—Cobb method, 1991, into §§ 178.516; 178.707; 178.708.

(2) ISO 1496–1: 1990 (E)—Series 1 freight containers—Specification and testing, Part 1: General cargo containers. Fifth Edition, (August 15, 1990), into § 173.411.

(3) ISO 1496–3(E)—Series 1 freight containers—Specification and testing—Part 3: Tank containers for liquids, gases and pressurized dry bulk, Fourth edition, March 1995, into §§ 178.74; 178.75; 178.274.

(4) ISO 1516:2002(E), Determination of flash/no flash—Closed cup equilibrium method, Third Edition, 2002–03–01, into § 173.120.

(5) ISO 1523:2002(E), Determination of flash point—Closed cup equilibrium method, Third Edition, 2002–03–01, into § 173.120.

(6) ISO 2431–1984(E) Standard Cup Method, 1984, into § 173.121.

(7) ISO 2592:2000(E), Determination of flash and fire points—Cleveland open cup method, Second Edition, 2000–09–15, into § 173.120.

(8) ISO 2719:2002(E), Determination of flash point—Pensky-Martens closed cup method, Third Edition, 2002–11–15, into § 173.120.

(9) ISO 2919:1999(E), Radiation Protection—Sealed radioactive sources—General requirements and classification, (ISO 2919), second edition, February 15, 1999, into § 173.469.

(10) ISO 3036–1975(E) Board—Determination of puncture resistance, 1975, into § 178.708.

(11) ISO 3405:2000(E), Petroleum products—Determination of distillation characteristics at atmospheric pressure, Third Edition, 2000–03–01, into § 173.121.

(12) ISO 3574–1986(E) Cold-reduced carbon steel sheet of commercial and drawing qualities, into § 178.503; Part 178, appendix C.

(13) ISO 3679:2004(E), Determination of flash point—Rapid equilibrium closed cup method, Third Edition, 2004–04–01, into § 173.120.

(14) ISO 3680:2004(E), Determination of flash/no flash—Rapid equilibrium closed cup method, Fourth Edition, 2004–04–01, into § 173.120.

(15) ISO 3807–2(E), Cylinders for acetylene—Basic requirements—Part 2: Cylinders with fusible plugs, First edition, March 2000, into §§ 173.303; 178.71.

(16) ISO 3924:1999(E), Petroleum products—Determination of boiling range distribution—Gas chromatography method, Second Edition, 1999–08–01, into § 173.121.

(17) ISO 4126–1:2004(E): Safety devices for protection against excessive pressure—Part 1: Safety valves, Second edition 2004–02–15, into § 178.274.

(18) ISO 4126–7:2004(E): Safety devices for protection against excessive pressure—Part 7: Common data, First Edition 2004–02–15 into § 178.274.

(19) ISO 4126–7:2004/Cor.1:2006(E): Safety devices for protection against excessive pressure—Part 7: Common data, Technical Corrigendum 1, 2006–11–01, into § 178.274.

(20) ISO 4626:1980(E), Volatile organic liquids—Determination of boiling range of organic solvents used as raw materials, First Edition, 1980–03–01, into § 173.121.

(21) ISO 4706:2008(E), Gas cylinders—Refillable welded steel cylinders—Test pressure 60 bar and below, First Edition, 2008–04–15, Corrected Version, 2008–07–01, into § 178.71.

(22) ISO 6406(E), Gas cylinders—Seamless steel gas cylinders—Periodic inspection and testing, Second edition, February 2005, into § 180.207.

(23) ISO 6892 Metallic materials—Tensile testing, July 15, 1984, First Edition, into § 178.274.

(24) ISO 7225(E), Gas cylinders—Precautionary labels, Second Edition, July 2005, into § 178.71.

(25) ISO 7866(E), Gas cylinders—Refillable seamless aluminum alloy gas cylinders—Design, construction and testing, First edition, June 1999, into § 178.71.

(26) ISO 8115 Cotton bales—Dimensions and density, 1986 Edition, into § 172.102.

(27) ISO 9809–1:1999(E): Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 1: Quenched and tempered steel cylinders with tensile strength less than 1100 MPa., First edition, June 1999, into §§ 178.37; 178.71; 178.75.

(28) ISO 9809–1:2010(E): Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 1: Quenched and tempered steel cylinders with tensile strength less than 1 100 MPa., Second edition, 2010–04–15, into §§ 178.37; 178.71; 178.75.

(29) ISO 9809–2:2000(E): Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1 100 MPa., First edition, June 2000, into §§ 178.71; 178.75.

(30) ISO 9809–2:2010(E): Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1100 MPa., Second edition, 2010–04–15, into §§ 178.71; 178.75.

(31) ISO 9809–3:2000(E): Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 3: Normalized steel cylinders, First edition, December 2000, into §§ 178.71; 178.75.

(32) ISO 9809–3:2010(E): Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 3: Normalized steel cylinders, Second edition, 2010–04–15, into §§ 178.71; 178.75.

(33) ISO 9978:1992(E)—Radiation protection—Sealed radioactive sources—Leakage test methods. First Edition, (February 15, 1992), into § 173.469.

(34) ISO 10156:2010(E): Gases and gas mixtures—Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets, Third edition, 2010–04–01, into § 173.115.

(35) ISO 10156:2010/Cor.1:2010(E): Gases and gas mixtures—Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets, Technical Corrigendum 1, 2010–09–01, into § 173.115.

(36) ISO 10297:1999(E), Gas cylinders—Refillable gas cylinder valves—Specification and type testing, First Edition, 1995–05–01, into §§ 173.301b; 178.71.

(37) ISO 10297:2006(E), Transportable gas cylinders—Cylinder valves—Specification and type testing, Second Edition, 2006–01–15, into §§ 173.301b; 178.71.

(38) ISO 10461:2005(E), Gas cylinders—Seamless aluminum-alloy gas cylinders—Periodic inspection and testing, Second Edition, 2005–02–15 and Amendment 1, 2006–07–15, into § 180.207.

(39) ISO 10462 (E), Gas cylinders—Transportable cylinders for dissolved acetylene—Periodic inspection and maintenance, Second edition, February 2005, into § 180.207.

(40) ISO 10692–2:2001(E), Gas cylinders—Gas cylinder valve connections for use in the micro-electronics industry—Part 2: Specification and type testing for valve to cylinder connections, First Edition, 2001–08–01, into §§ 173.40; 173.302c.

(41) ISO 11114–1:2012(E), Gas cylinders—Compatibility of cylinder and valve materials with gas contents—Part 1: Metallic materials, Second edition, 2012–03–15, into §§ 173.301b; 178.71.

(42) ISO 11114–2(E), Transportable gas cylinders—Compatibility of cylinder and valve materials with gas contents—Part 2: Non-metallic materials, First edition, December 2000, into §§ 173.301b; 178.71.

(43) ISO 11117:1998(E): Gas cylinders—Valve protection caps and valve guards for industrial and medical gas cylinders.—Design, construction and tests, First edition, 1998–08–01, into § 173.301b.

(44) ISO 11117:2008(E): Gas cylinders—Valve protection caps and valve guards—Design, construction and tests, Second edition, 2008–09–01, into § 173.301b.

(45) ISO 11117:2008/Cor.1:2009(E): Gas cylinders—Valve protection caps and valve guards—Design, construction and tests, Technical Corrigendum 1, 2009–05–01, into § 173.301b.

(46) ISO 11118(E), Gas cylinders—Non-refillable metallic gas cylinders—Specification and test methods, First edition, October 1999, into § 178.71.

(47) ISO 11119–1(E), Gas cylinders—Gas cylinders of composite construction—Specification and test methods—Part 1: Hoop-wrapped composite gas cylinders, First edition, May 2002, into § 178.71.

(48) ISO 11119–2(E), Gas cylinders—Gas cylinders of composite construction—Specification and test methods—Part 2: Fully wrapped fibre reinforced composite gas cylinders with load-sharing metal liners, First edition, May 2002, into § 178.71.

(49) ISO 11119–3(E), Gas cylinders of composite construction—Specification and test methods—Part 3: Fully wrapped fibre reinforced composite gas cylinders with non-load-sharing metallic or non-metallic liners, First edition, September 2002, into § 178.71.

(50) ISO 11120(E), Gas cylinders—Refillable seamless steel tubes of water capacity between 150 L and 3000 L—Design, construction and testing, First edition, March 1999, into §§ 178.71; 178.75.

(51) ISO 11513:2011(E), Gas cylinders—Refillable welded steel cylinders containing materials for sub-atmospheric gas packaging (excluding acetylene)—Design, construction, testing, use and periodic inspection, First edition, 2011–09–12, into §§ 173.302c; 178.71; 180.207.

(52) ISO 11621(E), Gas cylinders—Procedures for change of gas service, First edition, April 1997, into §§ 173.302, 173.336, 173.337.

(53) ISO 11623(E), Transportable gas cylinders—Periodic inspection and testing of composite gas cylinders, First edition, March 2002, into § 180.207.

(54) ISO 13340:2001(E) Transportable gas cylinders—Cylinder valves for non-refillable cylinders—Specification and prototype testing, First edition, 2004–04–01, into §§ 173.301b; 178.71.

(55) ISO 13736:2008(E), Determination of flash point—Abel closed-cup method, Second Edition, 2008–09–15, into § 173.120.

(56) ISO 16111:2008(E), Transportable gas storage devices—Hydrogen absorbed in reversible metal hydride, First Edition, 2008–11–15, into §§ 173.301b; 173.311; 178.71.

(57) ISO 18172–1:2007(E), Gas cylinders—Refillable welded stainless steel cylinders—Part 1: Test pressure 6 MPa and below, First Edition, 2007–03–01, into § 178.71.

(58) ISO 20703:2006(E), Gas cylinders—Refillable welded aluminum-alloy cylinders—Design, construction and testing, First Edition, 2006–05–01, into § 178.71.

* * * * *

(bb) * * *

(1) * * *

(ix) SOR/2011–239 November 9, 2011.

(x) SOR/2011–60 March 16, 2011.

(xi) SOR/2011–210 October 12, 2011.

(xii) SOR/2012–245 December 5, 2012.

* * * * *

(dd) * * *

(1) UN Recommendations on the Transport of Dangerous Goods, Model Regulations (UN Recommendations), 18th revised edition, Volumes I and II (2013), into §§ 171.8; 171.12; 172.202; 172.401; 172.407; 172.502; 173.22; 173.24; 173.24b; 173.40; 173.56; 173.192; 173.302b; 173.304b; 178.75; 178.274.

(2) UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, (Manual of Tests and Criteria), into §§ 171.24, 172.102; 173.21; 173.56; 173.57; 173.58; 173.60; 173.115; 173.124; 173.125; 173.127; 173.128; 173.137; 173.185; 173.220; 173.225, part 173, appendix H; 178.274:

* * * * *

(iii) Fifth revised edition, amendment 2 (2013).

* * * * *

■ 4. In § 171.8, the definitions for ''Adsorbed gas,'' ''Large salvage packaging,'' ''Neutron Radiation Detector'' and ''Radiation Detection System'' are added in alphabetical order, and the definitions for ''Bundle of cylinders'' and ''Non-bulk packaging'' are revised to read as follows:

§ 171.8 Definitions and abbreviations.

* * * * *

Adsorbed gas. See § 173.115 of this subchapter.

* * * * *

Bundle of cylinders means assemblies of UN cylinders fastened together and interconnected by a manifold and transported as a unit. The total water capacity for the bundle may not exceed 3,000 L, except that a bundle intended for the transport of gases in Division 2.3 is limited to a water capacity of 1,000 L. Not permitted for air transport.

* * * * *

Large salvage packaging means a special packaging into which damaged, defective or leaking hazardous materials packages, or hazardous materials that have spilled or leaked are placed for the purpose of transport for recovery or disposal, that—

(1) Is designed for mechanical handling; and

(2) Has a net mass greater than 400 kg (882 pounds) or a capacity of greater than 450 L (119 gallons), but has a volume of not more than 3 cubic meters (106 cubic feet).

* * * * *

Neutron Radiation Detector means a device that detects neutron radiation. In such a device, a gas may be contained in a hermetically sealed electron tube transducer that converts neutron radiation into a measurable electric signal.

* * * * *

Non-bulk packaging means a packaging which has:

(1) A maximum capacity of 450 L (119 gallons) or less as a receptacle for a liquid;

(2) A maximum net mass of 400 kg (882 pounds) or less and a maximum capacity of 450 L (119 gallons) or less as a receptacle for a solid;

(3) A water capacity of 454 kg (1000 pounds) or less as a receptacle for a gas as defined in § 173.115 of this subchapter; or

(4) Regardless of the definition of bulk packaging, a maximum net mass of 400 kg (882 pounds) or less for a bag or a box conforming to the applicable requirements for specification packagings, including the maximum net mass limitations, provided in subpart L of part 178 of this subchapter.

* * * * *

Radiation detection system means an apparatus that contains radiation detectors as components.

* * * * *

■ 5. In § 171.23 revise paragraphs (b)(2), (b)(11)(iv) and add paragraph (b)(11)(ix) to read as follows:

§ 171.23 Requirements for specific materials and packagings transported under the ICAO Technical Instructions, IMDG Code, Transport Canada TDG Regulations, or the IAEA Regulations.

* * * * *

(b) * * *

(2) *Safety devices for vehicles, vessels or aircraft, e.g. air bag inflators, air bag modules, seat-belt pretensioners, and pyromechanical devices.* For each safety device, the shipping paper description must conform to the requirements in § 173.166(c) of this subchapter.

* * * * *

(11) * * *

(iv) The country of origin for the shipment must have adopted the edition of SSR–6 of the IAEA Regulations referenced in § 171.7.

* * * * *

(ix) Packages containing fissile materials must conform to the requirements of § 173.453 to be otherwise excepted from the requirements of Subpart I of Part 173 for fissile materials.

* * * * *

■ 6. In § 171.24 paragraph (d)(1)(ii) is revised to read as follows:

§ 171.24 Additional requirements for the use of the ICAO Technical Instructions.

* * * * *

(d) * * *

(1) * * *

(ii) *Lithium metal cells and batteries.* Lithium metal cells and batteries (UN3090) are forbidden for transport aboard passenger-carrying aircraft. The outside of each package that contains lithium metal cells or lithium metal batteries (UN3090) transported in accordance with Packing Instruction 968, Section II must be marked ''PRIMARY LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT'' or ''LITHIUM METAL BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT'', or labeled with a CARGO AIRCRAFT ONLY label specified in § 172.448 of this subchapter.

* * * * *

■ 7. In § 171.25, paragraph (b)(3) is revised to read as follows:

§ 171.25 Additional requirements for the use of the IMDG Code.

* * * * *

(b) * * *

(3) The outside of each package containing lithium metal cells or batteries (UN3090) transported in accordance with special provision 188 of the IMDG Code must be marked ''PRIMARY LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT'' or ''LITHIUM METAL BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT'', or labeled with a CARGO AIRCRAFT ONLY label specified in § 172.448 of this subchapter. The provisions of this paragraph do not apply to packages that contain 5 kg (11 pounds) net weight or less of lithium metal cells or batteries that are packed with, or contained in, equipment.

* * * * *

PART 172—HAZARDOUS MATERIALS TABLE, SPECIAL PROVISIONS, HAZARDOUS MATERIALS COMMUNICATIONS, EMERGENCY RESPONSE INFORMATION, TRAINING REQUIREMENTS, AND SECURITY PLANS

■ 8. The authority citation for part 172 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; 49 CFR 1.81, 1.96 and 1.97.

■ 9. In § 172.101, revise paragraphs (f) and (k) introductory text to read as follows:

§ 172.101 Purpose and use of the hazardous materials table.

* * * * *

(f) *Column 5: Packing group.* Column 5 specifies one or more packing groups assigned to a material corresponding to the proper shipping name and hazard class for that material. Class 2, Class 7, Division 6.2 (other than regulated medical wastes), and ORM–D materials, do not have packing groups. Articles in other than Class 1 are not assigned to packing groups. For packing purposes, any requirement for a specific packaging performance level is set out in the applicable packing authorizations of

Part 173. Packing Groups I, II and III indicate the degree of danger presented by the material is great, medium or minor, respectively. If more than one packing group is indicated for an entry, the packing group for the hazardous material is determined using the criteria for assignment of packing groups specified in subpart D of part 173. When a reevaluation of test data or new data indicates a need to modify the specified packing group(s), the data should be submitted to the Associate Administrator. Each reference in this column to a material which is a hazardous waste or a hazardous substance, and whose proper shipping name is preceded in Column 1 of the Table by the letter ''A'' or ''W'', is modified to read ''III'' on those occasions when the material is offered for transportation or transported by a mode in which its transportation is not otherwise subject to requirements of this subchapter.

* * * * *

(k) *Column 10: Vessel stowage requirements.* Column 10A [Vessel stowage] specifies the authorized stowage locations on board cargo and passenger vessels. Column 10B [Other provisions] specifies codes for stowage and handling requirements for specific hazardous materials. Hazardous materials offered for transportation as limited quantities are allocated stowage category A and are not subject to the stowage codes assigned by column 10B. The meaning of each code in Column 10B is set forth in § 176.84 of this subchapter. Section 176.63 of this subchapter sets forth the physical requirements for each of the authorized locations listed in Column 10A. (For bulk transportation by vessel, see 46 CFR parts 30 to 40, 70, 98, 148, 151, 153 and 154.) The authorized stowage locations specified in Column 10A are defined as follows:

* * * * *

■ 10. In § 172.101, the Hazardous Materials Table is amended by removing the entries under ''[REMOVE]'', by adding the entries under ''[ADD]'' and revising entries under ''[REVISE]'' in the appropriate alphabetical sequence to read as follows:

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Nos.	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***) Exceptions	Non-bulk	Bulk	(9) Quantity limitations (see §§ 173.27 and 175.75) Passenger aircraft/rail	Cargo aircraft only	(10) Vessel stowage Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	[REMOVE].												
		*		*		*	*	*	*		*		
I	Air bag inflators, *or* Air bag modules, *or* Seatbelt pretensioners.	1.4G	UN0503		1.4G	161, A200	None	62	None	Forbidden	75 kg	02	25
	Air bag inflators, *or* Air bag modules, *or* Seatbelt pretensioners.	9	UN3268	III	9	160, A200	166	166	166	25 kg	100 kg	A.	
		*		*		*	*	*	*		*		
	Ammonium nitrate, *with not more than 0.2% total combustible material, including any organic substance, calculated as carbon to the exclusion of any other added substance.*	5.1	UN1942	III	5.1	A1, A29, B120, IB8, IP3, T1, TP33.	152	213	240	25 kg	100 kg	A	25, 59, 60, 116
		*		*		*	*	*	*		*		
I	Blue asbestos (Crocidolite) or Brown asbestos (amosite, mysorite).	9	UN2212	II	9	156, IB8, IP2, IP4, T3, TP33.	155	216	240	Forbidden	Forbidden	A	34, 40
		*		*		*	*	*	*		*		
	Capacitor, *electric double layer (with an energy storage capacity greater than 0.3 Wh).*	9	UN3499		9	361	176	176	176	No limit	No limit	A.	
		*		*		*	*	*	*		*		
	Chemical kits	9	UN3316		9	15	161	161	None	10 kg	10 kg	A.	
		*		*		*	*	*	*		*		
	First aid kits	9	UN3316		9	15	161	161	None	10 kg	10 kg	A.	
		*		*		*	*	*	*		*		
	Trinitrobenzene, *dry or wetted with less than 30 percent water, by mass.*	1.1D	UN0214	II	1.1D		None	62	None	Forbidden	Forbidden	04	25
		*		*		*	*	*	*		*		
	Trifluorochloroethylene, stabilized.	2.3	UN1082		2.3, 2.1.	3, B14, T50	None	304	314, 315	Forbidden	Forbidden	D	40
		*		*		*	*	*	*		*		
I	White asbestos *(chrysotile, actinolite, anthophyllite, tremolite).*	9	UN2590	III	9	156, IB8, IP2, IP3, T1, TP33.	155	216	240	200 kg	200 kg	A	34, 40

		*		*		*	*		*		*			
	[ADD].													
G	Adsorbed gas, n.o.s	2.2	UN3511		2.2		None	302c	None	75 kg	150 kg	A.		
G	Adsorbed gas, flammable, n.o.s.	2.1	UN3510		2.1		None	302c	None	Forbidden	150 kg	D		40
G	Adsorbed gas, oxidizing, n.o.s.	2.2	UN3513		2.2, 5.1.		None	302c	None	75 kg	150 kg	D.		
G	Adsorbed gas, toxic, n.o.s. *Inhalation hazard zone A.*	2.3	UN3512		2.3	1	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, n.o.s. *Inhalation hazard zone B.*	2.3	UN3512		2.3	2, B9, B14	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, n.o.s. *Inhalation hazard zone C.*	2.3	UN3512		2.3	3, B14	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, n.o.s. *Inhalation hazard zone D.*	2.3	UN3512		2.3	4	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, corrosive, n.o.s. *Inhalation hazard zone A.*	2.3	UN3516		2.3, 8	1	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, corrosive, n.o.s. *Inhalation hazard zone B.*	2.3	UN3516		2.3, 8	2, B9, B14	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, corrosive, n.o.s. *Inhalation hazard zone C.*	2.3	UN3516		2.3, 8	3, B14	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, corrosive, n.o.s. *Inhalation hazard zone D.*	2.3	UN3516		2.3, 8	4	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, flammable, n.o.s. *Inhalation hazard zone A.*	2.3	UN3514		2.3, 2.1.	1	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, flammable, n.o.s. *Inhalation hazard zone B.*	2.3	UN3514		2.3, 2.1.	2, B9, B14	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, flammable, n.o.s. *Inhalation hazard zone C.*	2.3	UN3514		2.3, 2.1.	3, B14	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, flammable, n.o.s. *Inhalation hazard zone D.*	2.3	UN3514		2.3, 2.1.	4	None	302c	None	Forbidden	Forbidden	D		40
G	Adsorbed gas, toxic, flammable, corrosive, n.o.s. *Inhalation hazard zone A.*	2.3	UN3517		2.3, 2.1, 8.	1	None	302c	None	Forbidden	Forbidden	D		17, 40
G	Adsorbed gas, toxic, flammable, corrosive, n.o.s. *Inhalation hazard zone B.*	2.3	UN3517		2.3, 2.1, 8.	2, B9, B14	None	302c	None	Forbidden	Forbidden	D		17, 40
G	Adsorbed gas, toxic, flammable, corrosive, n.o.s. *Inhalation hazard zone C.*	2.3	UN3517		2.3, 2.1, 8.	3, B14	None	302c	None	Forbidden	Forbidden	D		17, 40
G	Adsorbed gas, toxic, flammable, corrosive, n.o.s. *Inhalation hazard zone D.*	2.3	UN3517		2.3, 2.1, 8.	4	None	302c	None	Forbidden	Forbidden	D		17, 40

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Nos.	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
G	Adsorbed gas, toxic, oxidizing, n.o.s. *Inhalation hazard zone A.*	2.3	UN3515		2.3, 5.1.	1	None	302c	None	Forbidden	Forbidden	D	40
G	Adsorbed gas, toxic, oxidizing, n.o.s. *Inhalation hazard zone B.*	2.3	UN3515		2.3, 5.1.	2, B9, B14	None	302c	None	Forbidden	Forbidden	D	40
G	Adsorbed gas, toxic, oxidizing, n.o.s. *Inhalation hazard zone C.*	2.3	UN3515		2.3, 5.1.	3, B14	None	302c	None	Forbidden	Forbidden	D	40
G	Adsorbed gas, toxic, oxidizing, n.o.s. *Inhalation hazard zone D.*	2.3	UN3515		2.3, 5.1.	4	None	302c	None	Forbidden	Forbidden	D	40
G	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation hazard zone A.*	2.3	UN3518		2.3, 5.1, 8.	1	None	302c	None	Forbidden	Forbidden	D	40, 89, 90
G	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation hazard zone B.*	2.3	UN3518		2.3, 5.1, 8.	2, B9, B14	None	302c	None	Forbidden	Forbidden	D	40, 89, 90
G	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation hazard zone C.*	2.3	UN3518		2.3, 5.1, 8.	3, B14	None	302c	None	Forbidden	Forbidden	D	40, 89, 90
G	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s. *Inhalation hazard zone D.*	2.3	UN3518		2.3, 5.1, 8.	4	None	302c	None	Forbidden	Forbidden	D	40, 89, 90
		*		*		*	*	*	*		*		
	Air bag inflators, or Air bag modules, or Seatbelt pretensioners, see Safety devices, *electrically initiated or* Safety devices, pyrotechnic.												
		*		*		*	*	*	*		*		
	Ammonium nitrate, *with not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance.*	5.1	UN1942	III	5.1	A1, A29, B120, IB8, IP3, T1, TP33.	152	213	240	25 kg	100 kg	A	25, 59, 60, 66, 116, 124
		*		*		*	*	*	*		*		
	Arsine, adsorbed	2.3	UN3522		2.3, 2.1.	1	None	302c	None	Forbidden	Forbidden	D.	

		*		*		*	*	*	*	*		*		
G I	Asbestos, amphibole *amosite, tremolite, actinolite, anthophyllite, or crocidolite.*	9	UN2212	II	9	156, IB8, IP2, IP4, T3, TP33.	155	216	240	Forbidden		Forbidden	A	34, 40
I	Asbestos, chrysotile	9	UN2590	III	9	156, IB8, IP2, IP3, T1, TP33.	155	216	240	200 kg		200 kg	A	34, 40
		*		*		*	*	*	*	*		*		
	Boron trifluoride, adsorbed.	2.3	UN3519		2.3, 8	2, B9, B14	None	302c	None	Forbidden		Forbidden	D	40
		*		*		*	*	*	*	*		*		
	Capacitor, asymmetric *with an energy storage capacity greater than 0.3 Wh.*	9	UN3508		9	372	176	176	176	No limit		No Limit	A.	
	Capacitor, electric double layer *with an energy storage capacity greater than 0.3 Wh.*	9	UN3499		9	361	176	176	176	No limit		No limit	A.	
		*		*		*	*	*	*	*		*		
	Chemical kits	9	UN3316	II	9	15	161	161	None	10 kg		10 kg	A.	
				III	9	15	161	161	None	10 kg		10 kg	A.	
		*		*		*	*	*	*	*		*		
	Chlorine, adsorbed	2.3	UN3520		2.3, 5.1, 8.	2, B9, B14, N86	None	302c	None	Forbidden		Forbidden	D	40, 89, 90
		*		*		*	*	*	*	*		*		
	First aid kits	9	UN3316	II	9	15	161	161	None	10 kg		10 kg	A.	
	First aid kits	9	UN3316	III	9	15	161	161	None	10 kg		10 kg	A.	
		*		*		*	*	*	*	*		*		
	Germane, adsorbed	2.3	UN3523		2.3, 2.1.	2	None	302c	None	Forbidden		Forbidden	D	40
		*		*		*	*	*	*	*		*		
	Hydrogen selenide, adsorbed.	2.3	UN3526		2.3, 2.1.	1	None	302c	None	Forbidden		Forbidden	D	40
		*		*		*	*	*	*	*		*		
	Phosphine, adsorbed	2.3	UN3525		2.3, 2.1.	1	None	302c	None	Forbidden		Forbidden	D	40
		*		*		*	*	*	*	*		*		
	Phosphorus pentafluoride, adsorbed.	2.3	UN3524		2.3, 8	2, B9, B14	None	302c	None	Forbidden		Forbidden	D	40
		*		*		*	*	*	*	*		*		
	Safety devices, *electrically initiated.*	9	UN3268		9	160, A200	166	166	166	25 kg		100 kg	A.	
	Safety devices, pyrotechnic.	1.4G	UN0503		1.4G	A200	None	62	None	Forbidden		75 kg	02	25
		*		*		*	*	*	*	*		*		
	Silicon tetrafluoride, adsorbed.	2.3	UN3521		2.3, 8	2	None	302c	None	Forbidden		Forbidden	D	40
		*		*		*	*	*	*	*		*		
	Trifluorochloroethylene, stabilized *or* Refrigerant gas R 1113.	2.3	UN1082		2.3, 2.1.	3, B14, T50	None	304	314, 315	Forbidden		Forbidden	D	40

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Nos.	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***) Exceptions	Non-bulk	Bulk	(9) Quantity limitations (see §§ 173.27 and 175.75) Passenger aircraft/rail	Cargo aircraft only	(10) Vessel stowage Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*		*	*	*	*		*		
	Trinitrobenzene, *dry or wetted with less than 30 percent water, by mass.*	1.1D	UN0214	II	1.1D		None	62	None	Forbidden	Forbidden	04	25
	Trinitrobenzene, *wetted with not less than 30 percent water, by mass.*	4.1	UN1354	I	4.1	23, A2, A8, A19, N41	None	211	None	0.5 kg	0.5 kg	E	28, 36
		*		*		*	*	*	*		*		
	Uranium hexafluoride, radioactive material, excepted package, *less than 0.1 kg per package, non-fissile or fissile-excepted.*	8	UN3507	I	8, 7	369	420	None	None	Less than .1 kg.	Less than .1 kg.	A	132
		*		*		*	*	*	*		*		
	[REVISE].												
		*		*		*	*	*	*		*		
	Acrylamide, solid	6.1	UN2074	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	12, 25
	Acrylamide solution	6.1	UN3426	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	12, 25
		*		*		*	*	*	*		*		
	Aircraft hydraulic power unit fuel tank *(containing a mixture of anhydrous hydrazine and monomethyl hydrazine) (M86 fuel).*	3	UN3165	I	3, 6.1, 8.		None	172	None	Forbidden	42 L	E	21, 40, 49, 100
		*		*		*	*	*	*		*		
	Aldol	6.1	UN2839	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	12, 25
		*		*		*	*	*	*		*		
	Alkali metal alloys, liquid, n.o.s.	4.3	UN1421	I	4.3	A2, A3, A7, B48, N34	None	201	244	Forbidden	1 L	D	13, 52, 148
	Alkali metal amalgam, liquid.	4.3	UN1389	I	4.3	A2, A3, A7, N34	None	201	244	Forbidden	1 L	D	13, 40, 52, 148
	Alkali metal amalgam, solid.	4.3	UN3401	I	4.3	IB4, IP1, N40, T9, TP7, TP33.	None	211	242	Forbidden	15 kg	D	13, 52, 148
	Alkali metal amides	4.3	UN1390	II	4.3	A6, A7, A8, A19, A20, IB7, IP2, T3, TP33.	151	212	241	15 kg	50 kg	E	13, 40, 52, 148
	Alkali metal dispersions, flammable *or* Alkaline earth metal dispersions, flammable.	4.3	UN3482	I	4.3, 3	A2, A3, A7	None	201	244	Forbidden	1 L	D	13, 52, 148
	Alkali metal dispersions, *or* Alkaline earth metal dispersions.	4.3	UN1391	I	4.3	A2, A3, A7	None	201	244	Forbidden	1 L	D	13, 52, 148

*		*		*	*	*	*	*					
Alkaline earth metal alloys, n.o.s.	4.3	UN1393	II	4.3	A19, IB7, IP2, T3, TP33	151	212	241	15 kg	50 kg	E	13, 52, 148
Alkaline earth metal amalgams, liquid.	4.3	UN1392	I	4.3	A19, N34, N40	None	201	244	Forbidden	1 L	E	13, 40, 52, 148
Alkaline earth metal amalgams, solid.	4.3	UN3402	I	4.3	A19, N34, N40, T9, TP7, TP33.	None	211	242	Forbidden	15 kg	D	13, 52, 148
*		*		*	*	*	*	*					
Allyl chloroformate	6.1	UN1722	I	6.1, 3, 8.	2, B9, B14, B32, N41, T20, TP2, TP13, TP38, TP45.	None	227	244	Forbidden	Forbidden	D	21, 40, 100
*		*		*	*	*	*	*					
Aluminum borohydride *or* Aluminum borohydride in devices.	4.2	UN2870	I	4.2, 4.3.	B11, T21, TP7, TP33	None	181	244	Forbidden	Forbidden	D	13, 148
*		*		*	*	*	*	*					
Aluminum carbide	4.3	UN1394	II	4.3	A20, IB7, IP2, N41, T3, TP33.	151	212	242	15 kg	50 kg	A	13, 52, 148
*		*		*	*	*	*	*					
Aluminum ferrosilicon powder.	4.3	UN1395	II	4.3, 6.1.	A19, IB5, IP2, T3, TP33	151	212	242	15 kg	50 kg	A	13, 39, 40, 52, 53, 85, 103, 148
			III	4.3, 6.1.	A19, A20, IB4	151	213	241	25 kg	100 kg	A	13, 39, 40, 52, 53, 85, 103, 148
Aluminum hydride	4.3	UN2463	I	4.3	A19, N40	None	211	242	Forbidden	15 kg	E	13, 148
*		*		*	*	*	*	*					
Aluminum phosphide	4.3	UN1397	I	4.3, 6.1.	A8, A19, N40	None	211	242	Forbidden	15 kg	E	13, 40, 52, 85, 148
*		*		*	*	*	*	*					
Aluminum powder, coated.	4.1	UN1309	II	4.1	IB8, IP2, IP4, T3, TP33	151	212	240	15 kg	50 kg	A	13, 39, 52, 53, 74, 101, 147, 148
			III	4.1	IB8, IP3, T1, TP33	151	213	240	25 kg	100 kg	A	13, 39, 52, 53, 74, 101, 147, 148
Aluminum powder, uncoated.	4.3	UN1396	II	4.3	A19, A20, IB7, IP2, T3, TP33.	151	212	242	15 kg	50 kg	A	13, 39, 52, 53, 148
			III	4.3	A19, A20, IB8, IP4, T1, TP33.	151	213	241	25 kg	100 kg	A	13, 39, 52, 53, 148
*		*		*	*	*	*	*					
Aluminum silicon powder, uncoated.	4.3	UN1398	III	4.3	A1, A19, IB8, IP4, T1, TP33.	151	213	241	25 kg	100 kg	A	13, 39, 40, 52, 53, 85, 103, 148
Aluminum smelting by-products *or* Aluminum remelting by-products.	4.3	UN3170	II	4.3	128, B115, IB7, IP2, T3, TP33.	None	212	242	15 kg	50 kg	B	13, 85, 103, 148
			III	4.3	128, B115, IB8, IP4, T1, TP33.	None	213	241	25 kg	100 kg	B	13, 85, 103, 148
*		*		*	*	*	*	*					
N-Aminoethyl piperazine	8	UN2815	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	12, 25
*		*		*	*	*	*	*					
Aminopyridines *(o-; m-; p-).*	6.1	UN2671	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	B	12, 25, 40, 52
*		*		*	*	*	*	*					
Ammonium nitrate based fertilizer.	5.1	UN2067	III	5.1	52, 150, B120, IB8, IP3, T1, TP33.	152	213	240	25 kg	100 kg	B	25, 59, 60, 66, 117, 124

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*		* *		*	*		*		
	Ammonium nitrate emulsion *or* Ammonium nitrate suspension *or* Ammonium nitrate gel, *intermediate for blasting explosives.*	5.1	UN3375	II	5.1	147, 163, IB2, IP16	None	231	251	Forbidden	Forbidden	D	25, 59, 60, 66, 124
		*		*		* *		*	*		*		
	Ammonium nitrate, liquid *(hot concentrated solution).*	5.1	UN2426		5.1	B5, T7	None	None	243	Forbidden	Forbidden	D	59, 60, 124
	Ammonium nitrate, *with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance.*	1.1D	UN0222	II	1.1D	370	None	62	None	Forbidden	Forbidden	04	25, 19E
		*		*		* *		*	*		*		
	Ammonium polysulfide, solution.	8	UN2818	II	8, 6.1	IB2, T7, TP2, TP13	154	202	243	1 L	30 L	B	12, 25, 40, 52
				III	8, 6.1	IB3, T4, TP1, TP13	154	203	241	5 L	60 L	B	12, 25, 40, 52
		*		*		* *		*	*		*		
	Ammonium sulfide solution.	8	UN2683	II	8, 6.1, 3.	IB1, T7, TP2, TP13	154	202	243	1 L	30 L	B	12, 22, 25, 52, 100
		*		*		* *		*	*		*		
	Ammunition, tear-producing, non-explosive, *without burster or expelling charge, non-fuzed.*	6.1	UN2017		6.1, 8		None	212	None	Forbidden	50 kg	E	13, 40
		*		*		* *		*	*		*		
	Ammunition, toxic, non-explosive, *without burster or expelling charge, non-fuzed.*	6.1	UN2016		6.1		None	212	None	Forbidden	100 kg	E	13, 40
		*		*		* *		*	*		*		
	Anisoyl chloride	8	UN1729	II	8	B2, B4, IB8, IP2, IP4, T3, TP33.	154	212	240	15 kg	50 kg	A	40
		*		*		* *		*	*		*		
	Antimony pentafluoride	8	UN1732	II	8, 6.1	A3, A6, A7, A10, IB2, N3, N36, T7, TP2.	None	202	243	Forbidden	30 L	D	40, 44, 89, 100, 141
		*		*		* *		*	*		*		
	Arsenic bromide	6.1	UN1555	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	12, 25, 40

		*		*		*	*		*	*		*		
	Articles, pressurized pneumatic *or* hydraulic *containing non-flammable gas.*	2.2	UN3164		2.2	371	306	302, 304	None	No limit	No limit	A.		
		*		*		*	*		*	*		*		
	Barium	4.3	UN1400	II	4.3	A19, IB7, IP2, T3, TP33	151	212	241	15 kg	50 kg	E	13, 52, 148	
	Barium alloys, pyrophoric.	4.2	UN1854	I	4.2	T21, TP7, TP33	None	181	None	Forbidden	Forbidden	D	13, 148	
		*		*		*	*		*	*		*		
	Barium azide, wetted *with not less than 50 percent water, by mass.*	4.1	UN1571	I	4.1, 6.1.	162, A2	None	182	None	Forbidden	0.5 kg	D	28, 36	
		*		*		*	*		*	*		*		
	Barium peroxide	5.1	UN1449	II	5.1, 6.1.	A9, IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	C	13, 52, 66, 75, 148	
		*		*		*	*		*	*		*		
	Batteries, containing sodium.	4.3	UN3292		4.3		189	189	189	Forbidden	No limit	A	13, 148	
	Batteries, dry, containing potassium hydroxide solid, electric storage.	8	UN3028		8	237	None	213	None	25 kg	230 kg	A	52	
		*		*		*	*		*	*		*		
	Batteries, wet, filled with acid, *electric storage.*	8	UN2794		8	A51	159	159	159	30 kg	No limit	A	146	
	Batteries, wet, filled with alkali, *electric storage.*	8	UN2795		8	A51	159	159	159	30 kg	No limit	A	52, 146	
	Batteries, wet, non-spillable, *electric storage.*	8	UN2800		8		159a	159	159	No limit	No limit	A		
		*		*		*	*		*	*		*		
	Beryllium, powder	6.1	UN1567	II	6.1, 4.1.	IB8, IP2, IP4, T3, TP33	153	212	242	15 kg	50 kg	A	13, 147, 148	
		*		*		*	*		*	*		*		
+	Boron tribromide	8	UN2692	I	8, 6.1	2, B9, B14, B32, N34, T20, TP2, TP13, TP38, TP45.	None	227	244	Forbidden	Forbidden	C	12, 25	
		*		*		*	*		*	*		*		
	Boron trifluoride dihydrate.	8	UN2851	II	8	IB2, T7, TP2	154	212	240	15 kg	50 kg	B	12, 25, 40	
	Boron trifluoride dimethyl etherate.	4.3	UN2965	I	4.3, 8, 3.	A19, T10, TP2, TP7, TP13	None	201	243	Forbidden	1 L	D	21, 25, 28, 40, 49, 100	
		*		*		*	*		*	*		*		
	Bromoform	6.1	UN2515	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	12, 25, 40	
		*		*		*	*		*	*		*		
+	Bromine	8	UN1744	I	8, 6.1	1, B9, B85, N34, N43, T22, TP2, TP10, TP13.	None	226	249	Forbidden	Forbidden	D	12, 25, 40, 66, 74, 89, 90	
		*		*		*	*		*	*		*		
+	Bromine solutions	8	UN1744	I	8, 6.1	1, B9, B85, N34, N43, T22, TP2, TP10, TP13.	None	226	249	Forbidden	Forbidden	D	12, 25, 40, 66, 74, 89, 90	
+	Bromine solutions	8	UN1744	I	8, 6.1	2, B9, B85, N34, N43, T22, TP2, TP10, TP13.	None	227	249	Forbidden	Forbidden	D	12, 25, 40, 66, 74, 89, 90	

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Nos.	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***) Exceptions	Non-bulk	Bulk	(9) Quantity limitations (see §§ 173.27 and 175.75) Passenger aircraft/rail	Cargo aircraft only	(10) Vessel stowage Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*		* *		*	*		*		
	Bromobenzyl cyanides, liquid.	6.1	UN1694	I	6.1	T14, TP2, TP13	None	201	243	Forbidden	30 L	D	12, 25, 40, 52
	Bromobenzyl cyanides, solid.	6.1	UN3449	I	6.1	T6, TP33	None	211	242	5 kg	50 kg	D	12, 25, 40, 52
		*		*		* *		*	*		*		
	tert-Butyl hypochlorite	4.2	UN3255	I	4.2, 8		None	211	243	Forbidden	Forbidden	D	40
		*		*		* *		*	*		*		
	Butyl mercaptan	3	UN2347	II	3	A3, A6, IB2, T4, TP1	150	202	242	5 L	60 L	D	52, 95, 102
		*		*		* *		*	*		*		
	5-tert-Butyl-2,4,6-trinitro-m-xylene *or* Musk xylene.	4.1	UN2956	III	4.1	159	None	223	None	Forbidden	Forbidden	D	12, 25, 40, 127
		*		*		* *		*	*		*		
	Butyric acid	8	UN2820	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	12, 25
		*		*		* *		*	*		*		
	Calcium	4.3	UN1401	II	4.3	IB7, IP2, T3, TP33	151	212	241	15 kg	50kg	E	13, 52, 148
		*		*		* *		*	*		*		
	Calcium carbide	4.3	UN1402	I	4.3	A1, A8, B55, B59, IB4, IP1, N34, T9, TP7, TP33.	None	211	242	Forbidden	15 kg	B	13, 52, 148
				II	4.3	A1, A8, B55, B59, IB7, IP2, N34, T3, TP33.	151	212	241	15 kg	50 kg	B	13, 52, 148
		*		*		* *		*	*		*		
	Calcium cyanamide *with more than 0.1 percent of calcium carbide.*	4.3	UN1403	III	4.3	A1, A19, IB8, IP4, T1, TP33.	151	213	241	25 kg	100 kg	A	13, 52, 148
		*		*		* *		*	*		*		
	Calcium hydride	4.3	UN1404	I	4.3	A19, N40	None	211	242	Forbidden	15 kg	E	13, 52, 148
		*		*		* *		*	*		*		
	Calcium manganese silicon.	4.3	UN2844	III	4.3	A1, A19, IB8, IP4, T1, TP33.	151	213	241	25 kg	100 kg	A	13, 52, 85, 103, 148
		*		*		* *		*	*		*		
	Calcium peroxide	5.1	UN1457	II	5.1	IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	C	13, 52, 66, 75, 148
	Calcium phosphide	4.3	UN1360	I	4.3, 6.1.	A8, A19, N40	None	211	242	Forbidden	15 kg	E	13, 40, 52, 85, 148
	Calcium, pyrophoric *or* Calcium alloys, pyrophoric.	4.2	UN1855	I	4.2		None	187	None	Forbidden	Forbidden	D	13, 148
		*		*		* *		*	*		*		
	Calcium silicide	4.3	UN1405	II	4.3	A19, IB7, IP2, T3, TP33	151	212	241	15 kg	50 kg	B	13, 52, 85, 103, 148
				III	4.3	A1, A19, IB8, IP4, T1, TP33.	151	213	241	25 kg	100 kg	B	13, 52, 85, 103, 148

		*		*		*	*	*	*		*			
I	Carbon, activated	4.2	UN1362	III	4.2	IB8, IP3, T1, TP33	None	213	241	0.5 kg	0.5 kg	A	12, 25
I	Carbon, *animal or vegetable origin.*	4.2	UN1361	II	4.2	IB6, T3, TP33	None	212	242	Forbidden	Forbidden	A	12, 25
				III	4.2	IB8, IP3, T1, TP33	None	213	241	Forbidden	Forbidden	A	12, 25
		*		*		*	*	*	*		*			
A W	Castor beans *or* Castor meal *or* Castor pomace *or* Castor flake.	9	UN2969	II	None	IB8, IP2, IP4, T3, TP33	155	204	240	No limit	No limit	E	34, 40, 44, 122
		*		*		*	*	*	*		*			
	Cerium, *slabs, ingots, or rods.*	4.1	UN1333	II	4.1	IB8, IP2, IP4, N34	None	212	240	15 kg	50 kg	A	13, 74, 91, 147, 148
	Cerium, *turnings or gritty powder.*	4.3	UN3078	II	4.3	A1, IB7, IP2, T3, TP33	151	212	242	15 kg	50 kg	E	13, 52, 148
	Cesium *or* Caesium	4.3	UN1407	I	4.3	A7, A19, IB4, IP1, N34, N40.	None	211	242	Forbidden	15 kg	D	13, 52, 148
		*		*		*	*	*	*		*			
+	Chloroacetonitrile	6.1	UN2668	I	6.1, 3	2, B9, B14, B32, IB9, T20, TP2, TP13, TP38, TP45.	None	227	244	Forbidden	Forbidden	A	12, 25, 40, 52
		*		*		*	*	*	*		*			
	Chloroacetophenone, liquid, *(CN).*	6.1	UN3416	II	6.1	A3, IB2, N12, N32, N33, T7, TP2, TP13.	None	202	243	Forbidden	60 L	D	12, 25, 40
	Chloroacetophenone, solid, *(CN).*	6.1	UN1697	II	6.1	A3, IB8, IP2, IP4, N12, N32, N33, N34, T3, TP2, TP13, TP33.	None	212	None	Forbidden	100 kg	D	12, 25, 40
		*		*		*	*	*	*		*			
	Chlorocresols solution	6.1	UN2669	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	12, 25
				III	6.1	IB3, T7, TP2	153	203	241	60 L	220 L	A	12, 25
	Chlorocresols, solid	6.1	UN3437	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	12, 25
		*		*		*	*	*	*		*			
	Chloromethyl chloroformate.	6.1	UN2745	II	6.1, 8	IB2, T7, TP2, TP13	153	202	243	1 L	30 L	A	12, 13, 25, 40
		*		*		*	*	*	*		*			
+	Chloronitrobenzenes, liquid.	6.1	UN3409	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	44, 89, 100, 141
		*		*		*	*	*	*		*			
	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	4.3	UN2988	I	4.3, 3, 8.	A2, T14, TP2, TP7, TP13	None	201	244	Forbidden	1 L	D	13, 21, 28, 40, 49, 100, 147, 148
		*		*		*	*	*	*		*			
G	Corrosive liquids, water-reactive, n.o.s.	8	UN3094	I	8, 4.3	A6, A7	None	201	243	Forbidden	1 L	E	13, 148
				II	8, 4.3	A6, A7	None	202	243	1 L	5 L	E	13, 148
		*		*		*	*	*	*		*			
G	Corrosive solids, toxic, n.o.s.	8	UN2923	I	8, 6.1	IB7, T6, TP33	None	211	242	1 kg	25 kg	B	40
				II	8, 6.1	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	B	40
				III	8, 6.1	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	B	40
G	Corrosive solids, water-reactive, n.o.s.	8	UN3096	I	8, 4.3	IB4, IP1, T6, TP33	None	211	243	1 kg	25 kg	D	13, 148
				II	8, 4.3	IB6, IP2, T3, TP33	None	212	242	15 kg	50 kg	D	13, 148
		*		*		*	*	*	*		*			
	Crotonic acid, liquid	8	UN3472	III	8	IB8, T1	154	203	241	5 L	60 L	A	12, 25
	Crotonic acid, solid	8	UN2823	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	12, 25

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*		* *		*	*		*		
	Cyanogen bromide	6.1	UN1889	I	6.1, 8	A6, A8, T6, TP33	None	211	242	1 kg	15 kg	D	40, 52
		*		*		* *		*	*		*		
	Cyanuric chloride	8	UN2670	II	8	IB8, IP2, IP4, T3, TP33	None	212	240	15 kg	50 kg	A	12, 25, 40
		*		*		* *		*	*		*		
	Cyclohexyl mercaptan	3	UN3054	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40, 95, 102
		*		*		* *		*	*		*		
	1,1-Dichloro-1-nitroethane.	6.1	UN2650	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	12, 25, 40, 74
		*		*		* *		*	*		*		
	1,3-Dichloroacetone	6.1	UN2649	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	B	12, 25, 40
		*		*		* *		*	*		*		
	1,3-Dichloropropanol-2	6.1	UN2750	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	12, 25, 40
		*		*		* *		*	*		*		
	Diethylthiophosphoryl chloride.	8	UN2751	II	8	B2, IB2, T7, TP2	None	212	240	15 kg	50 kg	D	12, 25, 40
		*		*		* *		*	*		*		
	Dipicryl sulfide, wetted *with not less than 10 percent water, by mass*.	4.1	UN2852	I	4.1	162, A2, N41, N84	None	211	None	Forbidden	0.5 kg	D	28, 36
		*		*		* *		*	*		*		
	2-Ethylhexyl chloroformate.	6.1	UN2748	II	6.1, 8	IB2, T7, TP2, TP13	153	202	243	1 L	30 L	A	12, 13, 25, 40
		*		*		* *		*	*		*		
	Ferrocerium	4.1	UN1323	II	4.1	59, A19, IB8, IP2, IP4, T3, TP33.	151	212	240	15 kg	50 kg	A	13, 147, 148
	Ferrosilicon *with 30 percent or more but less than 90 percent silicon*.	4.3	UN1408	III	4.3, 6.1.	A1, A19, B6, IB8, IP4, IP7, T1, TP33.	151	213	240	25 kg	100 kg	A	13, 40, 52, 53, 85, 103, 148
		*		*		* *		*	*		*		
	Ferrous metal borings *or* Ferrous metal shavings *or* Ferrous metal turnings *or* Ferrous metal cuttings *in a form liable to self-heating*.	4.2	UN2793	III	4.2	A1, A19, IB8, IP3, IP7	None	213	241	25 kg	100 kg	A	13, 148
		*		*		* *		*	*		*		
A W	Fish meal, stabilized *or* Fish scrap, stabilized.	9	UN2216	III	None	155, IB8, IP3, T1, TP33	155	218	218	Forbidden	Forbidden	B	25, 88, 122, 128
	Fish meal, unstablized *or* Fish scrap, unstabilized.	4.2	UN1374	II	4.2	155, A1, A19, IB8, IP2, IP4, T3, TP33.	None	212	241	Forbidden	Forbidden	B	18, 25, 128

	*		*		*	*		*		*		*		
Fuel cell cartridges *or* Fuel cell cartridges contained in equipment *or* Fuel cell cartridges packed with equipment, *containing water-reactive substances.*	4.3	UN3476		4.3	328	230		230		230	5 kg	50 kg	A	13, 148
	*		*		*	*		*		*		*		
Hafnium powder, dry	4.2	UN2545	I	4.2		None		211		242	Forbidden	Forbidden	D	13, 148
			II	4.2	A19, A20, IB6, IP2, N34, T3, TP33.	None		212		241	15 kg	50 kg	D	13, 148
			III	4.2	IB8, IP3, T1, TP33	None		213		241	25 kg	100 kg	D	13, 148
	*		*		*	*		*		*		*		
Hexachlorocyclopentadiene.	6.1	UN2646	I	6.1	2, B9, B14, B32, B77, T20, TP2, TP13, TP38, TP45.	None		227		244	Forbidden	Forbidden	D	25, 40
	*		*		*	*		*		*		*		
Hexamethylenediamine, solid.	8	UN2280	III	8	IB8, IP3, T1, TP33	154		213		240	25 kg	100 kg	A	12, 25
	*		*		*	*		*		*		*		
Hydrofluoric acid, *with more than 60 percent strength.*	8	UN1790	I	8, 6.1	A6, A7, B4, B15, B23, N5, N34, T10, TP2, TP13.	None		201		243	0.5 L	2.5 L	D	12, 25, 40
Hydrofluoric acid, *with not more than 60 percent strength.*	8	UN1790	II	8, 6.1	A6, A7, B15, IB2, N5, N34, T8, TP2.	154		202		243	1 L	30 L	D	12, 25, 40
	*		*		*	*		*		*		*		
Hydrogen, refrigerated liquid *(cryogenic liquid).*	2.1	UN1966		2.1	T75, TP5	None		316		318, 319	Forbidden	Forbidden	D	40, 57
	*		*		*	*		*		*		*		
G Hypochlorites, inorganic, n.o.s.	5.1	UN3212	II	5.1	349, A9, IB8, IP2, IP4, T3, TP33.	152		212		240	5 kg	25 kg	D	4, 25, 52, 56, 58, 69, 116, 118
	*		*		*	*		*		*		*		
Iron oxide, spent, *or* Iron sponge, spent *obtained from coal gas purification.*	4.2	UN1376	III	4.2	B18, IB8, IP3, T1, TP33	None		213		240	Forbidden	Forbidden	E	13, 148
	*		*		*	*		*		*		*		
Isopropyl chloroformate	6.1	UN2407	I	6.1, 3, 8.	2, B9, B14, B32, B77, T20, TP2, TP13, TP38, TP44.	None		227		244	Forbidden	Forbidden	B	21, 40, 100
	*		*		*	*		*		*		*		
Krill meal	4.2	UN3497	II	4.2	155, IB6, IP2, T3, TP33	None		212		242	15 kg	50 kg	B	25, 88, 128
			III	4.2	155, IB8, IP3, T1, TP33	None		213		242	25 kg	100 kg	A	128
	*		*		*	*		*		*		*		
Life-saving appliances, not self inflating *containing dangerous goods as equipment.*	9	UN3072		None	134	None		219		None	No limit	No limit	A	122
Life-saving appliances, self inflating.	9	UN2990		None	338	None		219		None	No limit	No limit	A	122

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*		* *		*	*		*		
	Lithium	4.3	UN1415	I	4.3	A7, A19, IB4, IP1, N45	None	211	244	Forbidden	15 kg	E	13, 52, 148
		*		*		* *		*	*		*		
	Lithium aluminum hydride.	4.3	UN1410	I	4.3	A19	None	211	242	Forbidden	15 kg	E	13, 52, 148
	Lithium aluminum hydride, ethereal.	4.3	UN1411	I	4.3, 3	A2, A3, A11, N34	None	201	244	Forbidden	1 L	D	13, 40, 148
		*		*		* *		*	*		*		
	Lithium borohydride	4.3	UN1413	I	4.3	A19, N40	None	211	242	Forbidden	15 kg	E	13, 52, 148
	Lithium ferrosilicon	4.3	UN2830	II	4.3	A19, IB7, IP2, T3, TP33	151	212	241	15 kg	50 kg	E	13, 40, 85, 103, 148
	Lithium ion batteries *including lithium ion polymer batteries.*	9	UN3480		9	A51	185	185	185	5 kg	35 kg	A.	
	Lithium ion batteries contained in equipment *including lithium ion polymer batteries.*	9	UN3481		9	A54	185	185	185	5 kg	35 kg	A.	
	Lithium ion batteries packed with equipment *including lithium ion polymer batteries.*	9	UN3481		9	A54	185	185	185	5 kg	35 kg	A.	
	Lithium metal batteries *including lithium alloy batteries.*	9	UN3090		9		185	185	185	Forbidden	35 kg	A.	
	Lithium metal batteries contained in equipment *including lithium alloy batteries.*	9	UN3091		9	A54, A101	185	185	185	5 kg	35 kg	A.	
	Lithium metal batteries packed with equipment *including lithium alloy batteries.*	9	UN3091		9	A54	185	185	185	5 kg	35 kg	A.	
		*		*		* *		*	*		*		
	Lithium hydride	4.3	UN1414	I	4.3	A19, N40	None	211	242	Forbidden	15 kg	E	13, 52, 148
	Lithium hydride, fused solid.	4.3	UN2805	II	4.3	A8, A19, A20, IB4, T3, TP33.	151	212	241	15 kg	50 kg	E	13, 52, 148
		*		*		* *		*	*		*		
	Lithium peroxide	5.1	UN1472	II	5.1	A9, IB6, IP2, N34, T3, TP33.	152	212	None	5 kg	25 kg	C	13, 52, 66, 75, 148
		*		*		* *		*	*		*		
	Lithium silicon	4.3	UN1417	II	4.3	A19, A20, IB7, IP2, T3, TP33.	151	212	241	15 kg	50 kg	A	13, 85, 103, 148
		*		*		* *		*	*		*		
	Magnesium aluminum phosphide.	4.3	UN1419	I	4.3, 6.1.	A19, N34, N40	None	211	242	Forbidden	15 kg	E	13, 40, 52, 85, 148
		*		*		* *		*	*		*		
	Magnesium diamide	4.2	UN2004	II	4.2	A8, A19, A20, IB6, T3, TP33.	None	212	241	15 kg	50 kg	C	13, 148

	*		*		*	*	*	*		*		
Magnesium granules, coated, *particle size not less than 149 microns*.	4.3	UN2950	III	4.3	A1, A19, IB8, IP4, T1, TP33.	151	213	240	25 kg	100 kg	A	13, 52, 148
Magnesium hydride	4.3	UN2010	I	4.3	A19, N40	None	211	242	Forbidden	15 kg	E	13, 52, 148
Magnesium *or* Magnesium alloys *with more than 50 percent magnesium in pellets, turnings or ribbons*.	4.1	UN1869	III	4.1	A1, IB8, IP3, T1, TP33	151	213	240	25 kg	100 kg	A	13, 39, 52, 53, 74, 101, 147, 148
	*		*		*	*	*	*		*		
Magnesium peroxide	5.1	UN1476	II	5.1	IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	C	13, 52, 66, 75, 148
Magnesium phosphide	4.3	UN2011	I	4.3, 6.1.	A19, N40	None	211	None	Forbidden	15 kg	E	13, 40, 52, 85, 148
Magnesium, powder *or* Magnesium alloys, powder.	4.3	UN1418	I	4.3, 4.2.	A19, B56	None	211	244	Forbidden	15 kg	A	13, 39, 52, 148
			II	4.3, 4.2.	A19, B56, IB5, IP2, T3, TP33.	None	212	241	15 kg	50 kg	A	13, 39, 52, 148
			III	4.3, 4.2.	A19, B56, IB8, IP4, T1, TP33.	None	213	241	25 kg	100 kg	A	13, 39, 52, 148
	*		*		*	*	*	*		*		
Magnesium silicide	4.3	UN2624	II	4.3	A19, A20, IB7, IP2, T3, TP33.	151	212	241	15 kg	50 kg	B	13, 85, 103, 148
	*		*		*	*	*	*		*		
Maleic anhydride	8	UN2215	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	95, 102
Maleic anhydride, molten.	8	UN2215	III	8	T4, TP3	None	213	240	Forbidden	Forbidden	A	95, 102
Malononitrile	6.1	UN2647	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	12, 25
Maneb *or* Maneb preparations *with not less than 60 percent maneb*.	4.2	UN2210	III	4.2, 4.3.	57, A1, A19, IB6, T1, TP33.	None	213	242	25 kg	100 kg	A	13, 34, 148
Maneb stabilized *or* Maneb preparations, stabilized *against self-heating*.	4.3	UN2968	III	4.3	54, A1, A19, IB8, IP4, T1, TP33.	151	213	242	25 kg	100 kg	B	13, 34, 52, 148
	*		*		*	*	*	*		*		
Mercaptans, liquid, flammable, n.o.s. or Mercaptan mixture, liquid, flammable, n.o.s.	3	UN3336	I	3	T11, TP2	150	201	243	1 L	30 L	E	95, 102
			II	3	IB2, T7, TP1, TP8, TP28	150	202	242	5 L	60 L	B	95, 102
			III	3	B1, B52, IB3, T4, TP1, TP29.	150	203	241	60 L	220 L	B	95, 102
Mercaptans, liquid, flammable, toxic, n.o.s. *or* Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	3	UN1228	II	3, 6.1	IB2, T11, TP2, TP27	None	202	243	Forbidden	60 L	B	40, 95, 102
			III	3, 6.1	A6, B1, IB3, T7, TP1, TP28.	150	203	242	5 L	220 L	A	40, 95, 102
Mercaptans, liquid, toxic, flammable, n.o.s. *or* Mercaptan mixtures, liquid, toxic, flammable, n.o.s., *flash point not less than 23 degrees C*.	6.1	UN3071	II	6.1, 3	A6, IB2, T11, TP2, TP13, TP27.	153	202	243	5 L	60 L	C	40, 102, 121

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Nos.	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***) Exceptions	Non-bulk	Bulk	(9) Quantity limitations (see §§ 173.27 and 175.75) Passenger aircraft/rail	Cargo aircraft only	(10) Vessel stowage Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*		* *		*	*		*		
A W	Mercury contained in manufactured articles.	8	UN3506		8, 6.1	A191	164	None	None	No limit	No limit	B	40, 97
		*		*		* *		*	*		*		
G	Metal catalyst, dry	4.2	UN2881	I	4.2	N34, T21, TP7, TP33	None	187	None	Forbidden	Forbidden	C	13, 147, 148
				II	4.2	IB6, IP2, N34, T3, TP33	None	187	242	Forbidden	50 kg	C	13, 147, 148
				III	4.2	IB8, IP3, N34, T1, TP33	None	187	241	25 kg	100 kg	C	13, 147, 148
		*		*		* *		*	*		*		
	Metal hydrides, water reactive, n.o.s.	4.3	UN1409	I	4.3	A19, N34, N40	None	211	242	Forbidden	15 kg	D	13, 52, 148
				II	4.3	A19, IB4, N34, N40, T3, TP33.	151	212	242	15 kg	50 kg	D	13, 52, 148
		*		*		* *		*	*		*		
	Metal powder, self-heating, n.o.s.	4.2	UN3189	II	4.2	IB6, IP2, T3, TP33	None	212	241	15 kg	50 kg	C	13, 148
				III	4.2	IB8, IP3, T1, TP33	None	213	241	25 kg	100 kg	C	13, 148
	Metal powders, flammable, n.o.s.	4.1	UN3089	II	4.1	IB8, IP2, IP4, T3, TP33	151	212	240	15 kg	50 kg	B	13, 74, 147, 148
				III	4.1	IB8, IP2, IP4, T1, TP33	151	213	240	25 kg	100 kg	B	13, 74, 147, 148
G	Metallic substance, water-reactive, n.o.s.	4.3	UN3208	I	4.3	A7, IB4	None	211	242	Forbidden	15 kg	E	13, 40, 148
				II	4.3	A7, IB7, IP2, T3, TP33	151	212	242	15 kg	50 kg	E	13, 40, 148
				III	4.3	A7, IB8, IP4, T1, TP33	151	213	241	25 kg	100 kg	E	13, 40, 148
G	Metallic substance, water-reactive, self-heating, n.o.s.	4.3	UN3209	I	4.3, 4.2.	A7	None	211	242	Forbidden	15 kg	E	13, 40, 148
				II	4.3, 4.2.	A7, IB5, IP2, T3, TP33	None	212	242	15 kg	50 kg	E	13, 40, 148
				III	4.3, 4.2.	A7, IB8, IP4, T1, TP33	None	213	242	25 kg	100 kg	E	13, 40, 148
		*		*		* *		*	*		*		
	Methyl iodide	6.1	UN2644	I	6.1	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45.	None	227	244	Forbidden	Forbidden	D	12, 25, 40
		*		*		* *		*	*		*		
	Methyl magnesium bromide, in ethyl ether.	4.3	UN1928	I	4.3, 3		None	201	243	Forbidden	1 L	D	13, 148
		*		*		* *		*	*		*		
	Methyl vinyl ketone, stabilized.	6.1	UN1251	I	6.1, 3, 8.	1, B9, B14, B30, T22, TP2, TP13, TP38, TP44.	None	226	244	Forbidden	Forbidden	B	21, 40, 100
		*		*		* *		*	*		*		
G	Organic peroxide type B, liquid.	5.2	UN3101	II	5.2, 1	53	152	225	None	Forbidden	Forbidden	D	12, 25, 52, 53
G	Organic peroxide type B, liquid, temperature controlled.	5.2	UN3111	II	5.2, 1	53	None	225	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Organic peroxide type B, solid.	5.2	UN3102	II	5.2, 1	53	152	225	None	Forbidden	Forbidden	D	12, 25, 52, 53

G	Organic peroxide type B, solid, temperature controlled.	5.2	UN3112	II	5.2, 1	53	None	225	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Organic peroxide type C, liquid.	5.2	UN3103	II	5.2		152	225	None	5 L	10 L	D	12, 25, 52, 53
G	Organic peroxide type C, liquid, temperature controlled.	5.2	UN3113	II	5.2		None	225	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Organic peroxide type C, solid.	5.2	UN3104	II	5.2		152	225	None	5 kg	10 kg	D	12, 25, 52, 53
G	Organic peroxide type C, solid, temperature controlled.	5.2	UN3114	II	5.2		None	225	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Organic peroxide type D, liquid.	5.2	UN3105	II	5.2		152	225	None	5 L	10 L	D	12, 25, 52, 53
G	Organic peroxide type D, liquid, temperature controlled.	5.2	UN3115	II	5.2		None	225	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Organic peroxide type D, solid.	5.2	UN3106	II	5.2		152	225	None	5 kg	10 kg	D	12, 25, 52, 53
G	Organic peroxide type D, solid, temperature controlled.	5.2	UN3116	II	5.2		None	225	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Organic peroxide type E, liquid.	5.2	UN3107	II	5.2	A61	152	225	None	10 L	25 L	D	12, 25, 52, 53
G	Organic peroxide type E, liquid, temperature controlled.	5.2	UN3117	II	5.2		None	225	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Organic peroxide type E, solid.	5.2	UN3108	II	5.2		152	225	None	10 kg	25 kg	D	12, 25, 52, 53
G	Organic peroxide type E, solid, temperature controlled.	5.2	UN3118	II	5.2		None	225	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Organic peroxide type F, liquid.	5.2	UN3109	II	5.2	A61, IP5	152	225	225	10 L	25 L	D	12, 25, 52, 53
G	Organic peroxide type F, liquid, temperature controlled.	5.2	UN3119	II	5.2	IP5	None	225	225	Forbidden	Forbidden	D	2, 25, 52, 53
G	Organic peroxide type F, solid.	5.2	UN3110	II	5.2	TP33	152	225	225	10 kg	25 kg	D	12, 25, 52, 53
G	Organic peroxide type F, solid, temperature controlled.	5.2	UN3120	II	5.2	TP33	None	225	225	Forbidden	Forbidden	D	2, 25, 52, 53
		*		*		*	*	*	*		*		
G	Organometallic substance, liquid, pyrophoric.	4.2	UN3392	I	4.2	B11, T21, TP2, TP7, TP36	None	181	244	Forbidden	Forbidden	D	13, 78, 148
G	Organometallic substance, liquid, pyrophoric, water-reactive.	4.2	UN3394	I	4.2, 4.3.	B11, T21, TP2, TP7, TP36, TP47.	None	181	244	Forbidden	Forbidden	D	13, 52, 78, 148
G	Organometallic substance, liquid, water-reactive.	4.3	UN3398	I	4.3	T13, TP2, TP7, TP36, TP47.	None	201	244	Forbidden	1 L	E	13, 40, 52, 148
				II	4.3, 3	IB1, T7, TP2, TP7, TP36, TP47.	None	202	243	1 L	5 L	E	13, 40, 52, 148
				III	4.3, 3	IB2, T7, TP2, TP7, TP36, TP47.	None	203	242	5 L	60 L	E	13, 40, 52, 148
G	Organometallic substance, liquid, water-reactive, flammable.	4.3	UN3399	I	4.3, 3	T13, TP2, TP7, TP36, TP47.	None	201	244	Forbidden	1 L	D	13, 40, 52, 148
				II	4.3, 3	IB1, IP2, T7, TP2, TP7, TP36, TP47.	None	202	243	1 L	5 L	D	13, 40, 52, 148
				III	4.3, 3	IB2, IP4, T7, TP2, TP7, TP36, TP47.	None	203	242	5 L	60 L	E	13, 40, 52, 148

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Nos.	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***) Exceptions	Non-bulk	Bulk	(9) Quantity limitations (see §§ 173.27 and 175.75) Passenger aircraft/rail	Cargo aircraft only	(10) Vessel stowage Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
G	Organometallic substance, solid, pyrophoric.	4.2	UN3391	I	4.2	T21, TP7, TP33, TP36	None	187	244	Forbidden	Forbidden	D	13, 148
G	Organometallic substance, solid, pyrophoric, water-reactive.	4.2	UN3393	I	4.2, 4.3.	B11, T21, TP7, TP33, TP36, TP47.	None	187	244	Forbidden	Forbidden	D	13, 52, 148
		*		*		* *		*	*		*		
G	Organometallic substance, solid, water-reactive.	4.3	UN3395	I	4.3	N40, T9, TP7, TP33, TP36, TP47.	None	211	242	Forbidden	15 kg	E	13, 40, 52, 148
				II	4.3	IB4, T3, TP33, TP36, TP47.	151	212	242	15 kg	50 kg	E	13, 40, 52, 148
				III	4.3	IB6, T1, TP33, TP36, TP47.	151	213	241	25 kg	100 kg	E	13, 40, 52, 148
G	Organometallic substance, solid, water-reactive, flammable.	4.3	UN3396	I	4.3, 4.1.	N40, T9, TP7, TP33, TP36, TP47.	None	211	242	Forbidden	15 kg	E	13, 40, 52, 148
				II	4.3, 4.1.	IB4, T3, TP33, TP36, TP47.	151	212	242	15 kg	50 kg	E	13, 40, 52, 148
				III	4.3, 4.1.	IB6, T1, TP33, TP36, TP47.	151	213	241	25 kg	100 kg	E	13, 40, 52, 148
G	Organometallic substance, solid, water-reactive, self-heating.	4.3	UN3397	I	4.3, 4.2.	N40, T9, TP7, TP33, TP36, TP47.	None	211	242	Forbidden	15 kg	E	13, 40, 52, 148
				II	4.3, 4.2.	IB4, T3, TP33, TP36, TP47.	None	212	242	15 kg	50 kg	E	13, 40, 52, 148
				III	4.3, 4.2.	IB6, T1, TP33, TP36, TP47.	None	213	241	25 kg	100 kg	E	13, 40, 52, 148
		*		*		* *		*	*		*		
G	Oxidizing liquid, corrosive, n.o.s.	5.1	UN3098	I	5.1, 8	62, A6	None	201	244	Forbidden	2.5 L	D	13, 56, 58, 138
				II	5.1, 8	62, IB1	None	202	243	1 L	5 L	B	13, 56, 58, 138
				III	5.1, 8	62, IB2	152	203	242	2.5 L	30 L	B	13, 56, 58, 138
G	Oxidizing liquid, n.o.s	5.1	UN3139	I	5.1	62, 127, A2, A6	None	201	243	Forbidden	2.5 L	D	56, 58, 138
				II	5.1	62, 127, A2, IB2	152	202	242	1 L	5 L	B	56, 58, 138
				III	5.1	62, 127, A2, IB2	152	203	241	2.5 L	30 L	B	56, 58, 138
G	Oxidizing liquid, toxic, n.o.s.	5.1	UN3099	I	5.1, 6.1.	62, A6	None	201	244	Forbidden	2.5 L	D	56, 58, 138
				II	5.1, 6.1.	62, IB1	152	202	243	1 L	5 L	B	56, 58, 95, 138
				III	5.1, 6.1.	62, IB2	152	203	242	2.5 L	30 L	B	56, 58, 95, 138
		*		*		* *		*	*		*		
G	Oxidizing solid, corrosive, n.o.s.	5.1	UN3085	I	5.1, 8	62	None	211	242	1 kg	15 kg	D	13, 56, 58, 138
				II	5.1, 8	62, IB6, IP2, T3, TP33	None	212	242	5 kg	25 kg	B	13, 34, 56, 58, 138
				III	5.1, 8	62, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	B	13, 34, F56, 58, 138
G	Oxidizing solid, flammable, n.o.s.	5.1	UN3137	I	5.1, 4.1.	62	None	214	214	Forbidden	Forbidden		13, 147, 148

		*		*		*	*	*	*	*	*			
G	Oxidizing solid, toxic, n.o.s..	5.1	UN3087	I	5.1, 6.1.	62	None	211	242	1 kg	15 kg	D	56, 58, 138
				II	5.1, 6.1.	62, IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	B	56, 58, 138
				III	5.1, 6.1.	62, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	B	56, 58, 138
G	Oxidizing solid, water reactive, n.o.s.	5.1	UN3121		5.1, 4.3.	62	None	214	214	Forbidden	Forbidden		13, 148
		*		*		*	*	*	*	*	*			
	Oxygen generator, chemical *(including when contained in associated equipment, e.g., passenger service units (PSUs), portable breathing equipment (PBE), etc).*	5.1	UN3356		5.1		None	168	None	Forbidden	25 kg	D	56, 58, 69, 106
		*		*		*	*	*	*	*	*			
	Paint *including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base.*	3	UN1263	I	3	367, T11, TP1, TP8, TP27	150	201	243	1 L	30 L	E.	
				II	3	149, 367, B52, IB2, T4, TP1, TP8, TP28.	150	173	242	5 L	60 L	B.	
				III	3	367, B1, B52, IB3, T2, TP1, TP29.	150	173	242	60 L	220 L	A.	
	Paint *or* Paint related material.	8	UN3066	II	8	367, B2, IB2, T7, TP2, TP28.	154	173	242	1 L	30 L	A	40
				III	8	367, B52, IB3, T4, TP1, TP29.	154	173	241	5 L	60 L	A	40
	Paint, corrosive, flammable *(including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base).*	8	UN3470	II	8, 3	367, IB2, T7, TP2, TP8, TP28.	154	202	243	1 L	30 L	B	40
	Paint, flammable, corrosive, *(including paint , lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base).*	3	UN3469	I	3, 8	367, T11, TP2, TP27	None	201	243	0.5 L	2.5 L	E	40
				II	3, 8	367, IB2, T7, TP2, TP8, TP28.	150	202	243	1 L	5 L	B	40
				III	3, 8	367, IB3, T4, TP1, TP29	150	203	242	5 L	60 L	A	40
	Paint related material *including paint thinning, drying, removing, or reducing compound.*	3	UN1263	I	3	367, T11, TP1, TP8, TP27	150	201	243	1 L	30 L	E.	
				II	3	149,367, B52, IB2, T4, TP1, TP8, TP28.	150	173	242	5 L	60 L	B.	
				III	3	367, B1, B52, IB3, T2, TP1, TP29.	150	173	242	60 L	220 L	A.	
	Paint related material corrosive, flammable *(including paint thinning or reducing compound).*	8	UN3470	II	8, 3	367, IB2, T7, TP2, TP8, TP28.	154	202	243	1 L	30 L	B	40

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Nos.	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***) Exceptions	Non-bulk	Bulk	(9) Quantity limitations (see §§ 173.27 and 175.75) Passenger aircraft/rail	Cargo aircraft only	(10) Vessel stowage Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Paint related material, flammable, corrosive *(including paint thinning or reducing compound).*	3	UN3469	I	3, 8	367, T11, TP2, TP27	None	201	243	0.5 L	2.5 L	E	40
				II	3, 8	367, IB2, T7, TP2, TP8, TP28.	150	202	243	1 L	5 L	B	40
				III	3, 8	367, IB3, T4, TP1, TP29	150	203	242	5 L	60 L	A	40
		*		*		* *		*	*		*		
+	Pentaborane	4.2	UN1380	I	4.2, 6.1.	1	None	205	245	Forbidden	Forbidden	D	13, 148
		*		*		* *		*	*		*		
	Peroxides, inorganic, n.o.s.	5.1	UN1483	II	5.1	A7, A20, IB6, IP2, N34, T3, TP33.	None	212	242	5 kg	25 kg	C	13, 52, 66, 75, 148
				III	5.1	A7, A20, IB8, IP3, N34, T1, TP33.	152	213	240	25 kg	100 kg	C	13, 52, 66, 75, 148
		*		*		* *		*	*		*		
	Persulfates, inorganic, aqueous solution, n.o.s.	5.1	UN3216	III	5.1	IB2, T4, TP1, TP29	152	203	241	2.5 L	30 L	A	56, 58, 133
		*		*		* *		*	*		*		
G	Pesticides, liquid, flammable, toxic, flash point less than 23 degrees C.	3	UN3021	I	3, 6.1	B5, T14, TP2, TP13, TP27	None	201	243	Forbidden	30 L	B	40
				II	3, 6.1	IB2, T11, TP2, TP13, TP27.	150	202	243	1 L	60 L	B	40
		*		*		* *		*	*		*		
	Phenyl chloroformate	6.1	UN2746	II	6.1, 8	IB2, T7, TP2, TP13	153	202	243	1 L	30 L	A	12, 13, 25, 40
		*		*		* *		*	*		*		
	Phosphorus heptasulfide, *free from yellow or white phosphorus.*	4.1	UN1339	II	4.1	A20, IB4, N34, T3, TP33	None	212	240	15 kg	50 kg	B	13, 74, 147, 148
		*		*		* *		*	*		*		
	Phosphorus oxybromide	8	UN1939	II	8	B8, IB8, IP2, IP4, N41, N43, T3, TP33.	None	212	240	Forbidden	50 kg	C	12, 25, 40
		*		*		* *		*	*		*		
	Phosphorus pentabromide.	8	UN2691	II	8	A7, IB8, IP2, IP4, N34, T3, TP33.	154	212	240	Forbidden	50 kg	B	12, 25, 40, 53, 55
		*		*		* *		*	*		*		
	Phosphorus pentasulfide, *free from yellow or white phosphorus.*	4.3	UN1340	II	4.3, 4.1.	A20, B59, IB4, T3, TP33	151	212	242	15 kg	50 kg	B	13, 74, 148

		*		*		*		*		*		*			
	Phosphorus trioxide	8	UN2578	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	12, 25
	Phosphorus trisulfide, *free from yellow or white phosphorus.*	4.1	UN1343	II	4.1	A20, IB4, N34, T3, TP33	None	212	240	15 kg	50 kg	B	13, 74, 147, 148
		*		*		*		*		*		*			
	Piperazine	8	UN2579	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	12, 25, 52
		*		*		*		*		*		*			
	Potassium	4.3	UN2257	I	4.3	A7, A19, A20, B27, IB4, IP1, N6, N34, T9, TP7, TP33.	None	211	244	Forbidden	15 kg	D	13, 52, 148
		*		*		*		*		*		*			
	Potassium borohydride	4.3	UN1870	I	4.3	A19, N40	None	211	242	Forbidden	15 kg	E	13, 52, 148
		*		*		*		*		*		*			
	Potassium, metal alloys, liquid.	4.3	UN1420	I	4.3	A7, A19, A20, B27	None	201	244	Forbidden	1 L	E	13, 40, 52, 148
	Potassium, metal alloys, solid.	4.3	UN3403	I	4.3	A19, A20, B27, IB4, IP1, T9, TP7, TP33.	None	211	244	Forbidden	15 kg	D	13, 52, 148
		*		*		*		*		*		*			
	Potassium peroxide	5.1	UN1491	I	5.1	A20, IB6, IP1, N34	None	211	None	Forbidden	15 kg	C	13, 52, 66, 75, 148
		*		*		*		*		*		*			
	Potassium phosphide	4.3	UN2012	I	4.3, 6.1.	A19, N40	None	211	None	Forbidden	15 kg	E	13, 40, 52, 85, 148
		*		*		*		*		*		*			
	Potassium sodium alloys, liquid.	4.3	UN1422	I	4.3	A7, A19, B27, N34, N40, T9, TP3, TP7, TP31.	None	201	244	Forbidden	1 L	E	13, 40, 52, 148
	Potassium sodium alloys, solid.	4.3	UN3404	I	4.3	A19, B27, N34, N40, T9, TP7, TP33.	None	211	244	Forbidden	15 kg	D	13, 52, 148
		*		*		*		*		*		*			
	Potassium superoxide	5.1	UN2466	I	5.1	A20, IB6, IP1	None	211	None	Forbidden	15 kg	E	13, 52, 66, 75, 148
		*		*		*		*		*		*			
	Printing ink, flammable or Printing ink related material *(including printing ink thinning or reducing compound), flammable.*	3	UN1210	I	3	367, T11, TP1, TP8	150	173	243	1 L	30 L	E.	
				II	3	149, 367, IB2, T4, TP1, TP8.	150	173	242	5 L	60 L	B.	
				III	3	367, B1, IB3, T2, TP1	150	173	242	60 L	220 L	A.	
		*		*		*		*		*		*			
G	Pyrophoric liquid, inorganic, n.o.s.	4.2	UN3194	I	4.2		None	181	244	Forbidden	Forbidden	D	13, 78, 148
G	Pyrophoric liquids, organic, n.o.s.	4.2	UN2845	I	4.2	B11, T22, TP2, TP7	None	181	244	Forbidden	Forbidden	D	13, 78, 148
G	Pyrophoric metals, n.o.s., *or* Pyrophoric alloys, n.o.s.	4.2	UN1383	I	4.2	B11, T21, TP7, TP33	None	187	242	Forbidden	Forbidden	D	13, 148
G	Pyrophoric solid, inorganic, n.o.s.	4.2	UN3200	I	4.2	T21, TP7, TP33	None	187	242	Forbidden	Forbidden	D	13, 148
G	Pyrophoric solids, organic, n.o.s.	4.2	UN2846	I	4.2		None	187	242	Forbidden	Forbidden	D	13, 148
		*		*		*		*		*		*			
	Quinoline	6.1	UN2656	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	12, 25

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Nos.	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***) Exceptions	Non-bulk	Bulk	(9) Quantity limitations (see §§ 173.27 and 175.75) Passenger aircraft/rail	Cargo aircraft only	(10) Vessel stowage Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*		* *		*	*		*		
	Radioactive material, excepted package-limited quantity of material.	7	UN2910		None	368	421, 422	421, 422	421, 422			A.	
		*		*		* *		*	*		*		
	Rubidium	4.3	UN1423	I	4.3	22, A7, A19, IB4, IP1, N34, N40, N45.	None	211	242	Forbidden	15 kg	D	13, 52, 148
		*		*		* *		*	*		*		
I	Seed cake *with not more than 1.5 percent oil and not more than 11 percent moisture.*	4.2	UN2217	III	None	IB8, IP3, IP7, N7	None	213	241	Forbidden	Forbidden	A	13, 25, 120
		*		*		* *		*	*		*		
G	Self-reactive liquid type B.	4.1	UN3221	II	4.1	53	151	224	None	Forbidden	Forbidden	D	25, 52, 53, 127
G	Self-reactive liquid type B, temperature controlled.	4.1	UN3231	II	4.1	53	None	224	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Self-reactive liquid type C.	4.1	UN3223	II	4.1		151	224	None	5 L	10 L	D	25, 52, 53
G	Self-reactive liquid type C, temperature controlled.	4.1	UN3233	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Self-reactive liquid type D.	4.1	UN3225	II	4.1		151	224	None	5 L	10 L	D	25, 52, 53
G	Self-reactive liquid type D, temperature controlled.	4.1	UN3235	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Self-reactive liquid type E.	4.1	UN3227	II	4.1		151	224	None	10 L	25 L	D	25, 52, 53
G	Self-reactive liquid type E, temperature controlled.	4.1	UN3237	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Self-reactive liquid type F.	4.1	UN3229	II	4.1		151	224	None	10 L	25 L	D	25, 52, 53
G	Self-reactive liquid type F, temperature controlled.	4.1	UN3239	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Self-reactive solid type B	4.1	UN3222	II	4.1	53	151	224	None	(1)	(2)	D	25, 52, 53, 127
G	Self-reactive solid type B, temperature controlled.	4.1	UN3232	II	4.1	53	None	224	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Self-reactive solid type C.	4.1	UN3224	II	4.1		151	224	None	5 kg	10 kg	D	25, 52, 53
G	Self-reactive solid type C, temperature controlled.	4.1	UN3234	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Self-reactive solid type D.	4.1	UN3226	II	4.1		151	224	None	5 kg	10 kg	D	25, 52, 53
G	Self-reactive solid type D, temperature controlled.	4.1	UN3236	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 25, 52, 53

G	Self-reactive solid type E	4.1	UN3228	II	4.1		151	224	None	10 kg	25 kg	D	25, 52, 53
G	Self-reactive solid type E, temperature controlled.	4.1	UN3238	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 25, 52, 53
G	Self-reactive solid type F	4.1	UN3230	II	4.1		151	224	None	10 kg	25 kg	D	25, 52, 53
G	Self-reactive solid type F, temperature controlled.	4.1	UN3240	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 25, 52, 53
	*			*		*	*	*	*		*		
	Sodium	4.3	UN1428	I	4.3	A7, A8, A19, A20, B9, B48, B68, IB4, IP1, N34, T9, TP7, TP33, TP46.	None	211	244	Forbidden	15 kg	D	13, 52, 148
	*			*		*	*	*	*		*		
	Sodium aluminum hydride.	4.3	UN2835	II	4.3	A8, A19, A20, IB4, T3, TP33.	151	212	242	Forbidden	50 kg	E	13, 52, 148
	*			*		*	*	*	*		*		
	Sodium borohydride	4.3	UN1426	I	4.3	N40	None	211	242	Forbidden	15 kg	E	13, 52, 148
	*			*		*	*	*	*		*		
	Sodium dinitro-o-cresolate, wetted *with not less than 10% water, by mass.*	4.1	UN3369	I	4.1	162, A8, A19, N41, N84	None	211	None	0.5 kg	0.5 kg	E	28, 36
	*			*		*	*	*	*		*		
	Sodium hydride	4.3	UN1427	I	4.3	A19, N40	None	211	242	Forbidden	15 kg	E	13, 52, 148
	*			*		*	*	*	*		*		
	Sodium peroxide	5.1	UN1504	I	5.1	A20, IB5, IP1, N34	None	211	None	Forbidden	15 kg	C	13, 52, 66, 75, 148
	*			*		*	*	*	*		*		
	Sodium phosphide	4.3	UN1432	I	4.3, 6.1.	A19, N40	None	211	None	Forbidden	15 kg	E	13, 40, 52, 85, 148
	*			*		*	*	*	*		*		
	Sodium superoxide	5.1	UN2547	I	5.1	A20, IB6, IP1, N34	None	211	None	Forbidden	15 kg	D	13, 52, 66, 75, 148
	*			*		*	*	*	*		*		
	Stannic phosphide	4.3	UN1433	I	4.3, 6.1.	A19, N40	None	211	242	Forbidden	15 kg	E	13, 40, 52, 85, 148
	*			*		*	*	*	*		*		
	Strontium peroxide	5.1	UN1509	II	5.1	IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	C	13, 52, 66, 75, 148
	Strontium phosphide	4.3	UN2013	I	4.3, 6.1.	A19, N40	None	211	None	Forbidden	15 kg	E	13, 40, 52, 85, 148
	*			*		*	*	*	*		*		
	Tear gas candles	6.1	UN1700		6.1, 4.1.		None	340	None	Forbidden	50 kg	D	40
	*			*		*	*	*	*		*		
	Titanium powder, dry	4.2	UN2546	I	4.2		None	211	242	Forbidden	Forbidden	D	13, 148
				II	4.2	A19, A20, IB6, IP2, N5, N34, T3, TP33.	None	212	241	15 kg	50 kg	D	13, 148
				III	4.2	IB8, IP3, T1, TP33	None	213	241	25 kg	100 kg	D	13, 148
	*			*		*	*	*	*		*		
	Titanium sponge granules *or* Titanium sponge powders.	4.1	UN2878	III	4.1	A1, IB8, IP3, T1, TP33	None	213	240	25 kg	100 kg	D	13, 74, 147, 148

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Nos.	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***) Exceptions	Non-bulk	Bulk	(9) Quantity limitations (see §§ 173.27 and 175.75) Passenger aircraft/rail	Cargo aircraft only	(10) Vessel stowage Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*		* *		*	*		*		
	Titanium trichloride, pyrophoric *or* Titanium trichloride mixtures, pyrophoric.	4.2	UN2441	I	4.2, 8	N34	None	181	244	Forbidden	Forbidden	D	13, 40, 148
		*		*		* *		*	*		*		
G	Toxic by inhalation liquid, water-reactive, n.o.s. *with an LC50 lower than or equal to 200 ml/m³ and saturated vapor concentration greater than or equal to 500 LC50.*	6.1	UN3385	I	6.1, 4.3.	1, B9, B14, B30, T22, TP2, TP13, TP38, TP44.	None	226	244	Forbidden	Forbidden	D	13, 40, 148
G	Toxic by inhalation liquid, water-reactive, n.o.s. *with an LC50 lower than or equal to 1000 ml/m³ and saturated vapor concentration greater than or equal to 10 LC50.*	6.1	UN3386	I	6.1, 4.3.	2, B9, B14, B32, T20, TP2, TP13, TP38, TP44.	None	227	244	Forbidden	Forbidden	D	13, 40, 148
G	Toxic by inhalation liquid, water-reactive, flammable, n.o.s. *with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50.*	6.1	UN3490	I	6.1, 4.3, 3.	1, B9, B14, B30, T22, TP2, TP13, TP27, TP38, TP44.	None	226	244	Forbidden	Forbidden	D	13, 21, 28, 40, 49, 148
G	Toxic by inhalation liquid, water-reactive, flammable, n.o.s. *with an LC50 lower or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC50.*	6.1	UN3491	I	6.1, 4.3, 3.	2, B9, B14, B32, T20, TP2, TP13, TP27, TP38, TP45.	None	227	244	Forbidden	Forbidden	D	13, 21, 28, 40, 49, 148
		*		*		* *		*	*		*		
G	Toxic liquid, corrosive, inorganic, n.o.s.	6.1	UN3289	I	6.1, 8	T14, TP2, TP13, TP27	None	201	243	0.5 L	2.5 L	A	40
				II	6.1, 8	IB2, T11, TP2, TP27	153	202	243	1 L	30 L	A	40
		*		*		* *		*	*		*		
G	Toxic liquid, inorganic, n.o.s.	6.1	UN3287	I	6.1	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	A	40
				II	6.1	IB2, T11, TP2, TP27	153	202	243	5 L	60 L	A	40
				III	6.1	IB3, T7, TP1, TP28	153	203	241	60 L	220 L	A	40
		*		*		* *		*	*		*		
G	Toxic liquids, water-reactive, n.o.s.	6.1	UN3123	I	6.1, 4.3.	A4	None	201	243	Forbidden	1 L	E	13,40, 148

				II	6.1, 4.3.	IB2	None	202	243	1 L	5 L	E	13, 40, 148
		*		*		*	*	*	*		*		
G	Toxic solid, corrosive, inorganic, n.o.s.	6.1	UN3290	I	6.1, 8	IB7, T6, TP33	None	211	242	1 kg	25 kg	A	40
				II	6.1, 8	IB6, IP2, T3, TP33	153	212	242	15 kg	50 kg	A	40
G	Toxic solid, inorganic, n.o.s..	6.1	UN3288	I	6.1	IB7, T6, TP33	None	211	242	5 kg	50 kg	A	40
				II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	40
				III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	40
		*		*		*	*	*	*		*		
G	Toxic solids, water-reactive, n.o.s.	6.1	UN3125	I	6.1, 4.3.	A5, T6, TP33	None	211	242	5 kg	15 kg	D	13, 40, 148
				II	6.1, 4.3.	IB6, IP2, T3, TP33	153	212	242	15 kg	50 kg	D	13, 40, 148
		*		*		*	*	*	*		*		
	Trifluoroacetic acid	8	UN2699	I	8	A3, A6, A7, B4, N3, N34, N36, T10, TP2.	None	201	243	0.5 L	2.5 L	B	12, 25, 40
		*		*		*	*	*	*		*		
	Trimethylacetyl chloride	6.1	UN2438	I	6.1, 8, 3.	2, B3, B9, B14, B32, N34, T20, TP2, TP13, TP38, TP45.	None	227	244	Forbidden	Forbidden	D	21, 25, 40, 100
		*		*		*	*	*	*		*		
	Trinitrobenzene, wetted, *with not less than 10% water, by mass.*	4.1	UN3367	I	4.1	162, A8, A19, N41, N84	None	211	None	0.5 kg	0.5 kg	E	28, 36
		*		*		*	*	*	*		*		
	Trinitrobenzoic acid, wetted *with not less than 10% water by mass.*	4.1	UN3368	I	4.1	162, A8, A19, N41, N84	None	211	None	0.5 kg	0.5 kg	E	28, 36
	Trinitrobenzoic acid, wetted *with not less than 30 percent water, by mass.*	4.1	UN1355	I	4.1	23, A2, A8, A19, N41	None	211	None	0.5 kg	0.5 kg	E	28, 36
		*		*		*	*	*	*		*		
	Trinitrochlorobenzene (picryl chloride), wetted, *with not less than 10% water by mass.*	4.1	UN3365	I	4.1	162, A8, A19, N41, N84	None	211	None	0.5 kg	0.5 kg	E	28, 36
		*		*		*	*	*	*		*		
	Trinitrophenol (picric acid), wetted, *with not less than 10 percent water by mass.*	4.1	UN3364	I	4.1	162, A8, A19, N41, N84	None	211	None	0.5 kg	0.5 kg	E	28, 36
		*		*		*	*	*	*		*		
	Trinitrotoluene (TNT), wetted, *with not less than 10 percent water by mass.*	4.1	UN3366	I	4.1	162, A8, A19, N41, N84	None	211	None	0.5 kg	0.5 kg	E	28, 36
		*		*		*	*	*	*		*		
	Urea nitrate, wetted, *with not less than 10 percent water by mass.*	4.1	UN3370	I	4.1	162, A8, A19, N41, N84	None	211	None	0.5 kg	0.5 kg	E	28, 36

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Nos.	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***) Exceptions	Non-bulk	Bulk	(9) Quantity limitations (see §§ 173.27 and 175.75) Passenger aircraft/rail	Cargo aircraft only	(10) Vessel stowage Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*		* *		*	*		*		
	Vinylpyridines, stabilized	6.1	UN3073	II	6.1, 3, 8.	IB1, T7, TP2, TP13	153	202	243	1 L	30 L	B	21, 40, 52, 100
		*		*		* *		*	*		*		
G	Water-reactive liquid, corrosive, n.o.s.	4.3	UN3129	I	4.3, 8	T14, TP2, TP7, TP13	None	201	243	Forbidden	1 L	D	13, 148
				II	4.3, 8	IB1, T11, TP2, TP7	None	202	243	1 L	5 L	E	13, 85, 148
				III	4.3, 8	IB2, T7, TP2, TP7	None	203	242	5 L	60 L	E	13, 148
G	Water-reactive liquid, n.o.s.	4.3	UN3148	I	4.3	T13, TP2, TP7, TP41	None	201	244	Forbidden	1 L	E	13, 40, 148
				II	4.3	IB1, T7, TP2, TP7	None	202	243	1 L	5 L	E	13, 40, 148
				III	4.3	IB2, T7, TP2, TP7	None	203	242	5 L	60 L	E	13, 40, 148
G	Water-reactive liquid, toxic, n.o.s.	4.3	UN3130	I	4.3, 6.1.	A4	None	201	243	Forbidden	1 L	D	13, 148
				II	4.3, 6.1.	IB1	None	202	243	1 L	5 L	E	13, 85, 148
				III	4.3, 6.1.	IB2	None	203	242	5 L	60 L	E	13, 85, 148
G	Water-reactive solid, corrosive, n.o.s.	4.3	UN3131	I	4.3, 8	IB4, IP1, N40, T9, TP7, TP33.	None	211	242	Forbidden	15 kg	D	13, 148
				II	4.3, 8	IB6, IP2, T3, TP33	151	212	242	15 kg	50 kg	E	13, 85, 148
				III	4.3, 8	IB8, IP4, T1, TP33	151	213	241	25 kg	100 kg	E	13, 85, 148
G	Water-reactive solid, flammable, n.o.s.	4.3	UN3132	I	4.3, 4.1.	IB4, N40	None	211	242	Forbidden	15 kg	D	13, 148
				II	4.3, 4.1.	IB4, T3, TP33	151	212	242	15 kg	50 kg	E	13, 148
				III	4.3, 4.1.	IB6, T1, TP33	151	213	241	25 kg	100 kg	E	13, 148
G	Water-reactive solid, n.o.s.	4.3	UN2813	I	4.3	IB4, N40, T9, TP7, TP33	None	211	242	Forbidden	15 kg	E	13, 40, 148
				II	4.3	IB7, IP2, T3, TP33	151	212	242	15 kg	50 kg	E	13, 40, 148
				III	4.3	IB8, IP4, T1, TP33	151	213	241	25 kg	100 kg	E	13, 40, 148
G	Water-reactive, solid, oxidizing, n.o.s.	4.3	UN3133	II	4.3, 5.1.		None	214	214	Forbidden	Forbidden	E	13, 40, 148
				III	4.3, 5.1.		None	214	214	Forbidden	Forbidden	E	13, 40, 148
G	Water-reactive solid, self-heating, n.o.s.	4.3	UN3135	I	4.3, 4.2.	N40	None	211	242	Forbidden	15 kg	E	13, 148
				II	4.3, 4.2.	IB5, IP2, T3, TP33	None	212	242	15 kg	50 kg	E	13, 148
				III	4.3, 4.2.	IB8, IP4, T1, TP33	None	213	241	25 kg	100 kg	E	13, 148
G	Water-reactive solid, toxic, n.o.s.	4.3	UN3134	I	4.3, 6.1.	A8, IB4, IP1, N40	None	211	242	Forbidden	15 kg	D	13, 148
				II	4.3, 6.1.	IB5, IP2, T3, TP33	151	212	242	15 kg	50 kg	E	13, 85, 148
				III	4.3, 6.1.	IB8, IP4, T1, TP33	151	213	241	25 kg	100 kg	E	13, 85, 148
		*		*		* *		*	*		*		
	Zinc ashes	4.3	UN1435	III	4.3	A1, A19, IB8, IP4, T1, TP33.	151	213	241	25 kg	100 kg	A	13, 148

	*		*		*	*	*	*		*			
Zinc dithionite *or* Zinc hydrosulfite.	9	UN1931	III	None	IB8, IP3, T1, TP33	155	204	240	100 kg	200 kg	A	13, 26, 123
	*		*		*	*	*	*		*			
Zinc peroxide	5.1	UN1516	II	5.1	IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	C	13, 52, 66, 75, 148
Zinc phosphide	4.3	UN1714	I	4.3, 6.1.	A19, N40	None	211	None	Forbidden	15 kg	E	13, 40, 52, 85, 148
	*		*		*	*	*	*		*			
Zinc powder *or* Zinc dust	4.3	UN1436	I	4.3, 4.2.	A19, IB4, IP1, N40	None	211	242	Forbidden	15 kg	A	13, 52, 53, 148
			II	4.3, 4.2.	A19, IB7, IP2, T3, TP33	None	212	242	15 kg	50 kg	A	13, 52, 53, 148
			III	4.3, 4.2.	IB8, IP4, T1, TP33	None	213	242	25 kg	100 kg	A	13, 52, 53, 148
	*		*		*	*	*	*		*			
Zirconium, dry, *coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns).*	4.1	UN2858	III	4.1	A1	151	213	240	25 kg	100 kg	A	13, 147, 148
Zirconium, dry, *finished sheets, strip or coiled wire.*	4.2	UN2009	III	4.2	A1, A19	None	213	240	25 kg	100 kg	D	13, 148
	*		*		*	*	*	*		*			
Zirconium powder, dry	4.2	UN2008	I	4.2	T21, TP7, TP33	None	211	242	Forbidden	Forbidden	D	13, 148
			II	4.2	A19, A20, IB6, IP2, N5, N34, T3, TP33.	None	212	241	15 kg	50 kg	D	13, 148
			III	4.2	IB8, IP3, T1, TP33	None	213	241	25 kg	100 kg	D	13, 148
Zirconium powder, wetted *with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns.*	4.1	UN1358	II	4.1	A19, A20, IB6, IP2, N34, T3, TP33.	None	212	241	15 kg	50 kg	E	13, 74, 147, 148
Zirconium scrap	4.2	UN1932	III	4.2	IB8, IP3, N34, T1, TP33	None	213	240	Forbidden	Forbidden	D	13, 148
	*		*		*	*	*	*		*			

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■ 11. In Appendix B to § 172.101, the List of Marine Pollutants is amended by removing one (1) entry and adding sixty-two (62) entries in appropriate alphabetical order to read as follows:

Appendix B to § 172.101—List of Marine Pollutants.

* * * * *

LIST OF MARINE POLLUTANTS

S, M, P (1)	Marine Pollutant (2)
[Remove:]	Chlorotoluenes (meta-;para-)
*	* * * * * *
[Add:].	
*	* * * * * *
	Acroleic acid, stabilized
*	* * * * * *
	Acrylic Acid, Stabilized
*	* * * * * *
	Allyl alcohol
*	* * * * * *
	Aminobenzene
*	* * * * * *
	Ammonia, anhydrous (I) Ammonia solution, *relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia* Ammonia Solution *relative density less than 0.880 at 15 degrees C in water, with more than 35% but not more than 50% ammonia* Ammonia solution, *relative density between 0.880 and 0.957 at 15 degrees C in water, with more than 10 percent but not more than 35 percent ammonia, by mass*
*	* * * * * *
	Aniline Aniline oil
*	* * * * * *
	Bleaching powder
*	* * * * * *
	Butylbenzenes
*	* * * * * *
	Calcium hypochlorite , dry *with more than 39% available chlorine (8.8% available oxygen)* Calcium hypochlorite mixture, dry *with more than 10% but not more than 39% available chlorine* Calcium hypochlorite mixture, dry *with more than 39% available chlorine (8.8% available oxygen)* Calcium hypochlorite mixture, dry, corrosive *with more than 10% but not more than 39% available chlorine* Calcium hypochlorite mixture, dry, corrosive *with more than 39% available chlorine (8.8% available oxygen)* Calcium hypochlorite, hydrated *with not less than 5.5% but not more than 16% water* Calcium hypochlorite, hydrated, corrosive *with not less than 5.5% but not more than 16% water* Calcium hypochlorite, hydrated mixture *with not less than 5.5% but not more than 16% water* Calcium hypochlorite, hydrated mixture, corrosive *with not less than 5.5% but not more than 16% water*
*	* * * * * *
	ortho-Chlorotoluene
*	* * * * * *
	Creosote salts
*	* * * * * *
	Cycloheptane
*	* * * * * *
	2,4-Dichlorophenol
*	* * * * * *
	1,3-Dichloropropene
*	* * * * * *
	Dimethyl Disulphide
*	* * * * * *
	Dinitrotoluenes, Liquid Dinitrotoluenes, Molton

LIST OF MARINE POLLUTANTS—Continued

S, M, P (1)	Marine Pollutant (2)
	Dintrotoluenes, Solid
* * * * * * *	
	Dodecene
* * * * * * *	
	Heptanes
* * * * * * *	
	Hexane
* * * * * * *	
	Isooctane
* * * * * * *	
	Mesitylene
* * * * * * *	
	Methyl disulphide
* * * * * * *	
	2-Methyl-2-phenylpropane
* * * * * * *	
	Methyldinitrobenzenes, liquid Methyldinitrobenzenes, molten Methyldinitrobenzenes, solid Methyldithiomethane 2-Methylheptane
* * * * * * *	
	2-Methylpentane
* * * * * * *	
	Naphthalene, crude or Naphthalene, refined Napthalene, molten
* * * * * * *	
	Nonanes
* * * * * * *	
	Octanes
* * * * * * *	
	Phenylamine
* * * * * * *	
	Pine Oil alpha-Pinene
* * * * * * *	
	Propenoic acid, stabilized Propenyl alcohol
* * * * * * *	
	Propylene Tetramer
* * * * * * *	
	Sodium hypochlorite solution
* * * * * * *	
	Tetrapropylene
* * * * * * *	
	Toluidines, liquid Toluidines, Solid
* * * * * * *	
	1,3,5-Trimethylbenzene
* * * * * * *	
	2,2,4-Trimethylpentane

LIST OF MARINE POLLUTANTS—Continued

S, M, P (1)	Marine Pollutant (2)
* * * * * * *	
Turpentine	
* * * * * * *	
Zinc Chloride, Anhydrous Zinc Chloride Solution	
* * * * * * *	

■ 12. In § 172.102:

■ a. In paragraph (c)(1), special provisions 28, 52, 147, 160, 238, 342 and 362 are revised, special provisions 367, 368, 369, 370, 371, and 372 are added, and special provision 161 is removed.

■ b. In paragraph (c)(2), special provision A60 is revised and A61 is added.

■ c. Paragraph (c)(4) introductory text, Table 1 and Table 2 in paragraph (c)(4) are revised.

■ d. In paragraph (c)(8)(ii), TP47 is added in numerical sequence.

The additions and revisions read as follows:

§ 172.102 Special Provisions.

* * * * *

(c) * * *

(1) * * *

28 The dihydrated sodium salt of dichloroisocyanuric acid does not meet the criteria for inclusion in Division 5.1 (Oxidizer) and is not subject to the requirements of this subchapter unless meeting the criteria for inclusion in another class or division.

* * * * *

52 This entry may only be used for substances that are too insensitive for acceptance into Class 1 (explosive) when tested in accordance with Test Series 2 in the UN Manual of Tests and Criteria, Part I (incorporated by reference; see § 171.7 of this subchapter).

* * * * *

147 This entry applies to non-sensitized emulsions, suspensions, and gels consisting primarily of a mixture of ammonium nitrate and fuel, intended to produce a Type E blasting explosive only after further processing prior to use. The mixture for emulsions typically has the following composition: 60–85% ammonium nitrate; 5–30% water; 2–8% fuel; 0.5–4% emulsifier or thickening agent; 0–10% soluble flame suppressants; and trace additives. Other inorganic nitrate salts may replace part of the ammonium nitrate. The mixture for suspensions and gels typically has the following composition: 60–85% ammonium nitrate; 0–5% sodium or potassium perchlorate; 0–17% hexamine nitrate or monomethylamine nitrate; 5–30% water; 2–15% fuel; 0.5–4% thickening agent; 0–10% soluble flame suppressants; and trace additives. Other inorganic nitrate salts may replace part of the ammonium nitrate. These substances must satisfactorily pass Tests 8(a), (b) and (c) of Test Series 8 of the UN Manual of Tests and Criteria, Part I, Section 18 (IBR, see § 171.7 of this subchapter), and may not be classified and transported unless approved by the Associate Administrator.

* * * * *

160 This entry applies to safety devices for vehicles, vessels or aircraft, *e.g.* air bag inflators, air bag modules, seat-belt pretensioners, and pyromechanical devices containing Class 1 (explosive) materials or materials of other hazard classes. These articles must be tested in accordance with Test series 6(c) of Part I of the UN Manual of Tests and Criteria (incorporated by reference; see § 171.7 of this subchapter), with no explosion of the device, no fragmentation of device casing or pressure vessel, and no projection hazard or thermal effect that would significantly hinder fire-fighting or other emergency response efforts in the immediate vicinity. If the air bag inflator unit satisfactorily passes the series 6(c) test, it is not necessary to repeat the test on the air bag module. This entry does not apply to life saving appliances described in § 173.219 (UN2990 and UN3072).

* * * * *

238 Neutron radiation detectors: a. Neutron radiation detectors containing non-pressurized boron trifluoride gas in excess of 1 gram and radiation detection systems containing such neutron radiation detectors as components may be transported by highway, rail, vessel, or cargo aircraft in accordance with the following:

(1) Each radiation detector must meet the following conditions:

(i) The pressure in each neutron radiation detector must not exceed 105 kPa absolute at 20 °C;

(ii) The amount of gas must not exceed 13 grams per detector; and

(iii) Each neutron radiation detector must be of welded metal construction with brazed metal to ceramic feed through assemblies. These detectors must have a minimum burst pressure of 1800 kPa as demonstrated by design type qualification testing; and

(iv) Each detector must be tested to a 1×10^{-10} cm^3/s leaktightness standard before filling.

(2) Radiation detectors transported as individual components must be transported as follows:

(i) They must be packed in a sealed intermediate plastic liner with sufficient absorbent material to absorb the entire gas contents.

(ii) They must be packed in strong outer packagings and the completed package must be capable of withstanding a 1.8 meter (6-foot) drop without leakage of gas contents from detectors.

(iii) The total amount of gas from all detectors per outer packaging must not exceed 52 grams.

(3) Completed neutron radiation detection systems containing detectors meeting the conditions of paragraph (a)(1) of this special provision must be transported as follows:

(i) The detectors must be contained in a strong sealed outer casing;

(ii) The casing must contain include sufficient absorbent material to absorb the entire gas contents;

(iii) The completed system must be packed in strong outer packagings capable of withstanding a 1.8 meter (6-foot) drop test without leakage unless a system's outer casing affords equivalent protection.

b. Except for transportation by aircraft, neutron radiation detectors and radiation detection systems containing such detectors transported in accordance with paragraph (a) of this special provision are not subject to the labeling and placarding requirements of part 172 of this subchapter.

c. When transported by highway, rail, vessel, or as cargo on an aircraft, neutron radiation detectors containing not more than 1 gram of boron trifluoride, including those with solder glass joints are not subject to any other requirements of this subchapter provided they meet the requirements in paragraph (a)(1) of this special provision and are packed in accordance with paragraph (a)(2) of this special provision. Radiation detection systems containing such detectors are not subject to any other requirements of this subchapter provided they are packed in accordance with paragraph (a)(3) of this special provision.

* * * * *

342 Glass inner packagings (such as ampoules or capsules) intended only for use in sterilization devices, when containing less than 30 mL of ethylene oxide per inner packaging with not more than 300 mL per outer packaging, may be transported in accordance with § 173.4a of this subchapter, irrespective of the restriction of § 173.4a(b) and the indication of ''forbidden'' in columns (9A) and (9B) of the § 172.101 table provided that:

a. After filling, each glass inner packaging must be determined to be leak-tight by placing the glass inner packaging in a hot water bath at a temperature and for a period of time sufficient to ensure that an internal pressure equal to the vapor pressure of ethylene oxide at 55 °C is achieved. Any glass inner packaging showing evidence of leakage, distortion or other defect under this test must not be transported under the terms of this special provision;

b. In addition to the packaging required in § 173.4a, each glass inner packaging must be placed in a sealed plastic bag compatible with ethylene oxide and capable of containing the contents in the event of breakage or leakage of the glass inner packaging; and

c. Each glass inner packaging is protected by a means of preventing puncture of the plastic bag (*e.g.,* sleeves or cushioning) in the event of damage to the packaging (*e.g.,* by crushing).

* * * * *

362 This entry applies to liquids, pastes or powders, pressurized with a propellant that meets the definition of a gas in § 173.115. A chemical under pressure packaged in an aerosol dispenser must be transported under UN1950. The chemical under pressure must be classed based on the hazard characteristics of the components in the propellant; the liquid; or the solid. The following provisions also apply:

a. If one of the components, which can be a pure substance or a mixture, is classed as flammable, the chemical under pressure must be classed as flammable in Division 2.1. Flammable components are flammable liquids and liquid mixtures, flammable solids and solid mixtures or flammable gases and gas mixtures meeting the following criteria:

(1) A flammable liquid is a liquid having a flashpoint of not more than 93 °C (200 °F);

(2) A flammable solid is a solid that meets the criteria in § 173.124 of this subchapter; or

(3) A flammable gas is a gas that meets the criteria in § 173.115 of this subchapter.

b. Gases of Division 2.3 and gases with a subsidiary risk of 5.1 must not be used as a propellant in a chemical under pressure.

c. Where the liquid or solid components are classed as Division 6.1, Packing Group II or III, or Class 8, Packing Group II or III, the chemical under pressure must be assigned a subsidiary risk of Division 6.1 or Class 8 and the appropriate identification number must be assigned. Components classed as Division 6.1, Packing Group I, or Class 8, Packing Group I, must not be offered for transportation and transported under this description.

d. A chemical under pressure with components meeting the properties of: Class 1 (explosives); Class 3 (liquid desensitized explosives); Division 4.1 (self-reactive substances and solid desensitized explosives); Division 4.2 (substances liable to spontaneous combustion); Division 4.3 (substances which, in contact with water, emit flammable gases or toxic gases); Division 5.1 (oxidizing substances); Division 5.2 (organic peroxides); Division 6.2 (Infectious substances); or, Class 7 (Radioactive material), must not be offered for transportation under this description.

e. A description to which special provision 170 or TP7 is assigned in Column 7 of the § 172.101 Hazardous Materials Table, and therefore requires air to be eliminated from the package vapor space by nitrogen or other means, must not be offered for transportation under this description.

f. Chemicals under pressure containing components forbidden for transport on both passenger and cargo aircraft in Columns (9A) and (9B) of the § 172.101 Hazardous Materials Table must not be transported by air.

* * * * *

367 For the purposes of documentation and package marking:

a. The proper shipping name ''Paint related material'' may be used for consignments of packages containing ''Paint'' and ''Paint related material'' in the same package;

b. The proper shipping name ''Paint related material, corrosive, flammable'' may be used for consignments of packages containing ''Paint, corrosive, flammable'' and ''Paint related material, corrosive, flammable'' in the same package;

c. The proper shipping name ''Paint related material, flammable, corrosive'' may be used for consignments of packages containing ''Paint, flammable, corrosive'' and ''Paint related material, flammable, corrosive'' in the same package; and

d. The proper shipping name ''Printing ink related material'' may be used for consignments of packages containing ''Printing ink'' and ''Printing ink related material'' in the same package.

368 In the case of non-fissile or fissile-excepted uranium hexafluoride, the material must be classified under UN3507 or UN2978.

369 In accordance with § 173.2a, this radioactive material in an excepted package possessing corrosive properties is classified in Class 8 with a radioactive material subsidiary risk. Uranium hexafluoride may be classified under this entry only if the conditions of §§ 173.420(a)(4) and (a)(6), 173.420(d), 173.421(a)(2) and (a)(4), and, for fissile-excepted material, the conditions of 173.453 are met. In addition to the provisions applicable to the transport of Class 8 substances, the provisions of §§ 173.421(a)(3), and 173.443(a) apply. In addition, packages shall be legibly and durably marked with an identification of the consignor, the consignee, or both. No Class 7 label is required to be displayed. The consignor shall be in possession of a copy of each applicable certificate when packages include fissile material excepted by competent authority approval. When a consignment is undeliverable, the consignment shall be placed in a safe location and the appropriate competent authority shall be informed as soon as possible and a request made for instructions on further action. If it is evident that a package of radioactive material, or conveyance carrying unpackaged radioactive material, is leaking, or if it is suspected that the package, or conveyance carrying unpackaged material, may have leaked, the requirements of § 173.443(e) apply.

370 This entry also applies to Ammonium nitrate with not more than 0.2% combustible substances, including any organic substance calculated as

carbon, to the exclusion of any added substance, that gives a positive result when tested in accordance with Test Series 2 of the UN Manual of Tests and Criteria, Part I (incorporated by reference; see § 171.7 of this subchapter). See also UN No. 1942.

371 a. This entry also applies to articles not conforming to the requirements of §§ 173.302, 173.304, or 173.306 of this subchapter, containing a small pressure receptacle with a release device. Such articles must comply with the following requirements:

(1) The water capacity of the pressure receptacle must not exceed 0.5 L and the working pressure must not exceed 25 bar at 15 °C (59 °F);

(2) The minimum burst pressure of the pressure receptacle must be at least four times the pressure of the gas at 15 °C (59 °F);

(3) Each article must be manufactured in such a way that unintentional firing or release is avoided under normal conditions of handling, packing, transport and use. This may be fulfilled by an additional locking device linked to the activator;

(4) Each article must be manufactured in such a way as to prevent hazardous projections of the pressure receptacle or parts of the pressure receptacle;

(5) Each pressure receptacle must be manufactured from material which will not fragment upon rupture;

(6) The design type of the article must be subjected to a fire test. For this test, the provisions of paragraphs 16.6.1.2 except letter g, 16.6.1.3.1 to 16.6.1.3.6, 16.6.1.3.7(b) and 16.6.1.3.8 of the UN Manual of Tests and Criteria must be applied. It must be demonstrated that the article relieves its pressure by means of a fire degradable seal or other pressure relief device, in such a way that the pressure receptacle will not fragment and that the article or fragments of the article do not rocket more than 10 meters; and

(7) The design type of the article must be subjected to the following test. A stimulating mechanism must be used to initiate one article in the middle of the packaging. There must be no hazardous effects outside the package such as disruption of the package, metal fragments or a receptacle which passes through the packaging.

b. The manufacturer must produce technical documentation of the design type, manufacture as well as the tests and their results. The manufacturer must apply procedures to ensure that articles produced in series are made of good quality, conform to the design type and are able to meet the requirements in (a). The manufacturer must provide such information to a representative of the Department upon request.

372 This entry applies to asymmetric capacitors with an energy storage capacity greater than 0.3 Wh. Capacitors with an energy storage capacity of 0.3 Wh or less are not subject to the requirements of this subchapter.

Energy storage capacity means the energy stored in a capacitor, as calculated according to the following equation,

$$Wh = 1/2C_N(U_R^2 - U_L^2) \times (1/3600)$$

Using the nominal capacitance (C_N), rated voltage (U_R) and the rated lower limit voltage (U_L).

Nickel-carbon asymmetric capacitors containing Class 8 alkaline electrolytes must be transported as UN2795, Batteries, wet, filled with alkali, electric storage.

* * * * *

(2) * * *

A60 Sterilization devices, when containing less than 30 mL per inner packaging with not more than 150 mL per outer packaging, may be transported in accordance with the provisions in § 173.4a, irrespective of § 173.4a(b), provided such packagings were first subjected to comparative fire testing. Comparative fire testing between a package as prepared for transport (including the substance to be transported) and an identical package filled with water must show that the maximum temperature measured inside the packages during testing does not differ by more than 200 °C (392 °F). Packagings may include a vent to permit the slow escape of gas (*i.e.* not more than 0.1 mL/hour per 30 mL inner packaging at 20 °C (68 °F) produced from gradual decomposition. The requirements of §§ 173.24(g)(1) and 173.27(c) do not apply.

A61 a. When used for purposes such as sterilization, inner packagings of peroxyacetic acid, stabilized, classified as UN 3107 Organic peroxide type E, liquid or UN 3109 Organic peroxide type F, liquid may be fitted with a vent consisting of hydrophobic membrane, provided:

(1) Each inner packaging contains not more than 70 mL;

(2) The inner packaging is designed so that the vent is not immersed in liquid in any orientation;

(3) Each inner packaging is enclosed in an intermediate rigid plastic packaging with a small opening to permit release of gas and contains a buffer that neutralizes the contents of the inner packaging in the event of leakage;

(4) Intermediate packagings are packed in a fiberboard box (4G) outer packaging;

(5) Each outer packaging contains not more than 1.4 L of liquid; and

(6) The rate of oxygen release from the outer packaging does not exceed 15 mL per hour.

b. Such packages must be transported on cargo aircraft only. The requirements of §§ 173.24(g)(1) and 173.27(c) do not apply.

* * * * *

(4) *IB Codes and IP Codes.* These provisions apply only to transportation in IBCs and Large Packagings. Table 1 authorizes IBCs for specific proper shipping names through the use of IB Codes assigned in the § 172.101 table of this subchapter. Table 2 defines IP Codes on the use of IBCs that are assigned to specific commodities in the § 172.101 Table of this subchapter. Table 3 authorizes Large Packagings for specific proper shipping names through the use of IB Codes assigned in the § 172.101 table of this subchapter. Large Packagings are authorized for the Packing Group III entries of specific proper shipping names when either special provision IB3 or IB8 is assigned to that entry in the § 172.101 Table. When no IB code is assigned in the § 172.101 Table for a specific proper shipping name, or in § 173.185 or § 173.225(e) Organic Peroxide Table for Type F organic peroxides, use of an IBC or Large Packaging for the material may be authorized when approved by the Associate Administrator. The letter ''Z'' shown in the marking code for composite IBCs must be replaced with a capital code letter designation found in § 178.702(a)(2) of this subchapter to specify the material used for the other packaging. Tables 1, 2, and 3 follow:

* * * * *

TABLE 1—IB CODES (IBC CODES)

IBC code	Authorized IBCs
IB1	*Authorized IBCs:* Metal (31A, 31B and 31N). *Additional Requirement:* Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized.

TABLE 1—IB CODES (IBC CODES)—Continued

IBC code	Authorized IBCs
IB2	*Authorized IBCs:* Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). *Additional Requirement:* Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized.
IB3	*Authorized IBCs:* Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). *Additional Requirement:* Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized, except for UN2672 (also see special provision IP8 in Table 2 for UN2672).
IB4	*Authorized IBCs:* Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N).
IB5	*Authorized IBCs:* Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 21HZ1 and 31HZ1).
IB6	*Authorized IBCs:* Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2 and 31HZ1). *Additional Requirement:* Composite IBCs 11HZ2 and 21HZ2 may not be used when the hazardous materials being transported may become liquid during transport.
IB7	*Authorized IBCs:* Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2 and 31HZ1); Wooden (11C, 11D and 11F). *Additional Requirement:* Liners of wooden IBCs must be sift-proof.
IB8	*Authorized IBCs:* Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2 and 31HZ1); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).
IB9	IBCs are only authorized if approved by the Associate Administrator.

TABLE 2—IP CODES

IP code	
IP1	IBCs must be packed in closed freight containers or a closed transport vehicle.
IP2	When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.
IP3	Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.
IP4	Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner.
IP5	IBCs must have a device to allow venting. The inlet to the venting device must be located in the vapor space of the IBC under maximum filling conditions.
IP6	Non-specification bulk bins are authorized.
IP7	For UN identification numbers 1327, 1363, 1364, 1365, 1386, 1841, 2211, 2217, 2793 and 3314, IBCs are not required to meet the IBC performance tests specified in part 178, subpart N of this subchapter.
IP8	Ammonia solutions may be transported in rigid or composite plastic IBCs (31H1, 31H2 and 31HZ1) that have successfully passed, without leakage or permanent deformation, the hydrostatic test specified in § 178.814 of this subchapter at a test pressure that is not less than 1.5 times the vapor pressure of the contents at 55 °C (131 °F).
IP13	Transportation by vessel in IBCs is prohibited.
IP14	Air must be eliminated from the vapor space by nitrogen or other means.
IP15	For UN2031 with more than 55% nitric acid, rigid plastic IBCs and composite IBCs with a rigid plastic inner receptacle are authorized for two years from the date of IBC manufacture.
IP16	IBCs of type 31A and 31N are only authorized if approved by the Associate Administrator.
IP20	Dry sodium cyanide or potassium cyanide is also permitted in siftproof, water-resistant, fiberboard IBCs when transported in closed freight containers or transport vehicles.

* * * * *

(8) * * *

(ii) * * *

* * * * *

TP47 The 2.5 year internal examination may be waived or substituted by other test methods or inspection procedures specified by the competent authority or its authorized body, provided that the portable tank is dedicated to the transport of the organometallic substances to which this tank special provision is assigned. However this examination is required when the conditions of § 180.605(f) are met.

* * * * *

■ 13. In § 172.204, paragraph (a)(2) is revised to read as follows:

§ 172.204 Shipper's certification.

(a) * * *

(2) ''I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.''

Note to paragraph (a)(2): In the certification the word ''above'' may be substituted for the word ''below'' as appropriate.

* * * * *

■ 14. In § 172.315, revise paragraphs (a)(2), and (b)(2) to read as follows:

§ 172.315 Limited quantities.

(a) * * *

(2) The square-on-point must be durable, legible and of a size relative to the packaging, readily visible, and must be applied on at least one side or one end of the outer packaging. The width of the border forming the square-on-point must be at least 2 mm and the minimum dimension of each side, as measured from the outside of the lines forming the border, must be 100 mm

unless the packaging size requires a reduced size marking that must be no less than 50 mm on each side and the width of the border forming the square on point may be reduced to a minimum of 1 mm. Where dimensions are not specified, all features shall be in approximate proportion to those shown. When intended for transportation by vessel, a cargo transport unit (see § 176.2 of this subchapter) containing packages of hazardous materials in only limited quantities must be marked once on each side and once on each end of the exterior of the unit with an identical mark which must have minimum dimensions of 250 mm on each side.

(i) *Transitional exception.* A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(ii) For domestic transportation, a packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

(b) * * *

(2) The square-on-point must be durable, legible and of a size relative to the package as to be readily visible. The square-on-point must be applied on at least one side or one end of the outer packaging. The width of the border forming the square-on-point must be at least 2 mm and the minimum dimension of each side, as measured from the outside of the lines forming the border, must be 100 mm unless the package size requires a reduced size marking that must be no less than 50 mm on each side and the width of the border forming the square on point may be reduced to a minimum of 1 mm. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

(i) *Transitional exception.* A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(ii) For domestic transportation, a packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

■ 15. In § 172.317, revise paragraph (b) to read as follows:

§ 172.317 KEEP AWAY FROM HEAT handling mark.

* * * * *

(b) *Location and design.* The marking must be a rectangle measuring at least 105 mm (4.1 inches) in height by 74 mm (2.9 inches) in width as measured from the outside of the lines forming the border. Markings with not less than half this dimension are permissible where the dimensions of the package can only bear a smaller mark.

(1) *Transitional exception.* A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(2) For domestic transportation, a packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

■ 16. In § 172.322, revise paragraphs (a)(2), (b) introductory text, (e) introductory text, and (e)(2) and add paragraphs (e)(3) and (e)(4) to read as follows:

§ 172.322 Marine Pollutants.

* * * * *

(a) * * *

(2) Except as otherwise provided in this subchapter, the MARINE POLLUTANT mark shall be placed in association with the hazard warning labels required by subpart E of this part or, in the absence of any labels, in association with the marked proper shipping name.

(b) Except as otherwise provided in this subchapter, a bulk packaging that contains a marine pollutant must—

* * * * *

(e) *MARINE POLLUTANT mark.* The MARINE POLLUTANT mark must conform to the following:

* * * * *

(2) The marking must be in the form of a square-on-point. The symbol and border must be black on a white or suitable contrasting background. The width of the border forming the square-on-point marking must be at least 2 mm. Each side of the mark must be—

(i) At least 100 mm (4 inches) as measured from the outside of the lines forming the border for marks applied to:

(A) Non-bulk packages, except in the case of packages which, because of their size, can only bear smaller marks. If the size of the package so requires, the dimensions/line thickness may be reduced, provided the marking remains clearly visible. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

(B) Bulk packages with a capacity of less than 3,785 L (1,000 gallons); or

(ii) At least 250 mm (10 inches) for marks applied to all other bulk packages.

(3) *Transitional exception.* A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(4) For domestic transportation, a packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

■ 17. In § 172.326, paragraph (a) is revised to read as follows:

§ 172.326 Portable tanks.

(a) *Shipping name.* No person may offer for transportation or transport a portable tank containing a hazardous material unless it is legibly marked on two opposing sides with the proper shipping name specified for the material in the § 172.101 table. For transportation by vessel, the minimum height for a proper shipping name marked on a portable tank is 65 mm (2.5 inches); except that portable tanks with a capacity of less than 3,000 L (792.52 gallons) may reduce the marking size to not less than 12 mm (0.47 inches).

* * * * *

■ 18. In § 172.327, revise paragraph (a) to read as follows:

§ 172.327 Petroleum sour crude oil in bulk packaging.

* * * * *

(a) The marking must be durable, legible and of a size relative to the package as to be readily visible and similar to the illustration shown in this paragraph with the minimum dimension of each side of the marking at least 100 mm (3.9 inches) as measured from the outside of the lines forming the border. The width of the border forming the square-on-point marking must be at least 5 mm. The marking must be displayed at each location (*e.g.*, manhole, loading head) where exposure to hydrogen sulfide vapors may occur.

(1) *Transitional exception*—A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(2) For domestic transportation, a packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

■ 19. In § 172.407, paragraphs (c)(1) and (d)(2)(iii) are revised and paragraph (d)(2)(iv) is added to read as follows:

§ 172.407 Label specifications.

* * * * *

(c) *Size.* (1) Each diamond (square-on-point) label prescribed in this subpart must be at least 100 mm (3.9 inches) on each side with each side having a solid line inner border 5 mm inside and parallel to the edge. The 5 mm measurement is from the outside edge of the label to the outside of the solid line forming the inner border. The width of the solid line forming the inner border must be at least 2 mm.

(i) If the size of the package so requires, the dimensions of the label and its features may be reduced provided the symbol and other elements of the label remain clearly visible. The solid line forming the inner border must remain 5 mm from the outside edge of the label and the minimum width of the line must remain 2 mm.

(ii) Where dimensions are not specified, all features shall be in approximate proportion to those shown in §§ 172.411 through 172.448 of this subpart, as appropriate.

(iii) *Transitional exception*—A label in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(iv) For domestic transportation, a packaging labeled prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

(d) * * *

(2) * * *

(iii) White may be used for the symbol for the ORGANIC PEROXIDE label.

(A) If white is used for the symbol for the ORGANIC PEROXIDE label then the solid line forming the inner border on the upper half of the label must also be white.

(B) *Transitional exception.* A label in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(C) For domestic transportation, a packaging labeled prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

(iv) The FLAMMABLE GAS label displayed on cylinders and gas cartridges for liquefied petroleum gases may be shown in the background color of the receptacle if adequate contrast is provided.

* * * * *

■ 20. In § 172.512, paragraph (a)(3) is revised to read as follows:

§ 172.512 Freight containers and aircraft unit load devices.

(a) * * *

(3) Placarding is not required on a freight container or aircraft unit load device if it is only transported by air and is identified as containing a hazardous material in the manner provided in part 7, chapter 2, section 2.8, of the ICAO Technical Instructions (IBR, see § 171.7 of this subchapter).

* * * * *

■ 21. In § 172.519, revise paragraph (c)(1) to read as follows:

§ 172.519 General specifications for placards.

* * * * *

(c) *Size.* (1) Each diamond (square-on-point) placard prescribed in this subpart must measure at least 250 mm (9.84 inches) on each side and must have a solid line inner border 12.5 mm inside and parallel to the edge. The 12.5 mm measurement is from the outside edge of the placard to the outside of the solid line forming the inner border. (i) *Transitional exceptions* A placard in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(ii) For domestic transportation, a placard manufactured prior to January 1, 2017 in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life provided the color tolerances are maintained and are in accordance with the display requirements of this subchapter.

* * * * *

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

■ 22. The authority citation for part 173 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; 49 CFR 1.81, 1.96 and 1.97.

■ 23. In § 173.2a, paragraph (a)(1) is revised to read as follows:

§ 173.2a Classification of a material having more than one hazard.

(a) * * *

(1) Class 7 (radioactive materials, other than limited quantities; and shipments of UN 3507, Uranium hexafluoride, radioactive material, excepted package)

* * * * *

■ 24. In § 173.3, paragraphs (c)(3) and (d)(3)(iv) are revised and paragraph (f) is added to read as follows:

§ 173.3 Packaging and exceptions.

* * * * *

(c) * * *

(3) Each salvage packaging must be marked with the proper shipping name of the hazardous material inside the packaging and the name and address of the consignee. In addition, the packaging must be marked ''SALVAGE''. The lettering of the marking must be at least 12 mm (0.5 inches) high.

(i) *Transitional exception.* A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(ii) For domestic transportation, a packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

(d) * * *

(3) * * *

(iv) The word ''SALVAGE'' in letters at least 12 mm (0.5 inches) high on opposite sides near the middle of the cylinder; stamping on the sidewall is not authorized.

(A) *Transitional exception.* A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(B) For domestic transportation, a packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

(f) *Large salvage packagings.* Except for transportation by air, packages of hazardous materials that are damaged, defective, or leaking; packages found to be not conforming to the requirements of this subchapter after having been placed in transportation; and, hazardous materials that have spilled or leaked may be placed in a large salvage packaging that is compatible with the lading and shipped for repackaging or disposal under the following conditions:

(1) Large salvage packagings must be tested and marked in accordance with part 178, subparts P and Q of this subchapter at the Packing Group II or higher performance standards for large packagings intended for the transport of solids or inner packagings, except as follows:

(i) The test substance used in performing the tests shall be water, and the large salvage packagings must be filled to not less than 98 percent of their maximum capacity; and

(ii) Large salvage packagings must have been successfully subjected to a leakproofness test of 30 kPa (4.4 psig).

(2) Each large salvage packaging shall be provided when necessary with sufficient cushioning and absorption material to prevent excessive shifting of the contents and to eliminate the presence of any free liquid at the time the packaging is closed. All cushioning and absorbent material used in the large salvage packaging must be compatible with the hazardous material.

(3) Each large salvage packaging must be marked with the proper shipping name of the hazardous material inside the packaging and the name and address of the consignee. In addition, the packaging must be marked ''SALVAGE''. The lettering of the marking must be at least 12 mm (0.5 inches) high.

(4) Each large salvage packaging shall be labeled as prescribed for the respective material.

(5) The shipper shall prepare shipping papers in accordance with subpart C of part 172 of this subchapter.

(6) The overpack requirements of § 173.25 do not apply to large salvage packagings used in accordance with this paragraph.

■ 25. In § 173.4a, revise paragraph (g)(2) to read as follows:

§ 173.4a Excepted quantities.

* * * * *

(g) * * *

(2) The marking must be durable and clearly visible and in the form of a square. The hatching must be of the same color, black or red on white or a suitable contrasting background. The minimum dimensions must not be less than 100 mm (3.9 inches) by 100 mm (3.9 inches) as measured from the outside of the hatching forming the border. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

(i) *Transitional exception*—A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(ii) For domestic transportation, a packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

■ 26. In § 173.9, revise paragraph (e)(1) to read as follows:

§ 173.9 Transport vehicles or freight containers containing lading which has been fumigated.

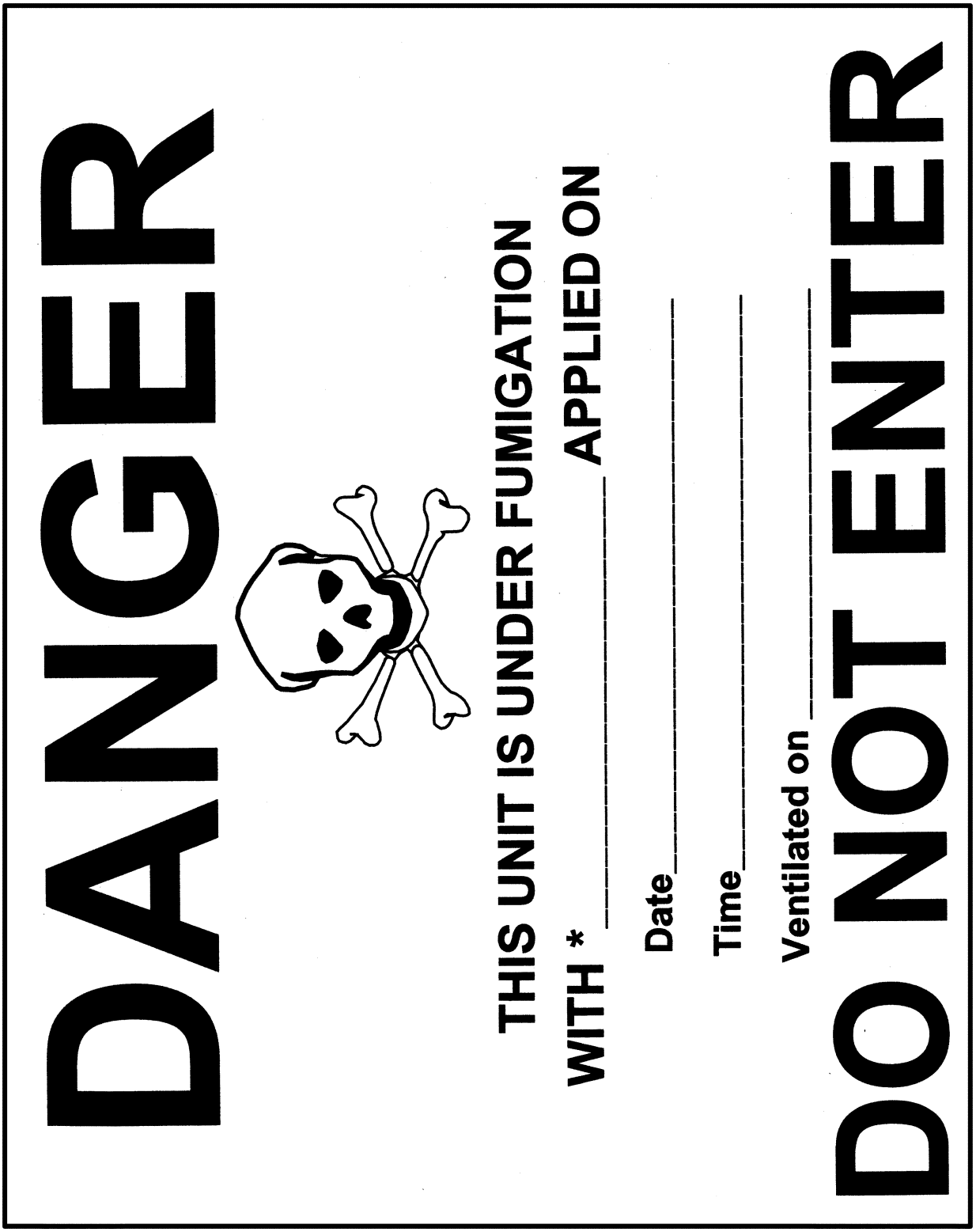
* * * * *

(e) *FUMIGANT marking.* (1) The FUMIGANT marking must consist of black letters on a white background that is a rectangle at least 400 mm (15.75 inches) wide and at least 300 mm (11.8 inches) high as measured to the outside of the lines forming the border of the marking. The minimum width of the line forming the border must be 2 mm and the text on the marking must not be less than 25 mm high. Except for size and color, the FUMIGANT marking must be as shown in the following figure. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

(i) *Transitional exception.* A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(ii) [Reserved]

BILLING CODE 4910–60–P



BILLING CODE 4910–60–C

* * * * *

■ 27. A new § 173.11 is added to read as follows:

§ 173.11 Exceptions for shipment of light bulbs containing hazardous materials.

The following light bulbs (lamps) are not subject to any other requirements of this subchapter provided they do not contain Class 7 (radioactive) material:

(a) Light bulbs that are collected directly from individuals and households when transported to a collection or recycling facility.

(b) Light bulbs each containing not more than 1 g of hazardous materials and packaged so that there is not more than 30 g of hazardous materials per package. Each light bulb must be packed in inner packagings separated by

dividers, or surrounded by cushioning material to protect the light bulbs and packed into strong outer packagings meeting the requirements of § 173.24(b) of this subpart and capable of passing a 1.2 m (4 feet) drop test;

(c) Used, damaged, defective light bulbs each containing not more than 1 g of hazardous materials and packaged so that there is not more than 30 g of hazardous materials per package when transported from a collection or recycling facility. The light bulbs must be packed in strong outer packagings meeting the requirements of § 173.24(b) of this subpart and capable of passing a 1.2 m (4 feet) drop test.

(d) Light bulbs containing only gases of Division 2.2 provided they are packaged so that the projectile effects of any rupture of the bulb will be contained within the package.

■ 28. In § 173.24, paragraph (c) is revised to read as follows:

§ 173.24 General requirements for packagings and packages.

* * * * *

(c) *Authorized packagings.* (1) A packaging is authorized for a hazardous material only if—

(i) The packaging is prescribed or permitted for the hazardous material in a packaging section specified for that material in Column 8 of the § 172.101 table and conforms to applicable requirements in the special provisions of Column 7 of the § 172.101 table and, for specification packagings (but not including UN standard packagings manufactured outside the United States), the specification requirements in parts 178 and 179 of this subchapter; or

(ii) The packaging is permitted under, and conforms to, provisions contained in subparts B or C of part 171 of this subchapter or §§ 173.3, 173.4, 173.4a, 173.4b, 173.5, 173.5a, 173.6, 173.7, 173.8, 173.27, or § 176.11 of this subchapter.

(2) The use of supplementary packagings within an outer packaging (*e.g.,* an intermediate packaging or a receptacle inside a required inner packaging) additional to what is required by this subchapter is authorized provided all applicable requirements of this subchapter are met and, when necessary, suitable cushioning is used to prevent movement within the packaging.

* * * * *

■ 29. In § 173.25, revise paragraph (a)(4) to read as follows:

§ 173.25 Authorized packagings and overpacks.

(a) * * *

(4) The overpack is marked with the word ''OVERPACK'' when specification packagings are required, unless specification markings on the inside packages are visible. The lettering on the ''OVERPACK'' marking must be at least 12 mm (0.5 inches) high.

(i) *Transitional exception.* A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(ii) For domestic transportation, an overpack marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

■ 30. In § 173.62, in paragraph (b), in the Explosives Table, the entry for UN0222 is revised; in paragraph (c), in the Table of Packing Methods, Packing Instructions 116, 117, 131, and 137 are revised to read as follows:

§ 173.62 Specific packaging requirements for explosives.

* * * * *

(b) * * *

EXPLOSIVES TABLE

ID No.	PI
* * * * *	
UN0222	112(b), 112(c) or 117.
* * * * *	

(c) * * *

TABLE OF PACKING METHODS

Packing instruction	Inner packagings	Intermediate packagings	Outer packagings
* *	* *	*	* *
116	Bags	Not necessary	Bags.
PARTICULAR PACKING REQUIREMENTS OR EXCEPTIONS:	paper, water and oil resistant plastics.		woven plastics (5H1/2/3).
1. For UN 0082, 0241, 0331 and 0332, inner packagings are not necessary if leakproof removable head drums are used as the outer packaging.	textile, plastic coated or lined woven plastics, sift-proof		paper, multiwall, water resistant (5M2).
2. For UN 0082, 0241, 0331 and 0332, inner packagings are not required when the explosive is contained in a material impervious to liquid.	Receptacles		plastics, film (5H4).
3. For UN 0081, inner packagings are not required when contained in rigid plastic that is impervious to nitric esters.	fiberboard, water resistant metal.		textile, sift-proof (5L2).
4. For UN 0331, inner packagings are not required when bags (5H2), (5H3) or (5H4) are used as outer packagings.	plastics		textile, water resistant (5L3).
5. For UN0081, bags must not be used as outer packagings.	wood, sift-proof		Boxes.
	Sheets		steel (4A).
	paper, water resistant		aluminum (4B).
	paper, waxed		other metal (4N).
	plastics		wood, natural, ordinary (4C1).
			natural wood, sift proof walls (4C2).
			plywood (4D).
			reconstituted wood (4F).
			fiberboard (4G).
			plastics, solid (4H2).
			Drums.
			steel (1A1 or 1A2).
			aluminum (1B1 or 1B2).
			other metal (1N1 or 1N2).
			plywood (1D).
			fiber (1G).
			plastics (1H1 or 1H2).
			Jerricans.
			steel (3A1 or 3A2).
			plastics (3H1 or 3H2).

TABLE OF PACKING METHODS—Continued

Packing instruction	Inner packagings	Intermediate packagings	Outer packagings
117	Not necessary	Not necessary	IBCs. metal (11A), (11B), (11N), (21A), (21B), (21N), (31A), (31B), (31N). flexible (13H2), (13H3), (13H4), (13L2), (13L3), (13L4), (13M2). rigid plastics (11H1), (11H2), (21H1), (21H2), (31H1), (31H2). composite (11HZ1), (11HZ2), (21HZ1), (21HZ2), (31HZ1), (31HZ2).
PARTICULAR PACKING REQUIREMENTS OR EXCEPTIONS: 1. This packing instruction may only be used for explosives of UN 0082 when they are mixtures of ammonium nitrate or other inorganic nitrates with other combustible substances that are not explosive ingredients. Such explosives must not contain nitroglycerin, similar liquid organic nitrates, liquid or solid nitrocarbons, or chlorates. 2. This packing instruction may only be used for explosives of UN 0241 that consist of water as an essential ingredient and high proportions of ammonium nitrate or other oxidizers, some or all of which are in solution. The other constituents may include hydrocarbons or aluminum powder, but must not include nitro-derivatives such as trinitrotoluene. 3. Metal IBCs must not be used for UN 0082, UN 0222 and UN 0241. 4. Flexible IBCs may only be used for solids. 5. For UN 0222, when other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle. 6. For UN 0222, flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.			
* *	* *	* *	* *
131	Bags paper plastics Receptacles fiberboard metal plastics wood Reels	Not necessary	Boxes. steel (4A). aluminum (4B). other metal (4N). wood, natural, ordinary (4C1). natural wood, sift proof walls (4C2). plastics, solid (4H2). plywood (4D). reconstituted wood (4F). fiberboard (4G). Drums. steel (1A1 or 1A2). Aluminum (1B1 or 1B2). other metal (1N1 or 1N2). Plywood (1D). fiber (1G). plastics (1H1 or 1H2).
PARTICULAR PACKING REQUIREMENTS OR EXCEPTIONS: 1. For UN 0029, 0267 and 0455, bags and reels may not be used as inner packagings. 2. For UN 0030, 0255 and 0456, inner packagings are not required when detonators are packed in pasteboard tubes, or when their leg wires are wound on spools with the caps either placed inside the spool or securely taped to the wire on the spool, so as to restrict free moving of the caps and to protect them from impact forces. 3. For UN 0360, 0361 and 0500, detonators are not required to be attached to the safety fuse, metal-clad mild detonating cord, detonating cord, or shock tube. Inner packagings are not required if the packing configuration restricts free moving of the caps and protects them from impact forces.			
* *	* *	* *	* *
137	Bags	Not necessary	Boxes.

TABLE OF PACKING METHODS—Continued

Packing instruction	Inner packagings	Intermediate packagings	Outer packagings
PARTICULAR PACKING REQUIREMENTS OR EXCEPTIONS: For UN 0059, 0439, 0440 and 0441, when the shaped charges are packed singly, the conical cavity must face downwards and the package marked "THIS SIDE UP". When the shaped charges are packed in pairs, the conical cavities must face inwards to minimize the jetting effect in the event of accidental initiation.	plastics ..... Boxes ..... fiberboard ..... wood ..... Tubes ..... fiberboard ..... metal ..... plastics ..... Dividing partitions in the outer packagings.		steel (4A). aluminum (4B). other metal (4N). wood, natural, ordinary (4C1). wood, natural, sift proof walls (4C2). plastics, solid (4H2). plywood (4D). reconstituted wood (4F). fiberboard (4G). Drums. steel (1A1 or 1A2). aluminum (1B1 or 1B2). other metal (1N1 or 1N2). plywood (1D). fiber (1G). plastics (1H1 or 1H2).
* * * * * * *			

* * * * *

■ 31. In § 173.115, add paragraph (m) to read as follows:

§ 173.115 Class 2, Divisions 2.1, 2.2, and 2.3—Definitions.

* * * * *

(m) *Adsorbed gas.* A gas which when packaged for transport is adsorbed onto a solid porous material resulting in an internal receptacle pressure of less than 101.3 kPa at 20 °C and less than 300 kPa at 50 °C.

■ 32. In § 173.121, paragraph (b)(1)(ii) is revised to read as follows:

§ 173.121 Class 3—Assignment of packing group.

* * * * *

(b) * * *

(1) * * *

(ii) The mixture or any separated solvent does not contain any substances with a primary or a subsidiary risk of Division 6.1 or Class 8;

* * * * *

■ 33. In § 173.127, paragraphs (a)(1) and (b) are revised to read as follows.

§ 173.127 Class 5, Division 5.1—Definition and assignment of packing groups.

(a) * * *

(1) A solid material is classed as a Division 5.1 material if, when tested in accordance with the UN Manual of Tests and Criteria (IBR, see § 171.7 of this subchapter):

(i) If test O.1 is used (UN Manual of Tests and Criteria, sub-section 34.4.1), the mean burning time is less than or equal to the burning time of a 3:7 potassium bromate/cellulose mixture; or

(ii) If test O.3 is used (UN Manual of Tests and Criteria, sub-section 34.4.3), the mean burning rate is greater than or equal to the burning rate of a 1:2 calcium peroxide/cellulose mixture.

* * * * *

(b) *Assignment of packing groups.* (1) The packing group of a Division 5.1 material which is a solid shall be assigned using the following criteria:

(i) Packing Group I, for any material which, in either concentration tested:

(A) If test O.1 is used (UN Manual of Tests and Criteria, sub-section 34.4.1), the mean burning time is less than the mean burning time of a 3:2 potassium bromate/cellulose mixture; or

(B) If test O.3 is used (UN Manual of Tests and Criteria, sub-section 34.4.3), the mean burning rate is greater than the mean burning rate of a 3:1 calcium peroxide/cellulose mixture.

(ii) Packing Group II, for any material which, in either concentration tested:

(A) If test O.1 is used (UN Manual of Tests and Criteria, sub-section 34.4.1), the mean burning time is less than the mean burning time of a 2:3 potassium bromate/cellulose mixture and the criteria for Packing Group I are not met; or

(B) If test O.3 is used (UN Manual of Tests and Criteria, sub-section 34.4.3), the mean burning rate is greater than the mean burning rate of a 1:1 calcium peroxide/cellulose mixture and the criteria for Packing Group I are not met.

(iii) Packing Group III for any material which, in either concentration tested:

(A) If test O.1 is used (UN Manual of Tests and Criteria, sub-section 34.4.1), the mean burning time is less than the mean burning time of a 3:7 potassium bromate/cellulose mixture and the criteria for Packing Groups I and II are not met; or

(B) If test O.3 is used (UN Manual of Tests and Criteria, sub-section 34.4.3), the mean burning rate is greater than the mean burning rate of a 1:2 calcium peroxide/cellulose mixture and the criteria for Packing Groups I and II are not met.

(iv) The materials is not classified as a Division 5.1 material if, in either concentration tested:

(A) If test O.1 is used (UN Manual of Tests and Criteria, sub-section 34.4.1), the sample tested does not ignite and exhibit burn, or exhibits a mean burning time of greater than or equal to the mean burning time of a 3:7 potassium bromate/cellulose mixture.

(B) If test O.3 is used (UN Manual of Tests and Criteria, sub-section 34.4.3), the sample tested does not ignite and exhibit burn, or exhibits a mean burning rate less than or equal to the mean burning rate of a 1:2 calcium peroxide/cellulose mixture.

* * * * *

■ 34. In § 173.151, revise paragraph (b) to read as follows:

§ 173.151 Exceptions for Class 4.

* * * * *

(b) *Limited quantities of Division 4.1.* (1) Limited quantities of flammable solids (Division 4.1) in Packing Groups II and III and, where authorized by this section, charcoal briquettes (Division 4.2) in Packing Group III, are excepted from labeling requirements unless the material is offered for transportation or transported by aircraft, and are excepted from the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. If authorized for transportation by aircraft, the package must also conform to applicable requirements of § 173.27 of this part (*e.g.,* authorized materials, inner packaging quantity limits and closure securement) and only hazardous

material authorized aboard passenger-carrying aircraft may be transported as a limited quantity. A limited quantity package that conforms to the provisions of this section is not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or is offered for transportation and transported by aircraft or vessel, and is eligible for the exceptions provided in § 173.156 of this part. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. Except for transportation by aircraft, the following combination packagings are authorized:

(i) For flammable solids in Packing Group II, inner packagings not over 1.0 kg (2.2 pounds) net capacity each, packed in a strong outer packaging.

(ii) For flammable solids in Packing Group III, inner packagings not over 5.0 kg (11 pounds) net capacity each, packed in a strong outer packaging.

(2) For transportation by highway or rail, Charcoal briquettes (NA1361) may be packaged as a limited quantity in accordance with paragraph (b) of this section in packagings not exceeding 30 kg gross weight and are eligible for the exceptions provided in § 173.156.

* * * * *

■ 35. In § 173.161, paragraph (b)(2) is revised to read as follows:

§ 173.161 Chemical kits and first aid kits.

* * * * *

(b) * * *

(2) The packing group assigned to the chemical kit and first aid kit as a whole must be the most stringent packing group assigned to any individual substance in the kit. The packing group must be shown on the shipping paper. Where the kit contains only hazardous materials to which no packing group is assigned, the packagings shall meet the Packing Group II performance level. Where the kit contains only hazardous materials to which no packing group is assigned, the packing group does not have to be indicated on the shipping paper.

* * * * *

■ 36. In § 173.164, paragraph (a)(5) is removed and reserved:

§ 173.164 Mercury (metallic and articles containing mercury).

(a) * * *

(5) [Reserved]

* * * * *

■ 37. Revise § 173.166 to read as follows:

§ 173.166 Safety devices.

For the purpose of this section, safety devices are articles which contain pyrotechnic substances or hazardous materials of other classes and are used in vehicles, vessels or aircraft to enhance safety to persons. Examples are: air bag inflators, air bag modules, seat-belt pretensioners and pyromechanical devices. Pyromechanical devices are assembled components for tasks such as but not limited to separation, locking, release-and-drive or occupant restraint. The term includes ''Safety devices, pyrotechnic.''

(a) *Definitions.* An *air bag inflator* (consisting of a casing containing an igniter, a booster material, a gas generant and, in some cases, a pressure receptacle (cylinder)) is a gas generator used to inflate an air bag in a supplemental restraint system in a motor vehicle. An *air bag module* is the air bag inflator plus an inflatable bag assembly. A *seat-belt pretensioner* contains similar hazardous materials and is used in the operation of a seat-belt restraining system in a motor vehicle.

(b) *Classification.* (1) Safety devices, excluding those which contain flammable or toxic gases or mixtures thereof, may be classed as Class 9 (UN3268) if the safety device, or if more than a single safety device is involved then the representative of the maximum parameters of each design type, is examined and successfully tested by a person or agency who is authorized by the Associate Administrator to perform examination and testing of explosives under § 173.56(b)(1), and who:

(i) Does not manufacture or market explosives or safety devices, is not owned in whole or in part, or is not financially dependent upon any entity that manufactures or markets explosives or safety devices;

(ii) Performs all examination and testing in accordance with the applicable requirements as specified in special provision 160 (see § 172.102 of this subchapter); and

(iii) Maintains records in accordance with paragraph (g) of this section.

(iv) By adhering to all the provisions specified in paragraph (b)(1) of this section, a Class 9 (UN3268) air bag inflator, air bag module or seat-belt pretensioner design is not required to be submitted to the Associate Administrator for approval or assigned an EX number. All other Class 9 (UN3268) safety device designs are required to be submitted to the Associate Administrator for approval and assigned an EX number;

(2) A safety device may be classed as Division 1.4G if the maximum parameters of each design type have been examined and successfully tested by a person or agency who is authorized by the Associate Administrator to perform such examination and testing of explosives under § 173.56(b)(1). As a Class 1 explosive, the manufacturer must submit to the Associate Administrator a report of the examination and assignment of a recommended shipping description, division, and compatibility group, and if the Associate Administrator finds the approval request meets the regulatory criteria, the explosive may be approved in writing and assigned an EX number; or

(3) The manufacturer has submitted an application, including a classification issued by the competent authority of a foreign government to the Associate Administrator, and received written notification from the Associate Administrator that the device has been approved for transportation and assigned an EX number.

(c) *EX numbers.* (1) When a safety device is classed and approved as a Division 1.4G and offered for transportation, the shipping paper must contain the EX number or product code for each approved device in association with the basic description required by § 172.202(a) of this subchapter. Product codes must be traceable to the specific EX number assigned to the device by the Associate Administrator. Further, if the EX number or product code is contained on the shipping paper then it is not required to be marked on the outside package.

(2) A safety device, when classed as a Class 9 (UN3268), is excepted from the EX number, or product code shipping paper requirements of paragraph (c) of this section.

(d) *Exceptions.* (1) A safety device that is classed as a Class 9 (UN3268) under the terms of paragraph (b)(1) of this section and is installed in a motor vehicle, aircraft, boat or other transport conveyance or its completed components, such as steering columns or door panels, is not subject to the requirements of this subchapter. A safety device that has been classed as a Division 1.4G and approved by the Associate Administrator and is installed in a motor vehicle, aircraft, boat or other transport conveyance or its completed components, such as steering columns

or door panels, is not subject to the requirements of this subchapter.

(2) An air bag module containing an inflator that has been previously approved by the Associate Administrator for transportation is not required to be submitted for further examination or approval. For classifications granted after July 30, 2013, if the Class 9 designation for the inflator is contingent upon packaging or other special means specified by the authorized testing agency, the modules must be tested and certified separately to determine if they can be shipped as ''UN3268, Safety Devices, 9, PG III''.

(3) An air bag module containing an inflator that has previously been approved by the Associate Administrator as a Division 2.2 material is not required to be submitted for further examination to be reclassed as a Class 9 material.

(4) *Shipments to recycling or waste disposal facilities.* When offered for domestic transportation by highway, rail freight, cargo vessel or cargo aircraft, a serviceable safety device classed as either Class 9 (UN3268) or Division 1.4G removed from a motor vehicle that was manufactured as required for use in the United States may be offered for transportation and transported without compliance with the shipping paper requirement prescribed in paragraph (c) of this section. However, when these articles are shipped to a recycling facility, the word ''Recycled'' must be entered on the shipping paper immediately after the basic description prescribed in § 172.202 of this subchapter. No more than one device is authorized in the packaging prescribed in paragraph (e)(1), (2) or (3) of this section. The device must be cushioned and secured within the package to prevent movement during transportation.

(5) An air bag inflator, air bag module, or seat-belt pretensioner that was classed and approved for transportation prior to January 1, 2015 may continue to be transported under the terms of the existing approval, using the appropriate proper shipping name ''Safety Devices'' or ''Safety Devices, Pyrotechnic'' based on the classification of the device as assigned by PHMSA or the authorized person or agency that examined and tested the design type.

(6) Until January 1, 2016, for domestic transportation by highway, rail, and vessel, packages containing air bag inflators, air bag modules, or seat-belt pretensioners may be;

(i) Marked with either the appropriate proper shipping name, or an appropriate proper shipping name authorized by § 172.101 in effect on December 31, 2014; and

(ii) Described on a shipping paper with either the appropriate proper shipping name, or an appropriate proper shipping name authorized by § 172.101 in effect on December 31, 2014.

(e) *Packagings.* Rigid, outer packagings, meeting the general packaging requirements of part 173 are authorized as follows. Additionally, the UN specification packagings listed in paragraphs (e)(1), (2), and (3) of this section must meet the packaging specification and performance requirements of part 178 of this subchapter at the Packing Group III performance level. The packagings must be designed and constructed to prevent movement of the articles and inadvertent activation. Further, if the Class 9 designation is contingent upon packaging specified by the authorized testing agency, shipments of the safety device must be in compliance with the prescribed packaging.

(1) 1A2, 1B2, 1N2, 1D, 1G, or 1H2 drums.

(2) 3A2, 3B2, or 3H2 jerricans.

(3) 4A, 4B, 4N, 4C1, 4C2, 4D, 4F, 4G, 4H1, or 4H2 boxes.

(4) *Reusable high-strength containers or dedicated handling devices.* (i) Reusable containers manufactured from high-strength plastic, metal, or other suitable material, or other dedicated handling devices are authorized for shipment of safety devices from a manufacturing facility to the assembly facility, subject to the following conditions:

(A) The gross weight of the containers or handling devices may not exceed 1000 kg (2205 pounds). Containers or handling devices must provide adequate support to allow stacking at least three units high with no resultant damage;

(B) If not completely enclosed by design, the container or handling device must be covered with plastic, fiberboard, metal, or other suitable material. The covering must be secured to the container by banding or other comparable methods; and

(C) Internal dunnage must be sufficient to prevent movement of the devices within the container.

(ii) Reusable containers manufactured from high-strength plastic, metal, or other suitable material, or other dedicated handling devices are authorized for shipment of safety devices only to, between, and from, intermediate handling locations, provided they meet the conditions specified in paragraphs (e)(4)(i)(A) through (C) of this section and:

(A) The packages may be opened and re-packed by an intermediate handler as long as no modifications or changes are made to the packagings; and

(B) Transportation must be made by private or contract carrier.

(5) Packagings which were previously authorized in an approval issued by the Associate Administrator may continue to be used, provided a copy of the approval is maintained while such packaging is being used.

(6) *Safety Devices removed from a vehicle.* When removed from, or were intended to be used in, a motor vehicle that was manufactured as required for use in the United States and offered for domestic transportation by highway to Recycling or Waste Disposal facilities, a serviceable safety device classed as Class 9 UN3268 may be offered for transportation and transported in the following additional packaging:

(i) Specification and non-specification steel drums with a wall and lid thickness not less than 20 gauge. The lid must be securely affixed with a lever-locking or bolted-ring assembly. The lid of the drum must provide ventilation of the drum contents in a fire. The drum may be filled with any combination of safety devices to a capacity not greater than fifty (50) percent of the drum's total volume. In addition, inner packagings or cushioning may not be used to fill the void space; or

(ii) Outer packaging consisting of 4H2 solid plastic boxes or non-specification rugged reusable plastic outer packaging and inner static-resistant plastic bags or trays. If not completely enclosed by design, the container or handling device must be covered with plastic, fiberboard, metal or other suitable material. The covering must be secured to the container by banding or other comparable methods. The articles must be packed to prevent movement within the container during transportation.

(f) *Labeling.* Notwithstanding the provisions of § 172.402, each package or handling device must display a CLASS 9 label. Additional labeling is not required when the package contains no hazardous materials other than the devices.

(g) *Recordkeeping requirements.* (1) Following the examination of each new design type classed as a Class 9 in accordance with paragraph (b)(1) of this section, the person that conducted the examination must prepare a test report and provide the test report to the manufacturer of the safety device. At a minimum, the test report must contain the following information:

(i) Name and address of the test facility;

(ii) Name and address of the applicant;

(iii) Manufacturer of the device. For a foreign manufacturer, the U.S. agent or importer must be identified;

(iv) A test report number, drawing of the device, and description of the safety device in sufficient detail to ensure that the test report is traceable (*e.g.* a unique product identifier) to a specific design;

(v) The tests conducted and the results; and

(vi) A certification that the safety device is classed as a Class 9 (UN3268).

(2) For at least fifteen (15) years after testing, a copy of each test report must be maintained by the authorizing testing agency. For as long as any safety device design is being manufactured, and for at least fifteen (15) years thereafter, a copy of each test report must be maintained by the manufacturer of the product.

(3) Test reports must be made available to a representative of the Department upon request.

■ 38. In § 173.167, paragraph (a)(4) is revised to read as follows:

§ 173.167 Consumer Commodities.

(a) * * *

(4) *Drop test capability.* Breakable inner packagings (*e.g.,* glass, earthenware, or brittle plastic) must be packaged to prevent failure under conditions normally incident to transport. Packages of consumer commodities as prepared for transport must be capable of withstanding a 1.2 m drop on solid concrete in the position most likely to cause damage. In order to pass the test, the outer packaging must not exhibit any damage liable to affect safety during transport and there must be no leakage from the inner packaging(s).

* * * * *

■ 39. Section 173.176, is revised to read as follows:

§ 173.176 Capacitors.

(a) Capacitors, including capacitors containing an electrolyte that does not meet the definition of any hazard class or division as defined in this part, must conform to the following requirements:

(1) Except for asymmetric capacitors, capacitors not installed in equipment must be transported in an uncharged state.

(2) Each capacitor or module must be protected against a potential short circuit hazard in transport as follows:

(i) Except for asymmetric capacitors, when a capacitor's energy storage capacity is less than or equal to 10 Wh or when the energy storage capacity of each capacitor in a module is less than or equal to 10 Wh, the capacitor or module must be protected against short circuit or be fitted with a metal strap connecting the terminals; or

(ii) Except for asymmetric capacitors, when the energy storage capacity of a capacitor or a capacitor in a module is more than 10 Wh, the capacitor or module must be fitted with a metal strap connecting the terminals.

(iii) When an asymmetric capacitor's energy storage capacity is greater than 0.3 Wh, or when the energy storage capacity of each capacitor in a module is greater than 0.3 Wh, the capacitor or module must be protected against short circuit.

(3) Capacitors containing an electrolyte that meets the definition of one or more hazard class or division as defined in this part, must be designed to withstand a 95 kPa (0.95 bar, 14 psi) pressure differential.

(4) Capacitors must be designed and constructed to safely relieve pressure that may build up in use, through a vent or a weak point in the capacitor casing. Any liquid that is released upon venting must be contained by the packaging or by the equipment in which a capacitor is installed.

(5) Except for asymmetric capacitors, capacitors manufactured after December 31, 2013, or asymmetric capacitors manufactured after December 31, 2015, must be marked with the energy storage capacity in Wh.

(b) Capacitors must be packed in strong outer packagings. For transport by air, capacitors must be securely cushioned within the outer packagings. Capacitors installed in equipment may be offered for transport unpackaged or on pallets, when the capacitors are afforded equivalent protection by the equipment in which they are contained.

(c) Capacitors containing an electrolyte not meeting the definition of any hazard class or division as defined in this part, including when configured in a module or when installed in equipment, are not subject to any other requirements of this subchapter.

(d) Except for asymmetric capacitors, capacitors containing an electrolyte that meets the definition of one or more hazard class or division as defined in this part, with an energy storage capacity of 10 Wh or less are not subject to any other requirements of this subchapter, when they are capable of withstanding a 1.2 m (3.9 feet) drop test unpackaged onto a rigid, non-resilient, flat and horizontal surface without loss of contents.

(e) Asymmetric capacitors containing an electrolyte that meets the definition of one or more hazard class or division as defined in this part, with an energy storage capacity of 20 Wh or less, including when configured in a module, are not subject to other provisions of this subchapter when the capacitors are capable of withstanding a 1.2 meter (3.9 feet) drop test unpackaged onto a rigid, non-resilient, flat and horizontal surface without loss of contents.

(f) Except for asymmetric capacitors, capacitors containing an electrolyte meeting the definition of one or more hazard class or division as defined in this part, that are not installed in equipment, and with an energy storage capacity of more than 10 Wh are subject to the requirements of this subchapter.

(g) Asymmetric capacitors containing an electrolyte meeting the definition of one or more hazard class or division as defined in this part, that are not installed in equipment, and with an energy storage capacity of more than 20 Wh are to the requirements of this subchapter.

(h) Capacitors installed in equipment and containing an electrolyte meeting the definition of one or more hazard class or division as defined in this part, are not subject to any other requirements of this subchapter, provided the equipment is packaged in a strong outer packaging and in such a manner as to prevent accidental functioning of the capacitors during transport. Large, robust equipment containing capacitors may be offered for transport unpackaged or on pallets when the capacitors are afforded equivalent protection by the equipment in which they are contained.

■ 40. In § 173.181, paragraph (c) is revised to read as follows:

§ 173.181 Pyrophoric materials (liquids).

* * * * *

(c) Steel drums (1A1 or 1A2), aluminum drums (1B1 or 1B2), metal drums, other than steel or aluminum (1N1 or 1N2) or fiber drums (1G); steel jerricans (3A1 or 3A2) or aluminum jerricans (3B1 or 3B2); or steel boxes (4A), aluminum boxes (4B) or metal boxes, other than steel or aluminum (4N) not exceeding 220 L (58 gallons) capacity each with strong, tight inner metal cans not over 4.0 L (1 gallon) capacity each. The strong, tight metal cans must be closed by positive means, not friction.

(1) Inner packagings must have no opening exceeding 25 mm (1 inch) diameter and must be surrounded with noncombustible cushioning material.

(2) Net quantity of pyrophoric liquids may not exceed two-thirds of the rated capacity of the outer drum. For example, a 220 L (58 gallons) outer drum may contain no more than 147 L (39 gallons) of pyrophoric liquids.

(3) Each layer of inner containers must be separated by a metal plate separator in addition to cushioning material.

■ 41. In § 173.185,
■ a. Paragraph (b)(6) is added;
■ b. Paragraphs (c) introductory text, (c)(1)(iii) and (c)(4)(v) are revised; and
■ d. Paragraph (f)(3) is revised.

The revisions and additions read as follows:

§ 173.185 Lithium cells and batteries.

* * * * *

(b) * * *

(6) Except for transportation by aircraft, the following rigid large packagings are authorized for a single battery, including for a battery contained in equipment, meeting provisions (b)(1) and (2) of this section and the requirements of part 178, subparts P and Q, of this subchapter at the Packing Group II level:

(i) Metal (50A, 50B, 50N);

(ii) Rigid plastic (50H);

(iii) Wooden (50C, 50D, 50F);

(iv) Rigid fiberboard (50G).

(c) Exceptions for smaller cells or batteries. Other than as specifically stated below, a package containing lithium cells or batteries, or lithium cells or batteries packed with, or contained in, equipment, that meets the conditions of this paragraph, is excepted from the requirements in subparts C through H of part 172 of this subchapter and the UN performance packaging requirements in paragraphs (b)(3)(ii) and (b)(4) of this section under the following conditions and limitations.

(1) * * *

(iii) Except when lithium metal cells or batteries are packed with or contained in equipment in quantities not exceeding 5 kg net weight, the outer package that contains lithium metal cells or batteries must be marked: ''PRIMARY LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT'' or ''LITHIUM METAL BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT, or labeled with a CARGO AIRCRAFT ONLY'' label specified in § 172.448 of this subchapter.

* * * * *

(4) * * *

(v) A package that exceeds the number or quantity (mass) limits in the table shown in (c)(4) is subject to all applicable requirements of this subchapter, except that a package containing no more than 2.5 kg lithium metal cells or batteries or 10 kg lithium ion cells or batteries is not subject to the UN performance packaging requirements in paragraphs (b)(3)(ii) of this section when the package displays both the lithium battery handling mark and the Class 9 label.

* * * * *

(f) * * *

(3) Each inner packaging must be individually placed in one of the following packagings meeting the applicable requirements of part 178, subparts L, M, P and Q of this subchapter at the Packing Group I level:

(i) Metal (4A, 4B, 4N), wooden (4C1, 4C2, 4D, 4F), or solid plastic (4H2) box;

(ii) Metal (1A2, 1B2, 1N2), plywood (1D), or plastic (1H2) drum; or

(iii) Except for transportation by aircraft, for a single large battery or for a single battery contained in equipment, the following rigid large packagings are authorized:

(A) Metal (50A, 50B, 50N);

(B) Rigid plastic (50H);

(C) Plywood (50D); and

* * * * *

■ 42. In § 173.199, revise paragraph (a)(5) to read as follows:

§ 173.199 Category B infectious substances.

* * * * *

(a) * * *

(5) The following square-on-point mark must be displayed on the outer packaging on a background of contrasting color. The width of the line forming the border must be at least 2 mm (0.08 inches) and the letters and numbers must be at least 6 mm (0.24 inches) high. The size of the mark must be such that no side of the diamond is less than 50 mm (1.97 inches) in length as measured from the outside of the lines forming the border. The proper shipping name ''Biological substances, Category B'' must be marked on the outer packaging adjacent to the diamond-shaped mark in letters that are at least 6 mm (0.24 inches) high.

(i) *Transitional exception*—A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.

(ii) For domestic transportation, a packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

§ 173.220 [Amended]

■ 43. In § 173.220, in the last sentence of paragraph (d), add the phrase ''(IBR, see § 171.7)'' after the phrase ''UN Manual of Tests and Criteria''.

■ 44. In § 173.225(g), in the Organic Peroxide Portable Tank Table, the last entry in the table is revised and a new Note 1 is added immediately following the end of the table to read as follows:

§ 173.225 Packaging requirements and other provisions for organic peroxides.

* * * * *

(g) * * *

ORGANIC PEROXIDE PORTABLE TANK TABLE

UN No.	Hazardous material	Minimum test pressure (bar)	Minimum shell thickness (mm-reference steel) See . . .	Bottom opening requirements See . . .	Pressure relief requirements See . . .	Filling limits	Control temperature	Emergency temperature
	[REVISE]							
	*	*	*	*	*	*	*	
	Peroxyacetic acid, distilled, stabilized, not more than 41%. [1]	4	§ 178.274(d)(2)	§ 178.275(d)(3)	§ 178.275(g)(1)	Not more than 90% at 59 °F (15 °C).	+30 °C	+35 °C

Note: 1. ''Corrosive'' subsidiary risk placard is required.

* * * * *

■ 45. A new § 173.231 is added to read as follows

§ 173.231 Ammonium nitrate emulsion, suspension or gel.

(a) Packagings for non-bulk shipments of Ammonium nitrate emulsions, suspensions and gels must conform to the general packaging requirements of subpart B of part 173, to the requirements of part 178 of this subchapter at the Packing Group I or II performance level, and the requirements of the special provisions of column 7 of the § 172.101 table.

(1) The following combination packagings are authorized:

Outer packagings:

Drums: 1B2, 1G, 1N2, 1H2 or 1D

Boxes: 4B, 4C1, 4C2, 4D, 4G or 4H2
Jerricans: 3B2 of 3H2
Inner Packagings:
Glass, plastic or metal inner receptacles

(2) For combination packagings, the capacity of each inner packaging must not exceed 5 liters (1.3 gallons) and the maximum authorized net weight of each outer packaging must not exceed 125 kg (275 pounds).

(3) The following single packagings are authorized:

Drums: 1B1, 1B2, 1H1 or 1H2 with a maximum capacity of 250 liters (66 gallons).

Jerricans: 3B1, 3B2, 3H1 or 3H2 with a maximum capacity of 60 liters (15.9 gallons).

Plastic receptacle in aluminum, fiber, plastic or plywood drum: 6HB1, 6HG1, 6HH1 or 6HD1with the outer drum having a maximum capacity of 250 liters (66 gallons).

Plastic receptacle in aluminum wood, plywood, fiberboard, or solid plastic box: 6HB2, 6HC, 6HD2, 6HG2, or 6HH2 with the outer box having a maximum capacity of 60 liters (15.9 gallons).

Glass receptacle in aluminum, fiber, or plywood drum: 6PB1, 6PF1 or 6PD1 with the outer drum having a maximum capacity of 60 liters (15.9 gallons).

Glass receptacle in expanded plastic or solid plastic packaging: 6PH1 or 6PH2 with the outer packaging having a maximum capacity of 60 liters (15.9 gallons).

Glass receptacle in aluminum, wood, or fiberboard box, or wickerwork hamper: 6PB2, 6PC, 6PG2 or 6PD2 with the outer box or hamper having a maximum capacity of 60 liters (15.9 gallons).

(b) [Reserved]

■ 46. Section 173.251 is added to subpart F to read as follows:

§ 173.251 Bulk packaging for ammonium nitrate emulsion, suspension, or gel.

When § 172.101 of this subchapter specifies that a hazardous material be packaged under this section, only the following bulk packagings are authorized, subject to the requirements of subparts A and B of part 173 of this subchapter and the special provisions specified in column 7 of the § 172.101 table.

(a) *IBCs.* IBCs are authorized subject to the conditions and limitations of this section provided:

(1) The IBC type is authorized according to the IBC packaging code for the specific hazardous material in Column (7) of the § 172.101 Table;

(2) The IBC conforms to the requirements in subpart O of part 178 of this subchapter at the Packing Group performance level in Column (5) of the § 172.101 Table for the material being transported.

(b) [Reserved]

■ 47. In § 173.301b, paragraphs (c)(1), (c)(2)(ii) and (iii) are revised to read as follows:

§ 173.301b Additional general requirements for shipment of UN pressure receptacles.

(c) *Pressure receptacle valve requirements.* (1) When the use of a valve is prescribed, the valve must conform to the requirements in ISO 10297:2006 (IBR, see § 171.7 of this subchapter). Until December 31, 2008, the manufacture of a valve conforming to the requirements in ISO 10297:1999 (IBR, see § 171.7 of this subchapter) is authorized.

(2) * * *

(ii) By equipping the UN pressure receptacle with a valve cap conforming to the requirements in ISO 11117:2008 and Technical Corrigendum 1 (IBR, see § 171.7 of this subchapter). Until December 31, 2014, the manufacture of a valve cap conforming to the requirements in ISO 11117:1998 (IBR, see § 171.7 of this subchapter) is authorized. The cap must have vent-holes of sufficient cross-sectional area to evacuate the gas if leakage occurs at the valve;

(iii) By protecting the valves by shrouds or guards conforming to the requirements in ISO 11117:2008 and Technical Corrigendum 1 (IBR; *see* § 171.7 of this subchapter). Until December 31, 2014, the manufacture of a shroud or guard conforming to the requirements in ISO 11117:1998 (IBR, see § 171.7 of this subchapter) is authorized. For metal hydride storage systems, by protecting the valves in accordance with the requirements in ISO 16111:2008 (IBR; *see* § 171.7 of this subchapter).

* * * * *

■ 48. In § 173.302, revise the section heading and paragraphs (a)(1) and (2) to read as follows:

§ 173.302 Filling of cylinders with nonliquefied (permanent) compressed gases or adsorbed gases.

(a) *General requirements.* (1) A cylinder filled with a non-liquefied compressed gas (except gas in solution) must be offered for transportation in accordance with the requirements of this section and § 173.301. In addition, a DOT specification cylinder must meet the requirements in §§ 173.301a, 173.302a and 173.305, as applicable. UN pressure receptacles must meet the requirements in §§ 173.301b and 173.302b, as applicable. Where more than one section applies to a cylinder, the most restrictive requirements must be followed.

(2) *Adsorbed gas.* A cylinder filled with an adsorbed gas must be offered for transportation in accordance with the requirements of paragraph (d) of this section, § 173.301, and § 173.302c. UN cylinders must meet the requirements in §§ 173.301b and 173.302b, as applicable. Where more than one section applies to a cylinder, the most restrictive requirements must be followed.

* * * * *

■ 49. A new § 173.302c is added to read as follows:

§ 173.302c Additional requirements for the shipment of adsorbed gases in UN pressure receptacles.

(a) A cylinder filled with an adsorbed gas must be offered for transportation in UN pressure receptacles subject to the requirements in this section and § 173.302, as well as, §§ 173.301 and 173.301b.

(b) The pressure of each filled cylinder must be less than 101.3 kPa at 20 °C (68 °F) and must not exceed 300 kPa at 50 °C (122 °F).

(c) The minimum test pressure of the cylinder must be 21 bar.

(d) The minimum burst pressure of the cylinder must be 94.5 bar.

(e) The internal pressure at 65 °C (149 °F) of the filled cylinder must not exceed the test pressure of the cylinder.

(f) The adsorbent material must be compatible with the cylinder and must not form harmful or dangerous compounds with the gas to be adsorbed. The gas in combination with the adsorbent material must not affect or weaken the cylinder or cause a dangerous reaction (*e.g.,* a catalyzing reaction).

(g) The quality of the adsorbent material must be verified at the time of each fill to assure the pressure and chemical stability requirements of this section are met each time an adsorbed gas package is offered for transport.

(h) The adsorbent material must not meet the definition of any other hazard class.

(i) Cylinders and closures containing toxic gases with an LC50 less than or equal to 200 ml/m3 (ppm) (see the following Adsorbed Gases Table) must meet the following requirements:

(1) Valve outlets must be fitted with pressure retaining gas-tight plugs or caps having threads matching those of the valve outlets.

(2) Each valve must either be of the packless type with non-perforated diaphragm, or be of a type which

prevents leakage through or past the packing.

(3) Each cylinder and closure must be tested for leakage after filling.

(4) Each valve must be capable of withstanding the test pressure of the cylinder and be directly connected to the cylinder by either a taper-thread or other means which meets the requirements of ISO 10692–2 (IBR, see § 171.7 of this subchapter); and

(5) Cylinders and valves must not be fitted with a pressure relief device.

(j) Valve outlets for cylinders containing pyrophoric gases must be fitted with gas-tight plugs or caps having threads matching those of the valve outlets.

(k) The filling procedure must be in accordance with Annex A of ISO 11513 (IBR, see § 171.7 of this subchapter).

(l) The maximum period for periodic requalification must be in accordance with § 180.207(c) of this subchapter.

ADSORBED GASES TABLE

ID No.	Hazardous material	LC_{50} ml/m³	Notes
3510	Adsorbed gas, flammable, n.o.s.		z.
3511	Adsorbed gas, n.o.s.		z.
3512	Adsorbed gas, toxic, n.o.s.	≤5000	z.
3513	Adsorbed gas, oxidizing, n.o.s.		z.
3514	Adsorbed gas, toxic, flammable, n.o.s.	≤5000	z.
3515	Adsorbed gas, toxic, oxidizing, n.o.s.	≤5000	z.
3516	Adsorbed gas, toxic, corrosive, n.o.s.	≤5000	z.
3517	Adsorbed gas, toxic, flammable, corrosive, n.o.s.	≤5000	z.
3518	Adsorbed gas, toxic, oxidizing, corrosive, n.o.s.	≤5000	z.
3519	Boron trifluoride, adsorbed	387	a.
3520	Chlorine, adsorbed	293	a.
3521	Silicon tetrafluoride, adsorbed	450	a.
3522	Arsine, adsorbed	20	d.
3523	Germane, adsorbed	620	d, r.
3524	Phosphorus pentafluoride, adsorbed	190	
3525	Phosphine, adsorbed	20	d.
3526	Hydrogen selenide, adsorbed	2	

Notes:

a: Aluminum alloy cylinders must not be used.

d: When steel cylinders are used, only those bearing the "H" mark in accordance with § 173.302b(f) are authorized.

r: The filling of this gas must be limited such that, if complete decomposition occurs, the pressure does not exceed two thirds of the test pressure of the cylinder.

z: The construction materials of the cylinders and their accessories must be compatible with the contents and must not react to form harmful or dangerous compounds therewith.

■ 50. In § 173.307, paragraphs (a)(5) and (a)(6) are revised to read as follows:

§ 173.307 Exceptions for compressed gases.

(a) * * *

(5) Manufactured articles or apparatuses, other than light bulbs each containing not more than 100 mg (0.0035 ounce) of inert gas and packaged so that the quantity of inert gas per package does not exceed 1 g (0.35 ounce).

(6) Light bulbs (lamps) conforming to the requirements of § 173.11.

* * * * *

■ 51. In § 173.309, an introductory paragraph and a new paragraph (e) are added to read as follows:

§ 173.309 Fire extinguishers.

This section applies to portable fire extinguishers for manual handling and operation, fire extinguishers for installation in aircraft, and large fire extinguishers. *Large fire extinguishers* include fire extinguishers mounted on wheels for manual handling; fire extinguishing equipment or machinery mounted on wheels or wheeled platforms or units transported similar to (small) trailers; and fire extinguishers composed of a non-rollable pressure drum and equipment, and handled, for example, by fork lift or crane when loaded or unloaded.

* * * * *

(e) Large fire extinguishers may be transported while unpackaged under the following conditions:

(1) The requirements of § 173.24(b) are met;

(2) The valves are protected in accordance with § 173.301(c)(2)(i), (ii), (iii) or (v); and

(3) Other equipment mounted on the fire extinguisher is protected to prevent accidental activation.

* * * * *

■ 52. In § 173.403, the definitions of "*Exclusive use*" and "*Freight container*" are revised to read as follows:

§ 173.403 Definitions.

* * *

Exclusive use means sole use by a single consignor of a conveyance for which all initial, intermediate, and final loading and unloading and shipment are carried out in accordance with the direction of the consignor or consignee where required by this subchapter. The consignor and the carrier must ensure that any loading or unloading is performed by personnel having radiological training and resources appropriate for safe handling of the consignment. The consignor must provide to the initial carrier specific written instructions for maintenance of exclusive use shipment controls, including the vehicle survey requirement of § 173.443(c) as applicable, and include these instructions with the shipping paper information provided to the carrier by the consignor.

* * * * *

Freight container means a reusable container having a volume of 1.81 cubic meters (64 cubic feet) or more, designed and constructed to permit it being lifted with its contents intact and intended primarily for containment of packages in unit form during transportation. A "small freight container" is one which has an internal volume of not more than 3.0 cubic meters (106 cubic feet). All other freight containers are designated as "large freight containers."

* * * * *

■ 53. In § 173.420, paragraph (d) is revised to read as follows:

§ 173.420 Uranium hexafluoride (fissile, fissile excepted and non-fissile).

* * * * *

(d) Uranium hexafluoride not exceeding the limits specified in the limited quantity package limits column of table 4 in § 173.425 may be classified as UN 3507, Uranium hexafluoride, radioactive material, excepted package, less than 0.1 kg (0.22 pounds) per package, non-fissile or fissile-excepted, provided that:

(1) The mass of uranium hexafluoride in the package is less than 0.1 kg (0.22 pounds); and

(2) The conditions of §§ 173.24, 173.24a, 173.421(a)(1) and (a)(4) are met.

* * * * *

■ 54. In § 173.415, paragraph (d) is revised to read as follows:

§ 173.415 Authorized Type A packages.

* * * * *

(d) Any foreign-made packaging that meets the standards in the '' IAEA Regulations for the Safe Transport of Radioactive Material, SSR–6'' (IBR, see § 171.7 of this subchapter) and bears the marking ''Type A''. Such packagings may be used for domestic and export shipments of Class 7 (radioactive) materials provided the offeror obtains the applicable documentation of tests and engineering evaluations and maintains the documentation on file in accordance with paragraph (a) of this section. These packagings must conform with requirements of the country of origin (as indicated by the packaging marking) and the IAEA regulations applicable to Type A packagings.

■ 55. In § 173.416, paragraph (b) is revised to read as follows:

§ 173.416 Authorized Type B packages.

* * * * *

(b) Any Type B(U) or B(M) packaging that meets the applicable requirements in ''IAEA Regulations for the Safe Transport of Radioactive Material, SSR–6'' (IBR, see § 171.7 of this subchapter) and for which the foreign Competent Authority Certificate has been revalidated by DOT pursuant to § 173.473. These packagings are authorized only for export and import shipments.

* * * * *

■ 56. In § 173.417, paragraphs (a)(1)(iii) and (b)(2) are revised to read as follows:

§ 173.417 Authorized fissile materials packages.

(a) * * *

(1) * * *

(iii) Any Type AF, Type B(U)F, or Type B(M)F packaging that meets the applicable requirements for fissile material packages in Section VI of the International Atomic Energy Agency ''Regulations for the Safe Transport of Radioactive Material, SSR–6 (IBR, see § 171.7 of this subchapter),'' and for which the foreign Competent Authority certificate has been revalidated by the U.S. Competent Authority, in accordance with § 173.473. These packages are authorized only for export and import shipments.

* * * * *

(b) * * *

(2) Type B(U) or Type B(M) packaging that also meets the applicable requirements for fissile material packaging in Section VI of the International Atomic Energy Agency ''Regulations for the Safe Transport of Radioactive Material, SSR–6,'' and for which the foreign Competent Authority certificate has been revalidated by the U.S. Competent Authority in accordance with § 173.473. These packagings are authorized only for import and export shipments; or

* * * * *

■ 57. In § 173.435, note (a) is revised to read as follows:

§ 173.435 Table of A_1 and A_2 values for radionuclides.

* * * * *

[a]A_1 and/or A_2 values for these parent radionuclides include contributions from daughter nuclides with half-lives less than 10 days as listed in footnote (a) to Table 2 in the ''IAEA Regulations for the Safe Transport of Radioactive Material, SSR–6'' (IBR, see § 171.7 of this subchapter).

* * * * *

■ 58. In § 173.466, paragraph (a) is revised to read as follows:

§ 173.466 Additional tests for Type A packagings designed for liquids and gases.

(a) In addition to the tests prescribed in § 173.465, Type A packagings designed for liquids and gases must be capable of withstanding the following tests in this section. The tests are successful if the requirements of § 173.412(k) are met.

(1) *Free drop test.* The packaging specimen must drop onto the target so as to suffer the maximum damage to its containment. The height of the drop measured from the lowest part of the packaging specimen to the upper surface of the target must be 9 m (30 feet) or greater. The target must be as specified in § 173.465(c)(5).

(2) *Penetration test.* The specimen must be subjected to the test specified in § 173.465(e) except that the height of the drop must be 1.7 m (5.5 feet).

* * * * *

■ 59. In § 173.473, the introductory paragraph and paragraph (a)(1) are revised to read as follows:

* * * * *

§ 173.473 Requirements for foreign-made packages.

In addition to other applicable requirements of this subchapter, each offeror of a foreign-made Type B(U), Type B(M), Type C, Type CF, Type H(U), Type H(M), or fissile material package for which a Competent Authority Certificate is required by IAEA's ''Regulations for the Safe Transport of Radioactive Material, SSR–6, '' (IBR, see § 171.7 of this subchapter) shall also comply with the following requirements:

(a) * * *

(1) Have the foreign competent authority certificate revalidated by the U.S. Competent Authority, unless this has been done previously. Each request for revalidation must be in triplicate, contain all the information required by Section VIII of the IAEA regulations in ''IAEA Regulations for the Safe Transport of Radioactive Material, SSR–6'' (IBR, see § 171.7 of this subchapter), and include a copy in English of the foreign competent authority certificate. The request and accompanying documentation must be sent to the Associate Administrator for Hazardous Materials Safety (PHH–23), Department of Transportation, East Building, 1200 New Jersey Avenue SE., Washington, DC 20590–0001. Alternatively, the request with any attached supporting documentation submitted in an appropriate format may be sent by facsimile (fax) to (202) 366–3753 or (202) 366–3650, or by electronic mail to *''ramcert@dot.gov.''* Each request is considered in the order in which it is received. To allow sufficient time for consideration, requests must be received at least 90 days before the requested effective date;

* * * * *

PART 175—CARRIAGE BY AIRCRAFT

■ 60. The authority citation for part 175 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; 49 CFR 1.81 and 1.97.

■ 61. In § 175.9, paragraphs (b)(6) introductory text and (b)(6)(v) are revised to read as follows:

§ 175.9 Special aircraft operations.

* * * * *

(b) * * *

(6) Hazardous materials that are loaded and carried on or in cargo only aircraft, and that are to be dispensed or expended during flight for weather control, environmental restoration or protection, forest preservation and protection, firefighting and prevention, flood control, avalanche control, landslide clearance, or ice jam control purposes, when the following requirements are met:

* * * * *

(v) When Division 1.1, 1.2, and 1.3 materials (except detonators and detonator assemblies) and detonators or detonator assemblies are carried for avalanche control, landslide clearance, or ice jam control flights, the explosives must be handled by, and at all times be under the control of, a qualified blaster. When required by a State or local authority, the blaster must be licensed and the State or local authority must be identified in writing to the FAA Principal Operations Inspector assigned to the operator.

* * * * *

■ 62. In § 175.10:

a. Paragraphs (a)(11) and (24) are revised;

b. Paragraphs (a)(18)(iii) and (iv) are added.

The revisions and additions read as follows:

§ 175.10 Exceptions for passengers, crewmembers, and air operators.

(a) * * *

(11) A single self-inflating personal safety device such as a life jacket or vest fitted with no more than two small gas cartridges (containing no hazardous material other than a Div. 2.2 gas) for inflation purposes plus no more than two spare cartridges. The personal safety device and spare cartridges may be carried in carry-on or checked baggage, with the approval of the aircraft operator, and must be packed in such a manner that it cannot be accidently activated.

* * * * *

(18) * * *

(iii) For a non-spillable battery, the battery and equipment must conform to § 173.159a(d). Each battery must not exceed a voltage greater than 12 volts and a watt-hour rating of not more than 100 Wh. No more than two individually protected spare batteries may be carried. Such equipment and spare batteries must be carried in checked or carry-on baggage.

(iv) Articles containing lithium metal or lithium ion cells or batteries the primary purpose of which is to provide power to another device must be carried as spare batteries in accordance with the provisions of this paragraph.

* * * * *

(24) Small cartridges fitted into devices with no more than four small cartridges of carbon dioxide or other suitable gas in Division 2.2, without subsidiary risk with the approval of the operator. The water capacity of each cartridge must not exceed 50 mL (equivalent to a 28 g cartridge).

* * * * *

■ 63. In § 175.25, paragraphs (b) and (c) are revised to read as follows:

§ 175.25 Notification at air passenger facilities of hazardous materials restrictions.

(a) * * *

(b) *Ticket purchase.* An aircraft operator must ensure that information on the types of hazardous materials which a passenger is forbidden to transport aboard an aircraft is presented at the point of ticket purchase or, if this is not practical, made available in another manner to passengers prior to the check-in process. Information provided via the Internet may be in text or pictorial form but must be such that ticket purchase cannot be completed until the passenger, or a person acting on their behalf, has been presented with this information and indicated that they have understood the restrictions on hazardous materials in baggage.

(c) *Check-in.* When the flight check-in process is conducted remotely (*e.g.,* via the Internet) or when completed at the airport, without assistance from another person (*e.g.,* automated check-in kiosk), the aircraft operator must ensure that information on the types of hazardous materials a passenger is forbidden to transport aboard an aircraft is presented to passengers. Information may be in text or in pictorial form but must be such that the check-in process cannot be completed until the passenger, or a person acting on their behalf, has been presented with this information and indicated that they have understood the restrictions on hazardous materials in baggage.

* * * * *

§ 175.30 [Amended]

■ 64. In § 175.30, remove paragraphs (a)(5) and (e)(1), and redesignate (e)(2) and (3) as (e)(1) and (2).

§ 175.33 [Amended]

■ 65. In § 175.33, revise paragraphs (a)(1)(i) and remove paragraphs (a)(12) and (c)(5).

The revision reads as follows:

§ 175.33 Shipping paper and notification of pilot-in-command.

(a) * * *

(1) * * *

(i) Section 172.101 of this subchapter. Except for the requirement to indicate the type of package or technical name, any additional description requirements provided in §§ 172.202, and 172.203 of this subchapter must also be shown on the notification.

* * * * *

§ 175.630 [Amended]

■ 66. In § 175.630, paragraph (a) is removed and reserved.

* * * * *

■ 67. In § 175.705, paragraph (c) is revised to read as follows:

§ 175.705 Radioactive contamination.

* * * * *

(c) An aircraft in which Class 7 (radioactive) material has been released must be taken out of service and may not be returned to service or routinely occupied until the aircraft is checked for radioactive substances and it is determined that any radioactive substances present do not meet the definition of radioactive material, as defined in § 173.403 of this subchapter, and it is determined in accordance with § 173.443 of this subchapter that the dose rate at every accessible surface must not exceed 0.005 mSv per hour (0.5 mrem per hour) and there is no significant removable surface contamination.

* * * * *

PART 176—CARRIAGE BY VESSEL

■ 68. The authority citation for part 176 continues to read as follows:

Authority: 49 U.S.C. 5101–5128; 49 CFR 1.81 and 1.97.

■ 69. In § 176.80, paragraph (b) is revised to read as follows:

§ 176.80 Applicability.

* * * * *

(b) Hazardous materials in limited quantities when loaded in transport vehicles and freight containers, are excepted from the segregation requirements of this subpart and any additional segregation specified in this subchapter for transportation by vessel; except that articles of division 1.4, compatibility group S, shall not be stowed in the same compartment or hold, or cargo transport unit with hazardous materials of Class 1 of compatibility groups A and L.

■ 70. In § 176.83, Table 176.83(b) is revised to read as follows:

§ 176.83 Segregation.

* * * * *

TABLE 176.83(b)—GENERAL SEGREGATION REQUIREMENTS FOR HAZARDOUS MATERIALS

[Segregation must also take account of a single secondary hazard label, as required by paragraph (a)(6) of this section.]

Class	1.1, 1.2, 1.5	1.3	1.4, 1.6	2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	6.2	7	8	9
Explosives, 1.1, 1.2, 1.5	(*)	(*)	(*)	4	2	2	4	4	4	4	4	4	2	4	2	4	X
Explosives, 1.3	(*)	(*)	(*)	4	2	2	4	3	3	4	4	4	2	4	2	2	X
Explosives, 1.4, 1.6	(*)	(*)	(*)	2	1	1	2	2	2	2	2	2	X	4	2	2	X
Flammable gases 2.1	4	4	2	X	X	X	2	1	2	2	2	2	X	4	2	1	X
Non-toxic, non-flammable gases 2.2	2	2	1	X	X	X	1	X	1	X	X	1	X	2	1	X	X
Poisonous gases 2.3	2	2	1	X	X	X	2	X	2	X	X	2	X	2	1	X	X
Flammable liquids 3	4	4	2	2	1	2	X	X	2	2	2	2	X	3	2	X	X
Flammable solids 4.1	4	3	2	1	X	X	X	X	1	X	1	2	X	3	2	1	X
Spontaneously combustible substances 4.2	4	3	2	2	1	2	2	1	X	1	2	2	1	3	2	1	X
Substances which are dangerous when wet 4.3	4	4	2	2	X	X	2	X	1	X	2	2	X	2	2	1	X
Oxidizing substances 5.1	4	4	2	2	X	X	2	1	2	2	X	2	1	3	1	2	X
Organic peroxides 5.2	4	4	2	2	1	2	2	2	2	2	2	X	1	3	2	2	X
Poisons 6.1	2	2	X	X	X	X	X	X	1	X	1	1	X	1	X	X	X
Infectious substances 6.2	4	4	4	4	2	2	3	3	3	2	3	3	1	X	3	3	X
Radioactive materials 7	2	2	2	2	1	1	2	2	2	2	1	2	X	3	X	2	X
Corrosives 8	4	2	2	1	X	X	X	1	1	1	2	2	X	3	2	X	X
Miscellaneous dangerous substances 9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Numbers and symbols relate to the following terms as defined in this section:
1—"Away from."
2—"Separated from."
3—"Separated by a complete compartment or hold from."
4—"Separated longitudinally by an intervening complete compartment or hold from."
X—The segregation, if any, is shown in the § 172.101 table.
*—See § 176.144 of this part for segregation within Class 1.

* * * * *

■ 71. In § 176.84:

■ a. Revise the section heading;

■ b. Footnote 3 is added and assigned to stowage code 12 and 13; and

■ c. Provisions 147 and 148 are added:

§ 176.84 Other requirements for stowage, cargo handling, and segregation for cargo vessels and passenger vessels.

Code	Provisions
*	* * * * * *
12	Keep as cool as reasonably practicable.[3]
13	Keep as dry as reasonably practicable.[3]
*	* * * * * *
147	Stow "separated from" flammable gases and flammable liquids.
148	In addition: from flammable gases and flammable liquids when stowed on deck of a containership a minimum distance of two container spaces athwartship shall be maintained, when stowed on ro-ro ships a distance of 6 m athwartship shall be maintained.
*	* * * * * *
*	* * * * * *

[3] These requirements apply to the loading of hazardous materials in cargo transport units as well as the stowage of cargo transport units.

■ 72. In § 176.905, paragraph (i) is revised as follows:

§ 176.905 Stowage of motor vehicles or mechanical equipment.

* * * * *

(i) * * *

(1) The vehicle or mechanical equipment has an internal combustion engine using liquid fuel that has a flashpoint less than 38 °C (100 °F), the fuel tank is empty, installed batteries are protected from short circuit, and the engine is run until it stalls for lack of fuel;

(2) The vehicle or mechanical equipment has an internal combustion engine using liquid fuel that has a flashpoint of 38 °C (100 °F) or higher, the fuel tank contains 450 L (119 gallons) of fuel or less, installed batteries are protected from short circuit, and there are no fuel leaks in any portion of the fuel system;

(3) The vehicle or mechanical equipment is stowed in a hold or compartment designated by the administration of the country in which the vessel is registered as specially designed and approved for vehicles and mechanical equipment and there are no signs of leakage from the battery, engine, fuel cell, compressed gas cylinder or accumulator, or fuel tank, as appropriate. For vehicles with batteries connected and fuel tanks containing gasoline transported by U.S. vessels, *see* 46 CFR 70.10–1 and 90.10–38;

(4) The vehicle or mechanical equipment is electrically powered solely by wet electric storage batteries (including non-spillable batteries) or sodium batteries and the installed batteries are protected from short circuit;

(5) The vehicle or mechanical equipment is equipped with liquefied petroleum gas or other compressed gas fuel tanks, the tanks are completely emptied of liquefied or compressed gas and the positive pressure in the tank

does not exceed 2 bar (29 psig), the fuel shut-off or isolation valve is closed and secured, and installed batteries are protected from short circuit; or

(6) The vehicle or mechanical equipment is powered by a fuel cell engine, the engine is protected from inadvertent operation by closing fuel supply lines or by other means, and the fuel supply reservoir has been drained and sealed.

* * * * *

PART 178—SPECIFICATIONS FOR PACKAGINGS

■ 73. The authority citation for part 178 continues to read as follows:

Authority: 49 U.S.C. 5101–5128; 49 CFR 1.81 and 1.97.

■ 74. In § 178.71, revise paragraphs (a), (d)(2), (g)(1), (2),and (3), (k)(1)(i), and (k)(1)(ii), redesignate paragraphs (n) through (s) as paragraphs (o) through (t) revise the newly redesignated paragraphs (o), (r), and (t); and add new paragraphs (n), (u) and (v) to read as follows:

§ 178.71 Specifications for UN pressure receptacles.

* * * * *

(a) *General.* Each UN pressure receptacle must meet the requirements of this section. UN pressure receptacles and service equipment constructed according to the standards applicable at the date of manufacture may continue in use subject to the continuing qualification and maintenance provisions of part 180 of this subchapter. Requirements for approval, qualification, maintenance, and testing are contained in § 178.70, and subpart C of part 180 of this subchapter.

* * * * *

(d) * * *

(2) Service equipment must be configured or designed to prevent damage that could result in the release of the pressure receptacle contents during normal conditions of handling and transport. Manifold piping leading to shut-off valves must be sufficiently flexible to protect the valves and the piping from shearing or releasing the pressure receptacle contents. The filling and discharge valves and any protective caps must be secured against unintended opening. The valves must conform to ISO 10297:2006 (IBR, *see* § 171.7 of this subchapter), or ISO 13340 (IBR, *see* § 171.7 of this subchapter) for non-refillable pressure receptacles, and be protected as specified in § 173.301b(f) of this subchapter. Until December 31, 2008, the manufacture of a valve conforming to the requirements in ISO 10297:1999 (IBR, see § 171.7 of this subchapter) is authorized.

* * * * *

(g) * * *

(1) ISO 9809–1:2010 Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 1: Quenched and tempered steel cylinders with tensile strength less than 1100 MPa. (IBR, see § 171.7 of this subchapter). Until December 31, 2018, the manufacture of a cylinder conforming to the requirements in ISO 9809–1:1999 (IBR, see § 171.7 of this subchapter) is authorized.

(2) ISO 9809–2: Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1100 MPa. (IBR, see § 171.7 of this subchapter). Until December 31, 2018, the manufacture of a cylinder conforming to the requirements in ISO 9809–2:2000 (IBR, see § 171.7 of this subchapter) is authorized.

(3) ISO 9809–3: Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 3: Normalized steel cylinders. (IBR, *see* § 171.7 of this subchapter). Until December 31, 2018, the manufacture of a cylinder conforming to the requirements in ISO 9809–3:2000 (IBR, see § 171.7 of this subchapter) is authorized.

* * * * *

(k) * * *

(1) * * *

(i) ISO 9809–1:2010 Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 1: Quenched and tempered steel cylinders with tensile strength less than 1100 MPa. Until December 31, 2018, the manufacture of a cylinder conforming to the requirements in ISO 9809–1:1999 (IBR, see § 171.7 of this subchapter) is authorized.

(ii) ISO 9809–3: Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 3: Normalized steel cylinders. Until December 31, 2018, the manufacture of a cylinder conforming to the requirements in ISO 9809–3:2000 (IBR, see § 171.7 of this subchapter) is authorized.

* * * * *

(n) *Design and construction requirements for UN cylinders for the transportation of adsorbed gases.* In addition to the general requirements of this section, UN cylinders for the transportation of adsorbed gases must conform to the following ISO standards, as applicable: ISO 11513:2011, Gas cylinders—Refillable welded steel cylinders containing materials for sub-atmospheric gas packaging (excluding acetylene)—Design, construction, testing, use and periodic inspection, or ISO 9809–1:2010: Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 1: Quenched and tempered steel cylinders with tensile strength less than 1100 MPa. (IBR, see § 171.7 of this subchapter.)

* * * * *

(o) *Material compatibility.* In addition to the material requirements specified in the UN pressure receptacle design and construction ISO standards, and any restrictions specified in part 173 for the gases to be transported, the requirements of the following standards must be applied with respect to material compatibility:

(1) ISO 11114–1:2012: Gas cylinders—Compatibility of cylinder and valve materials with gas contents—Part 1: Metallic materials. (IBR, *see* § 171.7 of this subchapter).

(2) ISO 11114–2: Transportable gas cylinders—Compatibility of cylinder and valve materials with gas contents—Part 2: Non-metallic materials. (IBR, *see* § 171.7 of this subchapter).

* * * * *

(r) *Marking sequence.* The marking required by paragraph (q) of this section must be placed in three groups as shown in the example below:

(1) The top grouping contains manufacturing marks and must appear consecutively in the sequence given in paragraphs (q)(13) through (19) of this section.

(2) The middle grouping contains operational marks described in paragraphs (q)(6) through (11) of this section.

(3) The bottom grouping contains certification marks and must appear consecutively in the sequence given in paragraphs (q)(1) through (5) of this section.

(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
25E	USA	765432	H			UW	FINAL 2XXX/XX

(10)	(6)	(7)	(8)	(11)	(9)
PW200	PH300BAR	RCPXXXBAR	62.1 KG	50L	5.8MM

(1)	(2)	(3)	(4)	(5)
	ISO 9809-1	USA/MXXXX	IB	2005/12

* * * * *

(t) *Marking of UN non-refillable pressure receptacles.* Unless otherwise specified in this paragraph, each UN non-refillable pressure receptacle must be clearly and legibly marked as prescribed in paragraph (q) of this section. In addition, permanent stenciling is authorized. Except when stenciled, the marks must be on the shoulder, top end or neck of the pressure receptacle or on a permanently affixed component of the pressure receptacle (*e.g.,* a welded collar).

(1) The marking requirements and sequence listed in paragraphs (q)(1) through (19) of this section are required, except the markings in paragraphs (q)(8), (9), (12) and (18) are not applicable. The required serial number marking in paragraph (q)(14) may be replaced by the batch number.

(2) Each receptacle must be marked with the words ''DO NOT REFILL'' in letters of at least 5 mm in height.

(3) A non-refillable pressure receptacle, because of its size, may substitute the marking required by this paragraph with a label. Reduction in marking size is authorized only as prescribed in ISO 7225, Gas cylinders—Precautionary labels. (IBR, *see* § 171.7 of this subchapter).

(4) Each non-refillable pressure receptacle must also be legibly marked by stenciling the following statement: ''Federal law forbids transportation if refilled-penalty up to $500,000 fine and 5 years in imprisonment (49 U.S.C. 5124).''

(u) *Marking of bundles of cylinders.* (1) Individual cylinders in a bundle of cylinders must be marked in accordance with paragraphs (q), (r), (s) and (t) of this section as appropriate.

(2) Refillable UN bundles of cylinders must be marked clearly and legibly with certification, operational, and manufacturing marks. These marks must be permanently affixed (*e.g.,* stamped, engraved, or etched) on a plate permanently attached to the frame of the bundle of cylinders. Except for the ''UN'' mark, the minimum size of the marks must be 5 mm. The minimum size of the ''UN'' mark must be 10 mm. A refillable UN bundle of cylinders must be marked with the following:

(i) The UN packaging symbol;

(ii) The ISO standard, for example ISO 9809–1, used for design, construction and testing. Acetylene cylinders must be marked to indicate the porous mass and the steel shell, for example: ''ISO 3807–2/ISO 9809–1'';

(iii) The mark of the country where the approval is granted. The letters ''USA'' must be marked on UN pressure receptacles approved by the United States. The manufacturer must obtain an approval number from the Associate Administrator. The manufacturer approval number must follow the country of approval mark, separated by a slash (for example, USA/MXXXX). Pressure receptacles approved by more than one national authority may contain the mark of each country of approval, separated by a comma;

(iv) The identity mark or stamp of the IIA;

(v) The date of the initial inspection, the year in four digits followed by the two digit month separated by a slash, for example ''2006/04'';

(vi) The test pressure in bar, preceded by the letters ''PH'' and followed by the letters ''BAR'';

(vii) For pressure receptacles intended for the transport of compressed gases and UN 1001 acetylene, dissolved, the working pressure in bar, proceeded by the letters ''PW'';

(viii) For liquefied gases, the water capacity in liters expressed to three significant digits rounded down to the last digit, followed by the letter ''L''. If the value of the minimum or nominal water capacity is an integer, the digits after the decimal point may be omitted;

(ix) The total mass of the frame of the bundle and all permanently attached parts (cylinders, manifolds, fittings and valves). Bundles intended for the carriage of UN 1001 acetylene, dissolved must bear the tare mass as specified in clause N.4.2 of ISO 10961:2010;

(x) The country of manufacture. The letters ''USA'' must be marked on cylinders manufactured in the United States;

(xi) The serial number assigned by the manufacturer; and

(xii) For steel pressure receptacles, the letter ''H'' showing compatibility of the steel, as specified in 1SO 11114–1.

(v) *Marking sequence.* The marking required by paragraph (u) of this section must be placed in three groups as follows:

(1) The top grouping contains manufacturing marks and must appear consecutively in the sequence given in paragraphs (u)(2)(x) through (u)(2)(xii) of this section as applicable.

(2) The middle grouping contains operational marks described in paragraphs (u)(2)(vi) through (u)(2)(ix) of this section as applicable. When the operational mark specified in paragraph (u)(2)(vii) is required, it must immediately precede the operational mark specified in paragraph (u)(2)(vi).

(3) The bottom grouping contains certification marks and must appear consecutively in the sequence given in paragraphs (u)(2)(i) through (u)(2)(v) of this section as applicable.

■ 75. In § 178.75, paragraphs (d)(3)(i), (ii), and (iii) are revised to read as follows:

§ 178.75 Specifications for MEGCs.

* * * * *

(d) * * *

(3) * * *

(i) ISO 9809–1: Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 1: Quenched and tempered steel cylinders with tensile strength less than 1100 MPa. (IBR, see § 171.7 of this subchapter). Until December 31, 2018, the manufacture of a cylinder conforming to the requirements in ISO 9809–1:1999 (IBR, see § 171.7 of this subchapter) is authorized;

(ii) ISO 9809–2: Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1100 MPa. (IBR, see § 171.7 of this subchapter). Until December 31, 2018, the manufacture of a cylinder conforming to the requirements in ISO 9809–2:2000 (IBR, see § 171.7 of this subchapter) is authorized;

(iii) ISO 9809–3: Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 3: Normalized steel cylinders. (IBR, see § 171.7 of this subchapter). Until December 31, 2018, the manufacture of a cylinder conforming to the requirements in ISO 9809–3:2000 (IBR, see § 171.7 of this subchapter) is authorized; or

* * * * *

■ 76. In § 178.703, paragraph (b)(7)(iii) is revised to read as follows:

§ 178.703 Marking of IBCs.

* * * * *

(b) * * *

(7) * * *

(iii) The symbol must be a square with each side being not less than 100 mm (3.9 inches) by 100 mm (3.9 inches) as measured from the corner printer marks shown on the figures in paragraph (b)(7)(i) of this section. Where dimensions are not specified, all features must be in approximate proportion to those shown.

(A) *Transitional exception.* A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be applied to all IBCs manufactured, repaired or remanufactured between January 1, 2011 and December 31, 2016.

(B) For domestic transportation, an IBC marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

■ 77. In § 178.910, revise paragraphs (a)(1)(ii), (b) introductory text, and add paragraphs (a)(2)(iv), (b)(1) and (b)(2) to read as follows.

§ 178.910 Marking of Large Packagings.

* * * * *

(a) * * *

(1) * * *

(ii) *The code number designating the Large Packaging design type according to § 178.905.* The letters ''T'' or ''W'' may follow the Large Packaging design type identification code on a Large Packaging. Large Salvage Packagings conforming to the requirements of subpart P of this part must be marked with the letter ''T''. Large Packagings must be marked with the letter ''W'' when the Large Packaging differs from the requirements in subpart P of this part, or is tested using methods other than those specified in this subpart, and is approved by the Associate Administrator in accordance with the provisions in § 178.955;

* * * * *

(2) * * *

(iv) For a steel Large Salvage Packaging suitable for stacking; stacking load: 2,500 kg; maximum gross mass: 1,000 kg.

50AT/Y/05 05/USA/M9399/2500/1000

(b) All Large Packagings manufactured, repaired or remanufactured after January 1, 2015 must be marked with the symbol applicable to a Large Packaging designed for stacking or not designed for stacking, as appropriate. The symbol must be a square with each side being not less than 100 mm (3.9 inches) by 100 mm (3.9 inches) as measured from the corner printer marks shown on the following figures. Where dimensions are not specified, all features must be in approximate proportion to those shown.

* * * * *

(1) *Transitional exception*—A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be applied to all Large Packagings manufactured, repaired or remanufactured between January 1, 2015 and December 31, 2016.

(2) For domestic transportation, a Large Packaging marked prior to January 1, 2017 and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

PART 180—CONTINUING QUALIFICATION AND MAINTENANCE OF PACKAGINGS

■ 78. The authority citation for part 180 continues to read as follows:

Authority: 49 U.S.C. 5101–5128; 49 CFR 1.81 and 1.97.

■ 79. In § 180.207, in paragraph (c), a new entry is added to the end of Table 1 and a new paragraph (d)(5) is added to read as follows:

§ 180.207 Requirements for requalification of UN pressure receptacles.

* * * * *

(c) * * *

TABLE 1—REQUALIFICATION INTERVALS OF UN PRESSURE RECEPTACLES

Interval (years)	UN pressure receptacles/ hazardous materials
* *	* * *
5	Pressure receptacles used for adsorbed gases.

(d) * * *

(5) UN cylinders for adsorbed gases: Each UN cylinder for adsorbed gases must be inspected and tested in accordance with § 173.302c and ISO 11513:2011 (IBR, see § 171.7 of this subchapter).

Issued in Washington, DC, on December 23, 2014 under authority delegated in 49 CFR 1.97.

Timothy P. Butters,

Acting Administrator.

[FR Doc. 2014–30462 Filed 12–31–14; 4:15 pm]

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Part III

Department of Energy

10 CFR Part 431

Energy Conservation Program for Certain Industrial Equipment: Energy Conservation Standards and Test Procedures for Commercial Heating, Air-Conditioning, and Water-Heating Equipment; Proposed Rule

DEPARTMENT OF ENERGY

10 CFR Part 431

[Docket No. EERE–2014–BT–STD–0015]

RIN 1904–AD23

Energy Conservation Program for Certain Industrial Equipment: Energy Conservation Standards and Test Procedures for Commercial Heating, Air-Conditioning, and Water-Heating Equipment

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of proposed rulemaking (NOPR) and announcement of public meeting.

SUMMARY: The Energy Policy and Conservation Act of 1975 (EPCA), as amended, prescribes energy conservation standards for various consumer products and certain commercial and industrial equipment, including several classes of commercial heating, air-conditioning, and water-heating equipment. EPCA also requires that each time the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1 is amended with respect to the standard levels or design requirements applicable to that equipment, the U.S. Department of Energy (DOE) must adopt amended uniform national standards for this equipment equivalent to those in ASHRAE Standard 90.1, unless DOE determines that there is clear and convincing evidence showing that more-stringent, amended standards would be technologically feasible and economically justified, and would save a significant additional amount of energy. ASHRAE most recently amended Standard 90.1 on October 9, 2013. Based upon its analysis of the energy savings potential of amended energy conservation standards and the lack of clear and convincing evidence to support more-stringent standards, DOE is proposing to adopt the amended standards in ASHRAE Standard 90.1 for: Small three-phase commercial air-cooled air conditioners (single package only) and heat pumps (single package and split system) less than 65,000 Btu/h; water-source heat pumps; and commercial oil-fired storage water heaters. DOE is also making a proposed determination that the standards for small three-phase commercial air-cooled air conditioners (split system) do not need to be amended. Finally, DOE is proposing updates to the current Federal test procedures to incorporate by reference the most current version of the American National Standards Institute (ANSI) Z21.47, *Gas-fired central furnaces,* specified in ASHRAE Standard 90.1 applicable to commercial warm-air furnaces, and to the most current version of ASHRAE 103, *Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers.* This document also announces a public meeting to receive comment on these proposed standards and associated analyses and results, as well as the proposed test procedure provisions.

DATES: *Meeting:* DOE will hold a public meeting on Friday, February 6, 2015 from 1:00 p.m. to 4:00 p.m., in Washington, DC. The meeting will also be broadcast as a webinar. See section X, ''Public Participation,'' for webinar registration information, participant instructions, and information about the capabilities available to webinar participants.

Comments: DOE will accept comments, data, and information regarding this notice of proposed rulemaking (NOPR) before and after the public meeting, but no later than March 24, 2015. See section X, ''Public Participation,'' for details.

ADDRESSES: The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 8E–089, 1000 Independence Avenue SW., Washington, DC 20585. To attend, please notify Ms. Brenda Edwards at (202) 586–2945. Please note that foreign nationals visiting DOE Headquarters are subject to advance security screening procedures. Any foreign national wishing to participate in the meeting should advise DOE as soon as possible by contacting Ms. Edwards at the phone number above to initiate the necessary procedures. Please also note that any person wishing to bring a laptop or tablet into the Forrestal Building will be required to obtain a property pass. Visitors should avoid bringing laptops, or allow an extra 45 minutes. Persons may also attend the public meeting via webinar. For more information, refer to section X, ''Public Participation,'' near the end of this document.

Due to the REAL ID Act implemented by the Department of Homeland Security (DHS), there have been recent changes regarding identification (ID) requirements for individuals wishing to enter Federal buildings from specific States and U.S. territories. As a result, driver's licenses from the following States or territory will not be accepted for building entry, and instead, one of the alternate forms of ID listed below will be required.

DHS has determined that regular driver's licenses (and ID cards) from the following jurisdictions are not acceptable for entry into DOE facilities: Alaska, American Samoa, Arizona, Louisiana, Maine, Massachusetts, Minnesota, New York, Oklahoma, and Washington.

Acceptable alternate forms of Photo-ID include: U.S. Passport or Passport Card; an Enhanced Driver's License or Enhanced ID-Card issued by the States of Minnesota, New York or Washington (Enhanced licenses issued by these States are clearly marked Enhanced or Enhanced Driver's License); a military ID or other Federal government-issued Photo-ID card.

Instructions: Any comments submitted must identify the NOPR on Energy Conservation Standards and Test Procedures for ASHRAE Standard 90.1 Equipment, and provide docket number EERE–2014–BT–STD–0015 and/or regulatory information number (RIN) 1904–AD23. Comments may be submitted using any of the following methods:

1. *Federal eRulemaking Portal: www.regulations.gov.* Follow the instructions for submitting comments.

2. *E-Mail: ComHeatingACWH Equip2014STD0015@ee.doe.gov.* Include the docket number and/or RIN in the subject line of the message. Submit electronic comments in WordPerfect, Microsoft Word, PDF, or ASCII file format, and avoid the use of special characters or any form of encryption.

3. *Postal Mail:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, Mailstop EE–5B, 1000 Independence Avenue SW., Washington, DC 20585–0121. If possible, please submit all items on a compact disc (CD), in which case it is not necessary to include printed copies.

4. *Hand Delivery/Courier:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza SW., Suite 600, Washington, DC 20024. Telephone: (202) 586–2945. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in this proposed rule may be submitted to Office of Energy Efficiency and Renewable Energy through the methods listed above and by email to *Chad_S_Whiteman@omb.eop.gov.*

No telefacsimilies (faxes) will be accepted. For detailed instructions on submitting comments and additional

information on the rulemaking process, see section X of this document (Public Participation).

Docket: The docket, which includes **Federal Register** notices, public meeting attendee lists and transcripts, comments, and other supporting documents/materials, is available for review at *www.regulations.gov.* All documents in the docket are listed in the *www.regulations.gov* index. However, some documents listed in the index may not be publicly available, such as those containing information that is exempt from public disclosure.

A link to the docket Web page can be found at: *www.regulations.gov/#!docketDetail;D=EERE-2014-BT-STD-0015.* This Web page contains a link to the docket for this document on the *www.regulations.gov* site. The *www.regulations.gov* Web page contains simple instructions on how to access all documents, including public comments, in the docket. See section X, ''Public Participation,'' for further information on how to submit comments through *www.regulations.gov.*

For further information on how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact Ms. Brenda Edwards at (202) 586–2945 or by email: *Brenda.Edwards@ee.doe.gov.*

FOR FURTHER INFORMATION CONTACT: Ms. Ashley Armstrong, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE–5B, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 586–6590. Email: *Ashley.Armstrong@ee.doe.gov.*

Mr. Eric Stas, U.S. Department of Energy, Office of the General Counsel, GC–33, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 586–9507. Email: *Eric.Stas@hq.doe.gov.*

For information on how to submit or review public comments, contact Ms. Brenda Edwards at (202) 586–2945 or by email: *Brenda.Edwards@ee.doe.gov.*

SUPPLEMENTARY INFORMATION: DOE proposes to incorporate by reference the following industry standards into 10 CFR 431.76:

- ANSI Z21.47–2012, ''*Gas-Fired Central Furnaces,''* ANSI approved on March 27, 2012.

Copies of ANSI Z21.47–2012 can be obtained from *ANSI.* American National Standards Institute. 25 W. 43rd Street, 4th Floor, New York, NY 10036. (212) 642–4900, or by going to *http://www.ansi.org.*

- ASHRAE Standard 103–2007, sections 7.2.2.4, 7.8, 9.2, and 11.3.7, ''Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers,'' ANSI approved on March 25, 2008.

Copies of ASHRAE Standard 103–2007 can be obtained from *ASHRAE.* American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc., 1791 Tullie Circle NE., Atlanta, Georgia 30329. (404) 636–8400, or by going to *http://www.ashrae.org.*

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I. Summary of the Proposed Rule

Title III, Part C [1] of the Energy Policy and Conservation Act of 1975 (''EPCA'' or ''the Act''), Public Law 94–163, (42 U.S.C. 6311–6317, as codified), added by Public Law 95–619, Title IV, section 441(a), established the Energy Conservation Program for Certain Industrial Equipment, which sets forth a variety of provisions designed to improve energy efficiency. These encompass several types of commercial heating, air-conditioning, and water-heating equipment, including those that are the subject of this rulemaking. (42 U.S.C. 6311(1)(B) and (K)) EPCA, as amended, also requires the U. S. Department of Energy (DOE) to consider amending the existing Federal energy conservation standard for certain types of listed commercial and industrial equipment (generally, commercial water heaters, commercial packaged boilers, commercial air-conditioning and heating equipment, and packaged terminal air conditioners and heat pumps) each time the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings,* is amended with respect to such equipment. (42 U.S.C. 6313(a)(6)(A)) For each type of equipment, EPCA directs that if ASHRAE Standard 90.1 is amended, DOE must adopt amended energy conservation standards at the new efficiency level in ASHRAE Standard 90.1, unless clear and convincing evidence supports a determination that adoption of a more-stringent efficiency level as a national standard would produce significant additional energy savings and be technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)) If DOE decides to adopt as a national standard the efficiency levels specified in the amended ASHRAE Standard 90.1, DOE must establish such standard not later than 18 months after publication of the amended industry standard. (42 U.S.C. 6313(a)(6)(A)(ii)(I)) If DOE determines that a more-stringent standard is appropriate under the statutory criteria, DOE must establish such more-stringent standard not later than 30 months after publication of the revised ASHRAE Standard 90.1. (42 U.S.C. 6313(a)(6)(B)) ASHRAE officially released ASHRAE Standard 90.1–2013 on October 9, 2013, thereby triggering DOE's previously referenced obligations pursuant to EPCA to determine for those types of equipment with efficiency level or design requirement changes beyond the current Federal standard, whether: (1) The amended industry standard should be adopted; or (2) clear and convincing evidence exists to justify more-stringent standard levels.

Accordingly, this NOPR sets forth DOE's determination of scope for consideration of amended energy conservation standards with respect to certain heating, ventilating, air-conditioning, and water-heating equipment addressed in ASHRAE Standard 90.1–2013. Such inquiry is necessary to ascertain whether the revised ASHRAE efficiency levels have become more stringent, thereby ensuring that any new amended national standard would not result in prohibited ''backsliding.'' For those equipment classes for which ASHRAE set more-stringent efficiency levels [2] (*i.e.,* small three-phase air-cooled air conditioners (single package only) and heat pumps (single package and split system) less than 65,000 Btu/h; water-source heat pumps; commercial oil-fired storage water heaters; single package vertical units; and packaged terminal air conditioners), DOE analyzed the energy savings potential of amended national energy conservation standards (at both the new ASHRAE Standard 90.1 efficiency levels and more-stringent efficiency levels). For small three-phase air-cooled air conditioners and heat pumps less than 65,000 Btu/h and water-source heat pumps, DOE analyzed the economic savings potential of amended national energy conservation standards at more-stringent efficiency levels, in addition to the energy savings potential. For commercial oil-fired storage water heaters, DOE determined that the potential for energy savings from adopting more-stringent levels than the ASHRAE Standard 90.1 levels was not significant, and, thus, DOE is proposing to adopt the ASHRAE Standard 90.1 levels without further analysis (see section IV.B for further details). For single package vertical units and packaged terminal air conditioners, DOE is performing economic analyses and responding to relevant comments from the NODA in separate rulemakings that were previously ongoing,[3] and consequently, the analysis for this equipment and further discussion or proposal of standard levels will not be discussed in this NOPR.

DOE has tentatively concluded that for three classes of small three-phase air-cooled air conditioners and heat pumps less than 65,000 Btu/h, three classes of water-source heat pumps, and one class of commercial oil-fired storage water heaters: (1) The revised efficiency levels in ASHRAE 90.1–2013 [4] are more stringent than current national standards; and (2) their adoption as Federal energy conservation standards would result in energy savings where models exist below the revised efficiency levels. DOE has also tentatively concluded that there is not clear and convincing evidence that would justify adoption of more-stringent efficiency levels for this equipment.

[1] For editorial reasons, upon codification in the U.S. Code, Part C was redesignated Part A–1.

[2] ASHRAE Standard 90.1–2013 did not change any of the design requirements for the commercial (HVAC) and water-heating equipment covered by EPCA.

[3] See Packaged Terminal Air Conditioners and Heat Pumps Standards Rulemaking Web page: *www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/64* and Single Package Vertical Air Conditioners and Heat Pumps Standards Rulemaking Web page: *www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx?ruleid=107.*

[4] To obtain a copy of ASHRAE Standard 90.1–2013, visit *https://www.ashrae.org/resources--publications/bookstore/standard-90-1.*

It is noted that DOE's regulations currently have a single equipment class for small, three-phase commercial air-cooled air conditioners less than 65,000 Btu/h, which covers both split-system and single-package models. Although ASHRAE Standard 90.1–2013 did not amend standard levels for the split-system models within that equipment class, it did so for the single-package models. Given this split, DOE is proposing to once again separate these two types of equipment into separate equipment classes. In the NOPR, DOE is proposing to evaluate amended standards for split-system models under the six-year-lookback provision at 42 U.S.C. 6313(a)(6)(C). Following this evaluation, DOE has tentatively concluded that there is not clear and convincing evidence that would justify adoption of more-stringent efficiency levels for small three-phase split-system air-cooled air conditioners less than 65,000 Btu/h, where the efficiency level in ASHRAE 90.1–2013 is the same as the current Federal energy conservation standards.

Thus, in accordance with the criteria discussed elsewhere in this document, DOE is proposing amended energy conservation standards for three classes of small three-phase air-cooled air conditioners and heat pumps less than 65,000 Btu/h, three classes of water-source heat pumps, and one class of commercial oil-fired storage water heaters by adopting the efficiency levels specified by ASHRAE Standard 90.1–2013, as shown in Table I.1. The proposed standards, if adopted, would apply to all equipment listed in Table I.1 and manufactured in, or imported into, the United States on or after the date two years after the effective date specified in ASHRAE Standard 90.1–2013 (*i.e.,* by January 1, 2017 for small air-cooled air conditioners and heat pumps and by October 9, 2015 for water-source heat pumps and oil-fired storage water heaters). (42 U.S.C. 6313(a)(6)(D)(i)) DOE is making a determination that standards for split-system air-cooled air conditioners less than 65,000 Btu/h do not need to be amended.

TABLE I.1—PROPOSED ENERGY CONSERVATION STANDARDS FOR SPECIFIC TYPES OF COMMERCIAL EQUIPMENT

Equipment class	Efficiency level	Anticipated compliance date
Three-Phase Air-Cooled Single-Package Air Conditioners <65,000 Btu/h	14.0 SEER	January 1, 2017.
Three-Phase Air-Cooled Single-Package Heat Pumps <65,000 Btu/h	14.0 SEER, 8.0 HSPF	January 1, 2017.
Three-Phase Air-Cooled Split-System Heat Pumps <65,000 Btu/h	14.0 SEER, 8.2 HSPF	January 1, 2017.
Oil-Fired Storage Water Heaters >105,000 Btu/h and <4,000 Btu/h/gal	80% E_t	October 9, 2015.
Water-Source (Water-to-Air, Water-Loop) Heat Pumps <17,000 Btu/h	12.2 EER, 4.3 COP	October 9, 2015.
Water-Source (Water-to-Air, Water-Loop) Heat Pumps ≥17,000 and <65,000 Btu/h	13.0 EER, 4.3 COP	October 9, 2015.
Water-Source (Water-to-Air, Water-Loop) Heat Pumps ≥65,000 and <135,000 Btu/h	13.0 EER, 4.3 COP	October 9, 2015.

In addition, when the generally accepted industry test procedures referenced in ASHRAE Standard 90.1 are updated, EPCA requires DOE to amend the DOE test procedures for the relevant type(s) of ASHRAE equipment (which manufacturers are required to use in order to certify compliance with energy conservation standards mandated under EPCA) to be consistent with the amended industry test procedure. (42 U.S.C. 6314(a)(4)(B)) DOE typically incorporates such industry test standards by reference, unless it determines they would not meet the requirements of 42 U.S.C. 6314(a)(2) and (3). Specifically, the amendments in this NOPR would update the citations and incorporations by reference in DOE's regulations to the most recent version of American National Standards Institute (ANSI) Z21.47, *Standard for Gas-Fired Central Furnaces* (*i.e.,* ANSI Z21.47–2012). However, as a substantive matter, DOE notes that the most recent version does not contain any updates to the sections currently referenced by the DOE test procedure, so no additional burden would be expected to result from this test procedure update.

Additionally, EISA 2007 amended EPCA to require that at least once every 7 years, DOE must conduct an evaluation of the test procedures for all covered equipment and either amend test procedures (if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of 42 U.S.C. 6314(a)(2)–(3)) or publish notice in the **Federal Register** of any determination not to amend a test procedure. (42 U.S.C. 6314(a)(1)(A)) Under this requirement, DOE has reviewed the test procedure for commercial warm-air furnaces and is proposing to update the citations and incorporations by reference to the most recent version of ASHRAE 103, *Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boiler* (*i.e.,* ASHRAE 103–2007), Thus, the final rule resulting from this rulemaking will satisfy the requirement to review the test procedures for commercial warm-air furnaces within seven years. DOE notes that the most recent version of ASHRAE 103 does not contain any updates to the sections currently referenced by the DOE test procedure, so no additional burden would be expected to result from this test procedure update.

II. Introduction

The following section briefly discusses the statutory authority underlying this proposal, as well as some of the relevant historical background related to the establishment of standards for small three-phase air-cooled air conditioners and heat pumps less than 65,000 Btu/h, water-source heat pumps, and commercial oil-fired storage water heaters.

A. Authority

Title III, Part C[5] of the Energy Policy and Conservation Act of 1975 (EPCA or the Act), Public Law 94–163 (42 U.S.C. 6311–6317, as codified), added by Public Law 95–619, Title IV, section 441(a), established the Energy Conservation Program for Certain Industrial Equipment, which includes the commercial heating, air-conditioning, and water-heating equipment that is the subject of this

[5] For editorial reasons, upon codification in the U.S. Code, Part C was redesignated Part A–1.

rulemaking.[6] In general, this program addresses the energy efficiency of certain types of commercial and industrial equipment. Relevant provisions of the Act specifically include definitions (42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6313), test procedures (42 U.S.C. 6314), labelling provisions (42 U.S.C. 6315), and the authority to require information and reports from manufacturers (42 U.S.C. 6316).

EPCA contains mandatory energy conservation standards for commercial heating, air-conditioning, and water-heating equipment. (42 U.S.C. 6313(a)) Specifically, the statute sets standards for small, large, and very large commercial package air-conditioning and heating equipment, packaged terminal air conditioners (PTACs), packaged terminal heat pumps (PTHPs), warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks. *Id.* In doing so, EPCA established Federal energy conservation standards that generally correspond to the levels in ASHRAE Standard 90.1, as in effect on October 24, 1992 (*i.e.,* ASHRAE Standard 90.1–1989), for each type of covered equipment listed in 42 U.S.C. 6313(a). The Energy Independence and Security Act of 2007 (EISA 2007) amended EPCA by adding definitions and setting minimum energy conservation standards for single-package vertical air conditioners (SPVACs) and single-package vertical heat pumps (SPVHPs). (42 U.S.C. 6313(a)(10)(A)) The efficiency standards for SPVACs and SPVHPs established by EISA 2007 correspond to the levels contained in ASHRAE Standard 90.1–2004, which originated as addendum ''d'' to ASHRAE Standard 90.1–2001.

In acknowledgement of technological changes that yield energy efficiency benefits, the U.S. Congress further directed DOE through EPCA to consider amending the existing Federal energy conservation standard for each type of equipment listed, each time ASHRAE Standard 90.1 is amended with respect to such equipment. (42 U.S.C. 6313(a)(6)(A)) For each type of equipment, EPCA directs that if ASHRAE Standard 90.1 is amended,[7] DOE must publish in the **Federal Register** an analysis of the energy savings potential of amended energy efficiency standards within 180 days of the amendment of ASHRAE Standard 90.1. (42 U.S.C. 6313(a)(6)(A)(i)) EPCA further directs that DOE must adopt amended standards at the new efficiency level in ASHRAE Standard 90.1, unless clear and convincing evidence supports a determination that adoption of a more-stringent level would produce significant additional energy savings and be technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)) If DOE decides to adopt as a national standard the efficiency levels specified in the amended ASHRAE Standard 90.1, DOE must establish such standard not later than 18 months after publication of the amended industry standard. (42 U.S.C. 6313(a)(6)(A)(ii)(I)) However, if DOE determines that a more-stringent standard is justified under 42 U.S.C. 6313(a)(6)(A)(ii)(II), then it must establish such more-stringent standard not later than 30 months after publication of the amended ASHRAE Standard 90.1. (42 U.S.C. 6313(a)(6)(B)) In addition, DOE notes that pursuant to the EISA 2007 amendments to EPCA, under 42 U.S.C. 6313(a)(6)(C), the agency must periodically review its already-established energy conservation standards for ASHRAE equipment. In December 2012, this provision was further amended by the American Energy Manufacturing Technical Corrections Act (AEMTCA) to clarify that DOE's periodic review of ASHRAE equipment must occur ''[e]very six years.'' (42 U.S.C. 6313(a)(6)(C)(i))

AEMTCA also modified EPCA to specify that any amendment to the design requirements with respect to the ASHRAE equipment would trigger DOE review of the potential energy savings under U.S.C. 6313(a)(6)(A)(i). Additionally, AEMTCA amended EPCA to require that if DOE proposes an amended standard for ASHRAE equipment at levels more stringent than those in ASHRAE Standard 90.1, DOE, in deciding whether a standard is economically justified, must determine, after receiving comments on the proposed standard, whether the benefits of the standard exceed its burdens by considering, to the maximum extent practicable, the following seven factors:

(1) The economic impact of the standard on manufacturers and consumers of the products subject to the standard;

(2) The savings in operating costs throughout the estimated average life of the product in the type (or class) compared to any increase in the price, initial charges, or maintenance expenses of the products likely to result from the standard;

(3) The total projected amount of energy savings likely to result directly from the standard;

(4) Any lessening of the utility or the performance of the products likely to result from the standard;

(5) The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard;

(6) The need for national energy conservation; and

(7) Other factors the Secretary considers relevant.

(42 U.S.C. 6313(a)(6)(B)(ii))

EPCA also requires that if a test procedure referenced in ASHRAE Standard 90.1 is updated, DOE must update its test procedure to be consistent with the amended test procedure in ASHRAE Standard 90.1, unless DOE determines that the amended test procedure is not reasonably designed to produce test results that reflect the energy efficiency, energy use, or estimated operating costs of the ASHRAE equipment during a representative average use cycle. In addition, DOE must determine that the amended test procedure is not unduly burdensome to conduct. (42 U.S.C. 6314(a)(2) and(4))

Additionally, EISA 2007 amended EPCA to require that at least once every 7 years, DOE must conduct an

[6] All references to EPCA in this document refer to the statute as amended through the American Energy Manufacturing Technical Corrections Act (AEMTCA), Public Law 112–210 (Dec. 18, 2012).

[7] Although EPCA does not explicitly define the term ''amended'' in the context of ASHRAE Standard 90.1, DOE provided its interpretation of what would constitute an ''amended standard'' in a final rule published in the **Federal Register** on March 7, 2007 (hereafter referred to as the ''March 2007 final rule''). 72 FR 10038. In that rule, DOE stated that the statutory trigger requiring DOE to adopt uniform national standards based on ASHRAE action is for ASHRAE to change a standard for any of the equipment listed in EPCA section 342(a)(6)(A)(i) (42 U.S.C. 6313(a)(6)(A)(i)) by increasing the energy efficiency level for that equipment type. *Id.* at 10042. In other words, if the revised ASHRAE Standard 90.1 leaves the standard level unchanged or lowers the standard, as compared to the level specified by the national standard adopted pursuant to EPCA, DOE does not have the authority to conduct a rulemaking to consider a higher standard for that equipment pursuant to 42 U.S.C. 6313(a)(6)(A). DOE subsequently reiterated this position in a final rule published in the **Federal Register** on July 22, 2009 (74 FR 36312, 36313) and again on May 16, 2012 (77 FR 28928, 28937). However, in the AEMTCA amendments to EPCA in 2012, Congress modified several provisions related to ASHRAE Standard 90.1 equipment. In relevant part, DOE is now triggered to act whenever ASHRAE Standard 90.1's ''standard levels or design requirements under that standard'' are amended. (42 U.S.C. 6313(a)(6)(A)(i)) Furthermore, DOE is now required to conduct an evaluation of each class of covered equipment in ASHRAE Standard 90.1 ''every 6 years.'' (42 U.S.C. 6313(a)(6)(C)(i)) For any covered equipment for which more than 6 years has elapsed since issuance of the most recent final rule establishing or amending a standard for such equipment, DOE must publish either the required notice of determination that standards do not need to be amended or a NOPR with proposed standards by December 31, 2013. (42 U.S.C. 6313(a)(6)(C)(vi)) DOE has incorporated these new statutory mandates into its rulemaking process for covered ASHRAE 90.1 equipment.

evaluation of the test procedures for all covered equipment and either amend test procedures (if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of 42 U.S.C. 6314(a)(2)–(3)) or publish notice in the **Federal Register** of any determination not to amend a test procedure. (42 U.S.C. 6314(a)(1)(A)) The final rule resulting from this rulemaking will satisfy the requirement to review the test procedures for commercial warm-air furnaces within seven years.

On October 9, 2013 ASHRAE officially released and made public ASHRAE Standard 90.1–2013. This action triggered DOE's obligations under 42 U.S.C. 6313(a)(6), as outlined previously.

EPCA, as codified, also contains what is known as an ''anti-backsliding'' provision, which prevents the Secretary from prescribing any amended standard that either increases the maximum allowable energy use or decreases the minimum required energy efficiency of a covered product. (42 U.S.C. 6313(a)(6)(B)(iii)(I)) Also, the Secretary may not prescribe an amended or new standard if interested persons have established by a preponderance of the evidence that such standard would likely result in the unavailability in the United States of any covered product type (or class) of performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as those generally available in the United States at the time of the Secretary's finding. (42 U.S.C. 6313(a)(6)(B)(iii)(II)(aa))

Further, EPCA, as codified, establishes a rebuttable presumption that a standard is economically justified if the Secretary finds that the additional cost to the consumer of purchasing a product complying with an energy conservation standard level will be less than three times the value of the energy (and, as applicable, water) savings during the first year that the consumer will receive as a result of the standard, as calculated under the applicable test procedure.

Additionally, when a type or class of covered equipment such as ASHRAE equipment, has two or more subcategories, DOE often specifies more than one standard level. DOE generally will adopt a different standard level than that which applies generally to such type or class of products for any group of covered products that have the same function or intended use if DOE determines that products within such group: (A) Consume a different kind of energy from that consumed by other covered products within such type (or class); or (B) have a capacity or other performance-related feature which other products within such type (or class) do not have and which justifies a higher or lower standard. In determining whether a performance-related feature justifies a different standard for a group of products, DOE generally considers such factors as the utility to the consumer of the feature and other factors DOE deems appropriate. In a rule prescribing such a standard, DOE includes an explanation of the basis on which such higher or lower level was established. DOE plans to follow a similar process in the context of this rulemaking.

B. Background

1. ASHRAE Standard 90.1–2013

As noted previously, ASHRAE released a new version of ASHRAE Standard 90.1 on October 9, 2013. The ASHRAE standard addresses efficiency levels for many types of commercial heating, ventilating, air-conditioning (HVAC), and water-heating equipment covered by EPCA. ASHRAE Standard 90.1–2013 revised its efficiency levels for certain commercial equipment, but for the remaining equipment, ASHRAE left in place the preexisting levels (*i.e.,* the efficiency levels in ASHRAE Standard 90.1–2010). ASHRAE Standard 90.1–2013 did not change any of the design requirements for the commercial HVAC and water-heating equipment covered by EPCA.

Table II.1 presents the equipment classes (and corresponding efficiency levels) for which efficiency levels in ASHRAE Standard 90.1–2013 (for metrics included in Federal energy conservation standards) differed from those in the previous version of ASHRAE Standard 90.1 (*i.e.,* ASHRAE Standard 90.1–2010). Table II.1 also presents the existing Federal energy conservation standards and the corresponding standard levels in both ASHRAE Standard 90.1–2010 and ASHRAE Standard 90.1–2013 for those equipment classes. Section IV of this document assesses each of these equipment types to determine whether the amendments in ASHRAE Standard 90.1–2013 constitute increased energy efficiency levels, as would necessitate further analysis of the potential energy savings from amended Federal energy conservation standards; the conclusions of this assessment are presented in the final column of Table II.1.

TABLE II.1—FEDERAL ENERGY CONSERVATION STANDARDS AND ENERGY EFFICIENCY LEVELS IN ASHRAE STANDARD 90.1–2013 FOR SPECIFIC TYPES OF COMMERCIAL EQUIPMENT*

ASHRAE equipment class**	Energy efficiency levels in ASHRAE Standard 90.1–2010	Energy efficiency levels in ASHRAE Standard 90.1–2013	Federal energy conservation standards	Energy-savings potential analysis required?
Commercial Package Air-Conditioning and Heating Equipment—Air-Cooled				
Air-Cooled Air Conditioner, 3-Phase, Single-Package, <65,000 Btu/h.	13.0 SEER	14.0 SEER (as of 1/1/2015).	13.0 SEER	Yes—See section IV.A.1.
Air-Cooled Heat Pump, 3-Phase, Single-Package, <65,000 Btu/h.	13.0 SEER, 7.7 HSPF	14.0 SEER, 8.0 HSPF (as of 1/1/2015).	13.0 SEER, 7.7 HSPF	Yes—See section IV.A.1.
Air-Cooled Heat Pump, 3-Phase, Split System, <65,000 Btu/h.	13.0 SEER, 7.7 HSPF	14.0 SEER, 8.2 HSPF (as of 1/1/2015).	13.0 SEER, 7.7 HSPF	Yes—See section IV.A.1.
Commercial Package Air-Conditioning and Heating Equipment—Water-Source				
Water-Source Heat Pump, <17,000 Btu/h	11.2 EER, 4.2 COP	12.2 EER, 4.3 COP_H***.	11.2 EER, 4.2 COP	Yes—See section IV.A.2.
Water-Source Heat Pump, ≥17,000 and <65,000 Btu/h.	12.0 EER, 4.2 COP	13.0 EER, 4.3 COP_H***.	12.0 EER, 4.2 COP	Yes—See section IV.A.2.
Water-Source Heat Pump, ≥65,000 and <135,000 Btu/h.	12.0 EER, 4.2 COP	13.0 EER, 4.3 COP_H***.	12.0 EER, 4.2 COP	Yes—See section IV.A.2.

TABLE II.1—FEDERAL ENERGY CONSERVATION STANDARDS AND ENERGY EFFICIENCY LEVELS IN ASHRAE STANDARD 90.1–2013 FOR SPECIFIC TYPES OF COMMERCIAL EQUIPMENT *—Continued

ASHRAE equipment class **	Energy efficiency levels in ASHRAE Standard 90.1–2010	Energy efficiency levels in ASHRAE Standard 90.1–2013	Federal energy conservation standards	Energy-savings potential analysis required?
Commercial Package Air-Conditioning and Heating Equipment—PTACs				
Package Terminal Air Conditioner, <7,000 Btu/h, Standard Size (New Construction) †.	EER = 11.7 as of 10/8/12).	EER = 11.9 (as of 1/1/2015).	EER = 11.7	Yes—See section IV.A.3.
Package Terminal Air Conditioner, ≥7,000 and ≤15,000 Btu/h, Standard Size (New Construction) †.	EER = 13.8—(0.300 × Cap ††) (as of 10/8/12).	EER = 14.0—(0.300 × Cap ††) (as of 1/1/2015).	EER = 13.8—(0.300 × Cap ††).	Yes—See section IV.A.3.
Package Terminal Air Conditioner, >15,000 Btu/h, Standard Size (New Construction) †.	EER = 9.3 (as of 10/8/12).	EER = 9.5 (as of 1/1/2015).	EER = 9.3	Yes—See section IV.A.3.
Commercial Package Air-Conditioning and Heating Equipment—SDHV and TTW				
Through-the-Wall (TTW), Air-Cooled Heat Pumps, ≤30,000 Btu/h.	13.0 SEER, 7.4 HSPF	12.0 SEER, 7.4 HSPF	13.0 SEER, 7.7 HSPF	No—See section IV.A.4.
Small-Duct, High-Velocity, Air-Cooled (SDHV) Air Conditioners, <65,000 Btu/h.	10.0 SEER	11.0 SEER	13.0 SEER	No—See section IV.A.4.
Small-Duct, High-Velocity, Air-Cooled Heat Pumps, <65,000 Btu/h.	10.0 SEER, HSPF not listed †††.	11.0 SEER, 6.8 HSPF	13.0 SEER, 7.7 HSPF	No—See section IV.A.4.
Commercial Package Air-Conditioning and Heating Equipment—SPVACs and SPVHPs				
Single Package Vertical Air Conditioners, <65,000 Btu/h.	9.0 EER	10.0 EER	9.0 EER	Yes—See section IV.A.5.
Single Package Vertical Air Conditioners, ≥65,000 and <135,000 Btu/h.	8.9 EER	10.0 EER	8.9 EER	Yes—See section IV.A.5.
Single Package Vertical Air Conditioners, ≥135,000 and <240,000 Btu/h.	8.6 EER	10.0 EER	8.6 EER	Yes—See section IV.A.5.
Single Package Vertical Heat Pumps, <65,000 Btu/h.	9.0 EER, 3.0 COP	10.0 EER, 3.0 COP_H***.	9.0 EER, 3.0 COP	Yes—See section IV.A.5.
Single Package Vertical Heat Pumps, ≥65,000 and <135,000 Btu/h.	8.9 EER, 3.0 COP	10.0 EER, 3.0 COP_H***.	8.9 EER, 3.0 COP	Yes—See section IV.A.5.
Single Package Vertical Heat Pumps, ≥135,000 and <240,000 Btu/h.	8.6 EER, 2.9 COP	10.0 EER, 3.0 COP_H***.	8.6 EER, 2.9 COP	Yes—See section IV.A.5.
Single Package Vertical Air Conditioners Nonweatherized Space Constrained, ≤30,000 Btu/h.	N/A	9.2 EER	N/A †	No—See section IV.A.5.
Single Package Vertical Air Conditioners Nonweatherized Space Constrained, >30,000 and ≤36,000 Btu/h.	N/A	9.0 EER	N/A †	No—See section IV.A.5.
Single Package Vertical Heat Pumps Nonweatherized Space Constrained, ≤30,000 Btu/h.	N/A	9.2 EER, 3.0 COP_H	N/A †	No—See section IV.A.5.
Single Package Vertical Heat Pumps Nonweatherized Space Constrained, >30,000 and ≤36,000 Btu/h.	N/A	9.0 EER, 3.0 COP_H	N/A †	No—See section IV.A.5.
Commercial Water Heaters				
Electric Storage Water Heaters, >12 kW, ≥20 gal.	20 + 35 $V^{1/2}$ SL ‡‡, Btu/h.	0.3 + 27/V_m ‡‡‡ %/h	0.3 + 27/V_m ‡‡‡ %/h	No—See Section IV.B.
Gas Storage Water Heaters, >75,000 Btu/h, <4,000 Btu/h/gal.	80% E_t; Q/800 + 110 $V^{1/2}$ SL ◊, Btu/h.	80% E_t; Q/799 + 16.6 $V^{1/2}$ SL ◊, Btu/h◊◊.	80% E_t; Q/800 + 110 $V_r^{1/2}$ Btu/hr.	No—See Section IV.B.
Oil Storage Water Heaters, >105,000 Btu/h, <4,000 Btu/h/gal.	78% E_t; Q/800 + 110 $V^{1/2}$ SL ◊, Btu/h.	80% E_t; Q/799 + 16.6 $V^{1/2}$ SL ◊, Btu/h◊◊.	78% E_t; Q/800 + 110 $V_r^{1/2}$ Btu/hr.	Yes—See Section IV.B.
Gas Instantaneous Water Heaters, ≥200,000 Btu/h, ≥4,000 Btu/h/gal, ≥10 gal.	80% E_t, Q/800 + 110 $V^{1/2}$ SL ◊, Btu/h.	80% E_t, Q/799 + 16.6 $V^{1/2}$ SL ◊, Btu/h◊◊.	80% E_t, Q/800 + 110 $V_r^{1/2}$ Btu/hr.	No—See Section IV.B.
Oil Instantaneous Water Heaters, >210,000 Btu/h, ≥4,000 Btu/h/gal, ≥10 gal.	78% E_t, Q/800 + 110 $V^{1/2}$ SL ◊, Btu/h.	78% E_t, Q/799 + 16.6 $V^{1/2}$ SL ◊, Btu/h◊◊.	78% E_t, Q/800 + 110 $V_r^{1/2}$ Btu/hr.	No—See Section IV.B.

* "E_t" means thermal efficiency; "EER" means energy efficiency ratio; "SEER" means seasonal energy efficiency ratio; "HSPF" means heating seasonal performance factor; "COP" and "COP_H" mean coefficient of performance; and "Btu/h" or "Btu/hr" means British thermal units per hour.

** ASHRAE Standard 90.1–2013 equipment classes may differ from the equipment classes defined in DOE's regulations, but no loss of coverage will occur (*i.e.,* all previously covered DOE equipment classes remain covered equipment).

*** While ASHRAE Standard 90.1–2013 added a subscript $_H$ to COP for all heat pumps, its definition for "coefficient of performance (COP), heat pump—heating" has not changed. As a result, DOE believes the subscript to be a clarifying change of nomenclature (to differentiate from the COP metric used for refrigeration) only, rather than a change to the metric itself.

† "Standard size" refers to PTAC equipment with wall sleeve dimensions ≥16 inches high or ≥42 inches wide. For DOE's purposes, this equipment class applies to standard-size equipment regardless of application (*e.g.,* new construction or replacement).

†† "Cap" means cooling capacity in kBtu/h at 95°F outdoor dry-bulb temperature.

††† This may have been an editorial error in ASHRAE 90.1–2010.

‡ While ASHRAE Standard 90.1–2013 added this equipment class, DOE believes that equipment falling into these classes is already covered by Federal standards, most commonly in the residential space-constrained central air conditioning equipment class with minimum standards of 12.0 SEER for air conditioners and heat pumps and 7.4 HSPF for heat pumps. See section II.A.5.1 of this NODA for further detail.

‡‡ "V" means rated volume in gallons; "SL" means standby loss.

‡‡‡ "V_m" means measured volume in tank.

◊ "Q" means the nameplate input rate in Btu/hr; "V" means rated volume in gallons; "SL" means standby loss. DOE's descriptor, "Vr," also means rated volume in gallons and differs only in nomenclature.

◊◊ As explained in section IV.B, DOE believes that all changes to standby loss levels for these equipment classes were editorial errors because they are identical to SI (International System of Units; metric system) formulas rather than I–P (Inch-Pound; English system) formulas.

DOE notes that ASHRAE 90.1–2013 also increased integrated energy efficiency ratio (IEER) levels for additional equipment not listed in Table II.1, including small, large, and very large air-cooled and water-cooled air conditioners and heat pumps. However, because current Federal energy conservation standards for this equipment do not use IEER as a rating metric, DOE is not triggered to review this equipment. In September 2014, DOE published a notice of proposed rulemaking (NOPR) for commercial air-cooled equipment. 79 FR 58948 (Sept. 30, 2014). In the NOPR, DOE proposed amended standards for small, large, and very large air-cooled commercial air conditioners and heat pumps based on IEER as the energy efficiency descriptor. Should DOE finalize new standards using IEER as the metric, future increases in IEER levels in ASHRAE Standard 90.1 as compared to the Federal energy conservation standards would trigger DOE to review its efficiency levels for that equipment.

2. Notice of Data Availability

On April 11, 2014, DOE published a notice of data availability (April 2014 NODA) in the **Federal Register** and requested public comment as a preliminary step required pursuant to EPCA when DOE considers amended energy conservation standards for certain types of commercial equipment covered by ASHRAE Standard 90.1. 79 FR 20114. Specifically, the April 2014 NODA presented for public comment DOE's analysis of the potential energy savings estimates related to amended national energy conservation standards for the types of commercial equipment for which DOE was triggered by ASHRAE action, based on: (1) The modified efficiency levels contained within ASHRAE Standard 90.1–2013; and (2) more-stringent efficiency levels. *Id.* at 20134–36. DOE has described these analyses and preliminary conclusions and sought input from interested parties, including the submission of data and other relevant information. *Id.*

In addition, DOE presented a discussion in the April 2014 NODA of the changes found in ASHRAE Standard 90.1–2013. *Id.* at 20119–25. The April 2014 NODA includes a description of DOE's evaluation of each ASHRAE equipment type in order for DOE to determine whether the amendments in ASHRAE Standard 90.1–2013 have increased efficiency levels or changed design requirements. As an initial matter, DOE sought to determine which requirements for covered equipment in ASHRAE Standard 90.1, if any: (1) Have been revised solely to reflect the level of the current Federal energy conservation standard (where ASHRAE is merely "catching up" to the current national standard); (2) have been revised but with a reduction in stringency; or (3) have had any other revisions made that do not change the standard's stringency, in which case, DOE is not triggered to act under 42 U.S.C. 6313(a)(6) for that particular equipment type. For those types of equipment in ASHRAE Standard 90.1 for which ASHRAE actually increased efficiency levels above the current Federal standard, DOE subjected that equipment to the potential energy savings analysis discussed previously and presented the results in the April 2014 NODA for public comment. 79 FR 20114, 20134–36 (April 11, 2014). Lastly, DOE presented an initial assessment of the test procedure changes included in ASHRAE Standard 90.1–2013. *Id.* at 20124–25.

As a result of the preliminary determination of scope set forth in the April 2014 NODA, DOE found that there were equipment types for which ASHRAE increased the efficiency levels (thereby triggering further analysis) including: (1) Three classes of small three-phase air-cooled air conditioners and heat pumps less than 65,000 Btu/h; (2) three classes of small water-source heat pumps; (3) six classes of single package vertical units; (4) three classes of packaged terminal air conditioners; and (5) commercial oil-fired storage water heaters. 79 FR 20114, 20119–23 (April 11, 2014). DOE presented its methodology, data, and results for the preliminary energy savings analysis developed for these equipment classes in the April 2014 NODA for public comment. 79 FR 20114, 20125–38 (April 11, 2014).

III. General Discussion of Comments Regarding the ASHRAE Process and DOE's Interpretation of EPCA's Requirements With Respect to ASHRAE Equipment

In response to its request for comment on the April 2014 NODA, DOE received 11 comments from manufacturers, trade associations, utilities, and energy efficiency advocates. Commenters included: First Co.; Lennox International Inc.; National Comfort Products (NCP); Earthjustice; Goodman Global, Inc.; California Investor-Owned Utilities (CA IOUs); GE Appliances; a group including Appliance Standards Awareness Project (ASAP), the American Council for an Energy-Efficient Economy (ACEEE), the Natural Resources Defense Council (NRDC), and the Northwest Energy Efficiency Alliance (jointly referred to as the Advocates); Daikin Applied; Edison Electric Institute (EEI); and the Air-conditioning, Heating, and Refrigeration Institute (AHRI). As discussed previously, these comments are available in the docket for this rulemaking and may be reviewed as described in the **ADDRESSES** section. The following section summarizes the issues raised in these comments, along with DOE's responses.

DOE received numerous comments regarding whether it should, in general, adopt levels contained in ASHRAE standard 90.1–2013 as the Federal energy conservation standard, rather than more-stringent levels. Several commenters stated that DOE should follow ASHRAE's lead (*e.g.,* Daikin Applied, No. 0022 at p. 1; Goodman Global, Inc., No. 0018 at p. 4; Lennox International Inc., No. 0015 at p. 1–2). AHRI stated that the ASHRAE revisions represent consensus standards that were subject to rigorous public review and were evaluated for cost-effectiveness. (AHRI, No. 24 at p. 1) Because the current Federal values are lower than ASHRAE 90.1–2013 values, EEI argued that less-efficient equipment could continue to enter the market until the effective date of any DOE standards, which would be four years after DOE completes the rulemaking for levels higher than ASHRAE. (EEI, No. 23 at p. 2) EEI added that adopting ASHRAE would reduce the amount of DOE

resources needed for updating these standards. (*Id.*)

On the other hand, the Advocates and CA IOUs commented that significant, non-trivial energy savings would be achievable by adopting higher efficiency levels than those in ASHRAE 90.1–2013 for the equipment classes analyzed in the NODA, at least when considered in aggregate. (Advocates, No. 21 at p. 1; CA IOUs, No. 19 at pp. 2–3) The commenters provided justifications for adopting higher efficiency levels for specific equipment classes; these details are discussed in the relevant sections of this NOPR.

In response to the submitted comments, DOE notes that it makes decisions about whether to adopt levels in ASHRAE 90.1–2013 or higher efficiency levels based on application of the statutory criteria to potential standard levels for individual equipment types (per its mandate under EPCA), rather than upon some general assessment of perceived benefits of a shorter process by adopting the ASHRAE levels or any other reason. Specifically, EPCA directs that if ASHRAE Standard 90.1 is amended, DOE must adopt amended energy conservation standards at the new efficiency level in ASHRAE Standard 90.1, unless clear and convincing evidence supports a determination that adoption of a more-stringent level as a national standard would produce significant additional energy savings and be technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)) In order to determine if more-stringent efficiency levels would meet EPCA's criteria, DOE must review the efficiency levels in ASHRAE Standard 90.1–2013 and more-stringent efficiency levels for their energy savings and economic potentials irrespective of whether the efficiency levels were part of a consensus standards process. The specific rationale for DOE's decisions for each equipment type can be found in the relevant sections of this document.

AHRI also lodged several complaints regarding the analyses described in the April 2014 NODA. AHRI stated that DOE's analysis ignored the energy savings from changes ASHRAE implemented even before Standard 90.1–2013 was published. For example, AHRI argued that ASHRAE's water-source heat pump level was developed in 2011, adopted in 2012, and took effect immediately. (AHRI, No. 24 at p. 2) Thus, the products have been providing energy savings for at least 2 years. (*Id.*) AHRI further asserted that DOE's analysis ignores the savings that occur from implementation of the ASHRAE standard in 2015 or 2017, rather than developing its own revised standard that would take effect in 2020. According to AHRI, DOE's rulemaking process will lose 3 to 5 years of energy savings, and DOE's analysis must consider the energy savings associated with earlier implementation of the ASHRAE 90.1–2013. (*Id.*) Finally, AHRI stated that the April 2014 NODA did not address technological feasibility and economic justification, unlike ASHRAE 90.1. (*Id.*)

In response, DOE only takes into account energy savings that result from adoption of a Federal standard, not from adoption of an industry standard such as ASHRAE Standard 90.1. However, DOE did take the savings gap into account in the April 2014 NODA by using an analysis period of 30 years beginning with 2015 or 2017 for the ASHRAE level, and a shorter analysis period beginning in 2020 but with the same end date for efficiency levels higher than ASHRAE. As part of any rulemaking triggered by ASHRAE, DOE follows EPCA's mandate by only addressing energy savings in the NODA and analyzing technological feasibility and economic justification in the NOPR where the potential for energy savings appears to be significant. DOE further notes that it can only take credit for savings from mandatory Federal standards and, therefore, cannot take credit for early adoption of ASHRAE Standard 90.1 levels prior to the compliance date of the corresponding DOE standard when evaluating any decision to amend DOE standards. DOE commends ASHRAE's action to amend Standard 90.1, as well as any early adoption of these levels by manufacturers to improve commercial equipment efficiency and to reduce national energy use. DOE strives to consider such early adoption in its analysis to the extent that further energy savings associated with DOE's adoption of either the ASHRAE 90.1 standard level or a more-stringent standard level would be negated or reduced. In other words, DOE seeks to determine any shifts in the baseline prior to adoption of amended DOE standards, thereby allowing for a more accurate assessment of energy savings. See section V.F.3 for more information regarding efficiency distributions of equipment shipments that allow proper consideration of the energy savings generated specifically by DOE's potential actions.

IV. General Discussion of the Changes in ASHRAE Standard 90.1–2013 and Determination of Scope for Further Rulemaking Activity

As discussed previously, before beginning an analysis of the potential economic impacts and energy savings that would result from adopting the efficiency levels specified by ASHRAE Standard 90.1–2013 or more-stringent efficiency levels, DOE first sought to determine whether or not the ASHRAE Standard 90.1–2013 efficiency levels actually represented an increase in efficiency above the current Federal standard levels. This section discusses each equipment class for which the ASHRAE Standard 90.1–2013 efficiency level differs from the current Federal standard level, along with DOE's preliminary conclusion as to the action DOE is taking with respect to that equipment. (Once again, DOE notes that ASHRAE Standard 90.1–2013 did not change any of the design requirements for the commercial HVAC and water-heating equipment covered by EPCA, so DOE is not conducting further analysis in the sections below on that basis.)

A. Commercial Package Air-Conditioning and Heating Equipment

EPCA, as amended, defines ''commercial package air conditioning and heating equipment'' as air-cooled, evaporatively-cooled, water-cooled, or water-source (not including ground water-source) electrically operated, unitary central air conditioners and central air conditioning heat pumps for commercial use. (42 U.S.C. 6311(8)(A); 10 CFR 431.92) EPCA also defines ''small,'' ''large,'' and ''very large'' commercial package air conditioning and heating equipment based on the equipment's rated cooling capacity. (42 6311(8)(B)–(D); 10 CFR 431.92) ''Small commercial package air conditioning and heating equipment'' means equipment rated less than 135,000 Btu per hour (cooling capacity). (42 U.S.C. 6311(8)(B); 10 CFR 431.92) ''Large commercial package air conditioning and heating equipment'' means equipment rated at or above 135,000 Btu per hour and less than 240,000 Btu per hour (cooling capacity). (42 U.S.C. 6311(8)(C); 10 CFR 431.92) ''Very large commercial package air conditioning and heating equipment'' means equipment rated at or above 240,000 Btu per hour and less than 760,000 Btu per hour (cooling capacity). (42 U.S.C. 6311(8)(D); 10 CFR 431.92)

1. Air-Cooled Equipment

The current Federal energy conservation standards for the three

classes of air-cooled commercial package air conditioners and heat pumps for which ASHRAE Standard 90.1–2013 amended efficiency levels are shown in Table II.1 and can be found in DOE's regulations at 10 CFR 431.97. The Federal energy conservation standards for air-cooled air conditioners and heat pumps are differentiated based on the unit's cooling capacity (*i.e.,* small, large, or very large). For small equipment, there is an additional disaggregation into: (1) Equipment less than 65,000 Btu/h and (2) equipment greater than or equal to 65,000 Btu/h and less than 135,000 Btu/h. In setting initial standards for three-phase equipment less than 65,000 Btu/h, Congress used the same metric for this commercial equipment as for residential single-phase equipment (*i.e.,* seasonal energy efficiency ratio (SEER)), which is reflected in DOE's current regulations. Unlike the current Federal energy conservation standards, ASHRAE Standard 90.1 also differentiates the equipment that is less than 65,000 Btu/h into split system and single package subcategories. Historically, ASHRAE has set equivalent efficiency levels for this equipment; however, effective January 1, 2015, ASHRAE Standard 90.1–2013 increases the efficiency level for single package air conditioners but not split system air conditioners. The increased efficiency level for single package air conditioners surpasses the current Federal energy conservation standard level for the overall equipment class, while the efficiency level for split system air conditioners meets and does not exceed the Federal energy conservation standard for the overall equipment class. ASHRAE Standard 90.1–2013 also increases the efficiency levels, effective January 1, 2015, for both single package and split system air-cooled heat pumps, for SEER and heating seasonal performance factor (HSPF), to efficiency levels that surpass the current Federal energy conservation standard levels. ASHRAE Standard 90.1–2013 increases the HSPF level for split systems above that for single package heat pumps.

Because ASHRAE increased the standard for only single package air conditioners, and increased the HSPF level to a more stringent level for split system heat pumps than for single package heat pumps, in the April 2014 NODA, DOE proposed to consider separate equipment classes for single package and split system equipment in the overall equipment classes of small commercial package air conditioners and heat pumps (air-cooled, three-phase) less than 65,000 Btu/h, as existed prior to codification of EISA 2007, and requested comment on this issue.

In response, AHRI, Goodman Global, and Lennox International agreed that DOE should re-create separate classes for split system and single package equipment with input ratings less than 65,000 Btu/h. (AHRI, No. 24 at p. 2; Goodman Global, Inc., No. 18 at p. 2; Lennox International Inc., No. 15 at p. 5) The CA IOUs instead preferred having only two equipment classes, one for air conditioners, and one for heat pumps, with identical levels across single package and split system equipment. (CA IOUs, No. 19 at p. 4) In order to facilitate following the statutory requirements of the ASHRAE trigger, in this NOPR, DOE continues to propose the re-creation of separate equipment classes.

With regard to split system three-phase air conditioners, Earthjustice stated that standards must be reviewed, if not under the ASHRAE trigger, then under the six-year look back, as the clock will expire next year. (Earthjustice, No. 17 at pp. 1–2) Specifically, Earthjustice opined that ASHRAE has amended the Standard 90.1 levels for air-cooled, three-phase air-conditioners less than 65,000 Btu/h by increasing the required SEER levels for single package air conditioners and all heat pump units. The fact that ASHRAE did not also increase the Standard 90.1-required SEER level for split system air conditioners in this equipment class does not insulate split system units from DOE's obligation to consider amended standards. The ''more stringent'' standard that EPCA obliges DOE to consider for this equipment class may be one that, for example, applies a SEER 14 level (or a higher SEER level) to all air-cooled 3-phase air-conditioners less than 65,000 Btu/h (see 42 U.S.C. 6313(a)(6)(A)(ii)(II)). (Earthjustice, No. 17 at p. 1) In addition, more than six years have elapsed since EISA 2007 amended the standards for the split system air conditioners at issue, and even if the 6-year clock began to run only when DOE incorporated the EISA 2007 levels into the Code of Federal Regulations, the time limit for DOE's review will expire next year.[8] (Earthjustice, No. 17 at pp. 1–2) The CA IOUs also requested that DOE update efficiency levels for split-system air conditioners even though ASHRAE did not update them. (CA IOUs, No. 19 at p. 4)

In response, DOE initially notes that EPCA's trigger regarding ASHRAE equipment is tied to the equipment that ASHRAE acts to amend. (42 U.S.C. 6313(a)(6)(A)) In this case, DOE was triggered for 3-phase air-cooled single-package air conditioners less than 65,000 Btu/h, but not the split-system variant, even though both types of units were included in a more comprehensive DOE equipment class. As noted previously, DOE is acting to prevent confusion by proposing to re-create separate product classes for the two types of systems. However, DOE has decided to now consider amended standards for 3-phase air-cooled split-system air conditioners less than 65,000 Btu/h under its 6-year look back authority. (42 U.S.C. 6313(a)(6)(C)(i)) It is worth noting that DOE did not consider ASHRAE's single-package air conditioner level of 14 SEER as the default adoption value for split-system air conditioners. Instead, DOE is treating those as a separate equipment class and has reviewed the adoption of 14 SEER for split-system air conditioners as a level more stringent than ASHRAE that must result in significant additional conservation of energy and be technologically feasible and economically justified.

In the April 2014 NODA, DOE conducted an analysis of the potential energy savings due to amended standards for single-package air conditioners and single-package and split-system heat pumps (air-cooled, three-phase, less than 65,000 Btu/h). At that time, DOE did not conduct an analysis of the potential energy savings for split-system air conditioners, but it added it to the analysis performed for this NOPR.

In response to the April 2014 NODA, Goodman Global supported the ASHRAE levels for small air-cooled air conditioners and heat pumps so that single-phase and three-phase products would have the same minimum efficiencies, which is a reduced burden. (Goodman Global, Inc., No. 17 at p. 4) Goodman Global added that it does not believe higher values than ASHRAE Standard 90.1–2013 could be justified from a simple payback perspective. (*Id.*) In contrast, the Advocates and the CA IOUs supported higher efficiency levels for three-phase equipment. The CA IOUs argued that the higher annual operating hours in nonresidential applications would support a higher

[8] DOE notes that pursuant to the EISA 2007 amendments to EPCA, under 42 U.S.C. 6313(a)(6)(C), the agency must periodically review its already established energy conservation standards for ASHRAE equipment. In December 2012, this provision was further amended by the American Energy Manufacturing Technical Corrections Act (AEMTCA) to clarify that DOE's periodic review of ASHRAE equipment must occur ''[e]very six years.'' (42 U.S.C. 6313(a)(6)(C)(i)) The final rule incorporating the EISA 2007 prescribed levels into the CFR was published on March 23, 2009. 74 FR 12058.

efficiency standard. (CA IOUs, No. 19 at p. 4) The Advocates stated that three-phase commercial units use a three-phase compressor, which is generally more efficient than a single-phase compressor, which suggests that a three-phase central air conditioner or heat pump has the potential to be more efficient than a comparable single-phase unit does. (Advocates, No. 21 at p. 1) Furthermore, the Advocates commented that efficiency levels were found on the market that were much higher than the ASHARE Standard 90.1–2013 level of SEER 14 and that energy savings as high as 0.2 quads may be possible. (Advocates, No. 21 at p. 3) The CA IOUs stated that more than one-fifth of the models of three-phase air-cooled single-package units for sale in California could meet a 16 SEER standard, which would result in energy savings five times greater than the 0.02 quad savings from simply adopting the ASHRAE level. (CA IOUs, No. 0019 at p. 2) The CA IOUs added that most manufacturers currently have products that meet 15 SEER, and given that a compliance date for more-stringent levels would be 2020, the manufacturers that do not would have 6 years to redesign. (*Id.*)

Upon reviewing the results of the potential energy savings analysis in the April 2014 NODA, DOE agrees with the Advocates and the CA IOUs that additional significant energy savings are possible and has conducted additional economic analysis on this equipment. However, after analysis, DOE has tentatively determined that efficiency levels higher than those in ASHRAE Standard 90.1–2013 are not economically justified for any of the four equipment classes and is proposing in this NOPR to adopt the energy efficiency levels contained in ASHRAE Standard 90.1–2013 for small air-cooled commercial package air conditioning and heating equipment less than 65,000 Btu/h (see section VIII.D.1). For split system air conditioners, DOE is not updating standards, as the ASHRAE levels are equal to the current Federal minimum.

For small commercial three-phase equipment less than 65,000 Btu/h, the CA IOUs stated that DOE should consider including the energy efficiency ratio (EER) metric, along with SEER, to align more closely with industry standards. (CA IOUs, No. 0019 at p. 3–4) The commenter noted that original equipment manufacturers would use both metrics when rating a unit. The CA IOUs also commented that the SEER metric is based on residential use patterns and, by itself, may not be appropriate to characterize energy use in nonresidential buildings. According to the commenter, full-load EER better approximates performance during peak loading conditions. (*Id.*)

In response, DOE does not have authority to adopt multiple metrics for a single equipment class. Pursuant to 42U.S.C. 6313(a)(6), the Secretary has authority to amend the energy conservation standards for specified equipment, but under 42 U.S.C. 6311(18), the statute's definition of the term ''energy conservation standard'' is limited to: (A) A performance standard that prescribes a minimum level of energy efficiency or a maximum quantity of energy use for a product; or (B) a design requirement for a product. The language of EPCA authorizes DOE to establish a single performance standard or a single design standard, but not multiple performance standards.

2. Water-Source Equipment

The current Federal energy conservation standards for the three classes of commercial water-source heat pumps for which ASHRAE Standard 90.1–2013 amended efficiency levels are shown in Table II.1 and can be found in DOE's regulations at 10 CFR 431.97. The Federal energy conservation standards for water-source equipment are differentiated based on the model's cooling capacity. ASHRAE Standard 90.1–2013 increased the energy efficiency levels for all three equipment classes to efficiency levels that surpass the current Federal energy conservation standard levels. Therefore, DOE conducted an analysis of the potential energy savings due to amended standards for this equipment in the April 2014 NODA.

In response to the April 2014 NODA, the Advocates requested that DOE conduct further analysis to consider higher efficiency levels than those in ASHRAE Standard 90.1–2013 efficiency levels for water-source heat pumps, because efficiency levels as high as 21 EER are available on the market and higher efficiency levels could achieve additional national energy savings of as much as 1 quad. (The Advocates, No. 21 at p. 1) Upon reviewing the results of the potential energy savings analysis in the April 2014 NODA, DOE agrees with the Advocates that additional energy savings are possible and has conducted further analysis on this equipment. However, after the analysis, DOE has tentatively determined that there is not clear and convincing evidence that efficiency levels higher than those in ASHRAE 90.1–2013 are economically justified for any of the three water-source heat pump classes and is proposing in this NOPR to adopt the energy efficiency levels contained in ASHRAE Standard 90.1–2013 for water-source heat pumps (see section VIII.D.2).

ASHRAE Standard 90.1–2013 also changed the name of this equipment class from ''water source'' to ''water to air, water-loop'' and changed the heating-mode descriptor for this equipment from COP to $COP_{H.}$ In the April 2014 NODA, DOE suggested that these were editorial changes only and that this new nomenclature refers to the same water-source heat pump equipment covered by Federal energy conservation standards, but with the metric nomenclature serving to clarify the difference between COP for refrigeration and COP for heat pumps. DOE requested comment on this issue. 79 FR 20114, 20120, 20137 (April 11, 2014). In response, AHRI agreed that the nomenclature changes were editorial. (AHRI, No. 24 at p. 3)

In the April 2014 NODA, DOE noted that EPCA does not define ''water-source heat pump'' other than to exclude ground-water-source units from the definition of ''commercial package air conditioning and heating equipment'' at 42 U.S.C. 6311(8)(A). 79 FR 20114, 20120 (April 11, 2014). However, DOE noted that there are several related types of water-source and ground-water-source heat pumps, as shown in Table IV.1. ASHRAE Standard 90.1–2013 included new nomenclature for all such types of heat pumps. DOE further noted that the vast majority of water-source (water-to-air, water-loop) heat pump models are also rated for performance in ground-loop or ground-water heat pump applications. It is DOE's understanding that design differences of the models used in the different applications are minimal, including potential use of material with better corrosion resistance in the water coil (for open-loop systems only) and/or added insulation for ground-water or ground-loop systems. Efficiency ratings are different across these three application types primarily because of the different test conditions. (Ground and ground-water-source systems are tested with cooler entering water.) Because of the similarity in models across applications, DOE believes that increased efficiency standards for water-loop applications may affect heat pumps for ground-source and ground-water applications, although they are excluded from coverage. *Id.*

TABLE IV.1—NOMENCLATURE FOR TYPES OF WATER-LOOP, GROUND-LOOP, AND GROUND-WATER-SOURCE HEAT PUMPS

ASHRAE standard 90.1–2010	ASHRAE standard 90.1–2013	Test procedure
Water-source (86° entering water)	Water-to-air, water-loop	ISO Standard 13256–1.
Ground-water-source (59° entering water)	Water-to-air, ground-water.	
Ground-water source (77° entering water)	Brine-to-air, ground-loop.	
Water-source water-to-water (86° entering water)	Water-to-water, water-loop	ISO Standard 13256–2.
Water-source water-to-water (59° entering water)	Water-to-water, ground-water.	
Ground-water-source brine-to-water (77° entering water)	Brine-to-water, ground-loop.	

In the April 2014 NODA, DOE considered adding a definition for ''water-source heat pump'' to the Code of Federal Regulations (CFR) that would include both single-phase and three-phase units of all capacities (up to 760,000 Btu/h) and would be applicable to water-to-air heat pumps. Specifically, DOE considered adapting the definition from that in the ASHRAE handbook: [9] ''A water-source heat pump is a [single-phase or three-phase] reverse-cycle heat pump that uses [a circulating water loop] as the heat source for heating and as the heat sink for cooling. The main components are a compressor, refrigerant-to-water heat exchanger, refrigerant-to-air heat exchanger, refrigerant expansion devices, and refrigerant reversing valve.'' DOE requested comment on this definition. 79 FR 20114, 20120 (April 11, 2014).

Regarding the proposed definition, Goodman Global agreed that it is beneficial to all stakeholders to define as clearly as possible the products being regulated. (Goodman Global, Inc., No. 17 at p. 2) On the other hand, AHRI stated that a definition for ''water-source heat pump'' was outside the scope of activity of this document, because ASHRAE Standard 90.1 does not contain any definition of a water-source heat pump. (AHRI, No. 24 at p. 3) AHRI also argued that the lack of definition has not hampered implementation of Federal minimum efficiency for such equipment and that DOE has not established any significant need or provided any compelling reasons that require the addition of this definition. (*Id.*) DOE agrees with Goodman Global and does not agree with AHRI, tentatively concluding that the nomenclature changes in ASHRAE Standard 90.1 that moved away from the term ''water-source'' necessitate inclusion of a definition for clarity.

AHRI and Daikin Applied expressed concern with the definition covering capacities up to 760,000 Btu/h, noting that neither ASHRAE Standard 90.1 nor DOE have standards for models above 135,000 Btu/h. (AHRI, No. 24 at p. 3; Daikin Applied, No. 22 at p. 1) Daikin Applied further commented that the size of the market above 135,000 Btu/h is approximately 2–3 percent of the total, that the AHRI certification program stops at 166,000 Btu/h, and that practically speaking, the largest models on the market are 250,000 Btu/h. (*Id.*) Daikin Applied argued that there would be test burdens associated with accommodating the larger sizes in test labs. (*Id.*) In response, DOE notes that regardless of any current size limits on water-source heat pump standards, it does not change the fact that Congress set forth the scope of coverage in the statutory definitions for ''commercial package air conditioning and heating equipment'' and ''very large commercial package air conditioning and heating equipment,'' which is limited to equipment with a cooling capacity below 760,000 Btu per hour. (42 U.S.C. 6311(8)(A) and (D)) However, setting in place a definition of ''water-source heat pump'' that clearly delineates what that equipment entails, as well as the limits on DOE's regulatory authority, would not in and of itself generate any standards compliance responsibilities or test burden. If the market changed and larger-size units became the norm, such standards might be appropriate, with ASHRAE presumably setting levels for such equipment. However, providing increased clarity through an appropriate definition is not directly tied to any such future developments.

Accordingly, DOE proposes to adopt the following definition, adapted from the ASHRAE Handbook and the definition proposed in the April 2014 NODA, and specifically referencing the new nomenclature included in ASHRAE 90.1–2013: ''*Water-source heat pump* means a single-phase or three-phase reverse-cycle heat pump of all capacities (up to 760,000 Btu/h) that uses a circulating water loop as the heat source for heating and as the heat sink for cooling. The main components are a compressor, refrigerant-to-water heat exchanger, refrigerant-to-air heat exchanger, refrigerant expansion devices, refrigerant reversing valve, and indoor fan. Such equipment includes, but is not limited to, water-to-air water-loop heat pumps.'' DOE requests additional comment on this proposed definition. This is identified as Issue 1 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

Furthermore, DOE is proposing to revise the nomenclature for its water-source heat pump equipment classes to match the revised nomenclature in ASHRAE 90.1–2013: water-to-air, water-loop. Specifically, DOE proposes to revise Table 1 to 10 CFR 431.96 and Tables 1 and 2 to 10 CFR 431.97 to refer to ''water-source (water-to-air, water-loop)'' heat pumps rather than simply ''water-source'' heat pumps. Throughout this document, any reference to water-source heat pump equipment classes should be considered as referring to water-to-air, water-loop heat pumps.

In preparing this rulemaking, DOE noticed that the 2013 CFR [10] and the current e-CFR [11] contained errors in Table 1 and Table 2 to 10 CFR 431.96 and Table 2 to 10 CFR 431.97 for small water-source heat pumps (*i.e.,* less than 135,000 Btu/h), as well as in Table 1 to 10 CFR 431.97 for small, large, and very large water-source heat pumps. DOE has determined that these errors were incorporated through the previous ASHRAE-trigger final rule. 77 FR 28928 (May 16, 2012). By this rulemaking, DOE seeks to clarify the relevant tables by removing the inadvertently amended language.

3. Packaged Terminal Air Conditioners and Heat Pumps

EPCA defines a ''packaged terminal air conditioner'' as ''a wall sleeve and a separate unencased combination of heating and cooling assemblies specified by the builder and intended for mounting through the wall. It includes a prime source of refrigeration, separable outdoor louvers, forced ventilation, and heating availability by

[9] 2012 ASHRAE Handbook, Heating, Ventilating, and Air-Conditioning Systems and Equipment. ASHRAE, Chapter 9 (Available at: *https://www.ashrae.org/resources-publications/description-of-the-2012-ashrae-handbook-hvac-systems-and-equipment*).

[10] See *http://www.gpo.gov/fdsys/pkg/CFR-2013-title10-vol3/pdf/CFR-2013-title10-vol3-part431-subpartF.pdf.*

[11] See *http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=1f6aa69cce81d1ccc6e9158c94d81e91&r=PART&n=pt10.3.431#sp10.3.431.f.*

builder's choice of hot water, steam, or electricity.'' (42 U.S.C. 6311(10)(A)) EPCA defines a ''packaged terminal heat pump'' as ''a packaged terminal air conditioner that utilizes reverse cycle refrigeration as its prime heat source and should have supplementary heat source available to builders with the choice of hot water, steam, or electric resistant heat.'' (42 U.S.C. 6311(10)(B)) DOE codified these definitions at 10 CFR 431.92 in a direct final rule published in the **Federal Register** on October 21, 2004. 69 FR 61962, 61970.

The current Federal energy conservation standards for the three classes of PTACs for which ASHRAE Standard 90.1–2013 amended efficiency levels are shown in Table II.1 and are found in DOE's regulations at 10 CFR 431.97. The Federal energy conservation standards for PTACs are differentiated based on the cooling capacity and physical dimensions (standard versus nonstandard size). ASHRAE Standard 90.1–2013 increased the energy efficiency levels for all three standard-size PTAC equipment classes to efficiency levels that meet those for PTHPs and surpass the current Federal energy conservation standard levels for PTACs. Therefore, DOE conducted an analysis of the potential energy savings due to amended standards for standard-size PTACs in the April 2014 NODA. 79 FR 20114, 20120–21 (April 11, 2014).

Prior to the ASHRAE trigger, in February 2013, DOE published a notice of public meeting and availability of the Framework Document regarding energy conservation standards for packaged terminal air conditioners and heat pumps standards. 78 FR 12252 (Feb. 22, 2013). This Framework Document was published as a first step toward meeting the six-year look back requirement specified in EISA 2007. (42 U.S.C. 6313(a)(6)(C)(i)) As part of the six-year look back, in September 2014, DOE issued a NOPR for PTAC and PTHP equipment that included equipment classes for which ASHRAE Standard 90.1–2013 increased efficiency levels (*i.e.,* standard-size PTACs), as well as those for which it did not. 79 FR 55537 (Sept. 16, 2014). Consequently, PTACs will not be discussed in the remainder of this document; comments received on the April 2014 NODA related to PTACs were discussed in the PTAC NOPR.

4. Small-Duct, High-Velocity, and Through-The-Wall Equipment

EPCA does not separate three-phase small-duct high-velocity (SDHV) or through-the-wall (TTW) heat pumps from other types of small commercial package air-conditioning and heating equipment in its definitions. (42 U.S.C. 6311(8)) Therefore, EPCA's definition of ''small commercial package air conditioning and heating equipment'' would include three-phase SDHV and TTW heat pumps. In contrast, single-phase SDHV and space-constrained equipment (including TTW), which are not the subject of this document, have separate product classes under DOE's residential central air conditioner and heat pump standards (see 10 CFR 430.32(c)).

ASHRAE Standard 90.1–2013 appeared to change some of the efficiency levels for three-phase SDHV and TTW equipment. Specifically, ASHRAE Standard 90.1–2010 had increased the cooling efficiency requirements for TTW heat pumps to 13.0 SEER in comparison to the efficiency levels of 12.0 SEER in ASHRAE Standard 90.1–2007. However, in March 2011, ASHRAE issued Proposed Addendum h for public review that would correct the minimum SEER for this equipment to 12.0 SEER, and this addendum was approved and incorporated into ASHRAE Standard 90.1–2013. Therefore, this change in ASHRAE Standard 90.1–2013 was correcting an editorial error in ASHRAE Standard 90.1–2010.

For SDHV air conditioners and heat pumps, ASHRAE Standard 90.1–2013 increases the cooling efficiency requirement from 10.0 SEER to 11.0 SEER. It also includes a heating efficiency requirement for SDHV heat pumps of 6.8 HSPF, which was present in ASHRAE 90.1–2007 but not ASHRAE 90.1–2010 (which DOE also thought to be an editorial error). These changes were made through Addendum bj to ASHRAE 90.1–2010, which noted that the previously adopted Addendum j to ASHRAE Standard 90.1–2010 had deleted the SDHV equipment class entirely because all SDHV models sold were single-phase residential products, but that Addendum bj was re-establishing the equipment class because manufacturers had expressed an intention to introduce three-phase equipment to the market. In addition, Addendum bj noted that it contained minimum efficiency levels identical to those established by DOE for single-phase residential SDHV products.

The DOE standards for both commercial (three-phase) TTW and SDHV air conditioners, which are 13.0 SEER, and for heat pumps, which are 13.0 SEER and 7.7 HSPF, were established for the overall equipment category of small commercial package air-conditioning and heating equipment by EISA 2007, which amended EPCA. (42 U.S.C. 6313(a)(7)(D)) Because the ASHRAE Standard 90.1–2013 efficiency levels for three-phase TTW and SDHV equipment are less than the applicable Federal standards, DOE has tentatively concluded that it is not required to take action on this equipment at this time (see 42 U.S.C. 6313(a)(6)(A)(i) and (B)(iii)(I)). DOE did not receive comment on this issue and reaffirms this position.

5. Single-Package Vertical Air Conditioners and Single-Package Vertical Heat Pumps

EPCA, as amended, defines ''single package vertical air conditioner'' as air-cooled commercial package air conditioning and heating equipment that:

(1) Is factory-assembled as a single package that:

(i) Has major components that are arranged vertically;

(ii) is an encased combination of cooling and optional heating components; and

(iii) is intended for exterior mounting on, adjacent interior to, or through an outside wall;

(2) is powered by a single- or 3-phase current;

(3) may contain one or more separate indoor grilles, outdoor louvers, various ventilation options, indoor free air discharges, ductwork, wall plenum, or sleeves; and

(4) has heating components that may include electrical resistance, steam, hot water, or gas, but may not include reverse cycle refrigeration as a heating means.

(42 U.S.C. 6311(22) ; 10 CFR 431.92)

EPCA, as amended, defines ''single package vertical heat pump'' as a single-package vertical air conditioner that

(1) uses reverse cycle refrigeration as its primary heat source; and

(2) may include secondary supplemental heating by means of electrical resistance, steam, hot water, or gas.

(42 U.S.C. 6311(23); 10 CFR 431.92)

The current Federal energy conservation standards for the six classes of single-package vertical units (SPVUs) for which ASHRAE Standard 90.1–2013 amended efficiency levels are shown in Table II.1 and can be found in DOE's regulations at 10 CFR 431.97. The equipment classes for SPVACs and SPVHPs, as well as their attendant Federal energy conservation standards, are differentiated based on cooling capacity. ASHRAE Standard 90.1–2013 increased the energy efficiency levels for all six equipment classes to efficiency levels that surpass the current Federal energy conservation standard levels. Therefore, DOE conducted an analysis of the potential energy savings

due to amended standards for this equipment in the April 2014 NODA. 79 FR 20114, 20121 (April 11, 2014).

In response to the April 2014 NODA, Lennox urged DOE to adopt the ASHRAE Standard 90.1–2013 efficiency levels for SPVUs. (Lennox International Inc., No. 0015 at p. 2) On the other hand, the Advocates encouraged DOE to initiate a rulemaking for SPVUs to consider higher efficiency levels than those in ASHRAE Standard 90.1–2013 because of potential national energy savings up to 0.48 quads. (Advocates, No. 21 at p. 3) DOE notes that prior to the release of ASHRAE Standard 90.1–2013, DOE had already been conducting a rulemaking on SPVUs as a result of a one-time review requirement added by EISA 2007. See 76 FR 25622, 25633 (May 5, 2011). DOE will continue to conduct its SPVU analysis as part of a separate rulemaking that will also meet the requirements of the ASHRAE trigger, and accordingly, DOE has not included any further analysis or results regarding SPVUs in this NOPR. In the April 11, 2014 NODA, DOE also discussed its consideration of a space-constrained SPVU equipment class (79 FR 20114, 20121–23); DOE's consideration of that issue will also occur in the separate SPVU rulemaking.

B. Commercial Water Heaters

EPCA defines ''storage water heater'' as a water heater that heats and stores water within the appliance at a thermostatically controlled temperature for delivery on demand. This term does not include units with an input rating of 4,000 Btu/h or more per gallon of stored water. (42 U.S.C. 6311(12)(A)) DOE further clarified this definition in its regulations by adding that it is industrial equipment. 10 CFR 431.102. EPCA defines ''instantaneous water heater'' as a water heater that has an input rating of at least 4,000 Btu/h per gallon of stored water. (42 U.S.C. 6311(12)(B)) DOE further clarified this definition in its regulations by adding that it is industrial equipment, including products meeting this description that are designed to heat water to temperatures of 180°F or higher. 10 CFR 431.102.

The current Federal energy conservation standards for the five classes of storage and instantaneous water heaters for which ASHRAE Standard 90.1–2013 amended efficiency levels are shown in Table II.1 and set forth in DOE's regulations at 10 CFR 431.110. The equipment classes for commercial storage and instantaneous water heaters, and attendant Federal energy conservation standards, are differentiated based on fuel type and size category. ASHRAE Standard 90.1–2013 appeared to change the standby loss levels for four equipment classes (gas-fired storage water heaters, oil-fired storage water heaters, gas-fired instantaneous water heaters, and oil-fired instantaneous water heaters) to efficiency levels that surpass the current Federal energy conservation standard levels. However, as discussed in the April 11, 2014 NODA, upon review of the changes, DOE believes that all changes to standby loss levels for these equipment classes were editorial errors because they are identical to SI (International System of Units; metric system) formulas rather than I–P (Inch-Pound; English system) formulas. 79 FR 20114, 20123. Therefore, DOE did not conduct an analysis of the potential energy savings for this equipment. DOE received no comment on this issue.

As discussed in the April 11, 2014 NODA, ASHRAE Standard 90.1–2013 also changed the standby loss level for electric storage water heaters, in this case in a purposeful manner to align with the current Federal energy conservation standard level. *Id.* Because these levels meet and do not exceed the current Federal standards, DOE did not conduct an analysis of the potential energy savings for this equipment class.

ASHRAE Standard 90.1–2013 also increased the thermal efficiency levels for oil-fired storage water heaters to efficiency levels that surpass the current Federal energy conservation standards. Therefore, DOE conducted an analysis of the potential energy savings due to amended thermal efficiency standards for oil-fired storage water heaters in the April 2014 NODA. *Id.*

DOE did not receive any comments from stakeholders specific to the efficiency level DOE should adopt for oil-fired storage water heaters. Based on the results of the April 2014 NODA, DOE has determined that there are minimal energy savings available from this equipment and has not conducted further analyses on these products. Therefore, DOE is proposing in this NOPR to adopt the energy efficiency levels contained in ASHRAE Standard 90.1–2013 for commercial oil-fired storage water heaters (see section VIII.D.3).

In response to the April 2014 NODA, DOE received comment from the Advocates that the standards for all commercial water heaters, not just oil-fired storage water heaters, are due for a six-year look back. (Advocates, No. 21 at p. 3) Although DOE acknowledges its statutory obligation to review the standards for commercial water heaters, in order to best allocate available resources, DOE is limiting the scope of this current rulemaking to ASHRAE-triggered equipment. However, in October 2014, the agency issued a request for information (RFI) regarding commercial water heaters to initiate a separate six-year look back rulemaking for all categories of commercial water heating equipment. 79 FR 62899 (Oct. 21, 2014).

C. Test Procedures

EPCA requires the Secretary to amend the DOE test procedures for covered ASHRAE equipment to the latest version of those generally accepted industry testing procedures or the rating procedures developed or recognized by AHRI or by ASHRAE, as referenced by ASHRAE/IES Standard 90.1, unless the Secretary determines by rule published in the **Federal Register** and supported by clear and convincing evidence that the latest version of the industry test procedure does not meet the requirements for test procedures described in paragraphs (2) and (3) of 42 U.S.C. 6314(a).[12] (42 U.S.C. 6314(a)(4)(B)) ASHRAE Standard 90.1–2013 updated several of its test procedures for ASHRAE equipment. Specifically, ASHRAE Standard 90.1–2013 updated to the most recent editions of test procedures for small commercial package air conditioners and heating equipment (AHRI 210/240–2008 with Addendum 1 and 2, *Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment*), large and very large commercial package air conditioners and heating equipment (AHRI 340/360–2007 with Addenda 1 and 2, *Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment*), variable refrigerant flow equipment (AHRI 1230–2010 with Addendum 1, *Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment*), commercial warm-air furnaces (ANSI (American National Standards Institute) Z21.47–2012, *Standard for Gas-Fired Central*

[12] (2) Test procedures prescribed in accordance with this section shall be reasonably designed to produce test results which reflect energy efficiency, energy use, and estimated operating costs of a type of industrial equipment (or class thereof) during a representative average use cycle (as determined by the Secretary), and shall not be unduly burdensome to conduct. (3) If the test procedure is a procedure for determining estimated annual operating costs, such procedure shall provide that such costs shall be calculated from measurements of energy use in a representative average-use cycle (as determined by the Secretary), and from representative average unit costs of the energy needed to operate such equipment during such cycle. The Secretary shall provide information to manufacturers of covered equipment respecting representative average unit costs of energy.

Furnaces), and commercial water heaters (ANSI Z21.10.3–2011, Gas Water Heaters, Volume III, *Storage Water Heaters with Input Ratings Above 75,000 Btu Per Hour, Circulating and Instantaneous*).

In the April 2014 NODA, DOE preliminarily reviewed each of the test procedures that were updated in ASHRAE Standard 90.1–2013 and discussed the changes to those industry test procedures. 79 FR 20114, 20123–25 (April 11, 2014). DOE found that for AHRI 210/240, AHRI 340/360, AHRI 1230, and ANSI Z1.10.3, DOE had already incorporated by reference the most recent version [13] and did not need to take action. DOE received no comment on this issue. For ANSI Z21.47, DOE determined that the changes to the 2012 version do not impact those provisions of that industry test procedure that are used under the DOE test procedure for gas-fired warm air furnaces, and, therefore, such changes do not affect the energy efficiency ratings for gas-fired furnaces. Consequently, DOE determined that no further action was required at the time. *Id.* at 20124–25. In response to the April 2014 NODA, AHRI, Goodman Global, and Lennox International agreed with DOE's substantive assessment of ANSI Z21.47–2012. (AHRI, No. 24 at p. 5; Goodman Global, Inc., No. 18 at p. 2; Lennox International, Inc., No. 15 at p. 6) However, in keeping with EPCA's mandate to incorporate the latest version of the applicable industry test procedure pursuant to 42 U.S.C. 6314(a)(4)(B), DOE is proposing to incorporate by reference ANSI Z21.47–2012. Once again, DOE anticipates no substantive change or increase in test burden to be associated with this test procedure amendment for warm air furnaces.

DOE is also required to review the test procedures for covered ASHRAE equipment at least once every seven years. (42 U.S.C. 6314(a)(1)(A)) In addition to the updates to the referenced standards discussed previously, DOE is proposing to update the citations and incorporations by reference in DOE's regulations for commercial warm-air furnaces to the most recent version of ASHRAE 103, *Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boiler* (*i.e.,* ASHRAE 103–2007). The applicable sections of this standard include measurement of condensate and calculation of additional heat gain and heat losses for condensing furnaces. DOE notes that the most recent version does not contain any updates to the sections currently referenced by the DOE test procedure, so no additional burden would be expected to result from this test procedure update.

DOE is aware that some commercial furnaces are designed for make-up air heating (*i.e.,* heating 100 percent outdoor air). DOE defines ''commercial warm air furnace'' at 10 CFR 431.72 as self-contained oil-fired or gas-fired furnaces designed to supply heated air through ducts to spaces that require it, with a capacity (rated maximum input) at or above 225,000 Btu/h. Further, DOE's definitions specify that this equipment includes combination warm air furnace/electric air conditioning units but does not include unit heaters and duct furnaces. Given the characteristics of this category of commercial furnaces, DOE tentatively concludes that gas-fired and oil-fired commercial furnaces that are designed for make-up air heating and that have input ratings at or above 225,000 Btu/h meet the definition of ''commercial warm air furnace'' because they are self-contained units that supply heated air through ducts. Consequently, DOE is clarifying that commercial warm air furnaces that are designed for make-up air heating are subject to DOE's regulatory requirements, including being tested according to the test procedure specified in 10 CFR 431.76.

DOE is seeking comments on any relevant issues that would affect the test procedure for commercial warm air furnaces. Interested parties are welcome to comment on any aspect of the DOE commercial warm air furnaces test procedure as part of this comprehensive 7-year-review. This is identified as issue 2 in section X.E, ''Issues on Which DOE Seeks Comment.''

V. Methodology for Small Commercial Air-Cooled Air Conditioners and Heat Pumps Less Than 65,000 Btu/h

This section addresses the analyses DOE has performed for this rulemaking with respect to small commercial air-cooled air conditioners and heat pumps less than 65,000 Btu/h. A separate subsection addresses each analysis. In overview, DOE used a spreadsheet to calculate the life-cycle cost (LCC) and payback periods (PBPs) of potential energy conservation standards. DOE used another spreadsheet to provide shipments projections and then calculate national energy savings and net present value impacts of potential amended energy conservation standards.

A. Market Assessment

To begin its review of the ASHRAE Standard 90.1–2013 efficiency levels, DOE developed information that provides an overall picture of the market for the equipment concerned, including the purpose of the equipment, the industry structure, and market characteristics. This activity included both quantitative and qualitative assessments based primarily on publicly-available information. The subjects addressed in the market assessment for this rulemaking include equipment classes, manufacturers, quantities, and types of equipment sold and offered for sale. The key findings of DOE's market assessment are summarized in the following sections. For additional detail, see chapter 2 of the NOPR technical support document (TSD).

1. Equipment Classes

As discussed previously, the Federal energy conservation standards for air-cooled air conditioners and heat pumps are differentiated based on the cooling capacity (*i.e.,* small, large, or very large). For small equipment, there is an additional disaggregation into: (1) Equipment less than 65,000 Btu/h and (2) equipment greater than or equal to 65,000 Btu/h and less than 135,000 Btu/h. ASHRAE Standard 90.1–2013 also differentiates the equipment that is less than 65,000 Btu/h into split system and single package subcategories. In the past, DOE has followed the same disaggregation. However, when EISA 2007 increased the efficiency levels to identical levels across single package and split system equipment, effective in 2008, DOE combined the equipment classes in the CFR, resulting in only two equipment classes, one for air conditioners and one for heat pumps. 74 FR 12058, 12074 (March 23, 2009). Because ASHRAE has increased the standard for only single package air conditioners, and has increased the HSPF level to a more stringent level for split system heat pumps than for single package heat pumps, and DOE is obligated to adopt, at a minimum, the increased level in ASHRAE 90.1–2013 for that equipment class, DOE proposes to re-create separate equipment classes for single package and split system equipment in the overall equipment classes of small commercial package air conditioners and heat pumps (three-phase air-cooled) less than 65,000 Btu/h, as shown in Table V.1.

[13] This final rule for commercial heating, air-conditioning, and water-heating equipment was published in the **Federal Register** on May 16, 2012. 77 FR 28928.

TABLE V.1—PROPOSED EQUIPMENT CLASSES FOR SMALL COMMERCIAL PACKAGED AIR-CONDITIONING AND HEATING EQUIPMENT <65,000 Btu/h

Product	Cooling capacity Btu/h)	Sub-category
Small Commercial Packaged Air Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Split System)	<65,000	AC HP
Small Commercial Packaged Air Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Single Package)	<65,000	AC HP

2. Review of Current Market

In order to obtain the information needed for the market assessment for this rulemaking, DOE consulted a variety of sources, including manufacturer literature, manufacturer Web sites, and the AHRI certified directory.[14] The information DOE gathered serves as resource material throughout the rulemaking. The sections below provide an overview of the market assessment, and chapter 2 of the NOPR TSD provides additional detail on the market assessment, including citations to relevant sources.

a. Trade Association Information

DOE researched various trade groups representing manufacturers, distributors, and installers of the various types of equipment being analyzed in this rulemaking. AHRI is one of the largest trade associations for manufacturers of space-heating, cooling, and water-heating equipment, representing more than 90 percent of the residential and commercial air-conditioning, space-heating, water-heating, and commercial refrigeration equipment manufactured in the United States.[15] AHRI also develops and publishes test procedure standards for measuring and certifying the performance of residential and commercial HVAC equipment and coordinates with the International Organization for Standardization (ISO) to help harmonize U.S. standards with international standards, if feasible. AHRI also maintains the AHRI Directory of Certified Product Performance, which is a database that lists all the products and equipment that have been certified by AHRI, thereby providing equipment ratings for all manufacturers who elect to participate in the program. DOE utilized this database in developing base-case efficiency distributions.

The Heating, Air-conditioning and Refrigeration Distributors International (HARDI) is a trade association that represents over 450 wholesale heating, ventilating, air-conditioning, and refrigeration (HVACR) companies, plus over 300 manufacturing associates and nearly 140 manufacturing representatives. HARDI estimates that 80 percent of the revenue of HVACR systems goes through its members.[16] DOE did not utilize HARDI data for this rule.

The Air Conditioning Contractors of America (ACCA) is another trade association whose members include over 4,000 contractors and 60,000 professionals in the indoor environment and energy service community. According to their Web site, ACCA provides contractors with technical, legal, and market resources, helping to promote good practices and to keep buildings safe, clean, and affordable.[17] DOE did not use ACCA data for this rule.

b. Manufacturer Information

DOE reviewed data for air-cooled commercial air conditioners and heat pumps currently on the market by examining the AHRI Directory of Certified Product Performance. DOE identified 23 parent companies (comprising 61 manufacturers) of small three-phase air-cooled air conditioners and heat pumps, which are listed in chapter 2 of the NOPR TSD. Of these manufacturers, five were identified as small businesses based upon number of employees and the employee thresholds set by the Small Business Administration. More details on this analysis can be found below in section IX.B.

c. Market Data

DOE reviewed the AHRI database to characterize the efficiency and performance of small commercial air-cooled air conditioners and heat pumps less than 65,000 Btu/h models currently on the market. The full results of this market characterization are found in chapter 2 of the NOPR TSD. For split-system air conditioners, the average SEER value was 13.9, and 120 models (0.1 percent of the total models) have SEER ratings below the ASHRAE Standard 90.1–2013 level of 13.0 SEER. For single-package air conditioners, the average SEER value was 14.3, and 1,450 models (45 percent of the total models) have SEER ratings below the ASHRAE Standard 90.1–2013 level of 14.0 SEER.

For single-package heat pumps, the average SEER value is 14.0. Of the models identified by DOE, 653 models (54 percent of the total models) have SEER ratings below the ASHRAE Standard 90.1–2013 level of 14.0 SEER. The average HSPF value for this equipment class is 7.9. Of the models identified by DOE, 632 models (52 percent of the total models) have HSPF ratings below the ASHRAE Standard 90.1–2013 levels of 8.0. For split-system heat pumps, the average SEER value for this equipment class is 13.7. Of the models identified by DOE, 30,009 models (64 percent of the total models) have SEER ratings below the ASHRAE Standard 90.1–2013 level of 14.0. The average HSPF for this equipment class is 7.9. Of the models identified by DOE, 36,902 models (79 percent of the total models) have HSPF ratings below the ASHRAE Standard 90.1–2013 level of 8.2. For more information on market performance data, see chapter 2 of the NOPR TSD.

B. Engineering Analysis

The engineering analysis establishes the relationship between an increase in energy efficiency and the increase in cost (manufacturer selling price (MSP)) of a piece of equipment DOE is evaluating for potential amended energy conservation standards. This relationship serves as the basis for cost-benefit calculations for individual

[14] AHRI Directory of Certified Product Performance (2013) (Available at: *www.ahridirectory.org*) (Last accessed November 11, 2013).

[15] Air-Conditioning, Heating, and Refrigeration Institute Web site, *About Us* (2013) (Available at: *www.ari.org/site/318/About-Us*) (Last accessed December 18, 2014).

[16] Heating, Air-conditioning & Refrigeration Distributors International Web site, About HARDI (2014) (Available at: *www.hardinet.org/about-hardi-0*) (Last accessed February 10, 2014).

[17] Air Conditioning Contractors of America Web site, About ACCA (2014) (Available at: *www.acca.org/acca*) (Last accessed February 10, 2014).

consumers, manufacturers, and the Nation. The engineering analysis identifies representative baseline equipment, which is the starting point for analyzing possible energy efficiency improvements. For covered ASHRAE equipment, DOE sets the baseline for analysis at the ASHRAE Standard 90.1 efficiency level, because by statute, DOE cannot adopt any level below the revised ASHRAE level. The engineering analysis then identifies higher efficiency levels and the incremental increase in product cost associated with achieving the higher efficiency levels. After identifying the baseline models and cost of achieving increased efficiency, DOE estimates the additional costs to the commercial consumer through an analysis of contractor costs and markups and uses that information in the downstream analyses to examine the costs and benefits associated with increased equipment efficiency.

DOE typically structures its engineering analysis around one of three methodologies: (1) The design-option approach, which calculates the incremental costs of adding specific design options to a baseline model; (2) the efficiency-level approach, which calculates the relative costs of achieving increases in energy efficiency levels without regard to the particular design options used to achieve such increases; and/or (3) the reverse-engineering or cost-assessment approach, which involves a ''bottom-up'' manufacturing cost assessment based on a detailed bill of materials derived from teardowns of the equipment being analyzed. A supplementary method called a catalog teardown uses published manufacturer catalogs and supplementary component data to estimate the major physical differences between a piece of equipment that has been physically disassembled and another piece of similar equipment for which catalog data are available to determine the cost of the latter equipment. Deciding which methodology to use for the engineering analysis depends on the equipment, the design options under study, and any historical data upon which DOE may draw.

1. Approach

For this analysis, DOE used a combination of the efficiency-level and the cost-assessment approach. DOE used the efficiency-level approach to identify incremental improvements in efficiency for each equipment class and the cost-assessment approach to develop a cost for each efficiency level. The efficiency levels that DOE considered in the engineering analysis were representative of three-phase central air conditioners and heat pumps currently produced by manufacturers at the time the engineering analysis was developed. DOE relied on data reported in the AHRI Directory of Certified Product Performance to select representative efficiency levels.

DOE generated a bill of materials (BOM) for each representative product that it disassembled. DOE did this for multiple manufacturers' products that span a range of efficiency levels for the equipment classes that are analyzed in this rulemaking. The BOMs describe the manufacture of the equipment in detail, listing all parts and including all manufacturing steps required to make each part and to assemble the unit. DOE also conducted catalog teardowns to supplement the information obtained directly from physical teardowns. Subsequently, DOE developed a cost model that calculates manufacturer production cost (MPC) for each unit, based on the detailed BOM data. Chapter 3 of the NOPR TSD describes DOE's cost model in greater detail. The calculated costs are plotted as a function of the equipment efficiency levels (based on rated efficiency) to create cost-efficiency curves. DOE notes that the cost at some efficiency levels was interpolated or extrapolated based on the available physical and catalog teardown data.

DOE developed cost-efficiency curves for a representative capacity of three tons, which it decided well represents the range of capacities on the market for commercial three-phase products. Because other capacity levels had similar designs and efficiency levels, cost-efficiency curves were not developed for any other capacities. Instead, DOE was able to utilize the cost-efficiency curve for the representative capacity and apply it to all three-phase products.

DOE based the cost-efficiency relationship for three-phase central air conditioners and heat pumps on reverse engineering conducted for the June 2011 direct final rule (DFR) for single-phase central air conditioners and heat pumps. 76 FR 37408. DOE researched manufacturer literature and noticed that most model numbers between single-phase products and three-phase equipment are interchangeable, with only a single-digit difference in the model number for the supply voltage. Although three-phase equipment contains three-phase compressors instead of single-phase compressors, DOE did not notice any inconsistency in energy efficiency ratings between single-phase products and three-phase equipment. To supplement the 2011 DFR data (29 physical teardowns and 12 catalog teardowns), DOE completed one physical teardown and seven catalog teardowns of three-phase equipment. This approach allowed DOE to provide an estimate of equipment prices at different efficiencies and spanned a range of technologies currently on the market that are used to achieve the increased efficiency levels.

2. Baseline Equipment

DOE selected baseline efficiency levels as reference points for each equipment class, against which it measured changes resulting from potential amended energy conservation standards. DOE defined the baseline efficiency levels as reference points to compare the technology, energy savings, and cost of equipment with higher energy efficiency levels. Typically, units at the baseline efficiency level just meet Federal energy conservation standards and provide basic consumer utility. However, EPCA requires that DOE must adopt either the ASHRAE Standard 90.1–2013 levels or more-stringent levels. Therefore, because the ASHRAE Standard 90.1–2013 levels were the lowest levels that DOE could adopt, DOE used those levels as the reference points against which more-stringent levels were evaluated.

	Split-system AC	Single-package AC	Split-system HP	Single-package HP
SEER				
Baseline—Federal Standard	13.0	13.0	13.0	13.0
Baseline—ASHRAE Standard	13.0	14.0	14.0	14.0
HSPF				
Baseline—Federal Standard			7.7	7.7

	Split-system AC	Single-package AC	Split-system HP	Single-package HP
Baseline—ASHRAE Standard			8.2	8.0

Table V.2 shows the current baseline and ASHRAE efficiency levels for each equipment class of small commercial air-cooled air conditioners and heat pumps <65,000 Btu/h.

TABLE V.2—BASELINE EFFICIENCY LEVELS FOR SMALL COMMERCIAL AIR-COOLED AIR CONDITIONERS (AC) AND HEAT PUMPS (HP) <65,000 Btu/h

	Split-system AC	Single-package AC	Split-system HP	Single-package HP
SEER				
Baseline—Federal Standard	13.0	13.0	13.0	13.0
Baseline—ASHRAE Standard	13.0	14.0	14.0	14.0
HSPF				
Baseline—Federal Standard			7.7	7.7
Baseline—ASHRAE Standard			8.2	8.0

3. Identification of Increased Efficiency Levels for Analysis

DOE analyzed several efficiency levels and obtained incremental cost data for the four equipment classes under consideration. Table V.3 presents the efficiency levels examined for each equipment class. As part of the engineering analyses, DOE considered up to six efficiency levels beyond the baseline for each equipment class. DOE derived the maximum technologically feasible (''max-tech'') level from the market maximum in the AHRI Certified Directory,[18] as of November 2013. The highest available efficiency level for split-system heat pumps was 16.2, compared to 18.05 for single-package heat pumps. DOE has tentatively determined that split-system heat pumps are capable of reaching the same efficiency level as single-package units, because the same technologies to increase efficiency can be employed across both equipment classes. As a result, the analyzed ''max-tech'' level for single-package and split-system heat pumps was 18.05. In the April 2014 commercial heating, air-conditioning, and water-heating equipment NODA, DOE determined the ''max-tech'' level for single-package air conditioners to be 19.15. 79 FR 20114, 20126 (April 11, 2014). DOE also tentatively determined that split-system air conditioners are capable of reaching the same efficiency levels as single-package units. For the engineering analysis, DOE rounded the ''max-tech'' levels to integer values of 18 and 19 for split-system and single-package heat pumps, and split-system and single-package air conditioners, respectively. The impact of this rounding, which results in efficiency levels that are whole-number values of SEER, is minimal.

The efficiency levels for each considered equipment class are presented in Table V.3. For additional details on the efficiency levels selected for analysis, see chapter 3 of the NOPR TSD.

TABLE V.3—EFFICIENCY LEVELS FOR SMALL COMMERCIAL AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

Efficiency level	Split-system AC	Single-package AC	Split-system HP		Single-package HP	
	SEER	SEER	SEER	HSPF	SEER	HSPF
Federal Baseline	13	13	13	7.7	13	7.7
0—ASHRAE Baseline*	14	14	14	8.2	14	8.0
1	15	15	15	8.5	15	8.4
2	16	16	16	8.7	16	8.8
3	17	17	17	9.0	17	8.9
4**	18	18	18	9.2	18	9.1
5***	19	19				

* For consistency across equipment classes, DOE refers to 14 SEER as EL 0, which is only the ASHRAE Baseline for three of the equipment classes, excluding split-system AC.
** Efficiency Level 4 is ''Max-Tech'' for HP equipment classes.
*** Efficiency Level 5 is ''Max-Tech'' for AC equipment classes.

[18] See: *http://www.ahridirectory.org/ahridirectory/pages/home.aspx.*

4. Engineering Analysis Results

The results of the engineering analysis are cost-efficiency curves based on results from the cost models for analyzed units. DOE's calculated MPCs for small commercial air conditioners and heat pumps less than 65,000 Btu/h are shown in Table V.4 through Table V.7, and further details on the calculation of these curves can be found in chapter 3 of the NOPR TSD. DOE used the cost-efficiency curves from the engineering analysis as an input for the life-cycle cost and payback period analyses.

TABLE V.4—MANUFACTURER PRODUCTION COSTS FOR THREE-TON SPLIT-SYSTEM COMMERCIAL AIR-COOLED AIR CONDITIONERS

SEER	MPC [$]
13	855
14	937
15	1,023
16	1,115
17	1,212
18	1,316
19	1,427

TABLE V.5—MANUFACTURER PRODUCTION COSTS FOR THREE-TON SINGLE-PACKAGE COMMERCIAL AIR-COOLED AIR CONDITIONERS

SEER	MPC [$]
13	1,003
14	1,122
15	1,241
16	1,361
17	1,480
18	1,599
19	1,719

TABLE V.6—MANUFACTURER PRODUCTION COSTS FOR THREE-TON SPLIT-SYSTEM COMMERCIAL AIR-COOLED HEAT PUMPS

SEER	HSPF	MPC [$]
13	7.7	1,068
14	8.2	1,154
15	8.5	1,244
16	8.7	1,377
17	9.0	1,486
18	9.2	1,601

TABLE V.7—MANUFACTURER PRODUCTION COSTS FOR THREE-TON SINGLE-PACKAGE COMMERCIAL AIR-COOLED HEAT PUMPS

SEER	HSPF	MPC [$]
13	7.7	1,239

TABLE V.7—MANUFACTURER PRODUCTION COSTS FOR THREE-TON SINGLE-PACKAGE COMMERCIAL AIR-COOLED HEAT PUMPS—Continued

SEER	HSPF	MPC [$]
14	8.0	1,372
15	8.4	1,504
16	8.8	1,637
17	8.9	1,769
18	9.1	1,902

a. Manufacturer Markups

DOE applies a non-production cost multiplier (the manufacturer markup) to the full MPC to account for corporate non-production costs and profit. The resulting manufacturer selling price (MSP) is the price at which the manufacturer can recover all production and non-production costs and earn a profit. To meet new or amended energy conservation standards, manufacturers often introduce design changes to their equipment lines that result in increased manufacturer production costs. Depending on the competitive environment for these particular types of equipment, some or all of the increased production costs may be passed from manufacturers to retailers and eventually to commercial consumers in the form of higher purchase prices. As production costs increase, manufacturers typically incur additional overhead. The MSP should be high enough to recover the full cost of the equipment (*i.e.,* full production and non-production costs) and yield a profit. The manufacturer markup has an important bearing on profitability. A high markup under a standards scenario suggests manufacturers can pass along the increased variable costs and some of the capital and product conversion costs (the one-time expenditures) to the consumer. A low markup suggests that manufacturers will not be able to recover as much of the necessary investment in plants and equipment.

For small commercial air-cooled air-conditioners and heat pumps, DOE used a manufacturer markup of 1.3, as developed for the 2011 direct final rule for single-phase central air conditioners and heat pumps. 76 FR 37408 (June 27, 2011). This markup was calculated using U.S. Security and Exchange Commission (SEC) 10–K reports for publicly-owned heating and cooling companies, as well as feedback from manufacturer interviews. See chapter 3 of the NOPR TSD for more details about the methodology DOE used to determine the manufacturing markup.

b. Shipping Costs

Manufacturers of commercial HVAC products typically pay for freight (shipping) to the first step in the distribution chain. Freight is not a manufacturing cost, but because it is a substantial cost incurred by the manufacturer, DOE accounts for shipping costs separately from other non-production costs that comprise the manufacturer markup. DOE calculated the MSP for small commercial air-cooled air-conditioners and heat pumps by multiplying the MPC at each efficiency level (determined from the cost model) by the manufacturer markup and adding shipping costs for equipment at the given efficiency level. More specifically, DOE calculated shipping costs at each efficiency level based on a typical 53-foot straight-frame trailer with a storage volume of 4,240 cubic feet. DOE examined the sizes of small commercial air-cooled air-conditioners and heat pumps and determined the number of units that would fit in each trailer, based on assumptions about the arrangement of units in the trailer. See chapter 3 of the NOPR TSD for more details about the methodology DOE used to determine the shipping costs.

C. Markups Analysis

The markups analysis develops appropriate markups in the distribution chain to convert the estimates of manufacturer selling price derived in the engineering analysis to commercial consumer prices. (''Commercial consumer'' refers to purchasers of the equipment being regulated.) DOE calculates overall baseline and incremental markups based on the equipment markups at each step in the distribution chain. The incremental markup relates the change in the manufacturer sales price of higher-efficiency models (the incremental cost increase) to the change in the commercial consumer price.

In the 2014 NOPR for Central Unitary Air Conditioners (CUAC), which includes equipment similar to but larger than that in this NOPR, DOE determined that there are three types of distribution channels to describe how the equipment passes from the manufacturer to the commercial consumer. 79 FR 58948, 58975 (Sept. 30, 2014). In the new construction market, the manufacturer sells the equipment to a wholesaler. The wholesaler sells the equipment to a mechanical contractor, who sells it to a general contractor, who in turn sells the equipment to the commercial consumer or end user as part of the building. In the replacement market, the

manufacturer sells to a wholesaler, who sells to a mechanical contractor, who in turn sells the equipment to the commercial consumer or end user. In the third distribution channel, used in both the new construction and replacement markets, the manufacturer sells the equipment directly to the customer through a national account.

In this NOPR, DOE used two of the three distribution channels described above to determine the markups. Given the small cooling capacities of air conditioners and heat pumps less than 65,000 Btu/h, DOE did not use the national accounts distribution chain in the markups analysis. National accounts are composed of large commercial consumers of HVAC equipment that negotiate equipment prices directly with the manufacturers, such as national retail chains. The end market consumers of three-ton central air conditioners and heat pumps are small offices and small retailers and do not fit the profile of large national chains.

In the 2014 CUAC NOPR, based on information that equipment manufacturers provided, commercial consumers were estimated to purchase 50 percent of the covered equipment through small mechanical contractors, 32.5 percent through large mechanical contractors, and the remaining 17.5 percent through national accounts. 79 FR 58948, 58976 (Sept. 30, 2014). For this NOPR, DOE removed the national accounts distribution channel and recalculated the size of the small and large mechanical contractor distribution channels assuming they make up the entire market. Therefore, the small mechanical distribution chain accounts for 61 percent of equipment purchases (*i.e.,* 50 percent divided by the sum of 50 percent and 32.5 percent), and the large mechanical contractor distribution chain represents 39 percent of purchases.

For this NOPR, DOE used the markups from the 2014 CUAC NOPR, for which DOE utilized updated versions of: (1) The Heating, Air Conditioning & Refrigeration Distributors International *2010 Profit Report* to develop wholesaler markups; (2) the Air Conditioning Contractors of America's (ACCA) *2005 Financial Analysis for the HVACR Contracting Industry* to develop mechanical contractor markups; and (3) U.S. Census Bureau economic data for the commercial and institutional building construction industry to develop general contractor markups.[19]

Chapter 5 of the NOPR TSD provides further detail on the estimation of markups.

D. Energy Use Analysis

The energy use analysis provides estimates of the annual energy consumption of small air-cooled air conditioners and heat pumps with cooling capacities less than 65,000 Btu/h at the considered efficiency levels. DOE uses these values in the LCC and PBP analyses and in the NIA.

The cooling unit energy consumption (UEC) by equipment type and efficiency level came from the national impact analysis associated with the 2011 direct final rule (DFR) for residential central air conditioners and heat pumps. (EERE–2011–BT–STD–0011–0011). Specifically, DOE used the UECs for single-phase equipment installed in commercial buildings. The UECs for split system and single package equipment were similar in the 2011 analysis for lower efficiency levels, but at higher efficiency levels, the only UECs available were for split-system equipment. DOE assumed that the similarities at lower levels could be expected to hold at higher efficiency levels; therefore, DOE is using the UECs for split equipment for all equipment classes in this NOPR, including split system and single package. In the April 11, 2014 NODA, DOE requested comment on the use of UECs from an analysis of single-phase products in commercial applications. 79 FR 20114, 20137. In response. Goodman, Lennox, and AHRI commented that single-phase and three-phase products should not differ substantially in energy consumption. (Goodman Global, Inc., No. 18 at p. 2; Lennox International, Inc., No. 15 at p. 6; AHRI, No. 24 at p. 5) Goodman added that for products less than 65,000 Btu/h, industry practice involves creating a single-phase product and then changing the compressor from single-phase to three-phase while leaving the motors for the condenser fan and evaporator blower at single-phase. (Goodman Global, Inc., No. 18 at p. 2) DOE agrees with the commenters and has maintained this approach.

In order to assess variability in the cooling UEC by region and building type, DOE used a Pacific Northwest National Laboratory report[20] that estimated the annual energy usage of space cooling and heating products using a Full Load Equivalent Operating Hour (FLEOH) approach. DOE normalized the provided FLEOHs to the UEC data discussed above to vary the average UEC across region and building type. The building types used in this analysis are small retail establishments and small offices.

In the April 11, 2014 NODA, DOE stated that it also considered analyzing heating UECs for heat pumps. 79 FR 20114, 20126. However, in reviewing the 2011 analysis, DOE found that the heating UECs did not scale proportionally with HSPF for commercial installations. *Id.* Therefore, DOE preliminarily determined that it was not possible to quantify energy savings given the available data. DOE requested comment seeking data and information related to the heating energy use of commercial heat pumps. *Id.* at 20137.

In response, AHRI commented that Pacific Northwest National Laboratory (PNNL) analyzes the benefits of increased efficiency requirements in ASHRAE 90.1–2013, and it increased the heating seasonal performance factor (HSPF) for 3-phase heat pumps less than 65,000 Btu/h. Therefore, PNNL may have information on the energy savings related to ASHRAE's standard. (AHRI, No. 24 at p. 6) Goodman suggests it is logical for there to be a reasonable relationship between the HSPF rating and UEC. (Goodman Global, Inc., No. 18 at p. 2) On the other hand, Lennox pointed out that HSPF is an efficiency metric designed to reflect the performance of a heat pump operating against a residential load profile in which the building balance point is at 65°F. Most commercial buildings have enough internal heat gain that their heating balance points can be at 30°F or below.[21] Therefore, the heat pump will not have a heating demand until the ambient temperature reaches this balance point. Much of the performance contribution for heat pumps to reach a high HSPF comes from its performance in the temperature range where it will never operate in a commercial building. For this reason, there will be little energy savings from increasing HSPF for commercial air-cooled equipment. (Lennox International Inc., No. 15 at p. 8)

DOE notes that ASHRAE increased the HSPF and SEER levels for this equipment to levels that matched DOE's residential requirements, for

[19] U.S. Census Bureau, 2007 Economic Census, Construction Industry Series and Wholesale Trade Subject Series (Available at: *www.census.gov/econ/census/data/historical_data.html).*

[20] See Appendix D of the 2000 Screening Analysis for EPACT-Covered Commercial HVAC and Water-Heating Equipment. (EERE–2006–STD–0098–0015)

[21] In other words, the quantity of people, lighting, and equipment in the commercial building produce so much heat (*i.e.,* internal heat gain) that heating is not required until the temperature is quite low, as mentioned in this case to be 30 °F. In contrast, residential buildings tend to have lower internal heat gain, so heating is required at a higher temperature.

consistency in the market rather than necessarily to achieve energy savings. In light of Goodman and Lennox's comments, DOE has further reviewed the results of the simulations for the 2011 DFR and determined that the heating loads for these small commercial applications are extremely low (less than 500 kwh/year). As a result, DOE has not included any energy savings due to the increase in HSPF for this equipment.

E. Life-Cycle Cost and Payback Period Analysis

The purpose of the LCC and PBP analysis is to analyze the effects of potential amended energy conservation standards on commercial consumers of small commercial air-cooled air conditioners and heat pumps less than 65,000 btu/h by determining how a potential amended standard affects their operating expenses (usually decreased) and their total installed costs (usually increased).

The LCC is the total consumer expense over the life of the equipment, consisting of equipment and installation costs plus operating costs (*i.e.,* expenses for energy use, maintenance, and repair). DOE discounts future operating costs to the time of purchase using commercial consumer discount rates. The PBP is the estimated amount of time (in years) it takes commercial consumers to recover the increased total installed cost (including equipment and installation costs) of a more-efficient type of equipment through lower operating costs. DOE calculates the PBP by dividing the change in total installed cost (normally higher) due to a standard by the change in annual operating cost (normally lower) that results from the potential standard. However, unlike the LCC, DOE only considers the first year's operating expenses in the PBP calculation. Because the PBP does not account for changes in operating expenses over time or the time value of money, it is also referred to as a simple PBP.

For any given efficiency level, DOE measures the PBP and the change in LCC relative to an estimate of the base-case efficiency level. For split-system air conditioners, for which ASHRAE did not increase efficiency levels, the base-case estimate reflects the market in the absence of amended energy conservation standards, including the market for equipment that exceeds the current energy conservation standards. For single-package air conditioners, split-system heat pumps, and single-package heat pumps, the base-case estimate reflects the market in the case where the ASHRAE 90.1–2013 level becomes the Federal minimum, and the LCC calculates the LCC savings likely to result from higher efficiency levels compared with the ASHRAE base-case.

DOE conducted an LCC and PBP analysis for small commercial air-cooled air conditioners and heat pumps less than 65,000 btu/h using a computer spreadsheet model. When combined with Crystal Ball (a commercially-available software program), the LCC and PBP model generates a Monte Carlo simulation to perform the analyses by incorporating uncertainty and variability considerations in certain of the key parameters as discussed below. Inputs to the LCC and PBP analysis are categorized as: (1) Inputs for establishing the total installed cost and (2) inputs for calculating the operating expense. The following sections contain brief discussions of comments on the inputs and key assumptions of DOE's LCC and PBP analysis and explain how DOE took these comments into consideration. They are also described in detail in chapter 6 of the NOPR TSD.

1. Equipment Costs

In the LCC and PBP analysis, the equipment costs faced by purchasers of small air-cooled air conditioning and heat pump equipment are derived from the MSPs estimated in the engineering analysis, the overall markups estimated in the markups analysis, and sales tax.

To develop an equipment price trend for the NOPR, DOE derived an inflation-adjusted index of the producer price index (PPI) for ''unitary air-conditioners, except air source heat pumps'' from 1978 to 2013, which is the PPI series most relevant to small air-cooled air-conditioning equipment. The PPI index for heat pumps covered too short a time period to provide a useful picture of pricing trends, so the air-conditioner time series was used for both air conditioners and heat pumps. DOE expects this to be a reasonably accurate assessment for heat pumps because heat pumps are produced by the same manufacturers as air-conditioners and contain most of the same components. Although the overall PPI index shows a long-term declining trend, data for the last decade have shown a flat-to-slightly-rising trend. Given the uncertainty as to which of the trends will prevail in coming years, DOE chose to apply a constant price trend (at 2013 levels) for the NOPR. See chapter 6 of the NOPR TSD for more information on the price trends.

2. Installation Costs

DOE derived national average installation costs for small air-cooled air conditioning and heat pump equipment from data provided in RS Means 2013.[22] RS Means provides estimates for installation costs for the subject equipment by equipment capacity, as well as cost indices that reflect the variation in installation costs for 656 cities in the United States. The RS Means data identify several cities in all 50 States and the District of Columbia. DOE incorporated location-based cost indices into the analysis to capture variation in installation costs, depending on the location of the consumer.

Based on these data, DOE tentatively concluded that data for 3-ton rooftop air conditioners would be sufficiently representative of the installation costs for air conditioners less than 65,000 btu/h. For heat pumps, DOE used the installation costs for 3-ton air-source heat pumps.

DOE also varied installation cost as a function of equipment weight. Because weight tends to increase with equipment efficiency, installation cost increased with equipment efficiency. The weight of the equipment in each class and efficiency level was determined through the engineering analysis.

3. Unit Energy Consumption

The calculation of annual per-unit energy consumption by each class of the subject small air-cooled air conditioning and heating equipment at each considered efficiency level is based on the energy use analysis as described above in section V.D and in chapter 4 of the NOPR TSD.

4. Electricity Prices and Electricity Price Trends

DOE used average and marginal electricity prices by Census Division based on tariffs from a representative sample of electric utilities. This approach calculates energy expenses based on actual commercial building average and marginal electricity prices that customers are paying.[23] The Commercial Buildings Energy Consumption Survey (CBECS) 1992 and CBECS 1995 surveys provide monthly electricity consumption and demand for a large sample of buildings. DOE used these values to help develop usage patterns associated with various building types. Using these monthly values in conjunction with the tariff data, DOE calculated monthly electricity

[22] RS Means Mechanical Cost Data 2013. *Reed Construction Data, LLC (2012).*

[23] Coughlin, K., C. Bolduc, R. Van Buskirk, G. Rosenquist and J.E. McMahon, ''Tariff-based Analysis of Commercial Building Electricity Prices'' (2008) Lawrence Berkeley National Laboratory: Berkeley, CA. Report No. LBNL–55551.

bills for each building. The average price of electricity is defined as the total electricity bill divided by total electricity consumption. From this average price, the marginal price for electricity consumption was determined by applying a 5-percent decrement to the average CBECS consumption data and recalculating the electricity bill. Using building location and the prices derived from the above method, an average and marginal price were determined for each region of the U.S.

The average electricity price multiplied by the baseline electricity consumption for each equipment class defines the baseline LCC. For each efficiency level, the operating cost savings are calculated by multiplying the electricity consumption savings (relative to the baseline) by the marginal consumption price.

For this NOPR, the tariff-based prices were updated to 2013 using the commercial electricity price index published in the *AEO.* An examination of data published by the Edison Electric Institute [24] indicates that the rate of increase of marginal and average prices is not significantly different, so the same factor was used for both pricing estimates. DOE projected future electricity prices using trends in average commercial electricity price from *AEO 2014.*

For further discussion of electricity prices, see chapter 6 of the NOPR TSD.

5. Maintenance Costs

Maintenance costs are costs to the commercial consumer of ensuring continued operation of the equipment (*e.g.,* checking and maintaining refrigerant charge levels and cleaning heat-exchanger coils). DOE derived annualized maintenance costs for small commercial air-cooled air conditioners and heat pumps from RS Means data.[25] These data provided estimates of person-hours, labor rates, and materials required to maintain commercial air-conditioning and heating equipment. The estimated annualized maintenance cost is $298 for air conditioners rated between 36,000 Btu/h and 288,000 Btu/h and $329 for heat pumps rated between 36,000 Btu/h and 288,000 Btu/h; this capacity range includes the equipment that is the subject of this NOPR. DOE assumed that the maintenance costs do not vary with efficiency level.

6. Repair Costs

Repair costs are costs to the commercial consumer associated with repairing or replacing components that have failed. DOE utilized RS Means [26] to find the repair costs for small commercial air-cooled air conditioners and heat pumps. For air conditioners, DOE used the repair costs for a 3-ton, single-zone rooftop unit. For heat pumps, DOE took the repair costs for 1.5-ton, 5-ton, and 10-ton air-to-air heat pumps and linearly scaled the repair costs to derive a 3-ton repair cost. DOE assumed that the repair would be a one-time event in year 10 of the equipment life. DOE then annualized the present value of the cost over the average equipment life of 19 or 16 years (for air conditioners and heat pumps, respectively) to obtain an annualized equivalent repair cost. This value ranges from $141 to $154 at the baseline level, depending on equipment class. The materials portion of the repair cost was scaled with the percentage increase in manufacturers' production cost by efficiency level. The labor cost was held constant across efficiency levels. This annualized repair cost was then added to the maintenance cost to create an annual ''maintenance and repair cost'' for the lifetime of the equipment. For further discussion of how DOE derived and implemented repair costs, see chapter 6 of the NOPR TSD.

7. Equipment Lifetime

Equipment lifetime is the age at which the subject small air-cooled air conditioners and heat pumps less than 65,000 Btu/h are retired from service. DOE based equipment lifetime on a retirement function in the form of a Weibull probability distribution. DOE used the inputs from the 2011 DFR technical support document for central air conditioners and heat pumps, which represented a mean lifetime of 19.01 years for air conditioners and 16.24 years for heat pumps, and used the same values for units in both residential and commercial applications. (EERE–2011–BT–STD–0011–0012) Given the similarity of such equipment types, DOE believes the lifetime for single-phase equipment may be a reasonable approximation of the lifetime for similar three-phase equipment.

8. Discount Rate

The discount rate is the rate at which future expenditures are discounted to estimate their present value. The cost of capital commonly is used to estimate the present value of cash flows to be derived from a typical company project or investment. Most companies use both debt and equity capital to fund investments, so the cost of capital is the weighted-average cost to the firm of equity and debt financing. DOE uses the capital asset pricing model (CAPM) to calculate the equity capital component, and financial data sources to calculate the cost of debt financing.

DOE derived the discount rates by estimating the weighted-average cost of capital (WACC) of companies that purchase air-cooled air-conditioning equipment. More details regarding DOE's estimates of commercial consumer discount rates are provided in chapter 6 of the NOPR TSD.

9. Base-Case Market Efficiency Distribution

For the LCC analysis, DOE analyzes the considered efficiency levels relative to a base case (*i.e.,* the case without amended energy efficiency standards, in this case the current Federal standards for split-system air conditioners, and the default scenario in which DOE is required to adopt the efficiency levels in ASHRAE 90.1–2013 for the three equipment classes triggered by ASHRAE). This analysis requires an estimate of the distribution of equipment efficiencies in the base case (*i.e.,* what consumers would have purchased in the compliance year in the absence of amended standards for split-system air conditioners, or amended standards more stringent than those in ASHRAE 90.1–2013 for the three triggered equipment classes). DOE refers to this distribution of equipment energy efficiencies as the base-case efficiency distribution. For more information on the development of the base-case distribution, see section V.F.3 and chapter 6 of the NOPR TSD.

10. Compliance Date

DOE calculated the LCC and PBP for all commercial consumers as if each were to purchase new equipment in the year that compliance with amended standards is required. Generally, covered equipment to which a new or amended energy conservation standard applies must comply with the standard if such equipment is manufactured or imported on or after a specified date. In this NOPR, DOE is evaluating whether more-stringent efficiency levels than those in ASHRAE Standard 90.1–2013 would be technologically feasible, economically justified, and result in a significant additional amount of energy savings. If DOE were to propose a rule prescribing energy conservation standards at the efficiency levels contained in ASHRAE Standard 90.1–2013 for the three triggered equipment

[24] Edison Electric Institute, EEI Typical Bills and Average Rates Report (bi-annual, 2007–2012).

[25] RS Means Facilities Maintenance & Repair Cost Data 2013. *Reed Construction Data, LLC. (2012).*

[26] *Id.*

classes, EPCA states that compliance with any such standards shall be required on or after a date which is two or three years (depending on equipment size) after the compliance date of the applicable minimum energy efficiency requirement in the amended ASHRAE/IES standard. (42 U.S.C. 6313(a)(6)(D)) Given the equipment size at issue here, DOE has applied the two-year implementation period to determine the compliance date of any energy conservation standard equal to the efficiency levels specified by ASHRAE Standard 90.1–2013 proposed by this rulemaking. Thus, if DOE decides to adopt the efficiency levels in ASHRAE Standard 90.1–2013, the compliance date of the rulemaking would be dependent upon the date specified in ASHRAE Standard 90.1–2013 or its publication date, if none is specified. In this case, the rule would apply to small commercial air-cooled air conditioners and heat pumps less than 65,000 Btu/h manufactured on or after January 1, 2017, which is two years after the date specified in ASHRAE Standard 90.1–2013.

If DOE were to propose a rule prescribing energy conservation standards more stringent than the efficiency levels contained in ASHRAE Standard 90.1–2013, EPCA states that compliance with any such standards is required for products manufactured on or after a date which is four years after the date the final rule is published in the **Federal Register**. (42 U.S.C. 6313(a)(6)(D)) DOE has applied this 4-year implementation period to determine the compliance date for any energy conservation standard more stringent than the efficiency levels specified by ASHRAE Standard 90.1–2013 that might be prescribed at the final rule stage for the three equipment classes triggered by ASHRAE. Thus, for equipment for which DOE might adopt a level more stringent than the ASHRAE efficiency levels, the rule would apply to products manufactured on or after a date four years from the date of publication of the final rule, which the statute requires to be completed by April 9, 2016 (thereby resulting in a compliance date no later than April 9, 2020).[27]

For split system air-cooled air conditioners, which DOE evaluated under the 6 year look back, DOE applied a different compliance date. Specifically, EPCA states that amended standards prescribed under this subsection shall apply to products manufactured after a date that is the later of: (I) the date that is 3 years after publication of the final rule establishing a new standard; or (II) the date that is 6 years after the effective date of the current standard for a covered product. (42 U.S.C. 6313(a)(6)(C)(iv)) Because DOE must publish a final rule by April 9, 2016, in the case that it adopts standards higher than those in ASHRAE Standard 90.1 for the other three equipment classes, DOE projected that the date under clause (I) would be April 2019, which is later than the date under clause (II). For purposes of its analysis, DOE used 2019 as the first year of compliance with amended standards.

Economic justification is not required for DOE to adopt the efficiency levels in ASHRAE 90.1–2013, as DOE is statutorily required to, at a minimum, adopt those levels. Therefore, DOE did not perform an LCC analysis on the ASHRAE Standard 90.1–2013 levels, and for purposes of the LCC analysis, DOE used 2020 as the first year of compliance with amended standards.

11. Payback Period Inputs

The payback period is the amount of time it takes the commercial consumer to recover the additional installed cost of more-efficient equipment, compared to baseline equipment, through energy cost savings. Payback periods are expressed in years. Payback periods that exceed the life of the equipment mean that the increased total installed cost is not recovered in reduced operating expenses.

Similar to the LCC, the inputs to the PBP calculation are the total installed cost of the equipment to the commercial consumer for each efficiency level and the average annual operating expenditures for each efficiency level for each building type and Census Division, weighted by the probability of shipment to each market. The PBP calculation uses the same inputs as the LCC analysis, except that discount rates are not needed. Because the simple PBP does not take into account changes in operating expenses over time or the time value of money, DOE considered only the first year's operating expenses to calculate the PBP, unlike the LCC, which is calculated over the lifetime of the equipment. Chapter 6 of the NOPR TSD provides additional detail about the PBP.

F. National Impact Analysis—National Energy Savings and Net Present Value Analysis

The national impact analysis (NIA) evaluates the effects of a considered energy conservation standard from a national perspective rather than from the consumer perspective represented by the LCC. This analysis assesses the net present value (NPV) (future amounts discounted to the present) and the national energy savings (NES) of total commercial consumer costs and savings, which are expected to result from amended standards at specific efficiency levels. For each efficiency level analyzed, DOE calculated the NPV and NES for adopting more-stringent standards than the efficiency levels specified in ASHRAE Standard 90.1–2013.

The NES refers to cumulative energy savings from 2017 through 2046 for the three equipment classes triggered by ASHRAE; however when evaluating more-stringent standards, energy savings do not begin accruing until the later compliance date of 2020. DOE calculated new energy savings in each year relative to a base case, defined as DOE adoption of the efficiency levels specified by ASHRAE Standard 90.1–2013. DOE also calculated energy savings from adopting efficiency levels specified by ASHRAE Standard 90.1–2013 compared to the EPCA base case (*i.e.,* the current Federal standards).

For split-system air conditioners, the NES refers to cumulative energy savings from 2019 through 2048 for all standards cases. DOE calculated new energy savings in each year relative to a base case, defined as the current Federal standards, which are equivalent to the efficiency levels specified by ASHRAE Standard 90.1–2013.

The NPV refers to cumulative monetary savings. DOE calculated net monetary savings in each year relative to the base case (ASHRAE Standard 90.1–2013) as the difference between total operating cost savings and increases in total installed cost. Cumulative savings are the sum of the annual NPV over the specified period. DOE accounted for operating cost savings until past 2100, when the equipment installed in the 30th year after the compliance date of the amended standards should be retired.

1. Approach

The NES and NPV are a function of the total number of units in use and their efficiencies. Both the NES and NPV depend on annual shipments and equipment lifetime. Both calculations start by using the shipments estimate

[27] Since ASHRAE published ASHRAE Standard 90.1–2013 on October 9, 2013, EPCA requires that DOE publish a final rule adopting more-stringent standards than those in ASHRAE Standard 90.1–2013, if warranted, within 30 months of ASHRAE action (*i.e.,* by April 2016). Thus, four years from April 2016 would be April 2020, which would be the anticipated compliance date for DOE adoption of more-stringent standards.

and the quantity of units in service derived from the shipments model.

With regard to estimating the NES, because more-efficient air conditioners and heat pumps are expected to gradually replace less-efficient ones, the energy per unit of capacity used by the air conditioners and heat pumps in service gradually decreases in the standards case relative to the base case. DOE calculated the NES by subtracting energy use under a standards-case scenario from energy use in a base-case scenario.

Unit energy savings for each equipment class are taken from the LCC spreadsheet for each efficiency level and weighted based on market efficiency distributions. To estimate the total energy savings for each efficiency level, DOE first calculated the national site energy consumption (*i.e.,* the energy directly consumed by the units of equipment in operation) for each class of air conditioner and heat pumps for each year of the analysis period. The NES and NPV analysis periods begin with the earliest expected compliance date of amended Federal energy conservation standards (*i.e.,* 2017 for the equipment classes triggered by ASHRAE, assuming DOE adoption of the baseline ASHRAE Standard 90.1–2013 efficiency levels, and 2019 for split-system air conditioners, 3 years after DOE would likely issue a final rule requiring standards more stringent than ASHRAE). For the analysis of DOE's potential adoption of more-stringent efficiency levels for the equipment classes triggered by ASHRAE, the earliest compliance date would be 2020, four years after DOE would likely issue a final rule requiring such standards. Second, DOE determined the annual site energy savings, consisting of the difference in site energy consumption between the base case and the standards case for each class of small commercial air conditioner and heat pump less than 65,000 Btu/h. Third, DOE converted the annual site energy savings into the annual primary and FFC energy savings using annual conversion factors derived from the *AEO 2014* version of the Energy Information Administration's (EIA) National Energy Modeling System (NEMS). Finally, DOE summed the annual primary and FFC energy savings from 2017 to 2046 (or 2019 to 2048) to calculate the total NES for that period. DOE performed these calculations for each efficiency level considered for small commercial air conditioners and heat pumps in this rulemaking.

DOE considered whether a rebound effect is applicable in its NES analysis. A rebound effect occurs when an increase in equipment efficiency leads to an increased demand for its service. The NEMS model assumes a certain elasticity factor to account for an increased demand for service due to the increase in cooling (or heating) efficiency.[28] EIA refers to this as an efficiency rebound. For the small commercial air conditioning and heating equipment market, there are two ways that a rebound effect could occur: (1) Increased use of the air conditioning equipment within the commercial buildings in which they are installed; and (2) additional instances of air conditioning of building spaces that were not being cooled before.

DOE does not expect either of these instances to occur because the annual energy use for this equipment is very low; therefore, the energy cost savings from more-efficient equipment would likely not be high enough to induce a commercial consumer to increase the use of the equipment, either in a previously-cooled space or another previously-uncooled space. Therefore, DOE did not assume a rebound effect in the present NOPR analysis. DOE seeks input from interested parties on whether there will be a rebound effect for improvements in the efficiency of small commercial air conditioners and heat pumps. If interested parties believe a rebound effect would occur, DOE is interested in receiving data quantifying the effects, as well as input regarding how should DOE quantify this in its analysis. This is identified as Issue 3 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

To estimate NPV, DOE calculated the net impact as the difference between net operating cost savings (including electricity cost savings and increased repair costs) and increases in total installed costs (including customer prices). DOE calculated the NPV of each considered standard level over the life of the equipment using the following three steps. First, DOE determined the difference between the equipment costs under the standard-level case and the base case in order to obtain the net equipment cost increase resulting from the higher standard level. As noted in section V.E.1, DOE used a constant price assumption as the default price forecast. Second, DOE determined the difference between the base-case operating costs and the standard-level operating costs in order to obtain the net operating cost savings from each higher efficiency level. Third, DOE determined the difference between the net operating cost savings and the net equipment cost increase in order to obtain the net savings (or expense) for each year. DOE then discounted the annual net savings (or expenses) to 2014 for air conditioners and heat pumps bought on or after 2017 (or 2019) and summed the discounted values to provide the NPV of an efficiency level. An NPV greater than zero shows net savings (*i.e.,* the efficiency level would reduce commercial consumer expenditures relative to the base case in present value terms). An NPV that is less than zero indicates that the efficiency level would result in a net increase in commercial consumer expenditures in present value terms.

To make the analysis more transparent to all interested parties, DOE used a commercially-available spreadsheet tool to calculate the energy savings and the national economic costs and savings from potential amended standards. Interested parties can review DOE's analyses by changing various input quantities within the spreadsheet.

Unlike the LCC analysis, the NES spreadsheet does not use distributions for inputs or outputs, but relies on national average first costs and energy costs developed from the LCC spreadsheet. DOE used the NES spreadsheet to perform calculations of energy savings and NPV using the annual energy consumption and total installed cost data from the LCC analysis. DOE projected the energy savings, energy cost savings, equipment costs, and NPV of benefits for equipment sold in each small commercial air-cooled air conditioner and heat pump class from 2017 through 2046 (or 2019 through 2048). For the three equipment classes triggered by ASHRAE, for efficiency levels more stringent than those in ASHRAE 90.1–2013, energy savings and costs do not begin accruing until 2020, the estimated first year of compliance. The projections provided annual and cumulative values for all four output parameters described previously.

2. Shipments Analysis

Equipment shipments are an important element in the estimate of the future impact of a potential energy conservation standard. DOE developed shipment projections for small commercial air-cooled air conditioners and heat pumps less than 65,000 Btu/h and, in turn, calculated equipment stock over the course of the analysis period by assuming a Weibull distribution with an average 19-year equipment life for air conditioners and a 16-year life for heat pumps. (See section V.E.7 for more information on lifetime.) DOE used the shipments projection and the equipment

[28] An overview of the NEMS model and documentation is found at *http://www.eia.doe.gov/oiaf/aeo/overview/index.html.*

stock to determine the NES. The shipments portion of the spreadsheet model projects small commercial air-cooled air conditioner and heat pump shipments through 2046.

In the April 11, 2014 NODA, DOE relied on 1999 shipment estimates along with trends from the U.S. Census to estimate shipments for this equipment. 79 FR 20114, 20130. Table V.8 shows the 1999 shipments estimates from the 2000 Screening Analysis for EPACT-Covered Commercial HVAC and Water-Heating Equipment (EERE–2006–STD–0098–0015). While the U.S. Census provides shipments data for air-cooled equipment less than 65,000 Btu/h, it does not disaggregate the shipments into single-phase and three-phase. Therefore, DOE used the Census data from 1999 to 2010 [29] as a trend from which to extrapolate DOE's 1999 estimated shipments data (which is divided by equipment class) for three-phase equipment for the time period from 2000 to 2010. DOE then used the estimated shipments from 1999 to 2010 to establish a trend from which to project shipments beyond 2010. For heat pumps, DOE used a linear trend, which is slightly decreasing for single-package units and increasing for split systems. However, for single-package air conditioners, the trend was precipitously declining. As a result, for single-package air conditioners for the years after 2010, DOE used the average value from 1999 to 2010.

TABLE V.8—DOE ESTIMATED SHIPMENTS OF SMALL THREE-PHASE COMMERCIAL AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

Equipment class	1999
Three-Phase Air-Cooled Split-System Air Conditioners <65,000 Btu/h	91,598
Three-Phase Air-Cooled Single-Package Air Conditioners <65,000 Btu/h	213,728
Three-Phase Air-Cooled Split-System Heat Pumps <65,000 Btu/h	11,903
Three-Phase Air-Cooled Single-Package Heat Pumps <65,000 Btu/h	27,773

[29] U.S. Census Bureau, Current Industrial Reports for Refrigeration, Air Conditioning, and Warm Air Heating Equipment, MA333M. Note that the current industrial reports were discontinued in 2010, so more recent data are not available. (Available at: *http://www.census.gov/manufacturing/cir/historical_data/ma333m/index.html*).

DOE received several comments on the NODA in response to these shipments estimates. Goodman found it illogical for DOE to base the initial value of shipments on data that was estimated a decade and a half ago. (Goodman Global, Inc., No. 18 at p. 3) The initial values, Goodman stated, should come from aggregated data provided by an industry trade association such as AHRI. (*Id.*) Goodman, AHRI, and Lennox also argued that by averaging shipments over 1999 to 2010, DOE did not account for the recent decline in shipments and, therefore, was overstating market volumes and potential energy savings. (AHRI, No. 24 at p. 8; Goodman, No. 18 at p. 3; Lennox International, No. 15 at p. 7) AHRI also asserted that the analysis did not support either the assumption that current shipments of packaged three-phase heat pumps less than 65,000 Btu/h are at 1999 levels and will decrease only slowly during the next 35 years or the assumption that current shipments of three-phase split-system heat pumps less than 65,000 Btu/h are nearly double those of 1999 and will more than double again in the next 35 years. (AHRI, No. 24 at p. 8).

In response to these comments, DOE reviewed its shipments analysis. AHRI did not provide any more recent data, so DOE continued to rely on the 1999 estimates for the initial value. However, DOE did revise its shipment projections for the years beyond 2010. Because the Census data end in 2010, DOE cannot use that data to determine whether shipments continue to decline past 2010. Therefore, DOE reviewed AHRI's monthly shipments data for the broader category of central air conditioners and heat pumps to determine more recent trends.[30] DOE found that the average annual growth rate from 2005 to 2010 was −12 percent for air conditioners and −4 percent for heat pumps. However, the average annual growth rate from 2010 to 2014 was 7 percent for air conditioners and 8 percent for heat pumps. These data indicate that the decline in shipments through 2010 has stopped and has in fact begun to reverse. Therefore, DOE used the AHRI-reported growth rates from 2010 to 2011 (10 percent for air conditioners and 1 percent for heat pumps) to scale its projected 2010 shipments to 2011, at which time it could begin projecting shipments using *Annual Energy Outlook* (*AEO*) *2014* forecasts (2011 through 2040) for commercial floor space. DOE assumed that shipments of small commercial air-cooled air conditioners and heat pumps would be related to the growth of commercial floor space. DOE used this projection, with an average annual growth rate of 1 percent, to project shipments for each of the four equipment classes through 2040. For years beyond 2040, DOE also applied an average annual growth rate of 1 percent.

Table V.9 shows the projected shipments for the different equipment classes of small commercial air-cooled air conditioners and heat pumps less than 65,000 Btu/h for selected years from 2017 to 2046, as well as the cumulative shipments. As equipment purchase price and repair costs increase with efficiency, DOE recognizes that higher first costs and repair costs can result in a drop in shipments. However, DOE had no basis for estimating the elasticity of shipments for small commercial air-cooled air conditioners and heat pumps less than 65,000 Btu/h as a function of first costs, repair costs, or operating costs. In addition, because air-cooled air conditioners are likely the lowest-cost option for air conditioning small office and retail applications, DOE has tentatively concluded that it is unlikely that shipments would change as a result of higher first costs and repair costs. Therefore, DOE presumed that the shipments projection would not change with higher standard levels. DOE seeks input on this assumption. This is identified as Issue 4 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR. Chapter 7 of the NOPR TSD provides additional details on the shipments forecasts.

[30] AHRI, *HVACR & Water Heating Industry Statistical Profile* (2012) (Available at: *http://www.ari.org/site/883/Resources/Statistics/AHRI-Industry-Statistical-Profile*). See also AHRI Monthly Shipments: *http://www.ari.org/site/498/Resources/Statistics/Monthly-Shipments*; especially December 2013 release: *http://www.ari.org/App_Content/ahri/files/Statistics/Monthly%20Shipments/2013/December2013.pdf*; May 2014 release: *http://www.ari.org/App_Content/ahri/files/Statistics/Monthly%20Shipments/2014/May2014.pdf.*

TABLE V.9—SHIPMENTS PROJECTION FOR SMALL COMMERCIAL AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

Equipment	Units shipped by year and equipment class							
	2017	2020	2025	2030	2035	2040	2046	Cumulative shipments (2017–2046) *
Three-Phase Air-Cooled Split-System Air Conditioners <65,000 Btu/h	80,210	83,175	87,651	91,610	96,170	101,593	107,802	2,806,115
Three-Phase Air-Cooled Single-Package Air Conditioners <65,000 Btu/h	122,271	126,790	133,613	139,649	146,600	154,867	164,332	4,277,584
Three-Phase Air-Cooled Split-System Heat Pumps <65,000 Btu/h	19,634	20,360	21,455	22,424	23,541	24,868	26,388	686,883
Three-Phase Air-Cooled Single-Package Heat Pumps <65,000 Btu/h	25,157	26,086	27,490	28,732	30,162	31,863	33,810	880,091
Total	247,272	256,411	270,210	282,415	296,473	313,191	332,333	8,650,673

* Note that the analysis period for split-system air conditioners is 2019–2048, but for comparison purposes, the same time period for cumulative shipments is shown for each equipment class.

3. Base-Case and Standards-Case Forecasted Distribution of Efficiencies

In the April 11, 2014 NODA, DOE presented base-case efficiency distributions based on model availability in the AHRI certified directory. 79 FR 20114, 20132. DOE bundled the efficiency levels into ''efficiency ranges'' and determined the percentage of models within each range. DOE applied the percentages of models within each efficiency range to the total unit shipments for a given equipment class to estimate the distribution of shipments within the base case. In response, AHRI commented that DOE's use of a market-weighted unit energy consumption (UEC) based on the distribution of efficiencies of available models was flawed. (AHRI, No. 24 at p. 7) AHRI stated that the majority of shipments involve models at or near the minimum efficiency standard level, with volume of shipments decreasing as efficiency increases. Although there may be no information on the exact percentages, AHRI considered this to be the general pattern. (*Id.*) Goodman Global also disagreed that roughly half or more of commercial HVAC products less than 65,000 Btu/h shipped today are above the minimum efficiency level; Goodman estimated roughly three-quarters of such models are at base efficiency today. (Goodman Global, Inc. No 18 at p. 3) Neither AHRI nor Goodman provided any data to support their positions or to allow DOE to better estimate the base-case efficiency distribution. Therefore, DOE has retained the initial distribution used in the NODA.

For this NOPR, DOE has estimated a base-case efficiency trend of an increase of approximately 1 SEER every 35 years, based on the EER trend from 2012 to 2035 found in the Commercial Unitary Air Conditioner Advance Notice of Proposed Rulemaking (ANOPR).[31] DOE used this same trend in the standards-case scenarios. DOE requests comment on the estimated efficiency trend. This is identified as Issue 5 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

As in the April 11, 2014 NODA, for each efficiency level analyzed, DOE used a ''roll-up'' scenario to establish the market shares by efficiency level for the year that compliance would be required with amended standards (*i.e.,* 2017 for adoption of efficiency levels in ASHRAE Standard 90.1–2013 or 2020 if DOE adopts more-stringent efficiency levels than those in ASHRAE Standard 90.1–2013). 79 FR 20114, 20132. DOE collected information that suggests the efficiencies of equipment in the base case that did not meet the standard level under consideration would roll up to meet the standard level. This information also suggests that equipment efficiencies in the base case that were above the standard level under consideration would not be affected. In response to the April 2014 NODA, AHRI and Goodman agreed that the roll-up scenario was a reasonable assumption. (AHRI, No. 24 at p. 8; Goodman Global, Inc., No. 18 at p. 3) Table V.10 presents the estimated base-case efficiency market shares for each small commercial air-cooled air conditioner and heat pump equipment class.

TABLE V.10—BASE-CASE EFFICIENCY MARKET SHARES FOR SMALL COMMERCIAL AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

Three-phase air-cooled split-system air conditioners <65,000 Btu/h (2019)		Three-phase air-cooled single-package air conditioners <65,000 Btu/h (2020)		Three-phase air-cooled split-system heat pumps <65,000 Btu/h (2020)		Three-phase air-cooled single-package heat pumps <65,000 Btu/h (2020)	
SEER	Market share (%)	SEER	Market share (%)	SEER	Market share (%)	SEER	Market share (%)
13	26	13	0	13	0	13	0
14	50	14	52	14	80	14	69

[31] See DOE's technical support document underlying DOE's July 29, 2004 ANOPR. 69 FR 45460 (Available at: *http://www.regulations.gov/#!documentDetail;D=EERE-2006-STD-0103-0078*). DOE assumed that the EER trend would reasonably represent a SEER trend.

TABLE V.10—BASE-CASE EFFICIENCY MARKET SHARES FOR SMALL COMMERCIAL AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h—Continued

Three-phase air-cooled split-system air conditioners <65,000 Btu/h (2019)		Three-phase air-cooled single-package air conditioners <65,000 Btu/h (2020)		Three-phase air-cooled split-system heat pumps <65,000 Btu/h (2020)		Three-phase air-cooled single-package heat pumps <65,000 Btu/h (2020)	
SEER	Market share (%)	SEER	Market share (%)	SEER	Market share (%)	SEER	Market share (%)
15	22	15	30	15	19	15	21
16	2	16	7	16	1	16	9
17	0	17	4	17	0	17	1
18	0	18	7	18	0	18	1
19	0	19	0				

Note: The 0% market share at 13.0 SEER for three equipment classes is accounting for the default adoption of ASHRAE Standard 90.1–2013 levels in 2017.

4. National Energy Savings and Net Present Value

The stock of small commercial air-cooled air conditioner and heat pump equipment less than 65,000 Btu/h is the total number of units in each equipment class purchased or shipped from previous years that have survived until a given point. The NES spreadsheet,[32] through use of the shipments model, keeps track of the total number of units shipped each year. For purposes of the NES and NPV analyses, DOE assumes that shipments of air conditioner and heat pump units survive for an average of 19 years and 16 years, respectively, following a Weibull distribution, at the end of which time they are removed from service.

The national annual energy consumption is the product of the annual unit energy consumption and the number of units of each vintage in the stock, summed over all vintages. This approach accounts for differences in unit energy consumption from year to year. In determining national annual energy consumption, DOE estimated energy consumption and savings based on site energy and converted the electricity consumption and savings to primary energy using annual conversion factors derived from the *AEO 2014* version of NEMS. Cumulative energy savings are the sum of the NES for each year over the timeframe of the analysis.

In response to the recommendations of a committee on ''Point-of-Use and Full-Fuel-Cycle Measurement Approaches to Energy Efficiency Standards'' appointed by the National Academy of Sciences, DOE announced its intention to use FFC measures of energy use and greenhouse gas and other emissions in the national impact analyses and emissions analyses included in future energy conservation standards rulemakings. 76 FR 51281 (Aug. 18, 2011). After evaluating the approaches discussed in the August 18, 2011 notice, DOE published a statement of amended policy in the **Federal Register** in which DOE explained its determination that NEMS is the most appropriate tool for its FFC analysis and its intention to use NEMS for that purpose. 77 FR 49701 (Aug. 17, 2012). The approach used for this NOPR is described in Appendix 8–A of the NOPR TSD.

In accordance with the OMB's guidelines on regulatory analysis, DOE calculated NPV using both a 7-percent and a 3-percent real discount rate. The 7-percent rate is an estimate of the average before-tax rate of return on private capital in the U.S. economy. DOE used this discount rate to approximate the opportunity cost of capital in the private sector, because recent OMB analysis has found the average rate of return on capital to be near this rate. DOE used the 3-percent rate to capture the potential effects of standards on private consumption (*e.g.,* through higher prices for products and reduced purchases of energy). This rate represents the rate at which society discounts future consumption flows to their present value. This rate can be approximated by the real rate of return on long-term government debt (*i.e.,* yield on United States Treasury notes minus annual rate of change in the Consumer Price Index), which has averaged about 3 percent on a pre-tax basis for the past 30 years.

Table V.11 summarizes the inputs to the NES spreadsheet model along with a brief description of the data sources. The results of DOE's NES and NPV analysis are summarized in section VIII.B.1.b and described in detail in chapter 8 of the NOPR TSD.

TABLE V.11—SUMMARY OF SMALL COMMERCIAL AIR-COOLED AIR CONDITIONER AND HEAT PUMPS <65,000 Btu/h NES AND NPV MODEL INPUTS

Inputs	Description
Shipments	Annual shipments based on U.S. Census, AHRI monthly shipment reports, and *AEO2014* forecasts of commercial floor space. (See chapter 7 of the NOPR TSD.)
Compliance Date of Standard	2020 for adoption of a more-stringent efficiency level than those specified by ASHRAE Standard 90.1–2013 for the three equipment classes triggered by ASHRAE. 2017 for adoption of the efficiency levels specified by ASHRAE Standard 90.1–2013. 2019 for split-system air conditioners.
Base-Case Efficiencies	Distribution of base-case shipments by efficiency level, with efficiency trend of an increase of 1 EER every 35 years.

[32] The NES spreadsheet can be found in the docket for the ASHRAE rulemaking at: *www.regulations.gov/#!docketDetail;D=EERE-2014-BT-STD-0015.*

TABLE V.11—SUMMARY OF SMALL COMMERCIAL AIR-COOLED AIR CONDITIONER AND HEAT PUMPS <65,000 Btu/h NES AND NPV MODEL INPUTS—Continued

Inputs	Description
Standards-Case Efficiencies	Distribution of shipments by efficiency level for each standards case. In compliance year, units below the standard level ''roll-up'' to meet the standard. Efficiency trend of an increase of 1 EER every 35 years.
Annual Energy Use per Unit	Annual national weighted-average values are a function of efficiency level. (See chapter 4 of the NOPR TSD.)
Total Installed Cost per Unit	Annual weighted-average values are a function of efficiency level. (See chapter 5 of the NOPR TSD.)
Annualized Maintenance and Repair Costs per Unit.	Annual weighted-average values are a function of efficiency level. (See chapter 5 of the NOPR TSD.)
Escalation of Fuel Prices	*AEO2014* forecasts (to 2040) and extrapolation for beyond 2040. (See chapter 8 of the NOPR TSD.)
Site to Primary and FFC Conversion	Based on *AEO2014* forecasts (to 2040) and extrapolation for beyond 2040. (See chapter 8 of the NOPR TSD.)
Discount Rate	3 percent and 7 percent real.
Present Year	Future costs are discounted to 2014.

VI. Methodology for Water-Source Heat Pumps

This section addresses the analyses DOE has performed for this rulemaking with respect to water-source heat pumps. A separate subsection addresses each analysis. In overview, DOE used a spreadsheet to calculate the LCC and PBPs of potential energy conservation standards. DOE used another spreadsheet to provide shipments projections and then calculate national energy savings and net present value impacts of potential amended energy conservation standards.

A. Market Assessment

To begin its review of the ASHRAE Standard 90.1–2013 efficiency levels, DOE developed information that provides an overall picture of the market for the equipment concerned, including the purpose of the equipment, the industry structure, and market characteristics. This activity included both quantitative and qualitative assessments based primarily on publicly-available information. The subjects addressed in the market assessment for this rulemaking include equipment classes, manufacturers, quantities, and types of equipment sold and offered for sale. The key findings of DOE's market assessment are summarized subsequently. For additional detail, see chapter 2 of the NOPR TSD.

1. Equipment Classes

EPCA and ASHRAE Standard 90.1–2013 both divide water-source heat pumps into three categories based on the following cooling capacity ranges: (1) <17,000 Btu/h; (2) ≥17,000 and <65,000 Btu/h; and (3) ≥65,000 and <135,000 Btu/h. As noted previously, ASHRAE 90.1–2013 revised the nomenclature for these equipment classes to refer to ''water-to-air, water-loop.'' In this document, DOE is proposing to revise the nomenclature for these equipment classes (but not the broader category) to match that used by ASHRAE.

2. Review of Current Market

In order to obtain the information needed for the market assessment for this rulemaking, DOE consulted a variety of sources, including manufacturer literature, manufacturer Web sites, and the AHRI certified directory.[33] The information DOE gathered serves as resource material throughout the rulemaking. The sections that follow provide an overview of the market assessment, and chapter 2 of the NOPR TSD provides additional detail on the market assessment, including citations to relevant sources.

a. Trade Association Information

DOE identified the same trade groups relevant to water-source heat pumps as to those listed in section V.A.2.a for small air-cooled air conditioners and heat pumps, namely AHRI, HARDI, and ACCA. DOE used data available from AHRI in its analysis, as described in the next section.

b. Manufacturer Information

DOE reviewed data for water-source (water-to-air, water-loop) heat pumps currently on the market by examining the AHRI Directory of Certified Product Performance. DOE identified 18 parent companies (comprising 21 manufacturers) of water-source (water-to-air, water-loop) heat pumps, which are listed in chapter 2 of the NOPR TSD. Of these manufacturers, seven were identified as small businesses based upon number of employees and the employee thresholds set by the Small Business Administration. More details on this analysis can be found below in section IX.B.

c. Market Data

DOE reviewed the AHRI database to characterize the efficiency and performance of water-source (water-to-air, water-loop) heat pump models currently on the market. The full results of this market characterization are found in chapter 2 of the NOPR TSD. For water-source heat pumps less than 17,000 Btu/h, the average EER was 13.8, and the average coefficient of performance (COP) was 4.7. Of the models identified by DOE, 34 (six percent of the total models) have EERs rated below the ASHRAE Standard 90.1–2013 levels, and 30 (five percent of the total models) have COPs rated below the ASHRAE Standard 90.1–2013 levels. For water-source heat pumps greater than or equal to 17,000 Btu/h and less than 65,000 Btu/h, the average EER was 15.2, and the average COP was 4.9. Of the models identified by DOE, 72 (two percent of the total models) have EERs rated below the ASHRAE Standard 90.1–2013 levels, and 133 (four percent of the total models) have COPs rated below the ASHRAE Standard 90.1–2013 levels. For water-source heat pumps greater than or equal to 65,000 Btu/h and less than 135,000 Btu/h, the average EER was 14.7, and the average COP was 4.8. Of the models identified by DOE, five (one percent of the total models) have EERs rated below the ASHRAE Standard 90.1–2013 levels, and two (0.5 percent of the total models) have COPs rated below the ASHRAE Standard 90.1–2013 levels.

[33] AHRI Directory of Certified Product Performance (2013) (Available at: *www.ahridirectory.org*) (Last accessed November 11, 2013).

B. Engineering Analysis

The engineering analysis establishes the relationship between an increase in energy efficiency and the increase in cost (manufacturer selling price (MSP)) of a piece of equipment DOE is evaluating for potential amended energy conservation standards. This relationship serves as the basis for cost-benefit calculations for individual consumers, manufacturers, and the Nation. The engineering analysis identifies representative baseline equipment, which is the starting point for analyzing possible energy efficiency improvements. For covered ASHRAE equipment, DOE sets the baseline for analysis at the ASHRAE Standard 90.1 efficiency level, because by statute, DOE cannot adopt any level below the revised ASHRAE level. The engineering analysis then identifies higher efficiency levels and the incremental increase in product cost associated with achieving the higher efficiency levels. After identifying the baseline models and cost of achieving increased efficiency, DOE estimates the additional costs to the commercial consumer through an analysis of contractor costs and markups, and uses that information in the downstream analyses to examine the costs and benefits associated with increased equipment efficiency.

DOE typically structures its engineering analysis around one of three methodologies: (1) The design-option approach, which calculates the incremental costs of adding specific design options to a baseline model; (2) the efficiency-level approach, which calculates the relative costs of achieving increases in energy efficiency levels without regard to the particular design options used to achieve such increases; and/or (3) the reverse-engineering or cost-assessment approach, which involves a ''bottom-up'' manufacturing cost assessment based on a detailed bill of materials derived from teardowns of the equipment being analyzed. A supplementary method called a catalog teardown uses published manufacturer catalogs and supplementary component data to estimate the major physical differences between a piece of equipment that has been physically disassembled and another piece of similar equipment for which catalog data are available to determine the cost of the latter equipment. Deciding which methodology to use for the engineering analysis depends on the equipment, the design options under study, and any historical data upon which DOE may draw.

1. Approach

For this analysis, DOE used a combination of the efficiency-level approach and the cost-assessment approach. DOE used the efficiency-level approach to identify incremental improvements in efficiency for each equipment class and the cost-assessment approach to develop a cost for each efficiency level. The efficiency levels that DOE considered in the engineering analysis were representative of commercial water-source heat pumps currently produced by manufacturers at the time the engineering analysis was developed. DOE relied on data reported in the AHRI Directory of Certified Product Performance to select representative efficiency levels. This directory reported EER, COP, heating and cooling capacities, and other data for all three application types (water-loop, ground-water, ground-loop) for all AHRI-certified units. After identifying representative efficiency levels, DOE used a catalog teardown or ''virtual teardown'' approach to estimate equipment costs at each level. DOE obtained general descriptions of key water-source heat pump components in product literature and used data collected for dozens of HVAC products to characterize the components' design details. This approach was used instead of the physical teardown approach due to time constraints.

Although there are benefits to using a catalog teardown approach, DOE notes that there are drawbacks as well. Most significantly, there are differences between water-source heat pumps and the commercial heating and cooling equipment that were physically torn down. DOE was only able to account for these difference based upon data supplied from manufacturer catalogs or component data. Therefore, there may be additional minor details or parts of the units that were not accounted for. However, DOE has tentatively concluded that this approach provides a reasonable approximation of the cost increases associated with efficiency increases by including all major parts and components. In the end, the approach allowed DOE to provide estimates of equipment prices for the range of efficiencies currently available on the market.

After selecting efficiency levels for each capacity class, as described in the sections that follow, DOE selected products for the catalog teardown analysis that corresponded to the representative efficiencies and cooling capacities. The engineering analysis included data for over 60 water-source heat pumps. DOE calculated the MPC for products spanning the full range of efficiencies from the baseline to the max-tech level for each analyzed equipment class. In some cases, catalog data providing sufficient information for cost analysis were not available at each efficiency level under consideration. Hence, DOE calculated the costs for some of the efficiency levels based on the cost/efficiency trends observed for other efficiency levels for which such catalog data were available. The engineering analysis is described in more detail in chapter 3 of the NOPR TSD.

2. Baseline Equipment

DOE selected baseline efficiency levels as reference points for each equipment class, against which it measured changes resulting from potential amended energy conservation standards. DOE defined the baseline efficiency levels as reference points to compare the technology, energy savings, and cost of equipment with higher energy efficiency levels. Typically, units at the baseline efficiency level just meet Federal energy conservation standards and provide basic consumer utility. However, EPCA requires that DOE must adopt either the ASHRAE Standard 90.1–2013 levels or more-stringent levels. Therefore, because the ASHRAE Standard 90.1–2013 levels were the lowest levels that DOE could adopt, DOE used those levels as the reference points against which more-stringent levels were evaluated. Table VI.1 shows the current baseline and ASHRAE efficiency levels for each water-source heat pump equipment class. In Table VI.2 below, the ASHRAE levels are designated ''0'' and more-stringent levels are designated 1, 2, and so on.

TABLE VI.1—BASELINE EFFICIENCY LEVELS FOR WATER-SOURCE HEAT PUMPS

	Water-source (water-to-air, water-loop) heat pumps <17,000 Btu/h	Water-source (water-to-air, water-loop) heat pumps ≥17,000 and <65,000 Btu/h	Water-source (water-to-air, water-loop) heat pumps ≥65,000 and <135,000 Btu/h
Efficiency level (EER)			
Baseline—Federal Standard	11.2	12.0	12.0
Baseline—ASHRAE Standard	12.2	13.0	13.0

3. Identification of Increased Efficiency Levels for Analysis

DOE developed and considered potential increased energy efficiency levels for each equipment class. These more-stringent efficiency levels are representative of efficiency levels along the technology paths that manufacturers of residential heating products commonly use to maintain cost-effective designs while increasing energy efficiency. DOE developed more-stringent energy efficiency levels for each of the equipment classes, based on a review of AHRI's Directory of Certified Product Performance, manufacturer catalogs, and other publicly-available literature. The efficiency levels selected for analysis for each water-source heat pump equipment class are shown in Table VI.2. Chapter 3 of the NOPR TSD shows additional details on the efficiency levels selected for analysis.

TABLE VI.2—EFFICIENCY LEVELS FOR ANALYSIS OF WATER-SOURCE HEAT PUMPS

	Water-source (water-to-air, water-loop) heat pumps <17,000 Btu/h	Water-source (water-to-air, water-loop) heat pumps ≥17,000 and <65,000 Btu/h	Water-source (water-to-air, water-loop) heat pumps ≥65,000 and <135,000 Btu/h
Efficiency Level (EER, Btu/W-h)			
Baseline—Federal Standard	11.2	12.0	12.0
Baseline—ASHRAE Level (0)	12.2	13.0	13.0
Efficiency Level 1	13.0	14.6	14.0
Efficiency Level 2	14.0	16.6	15.0
Efficiency Level 3	15.7	18.0	16.0
Efficiency Level 4 *	16.5	19.2	17.2
Efficiency Level 5 **	18.1	21.6	.....

* Efficiency Level 4 is "Max-Tech" for the largest equipment classes.
** Efficiency Level 5 is "Max-Tech" for the two smaller equipment classes.

4. Engineering Analysis Results

The results of the engineering analysis are cost-efficiency curves based on results from the cost models for analyzed units. DOE's calculated MPCs for the three analyzed classes of water-source heat pumps are shown in Table VI.3. DOE used the cost-efficiency curves from the engineering analysis as an input for the life-cycle cost and PBP analysis. Further details regarding MPCs for water-source heat pumps may be found in chapter 3 of the NOPR TSD.

TABLE VI.3—MANUFACTURER PRODUCTION COSTS FOR WATER-SOURCE HEAT PUMPS

	Water-source (water-to-air, water-loop) heat pumps <17,000 Btu/h		Water-source (water-to-air, water-loop) heat pumps ≥17,000 and <65,000 Btu/h		Water-source (water-to-air, water-loop) heat pumps ≥65,000 and <135,000 Btu/h	
	EER	MPC ($)	EER	MPC ($)	EER	MPC ($)
ASHRAE—Level 0	12.2	860	13.0	1,346	13.0	3,274
Efficiency Level 1	13.0	904	14.6	1,463	14.0	3,660
Efficiency Level 2	14.0	960	16.6	1,609	15.0	4,045
Efficiency Level 3	15.7	1,053	18.0	1,711	16.0	4,431
Efficiency Level 4	16.5	1,097	19.2	1,798	17.2	4,893
Efficiency Level 5	18.1	1,185	21.6	1,974	.....	.....

a. Manufacturer Markups

As discussed in detail in section V.B.4.a, DOE applies a non-production cost multiplier (the manufacturer markup) to the full MPC to account for corporate non-production costs and profit. The resulting manufacturer selling price (MSP) is the price at which the manufacturer can recover all production and nonproduction costs and earn a profit. Because water-source heat pumps and commercial air-cooled equipment are sold by similar heating and cooling product manufacturers, DOE used the same manufacturer markup of 1.3 that was developed for small commercial air-cooled air-conditioners and heat pumps, as described in chapter 3 of the NOPR TSD.

b. Shipping Costs

Manufacturers of commercial HVAC equipment typically pay for freight (shipping) to the first step in the distribution chain. Freight is not a manufacturing cost, but because it is a substantial cost incurred by the manufacturer, DOE accounts for shipping costs separately from other non-production costs that comprise the manufacturer markup. DOE calculated the MSP for water-source heat pumps by multiplying the MPC at each efficiency level (determined from the cost model) by the manufacturer markup and adding shipping costs. Shipping costs for water-source heat pumps were calculated similarly to those for small commercial air-cooled air-conditioners and heat pumps described in section V.B.4.b. See chapter 3 of the NOPR TSD for more details about DOE's shipping cost assumptions and the shipping costs per unit for each water-source heat pump product class.

C. Markups Analysis

The markups analysis develops appropriate markups in the distribution chain to convert the estimates of manufacturer selling price derived in the engineering analysis to commercial consumer prices. (''Commercial consumer'' refers to purchasers of the equipment being regulated.) DOE calculates overall baseline and incremental markups based on the equipment markups at each step in the distribution chain. The incremental markup relates the change in the manufacturer sales price of higher-efficiency models (the incremental cost increase) to the change in the commercial consumer price.

For water-source heat pumps, DOE used the same markups that were developed for small commercial air-cooled air-conditioners and heat pumps, as discussed in section V.C. DOE understands that the equipment move through the same distribution channels and that, therefore, using the same markups is reasonable. In addition, DOE's development of markups within those channels is at the broader equipment category level, in this case heating, ventilation, and air-conditioning equipment. As with small commercial air-cooled equipment, DOE did not use national accounts in its markups analysis for water-source heat pumps, because DOE does not believe that the commercial consumers of water-source heat pump equipment less than 135,000 Btu/h would typically be national retail chains that negotiate directly with manufacturers. DOE seeks comment on whether the use of national accounts would be appropriate in this analysis. This is identified as Issue 6 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

Chapter 6 of the NOPR TSD provides further detail on the estimation of markups.

D. Energy Use Analysis

The energy use analysis provides estimates of the annual energy consumption of water-source heat pumps at the considered efficiency levels. DOE uses these values in the LCC and PBP analyses and in the NIA.

The cooling unit energy consumption (UEC) by equipment type and efficiency level used in the April 11, 2014 NODA came from Appendix D of the 2000 Screening Analysis for EPACT-Covered Commercial HVAC and Water-Heating Equipment. (EERE–2006–STD–0098–0015) 79 FR 20114, 20126–27. Where identical efficiency levels were available, DOE used the UEC directly from the screening analysis. For additional efficiency levels, DOE scaled the UECs based on the ratio of EER, as was done in the original analysis. In response to the NODA, AHRI commented that DOE should use up-to-date data to estimate the cooling UEC of water-source heat pumps, because significant improvements have been made in envelope construction in the 14 years since the screening analysis was performed. (AHRI, No. 24 at p. 6) In reviewing this comment, DOE found that the NEMS commercial demand module accounts for improvements in building shell characteristics and changes in internal load by adjusting the cooling energy use with a factor that is a function of region and building activity. Consequently, for this NOPR, DOE used these factors to adjust the cooling energy use from the 2000 Screening Analysis.

In the April 11, 2014 NODA, DOE did not analyze heating UECs for water-source heat pumps because of lack of data availability. 79 FR 20114, 20126. DOE requested input and data related to this topic but did not receive any. For this NOPR, to characterize the heating-side performance, DOE analyzed CBECS 2003 data to develop a national-average annual energy use per square foot for buildings that use heat pumps. DOE assumed that the average COP of the commercial unitary heat pump (CUHP) was 2.9.[34] DOE converted the energy use per square foot value to annual energy use per ton using a ton-per-square-foot relationship derived from the energy use analysis in the 2014 CUAC NOPR. (EERE–2013–BT–STD–0007–0027) This analysis relates to equipment larger than some of the equipment that is the subject of this current NOPR and is directly applicable only to air-source heat pumps rather than water-source heat pumps. However, for this NOPR, DOE assumed that this estimate was sufficiently representative of the heating energy use for all three classes of water-source heat pumps. DOE seeks comment on this issue. This is identified as Issue 7 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

Because equipment energy use is a function of efficiency, DOE assumed that the annual heating energy consumption of a unit scales proportionally with its heating COP efficiency level. Finally, to determine the COPs of units with given EERs, DOE correlated COP to EER based on the AHRI Certified Equipment Database.[35] Thus, for any given cooling efficiency of a water-source heat pump, DOE was able to use this method to establish the corresponding heating efficiency, and, in turn, the associated annual heating energy consumption.

In order to create variability in the cooling and heating UECs by region and building type, DOE used a Pacific Northwest National Laboratory report [36] that estimated the annual energy usage of space cooling and heating products using a Full Load Equivalent Operating Hour (FLEOH) approach. DOE normalized the provided FLEOHs to the UECs taken from the 2011 DFR for central air conditioners and heat pumps to vary the average UEC across region

[34] A heating efficiency of 2.9 COP corresponds to the existing minimum heating efficiency standard for commercial unitary heat pumps, a value which DOE believes is representative of the heat pump stock characterized by CBECS.

[35] See: *http://www.ahridirectory.org/ahridirectory/pages/homeM.aspx.*

[36] See Appendix D of the 2000 Screening Analysis for EPACT-Covered Commercial HVAC and Water-Heating Equipment. (EERE–2006–STD–0098–0015)

and building type. In this analysis, DOE used the following building types: Office, education, lodging, multi-family apartments, and healthcare. DOE seeks comment on whether these building types are appropriate or whether there are other building types that should be considered for the water-source heat pump analysis. This is identified as Issue 8 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

E. Life-Cycle Cost and Payback Period Analysis

The purpose of the LCC and PBP analysis is to analyze the effects of potential amended energy conservation standards on commercial consumers of water-source heat pumps by determining how a potential amended standard affects their operating expenses (usually decreased) and their total installed costs (usually increased).

The LCC is the total consumer expense over the life of the equipment, consisting of equipment and installation costs plus operating costs (*i.e.,* expenses for energy use, maintenance, and repair). DOE discounts future operating costs to the time of purchase using commercial consumer discount rates. The PBP is the estimated amount of time (in years) it takes commercial consumers to recover the increased total installed cost (including equipment and installation costs) of a more-efficient type of equipment through lower operating costs. DOE calculates the PBP by dividing the change in total installed cost (normally higher) due to a standard by the change in annual operating cost (normally lower) that results from the potential standard. However, unlike the LCC, DOE only considers the first year's operating expenses in the PBP calculation. Because the PBP does not account for changes in operating expense over time or the time value of money, it is also referred to as a simple PBP.

For any given efficiency level, DOE measures the PBP and the change in LCC relative to an estimate of the base-case efficiency level. For water-source heat pumps, the base-case estimate reflects the market in the case where the ASHRAE level becomes the Federal minimum, and the LCC calculates the LCC savings likely to result from higher efficiency levels compared with the ASHRAE base case.

DOE conducted an LCC and PBP analysis for water-source heat pumps using a computer spreadsheet model. When combined with Crystal Ball (a commercially-available software program), the LCC and PBP model generates a Monte Carlo simulation to perform the analyses by incorporating uncertainty and variability considerations in certain of the key parameters as discussed below. Inputs to the LCC and PBP analysis are categorized as: (1) Inputs for establishing the total installed cost and (2) inputs for calculating the operating expense. The following sections contain brief discussions of comments on the inputs and key assumptions of DOE's LCC and PBP analysis and explain how DOE took these comments into consideration. They are also described in detail in chapter 6 of the NOPR TSD.

1. Equipment Costs

In the LCC and PBP analysis, the equipment costs faced by purchasers of water-source heat pumps are derived from the MSPs estimated in the engineering analysis, the overall markups estimated in the markups analysis, and sales tax.

To develop an equipment price trend for the NOPR, DOE derived an inflation-adjusted index of the PPI for ''all other miscellaneous refrigeration and air-conditioning equipment'' from 1990–2013, which is the PPI series most relevant to water-source heat pumps. Although the inflation-adjusted index shows a declining trend from 1990 to 2004, data since 2008 have shown a flat-to-slightly rising trend. Given the uncertainty as to which of the trends will prevail in coming years, DOE chose to apply a constant price trend (at 2013 levels) for each efficiency level in each equipment class for the NOPR. See chapter 6 of the NOPR TSD for more information on the price trends.

2. Installation Costs

DOE derived installation costs for water-source heat pump equipment from current RS Means data (2013).[37] RS Means provides estimates for installation costs for the subject equipment by equipment capacity, as well as cost indices that reflect the variation in installation costs for 656 cities in the United States. The RS Means data identify several cities in all 50 States and the District of Columbia. DOE incorporated location-based cost indices into the analysis to capture variation in installation costs, depending on the location of the consumer.

Based on these data, DOE tentatively concluded that data for 1-ton, 3-ton, and 7.5-ton water-source heat pumps would be sufficiently representative of the installation costs for of water-source heat pumps with capacities of less than 17,000 btu/h, greater than or equal to 17,000 and less than 65,000 btu/h, and greater than or equal to 65,000 and less than 135,000 btu/h, respectively.

DOE also varied installation cost as a function of equipment weight. Because weight tends to increase with equipment efficiency, installation cost increased with equipment efficiency. The weight of the equipment in each class and efficiency level was determined through the engineering analysis.

3. Unit Energy Consumption

The calculation of annual per-unit energy consumption by each class of the subject water-source heat pumps at each considered efficiency level based on the energy use analysis is described above in section VI.D and in chapter 4 of the NOPR TSD.

4. Electricity Prices and Electricity Price Trends

DOE used the same average and marginal electricity prices and electricity price trends as discussed in the methodology for small commercial air-cooled air conditioners and heat pumps (see section V.E.4). These data were developed for the broader commercial air-conditioning category and, thus, are also relevant to water-source heat pumps.

5. Maintenance Costs

Maintenance costs are costs to the commercial consumer of ensuring continued operation of the equipment (*e.g.,* checking and maintaining refrigerant charge levels and cleaning heat-exchanger coils). Because RS Means does not provide maintenance costs for water-source heat pumps, DOE used annualized maintenance costs for air-source heat pumps, the closest related equipment category, derived from RS Means data.[38] DOE does not expect the maintenance costs for water-source heat pumps to differ significantly from those for air-source heat pumps. These data provided estimates of person-hours, labor rates, and materials required to maintain commercial air-source heat pumps. The estimated annualized maintenance cost is $329 for a heat pump rated up to 60,000 Btu/h and $398 for a heat pump rated greater than 60,000 Btu/h. DOE applied the former cost to water-source heat pumps less than 17,000 Btu/h and heat pumps greater than or equal to 17,000 and less than 65,000 Btu/h. DOE applied the latter cost to water-source heat pumps greater than or equal to 65,000 Btu/h

[37] RS Means Mechanical Cost Data 2013. *Reed Construction Data, LLC. (2012).*

[38] RS Means Facilities Maintenance & Repair Cost Data 2013. *Reed Construction Data, LLC. (2012).*

and less than 135,000 Btu/h. DOE requests comment on how maintenance costs for water-source heat pumps might be expected to differ from that for air-source heat pumps. This is identified as Issue 9 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

6. Repair Costs

Repair costs are costs to the commercial consumer associated with repairing or replacing components that have failed. As with maintenance costs, RS Means does not provide repair costs for water-source heat pumps. Therefore, DOE assumed the repair costs for water-source heat pumps would be similar to air-source units and utilized RS Means [39] to find the repair costs for air-source heat pumps. DOE does not expect the repair costs for water-source heat pumps to differ significantly from those for air-source heat pumps. DOE took the repair costs for 1.5-ton, 5-ton, and 10-ton air to air heat pumps and linearly scaled the repair costs to derive repair costs for 1-ton, 3-ton, and 7.5-ton equipment. DOE assumed that the repair would be a one-time event in year 10 of the equipment life. DOE then annualized the present value of the cost over the average equipment life (see next section) to obtain an annualized equivalent repair cost. This value ranged from $92 to $237 for the ASHRAE baseline, depending on equipment class. The materials portion of the repair cost was scaled with the percentage increase in manufacturers' production cost by efficiency level. The labor cost was held constant across efficiency levels. This annualized repair cost was then added to the maintenance cost to create an annual ''maintenance and repair cost'' for the lifetime of the equipment. For further discussion of how DOE derived and implemented repair costs, see chapter 8 of the NOPR TSD. DOE requests comment on how repair costs for water-source heat pumps might be expected to differ from that for air-source heat pumps. This is identified as Issue 10 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

7. Equipment Lifetime

Equipment lifetime is the age at which the subject water-source heat pump are retired from service. In the April 11, 2014 NODA, DOE used a mean lifetime of 19 years from the 2000 screening analysis for EPACT-Covered Commercial HVAC and Water-Heating Equipment (EERE–2006–STD–0098–0015). 79 FR 20114, 20133. For this NOPR, DOE based equipment lifetime on a retirement function in the form of a Weibull probability distribution. Because a function specific to water-source heat pumps was not available, DOE used that for air-cooled air conditioners presented in the 2011 DFR (EERE–2011–BT–STD–0011–0012), as it is for similar equipment and represented the desired mean lifetime of 19 years. DOE requests data and information that would help it develop a retirement function specific to water-source heat pumps. This is identified as Issue 11 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

8. Discount Rate

The discount rate is the rate at which future expenditures are discounted to estimate their present value. The cost of capital commonly is used to estimate the present value of cash flows to be derived from a typical company project or investment. Most companies use both debt and equity capital to fund investments, so the cost of capital is the weighted-average cost of capital (WACC) to the firm of equity and debt financing. DOE uses the capital asset pricing model (CAPM) to calculate the equity capital component, and financial data sources to calculate the cost of debt financing.

DOE derived the discount rates by estimating the cost of capital of companies that purchase water-source heat pump equipment. More details regarding DOE's estimates of commercial consumer discount rates are provided in chapter 6 of the NOPR TSD.

9. Base-Case Market Efficiency Distribution

For the LCC analysis, DOE analyzes the considered efficiency levels relative to a base case (*i.e.,* the case without amended energy efficiency standards, in this case the default scenario in which DOE is statutorily required to adopt the efficiency levels in ASHRAE 90.1–2013). This analysis requires an estimate of the distribution of equipment efficiencies in the base case (*i.e.,* what consumers would have purchased in the compliance year in the absence of amended standards more stringent than those in ASHRAE 90.1–2013). DOE refers to this distribution of equipment energy efficiencies as the base-case efficiency distribution. For more information on the development of the base-case distribution, see section VI.F.3 and chapter 6 of the NOPR TSD.

10. Compliance Date

DOE calculated the LCC and PBP for all commercial consumers as if each were to purchase new equipment in the year that compliance with amended standards is required. Generally, covered equipment to which a new or amended energy conservation standard applies must comply with the standard if such equipment is manufactured or imported on or after a specified date. In this NOPR, DOE is evaluating whether more-stringent efficiency levels than those in ASHRAE Standard 90.1–2013 would be technologically feasible, economically justified, and result in a significant additional amount of energy savings. If DOE were to propose a rule prescribing energy conservation standards at the efficiency levels contained in ASHRAE Standard 90.1–2013, EPCA states that compliance with any such standards shall be required on or after a date which is two or three years (depending on equipment size) after the compliance date of the applicable minimum energy efficiency requirement in the amended ASHRAE/IES standard. (42 U.S.C. 6313(a)(6)(D)) Given the equipment size at issue here, DOE has applied the two-year implementation period to determine the compliance date of any energy conservation standard equal to the efficiency levels specified by ASHRAE Standard 90.1–2013 proposed by this rulemaking. Thus, if DOE decides to adopt the efficiency levels in ASHRAE Standard 90.1–2013, the compliance date of the rulemaking would be dependent upon the date specified in ASHRAE Standard 90.1–2013 or its publication date, if none is specified. In this case, the rule would apply to water-source heat pumps manufactured on or after October 9, 2015, which is two years after the publication date of ASHRAE Standard 90.1–2013.

If DOE were to propose a rule prescribing energy conservation standards more stringent than the efficiency levels contained in ASHRAE Standard 90.1–2013, EPCA states that compliance with any such standards is required for equipment manufactured on or after a date which is four years after the date the final rule is published in the **Federal Register**. (42 U.S.C. 6313(a)(6)(D)) DOE has applied this 4-year implementation period to determine the compliance date for any energy conservation standard more stringent than the efficiency levels specified by ASHRAE Standard 90.1–2013 that might be prescribed at the final rule stage. Thus, for equipment for which DOE might adopt a level more stringent than the ASHRAE efficiency levels, the rule would apply to such equipment manufactured on or after a date four years from the date of

[39] *Id.*

publication of the final rule, which the statute requires to be completed by April 9, 2016 (thereby resulting in a compliance date no later than April 9, 2020).[40]

Economic justification is not required for DOE to adopt the efficiency levels in ASHRAE 90.1–2013, as DOE is statutorily required to, at a minimum, adopt those levels. Therefore, DOE did not perform an LCC analysis on the ASHRAE Standard 90.1–2013 levels, and, for purposes of the LCC analysis, DOE used 2020 as the first year of compliance with amended standards.

11. Payback Period Inputs

The payback period is the amount of time it takes the commercial consumer to recover the additional installed cost of more-efficient equipment, compared to baseline equipment, through energy cost savings. Payback periods are expressed in years. Payback periods that exceed the life of the equipment mean that the increased total installed cost is not recovered in reduced operating expenses.

Similar to the LCC, the inputs to the PBP calculation are the total installed cost of the equipment to the commercial consumer for each efficiency level and the average annual operating expenditures for each efficiency level for each building type and Census Division, weighted by the probability of shipment to each market. The PBP calculation uses the same inputs as the LCC analysis, except that discount rates are not needed. Because the simple PBP does not take into account changes in operating expenses over time or the time value of money, DOE considered only the first year's operating expenses to calculate the PBP, unlike the LCC, which is calculated over the lifetime of the equipment. Chapter 6 of the NOPR TSD provides additional detail about the PBP.

F. National Impact Analysis—National Energy Savings and Net Present Value Analysis

The NIA evaluates the effects of a considered energy conservation standard from a national perspective rather than from the consumer perspective represented by the LCC. This analysis assesses the NPV (future amounts discounted to the present) and the NES of total commercial consumer costs and savings, which are expected to result from amended standards at specific efficiency levels. For each efficiency level analyzed, DOE calculated the NPV and NES for adopting more-stringent standards than the efficiency levels specified in ASHRAE Standard 90.1–2013.

The NES refers to cumulative energy savings from 2016 through 2045;[41] however, when evaluating more-stringent standards, energy savings do not begin accruing until the later compliance date of 2020. DOE calculated new energy savings in each year relative to a base case, defined as DOE adoption of the efficiency levels specified by ASHRAE Standard 90.1–2013. DOE also calculated energy savings from adopting efficiency levels specified by ASHRAE Standard 90.1–2013 compared to the EPCA base case (*i.e.,* the current Federal standards).

The NPV refers to cumulative monetary savings. DOE calculated net monetary savings in each year relative to the base case (ASHRAE Standard 90.1–2013) as the difference between total operating cost savings and increases in total installed cost. Cumulative savings are the sum of the annual NPV over the specified period. DOE accounted for operating cost savings until past 2100, when the equipment installed in the thirtieth year after the compliance date of the amended standards should be retired.

1. Approach

The NES and NPV are a function of the total number of units and their efficiencies. Both the NES and NPV depend on annual shipments and equipment lifetime. Both calculations start by using the shipments estimate and the quantity of units in service derived from the shipments model. DOE used the same approach to determine NES and NPV for water-source heat pumps which was used for small commercial air-cooled air-conditioning and heating equipment, as described in section V.F.1. In this case, the analysis period runs from 2016 through 2045.

DOE considered whether a rebound effect is applicable in its NES analysis, a concept explained in detail in section V.F.1. DOE does not expect commercial consumers with water-source heat pump equipment to increase their use of the equipment, either in a previously cooled space or another previously uncooled space. Water-source heat pumps are part of engineered water-loop systems designed for specific applications. It is highly unlikely that the operation or installation of these systems would be changed simply as a result of energy cost savings. Therefore, DOE did not assume a rebound effect in the present NOPR analysis. DOE seeks input from interested parties on whether there will be a rebound effect for improvements in the efficiency of water-source heat pumps. If interested parties believe a rebound effect would occur, DOE is interested in receiving data quantifying the effects, as well as input regarding how DOE should quantify this in its analysis. This is identified as Issue 3 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

2. Shipments Analysis

Equipment shipments are an important element in the estimate of the future impact of a potential energy conservation standard. DOE developed shipment projections for water-source heat pumps and, in turn, calculated equipment stock over the course of the analysis period by assuming a Weibull distribution with an average 19-year equipment life. (See section V.E.7 for more information on equipment lifetime.) DOE used the shipments projection and the equipment stock to determine the NES. The shipments portion of the spreadsheet model projects water-source heat pump shipments through 2045.

In the April 11, 2014 NODA, DOE based its shipments analysis for water-source heat pumps on data from the U.S. Census. 79 FR 20114, 20130. The U.S. Census published historical (1980, 1983–1994, 1997–2006, and 2008–2010) water-source heat pump shipment data.[42] Table VI.4 exhibits the shipment data provided for a selection of years. DOE analyzed data from the years 1990–2010 to establish a trend from which to project shipments beyond 2010. DOE used a linear trend. Because the Census data do not distinguish between equipment capacities, DOE used the shipments data by equipment class provided by AHRI in 1999, and published in the 2000 Screening Analysis for EPACT-Covered Commercial HVAC and Water-Heating Equipment (EERE–2006–STD–0098–0015), to distribute the total water-source heat pump shipments to individual equipment classes. Table

[40] Since ASHRAE published ASHRAE Standard 90.1–2013 on October 9, 2013, EPCA requires that DOE publish a final rule adopting more-stringent standards than those in ASHRAE Standard 90.1–2013, if warranted, within 30 months of ASHRAE action (*i.e.,* by April 2016). Thus, four years from April 2016 would be April 2020, which would be the anticipated compliance date for DOE adoption of more-stringent standards.

[41] Although the expected compliance date for adoption of the efficiency levels in ASHRAE Standard 90.1–2013 is October 9, 2015, DOE began its analysis period in 2016 to avoid ascribing savings to the three-quarters of 2015 prior to the compliance date.

[42] U.S. Census Bureau, Current Industrial Reports for Refrigeration, Air Conditioning, and Warm Air Heating Equipment, MA333M. Note that the current industrial reports were discontinued in 2010, so more recent data are not available (Available at: *http://www.census.gov/manufacturing/cir/historical_data/ma333m/index.html*).

VI.5 exhibits the shipment data provided for 1999. DOE assumed that this distribution of shipments across the various equipment classes remained constant and has used this same distribution in its projection of future shipments of water-source heat pumps. The complete historical data set and the projected shipments for each equipment class can be found in the ASHRAE NOPR TSD.

TABLE VI.4—TOTAL SHIPMENTS OF WATER-SOURCE HEAT PUMPS

[Census Product Code: 333415E181]

	1989	1999	2009
Total	157,080	120,545	180,101

TABLE VI.5—TOTAL SHIPMENTS OF WATER-SOURCE HEAT PUMPS

(AHRI)

Equipment class	1999	Percent
WSHP <17000 Btu/h	41,000	31
WSHP 17000–65000 Btu/h	86,000	65
WSHP 65000–135000 Btu/h	5,000	4

In the April 11, 2014 NODA, DOE noted that an EIA report on geothermal heat pump manufacturers [43] shows shipments of water-source units (defined by EIA as those tested to ARI–320) as only 22,009 in 2009 and 7,808 in 2000, which is significantly less than that reported by the Census (product code 333415E181) and by AHRI. 79 FR 20114, 20130. DOE added that both the Census data and the EIA report show consistent shipments of separately-reported ground-source and ground-water-source heat pumps (listed as Census product code 333415G and defined by EIA as those tested to ARI–325/330) at approximately 87,000 shipments in 2009; DOE is not counting these shipments in its estimates as reported in Table VI.4. DOE believes that water-source heat pumps operate with a water loop using a boiler or chiller as the heat source or sink, and that, therefore, may not be considered ''geothermal;'' in this case, the EIA report may not include a comprehensive number of water-source heat pump shipments. *Id.*

In the April 11, 2014 NODA, DOE requested comment on the market for water-source heat pumps, especially what magnitude of annual shipments is most accurate and how shipments are expected to change over time. DOE also sought comment on the share of the market for ground-source and ground-water-source heat pump applications that use models also rated for water-loop application. *Id.* at 20130–31. In response, AHRI reported that it has no data on the market share of various applications and no comment on the current shipments or future trends. (AHRI, No. 24 at p. 7) DOE did not receive any other comment on this issue. Consequently, DOE has retained the shipments analysis used in the April 11, 2014 NODA for water-source heat pumps. Table VI.6 shows the projected shipments for the different equipment classes of water-source heat pumps for selected years from 2016 to 2045, as well as the cumulative shipments.

TABLE VI.6—SHIPMENTS PROJECTION FOR WATER-SOURCE HEAT PUMPS

Equipment	Units Shipped by Year and Equipment Class							
	2016	2020	2025	2030	2035	2040	2045	Cumulative shipments (2016–2045)
WSHP <17000 Btu/h	62,934	68,072	74,495	80,918	87,341	93,764	100,187	2,446,810
WSHP 17000–65000 Btu/h	132,007	142,785	156,258	169,731	183,203	196,676	210,148	5,132,334
WSHP 65000–135000 Btu/h	7,675	8,301	9,085	9,868	10,651	11,435	12,218	7,579,144
Total	202,616	219,159	239,838	260,517	281,195	301,874	322,553	7,877,536

As equipment purchase price and repair costs increase with efficiency, DOE recognizes that higher first costs and repair costs can result in a drop in shipments. However, DOE had no basis for estimating the elasticity of shipments for water-source heat pumps as a function of first costs, repair costs, or operating costs. In addition, because water-source heat pumps are often installed for their higher efficiency as compared to air-cooled equipment, DOE has tentatively concluded that it is unlikely that shipments would change as a result of higher first costs and repair costs. Therefore, DOE presumed that the shipments projection would not change with higher standard levels. DOE seeks input on this assumption. This is identified as Issue 4 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR. Chapter 7 of the NOPR TSD provides additional details on the shipments forecasts.

3. Base-Case and Standards-Case Forecasted Distribution of Efficiencies

In the April 11, 2014 NODA, DOE presented base-case efficiency distributions based on model

[43] U.S. Energy Information Administration, Geothermal Heat Pump Manufacturing Activities 2009 (2010) (Available at: *www.eia.gov/renewable/renewables/geothermalrpt09.pdf*).

availability in the AHRI certified directory. 79 FR 20114, 20132. As noted in section V.F.3, DOE received comments that this was an incorrect assumption; however, no data were provided that would allow DOE to better estimate the base-case efficiency distribution. Therefore, DOE has retained the initial distribution used in the April 2014 NODA.

For this NOPR, DOE has estimated a base-case efficiency trend of an increase of approximately 1 EER every 35 years, based on the trend from 2012 to 2035 found in the Commercial Unitary Air Conditioner Advance Notice of Proposed Rulemaking (ANOPR).[44] DOE used this same trend in the standards-case scenarios. DOE requests comment on its estimated efficiency trends. This is identified as Issue 5 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR.

As in the April 11, 2014 NODA, for each efficiency level analyzed, DOE used a ''roll-up'' scenario to establish the market shares by efficiency level for the first full year that compliance would be required with amended standards (*i.e.,* 2016 for adoption of efficiency levels in ASHRAE Standard 90.1–2013 or 2020 if DOE adopts more-stringent efficiency levels than those in ASHRAE Standard 90.1–2013). As noted in section V.F.3, stakeholders agreed that this was a reasonable assumption. Table VI.7 presents the estimated base-case efficiency market shares for each water-source heat pump equipment class.

TABLE VI.7—BASE-CASE EFFICIENCY MARKET SHARES IN 2020 FOR WATER-SOURCE HEAT PUMPS

Water-source (water-to-air, water-loop) heat pumps <17,000 Btu/h		Water-source (water-to-air, water-loop) heat pumps ≥17,000 and <65,000 Btu/h		Water-source (water-to-air, water-loop) heat pumps ≥65,000 and <135,000 Btu/h	
EER	Market share %	EER	Market share %	EER	Market share %
11.2	0.0	12.0	0.0	12.0	0.0
12.2	0.7	13.0	7.6	13.0	0.0
13.0	49.7	14.6	55.1	14.0	29.8
14.0	22.0	16.6	25.0	15.0	48.5
15.7	20.5	18.0	8.9	16.0	20.1
16.5	4.9	19.2	2.5	17.0	1.7
18.1	2.3	21.6	1.0		

NOTE: The 0% market share at the first listed EER level is accounting for the default adoption of ASHRAE Standard 90.1–2013 levels in 2016.

4. National Energy Savings and Net Present Value

The stock of water-source heat pump equipment is the total number of units in each equipment class purchased or shipped from previous years that have survived until a given point in time. The NES spreadsheet,[45] through use of the shipments model, keeps track of the total number of units shipped each year. For purposes of the NES and NPV analyses, DOE assumes that shipments of water-source heat pump units survive for an average of 19 years, following a Weibull distribution, at the end of which time they are removed from service.

The national annual energy consumption is the product of the annual unit energy consumption and the number of units of each vintage in the stock, summed over all vintages. This approach accounts for differences in unit energy consumption from year to year. In determining national annual energy consumption, DOE estimated energy consumption and savings based on site energy and converted the electricity consumption and savings to primary energy using annual conversion factors derived from the *AEO 2014* version of NEMS. Cumulative energy savings are the sum of the NES for each year over the timeframe of the analysis.

In response to the recommendations of a committee on ''Point-of-Use and Full-Fuel-Cycle Measurement Approaches to Energy Efficiency Standards'' appointed by the National Academy of Sciences, DOE announced its intention to use FFC measures of energy use and greenhouse gas and other emissions in the national impact analyses and emissions analyses included in future energy conservation standards rulemakings. 76 FR 51281 (Aug. 18, 2011). After evaluating the approaches discussed in the August 18, 2011 notice, DOE published a statement of amended policy in the **Federal Register** in which DOE explained its determination that NEMS is the most appropriate tool for its FFC analysis and its intention to use NEMS for that purpose. 77 FR 49701 (Aug. 17, 2012). The approach used for this NOPR is described in Appendix 8–A of the NOPR TSD.

Table VI.8 summarizes the inputs to the NES spreadsheet model along with a brief description of the data sources. The results of DOE's NES and NPV analysis are summarized in section VIII.B.2.b and described in detail in chapter 7 of the NOPR TSD.

TABLE VI.8—SUMMARY OF WATER-SOURCE HEAT PUMP NES AND NPV MODEL INPUTS

Inputs	Description
Shipments	Annual shipments based on U.S. Census data. (See chapter 7 of the NOPR TSD.)
Compliance Date of Standard	2020 for adoption of a more-stringent efficiency level than those specified by ASHRAE Standard 90.1–2013. 2016 for adoption of the efficiency levels specified by ASHRAE Standard 90.1–2013.
Base-Case Efficiencies	Distribution of base-case shipments by efficiency level, with efficiency trend of an increase of 1 EER every 35 years.

[44] *See* DOE's technical support document underlying DOE's July 29, 2004 ANOPR. 69 FR 45460 (Available at: *www.regulations.gov/#!documentDetail;D=EERE-2006-STD-70103-0078*).

[45] The NES spreadsheet can be found in the docket for the ASHRAE rulemaking at: *www.regulations.gov/#!docketDetail;D=EERE-2014-BT-STD-0015*.

TABLE VI.8—SUMMARY OF WATER-SOURCE HEAT PUMP NES AND NPV MODEL INPUTS—Continued

Inputs	Description
Standards-Case Efficiencies	Distribution of shipments by efficiency level for each standards case. In compliance year, units below the standard level ''roll-up'' to meet the standard. Efficiency trend of an increase of 1 EER every 35 years.
Annual Energy Use per Unit	Annual national weighted-average values are a function of efficiency level. (See chapter 4 of the NOPR TSD.)
Total Installed Cost per Unit	Annual weighted-average values are a function of efficiency level. (See chapter 5 of the NOPR TSD.)
Annualized Maintenance and Repair Costs per Unit	Annual weighted-average values are a function of efficiency level. (See chapter 5 of the NOPR TSD.)
Escalation of Fuel Prices	*AEO2014* forecasts (to 2040) and extrapolation for beyond 2040. (See chapter 8 of the NOPR TSD.)
Site to Primary and FFC Conversion	Based on *AEO2014* forecasts (to 2040) and extrapolation for beyond 2040. (See chapter 8 of the NOPR TSD.)
Discount Rate	3 percent and 7 percent real.
Present Year	Future costs are discounted to 2014.

VII. Methodology for Emissions Analysis and Monetizing Carbon Dioxide and Other Emissions Impacts

A. Emissions Analysis

In the emissions analysis, DOE estimates the reduction in power sector emissions of carbon dioxide (CO_2), nitrogen oxides (NO_X), sulfur dioxide (SO_2), and mercury (Hg) from potential amended energy conservation standards for the ASHRAE equipment that is the subject of this document. In addition, DOE estimates emissions impacts in production activities (extracting, processing, and transporting fuels) that provide the energy inputs to power plants. These are referred to as ''upstream'' emissions. Together, these emissions account for the full-fuel cycle (FFC). In accordance with DOE's FFC Statement of Policy (76 FR 51281 (Aug. 18, 2011) as amended at 77 FR 49701 (August 17, 2012)), the FFC analysis also includes impacts on emissions of methane (CH_4) and nitrous oxide (N_2O), both of which are recognized as greenhouse gases. The combustion emissions factors and the method DOE used to derive upstream emissions factors are described in chapter 9 of the NOPR TSD. The cumulative emissions reduction estimated for the subject ASHRAE equipment is presented in section VIII.C.

DOE primarily conducted the emissions analysis using emissions factors for CO_2 and most of the other gases derived from data in *AEO 2014.* Combustion emissions of CH_4 and N_2O were estimated using emissions intensity factors published by the U.S. Environmental Protection Agency (EPA) in its Greenhouse Gas (GHG) Emissions Factors Hub.[46] DOE developed separate emissions factors for power sector emissions and upstream emissions. The method that DOE used to derive emissions factors is described in chapter 9 of the NOPR TSD.

EIA prepares the *AEO* using NEMS. Each annual version of NEMS incorporates the projected impacts of existing air quality regulations on emissions. *AEO 2014* generally represents current legislation and environmental regulations, including recent government actions, for which implementing regulations were available as of October 31, 2013.

SO_2 emissions from affected electric generating units (EGUs) are subject to nationwide and regional emissions cap-and-trade programs. Title IV of the Clean Air Act sets an annual emissions cap on SO_2 for affected EGUs in the 48 contiguous States and the District of Columbia (DC). (42 U.S.C. 7651 *et seq.*) SO_2 emissions from 28 eastern States and DC were also limited under the Clean Air Interstate Rule (CAIR). 70 FR 25162 (May 12, 2005). CAIR, which created an allowance-based trading program that operates along with the Title IV program, was remanded to the EPA by the U.S. Court of Appeals for the District of Columbia Circuit, but it remained in effect.[47] In 2011, EPA issued a replacement for CAIR, the Cross-State Air Pollution Rule (CSAPR). 76 FR 48208 (Aug. 8, 2011). On August 21, 2012, the D.C. Circuit issued a decision to vacate CSAPR.[48] The court ordered EPA to continue administering CAIR. The emissions factors used for this NOPR, which are based on *AEO 2014,* assume that CAIR remains a binding regulation through 2040.[49]

The attainment of emissions caps is typically flexible among EGUs and is enforced through the use of emissions allowances and tradable permits. Beginning in 2016, however, SO_2 emissions will decline significantly as a result of the Mercury and Air Toxics Standards (MATS) for power plants. 77 FR 9304 (Feb. 16, 2012). In the final MATS rule, EPA established a standard for hydrogen chloride as a surrogate for acid gas hazardous air pollutants (HAP), and also established a standard for SO_2 (a non-HAP acid gas) as an alternative equivalent surrogate standard for acid gas HAP. The same controls are used to reduce HAP and non-HAP acid gas; thus, SO_2 emissions will be reduced as a result of the control technologies installed on coal-fired power plants to comply with the MATS requirements for acid gas. *AEO 2014* assumes that, in order to continue operating, coal plants must have either flue gas desulfurization or dry sorbent injection systems installed by 2016. Both technologies are used to reduce acid gas emissions, and also reduce SO_2 emissions. Under the MATS, emissions

[46] See *http://www.epa.gov/climateleadership/inventory/ghg-emissions.html.*

[47] See *North Carolina* v. *EPA,* 550 F.3d 1176 (D.C. Cir. 2008); *North Carolina* v. *EPA,* 531 F.3d 896 (D.C. Cir. 2008).

[48] See *EME Homer City Generation, LP* v. *EPA,* 696 F.3d 7, 38 (D.C. Cir. 2012), *cert. granted,* 81 U.S.L.W. 3567, 81 U.S.L.W. 3696, 81 U.S.L.W. 3702 (U.S. June 24, 2013) (No. 12–1182).

[49] On April 29, 2014, the U.S. Supreme Court reversed the judgment of the D.C. Circuit and remanded the case for further proceedings consistent with the Supreme Court's opinion. The Supreme Court held in part that EPA's methodology for quantifying emissions that must be eliminated in certain states due to their impacts in other downwind states was based on a permissible, workable, and equitable interpretation of the Clean Air Act provision that provides statutory authority for CSAPR. See *EPA* v. *EME Homer City Generation,* No 12–1182, slip op. at 32 (U.S. April 29, 2014). On October 23, 2014, the D.C. Circuit lifted the stay of CSAPR. Pursuant to this action, CSAPR will go into effect (and the Clean Air Interstate Rule will sunset) as of January 1, 2015. However, because DOE used emissions factors based on *AEO 2014* for this NOPR, the analysis assumes that CAIR, not CSAPR, is the regulation in force. The difference between CAIR and CSAPR is not relevant for the purpose of DOE's analysis of SO_2 emissions.

will be far below the cap established by CAIR, so it is unlikely that excess SO_2 emissions allowances resulting from the lower electricity demand would be needed or used to permit offsetting increases in SO_2 emissions by any regulated EGU. Therefore, DOE believes that energy efficiency standards will reduce SO_2 emissions in 2016 and beyond.

CAIR established a cap on NO_X emissions in 28 eastern States and the District of Columbia.[50] Energy conservation standards are expected to have little effect on NO_X emissions in those States covered by CAIR, because excess NO_X emissions allowances resulting from the lower electricity demand could be used to permit offsetting increases in NO_X emissions. However, standards would be expected to reduce NO_X emissions in the States not affected by the caps, so DOE estimated NO_X emissions reductions from the standards considered in this NOPR for these States.

The MATS limit mercury emissions from power plants, but they do not include emissions caps. DOE estimated mercury emissions using emissions factors based on *AEO 2014,* which incorporates the MATS.

B. Monetizing Carbon Dioxide and Other Emissions Impacts

As part of the development of this proposed rule, DOE considered the estimated monetary benefits from the reduced emissions of CO_2 and NO_X that are expected to result from each of the efficiency levels considered. In order to make this calculation analogous to the calculation of the NPV of consumer benefit, DOE considered the reduced emissions expected to result over the lifetime of equipment shipped in the forecast period for each efficiency level. This section summarizes the basis for the monetary values used for each of these emissions and presents the values considered in this NOPR.

For this NOPR, DOE relied on a set of values for the social cost of carbon (SCC) that was developed by a Federal interagency process. The basis for these values is summarized in the next section, and a more detailed description of the methodologies used is provided as an appendix to chapter 14 of the NOPR TSD.

[50] CSAPR also applies to NO_X, and it would supersede the regulation of NO_X under CAIR. As stated previously, the current analysis assumes that CAIR, not CSAPR, is the regulation in force. The difference between CAIR and CSAPR with regard to DOE's analysis of NO_X is slight.

1. Social Cost of Carbon

The SCC is an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year. It is intended to include (but is not limited to) changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services. Estimates of the SCC are provided in dollars per metric ton of CO_2. A domestic SCC value is meant to reflect the value of damages in the United States resulting from a unit change in CO_2 emissions, while a global SCC value is meant to reflect the value of damages worldwide.

Under section 1(b) of Executive Order 12866, ''Regulatory Planning and Review,'' 58 FR 51735 (Oct. 4, 1993), agencies must, to the extent permitted by law, ''assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.'' The purpose of the SCC estimates presented here is to allow agencies to incorporate the monetized social benefits of reducing CO_2 emissions into cost-benefit analyses of regulatory actions. The estimates are presented with an acknowledgement of the many uncertainties involved and with a clear understanding that they should be updated over time to reflect increasing knowledge of the science and economics of climate impacts.

As part of the interagency process that developed these SCC estimates, technical experts from numerous agencies met on a regular basis to consider public comments, explore the technical literature in relevant fields, and discuss key model inputs and assumptions. The main objective of this process was to develop a range of SCC values using a defensible set of input assumptions grounded in the existing scientific and economic literatures. In this way, key uncertainties and model differences transparently and consistently inform the range of SCC estimates used in the rulemaking process.

a. Monetizing Carbon Dioxide Emissions

When attempting to assess the incremental economic impacts of CO_2 emissions, the analyst faces a number of challenges. A report from the National Research Council[51] points out that any assessment will suffer from uncertainty, speculation, and lack of information about: (1) Future emissions of GHGs; (2) the effects of past and future emissions on the climate system; (3) the impact of changes in climate on the physical and biological environment; and (4) the translation of these environmental impacts into economic damages. As a result, any effort to quantify and monetize the harms associated with climate change will raise questions of science, economics, and ethics and should be viewed as provisional.

Despite the limits of both quantification and monetization, SCC estimates can be useful in estimating the social benefits of reducing CO_2 emissions. The agency can estimate the benefits from reduced (or costs from increased) emissions in any future year by multiplying the change in emissions in that year by the SCC values appropriate for that year. The NPV of the benefits can then be calculated by multiplying each of these future benefits by an appropriate discount factor and summing across all affected years.

It is important to emphasize that the interagency process is committed to updating these estimates as the science and economic understanding of climate change and its impacts on society improves over time. In the meantime, the interagency group will continue to explore the issues raised by this analysis and consider public comments as part of the ongoing interagency process.

b. Development of Social Cost of Carbon Values

In 2009, an interagency process was initiated to offer a preliminary assessment of how best to quantify the benefits from reducing carbon dioxide emissions. To ensure consistency in how benefits are evaluated across Federal agencies, the Administration sought to develop a transparent and defensible method, specifically designed for the rulemaking process, to quantify avoided climate change damages from reduced CO_2 emissions. The interagency group did not undertake any original analysis. Instead, it combined SCC estimates from the existing literature to use as interim values until a more comprehensive analysis could be conducted. The outcome of the preliminary assessment by the interagency group was a set of five interim values: Global SCC estimates for 2007 (in 2006$) of $55, $33, $19, $10, and $5 per metric ton of CO_2. These interim values represented the first sustained interagency effort within the U.S. government to develop an SCC for use in regulatory analysis. The results of this preliminary effort

[51] National Research Council, *Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use,* National Academies Press: Washington, DC (2009).

were presented in several proposed and final rules.

c. Current Approach and Key Assumptions

After the release of the interim values, the interagency group reconvened on a regular basis to generate improved SCC estimates. Specifically, the group considered public comments and further explored the technical literature in relevant fields. The interagency group relied on three integrated assessment models commonly used to estimate the SCC: the FUND, DICE, and PAGE models. These models are frequently cited in the peer-reviewed literature and were used in the last assessment of the Intergovernmental Panel on Climate Change (IPCC). Each model was given equal weight in the SCC values that were developed.

Each model takes a slightly different approach to model how changes in emissions result in changes in economic damages. A key objective of the interagency process was to enable a consistent exploration of the three models, while respecting the different approaches to quantifying damages taken by the key modelers in the field. An extensive review of the literature was conducted to select three sets of input parameters for these models: Climate sensitivity, socio-economic and emissions trajectories, and discount rates. A probability distribution for climate sensitivity was specified as an input into all three models. In addition, the interagency group used a range of scenarios for the socio-economic parameters and a range of values for the discount rate. All other model features were left unchanged, relying on the model developers' best estimates and judgments.

In 2010, the interagency group selected four sets of SCC values for use in regulatory analyses. Three sets of values are based on the average SCC from the three integrated assessment models, at discount rates of 2.5, 3, and 5 percent. The fourth set, which represents the 95th percentile SCC estimate across all three models at a 3-percent discount rate, was included to represent higher-than-expected impacts from climate change further out in the tails of the SCC distribution. The values grow in real terms over time. Additionally, the interagency group determined that a range of values from 7 percent to 23 percent should be used to adjust the global SCC to calculate domestic effects,[52] although preference is given to consideration of the global benefits of reducing CO_2 emissions. Table VII.1 presents the values in the 2010 interagency group report,[53] which is reproduced in appendix 10–A of the NOPR TSD.

TABLE VII.1—ANNUAL SCC VALUES FROM 2010 INTERAGENCY REPORT, 2010–2050

[2007$ per metric ton CO_2]

Year	Discount rate			
	5%	3%	2.5%	3%
	Average	Average	Average	95th percentile
2010	4.7	21.4	35.1	64.9
2015	5.7	23.8	38.4	72.8
2020	6.8	26.3	41.7	80.7
2025	8.2	29.6	45.9	90.4
2030	9.7	32.8	50.0	100.0
2035	11.2	36.0	54.2	109.7
2040	12.7	39.2	58.4	119.3
2045	14.2	42.1	61.7	127.8
2050	15.7	44.9	65.0	136.2

The SCC values used for this document were generated using the most recent versions of the three integrated assessment models that have been published in the peer-reviewed literature.[54]

Table VII.2 shows the updated sets of SCC estimates from the 2013 interagency update in 5-year increments from 2010 to 2050. The full set of annual SCC estimates between 2010 and 2050 is reported in appendix 10–B of the NOPR TSD. The central value that emerges is the average SCC across models at the 3-percent discount rate. However, for purposes of capturing the uncertainties involved in regulatory impact analysis, the interagency group emphasizes the importance of including all four sets of SCC values.

TABLE VII.2—ANNUAL SCC VALUES FROM 2013 INTERAGENCY REPORT, 2010–2050

[2007$ per metric ton CO_2]

Year	Discount rate			
	5%	3%	2.5%	3%
	Average	Average	Average	95th percentile
2010	11	32	51	89
2015	11	37	57	109

[52] It is recognized that this calculation for domestic values is approximate, provisional, and highly speculative. There is no *a priori* reason why domestic benefits should be a constant fraction of net global damages over time.

[53] *Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866,* Interagency Working Group on Social Cost of Carbon, United States Government (February 2010) (Available at: *www.whitehouse.gov/sites/default/files/omb/inforeg/for-agencies/Social-Cost-of-Carbon-for-RIA.pdf*).

[54] *Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866,* Interagency Working Group on Social Cost of Carbon, United States Government (May 2013; revised November 2013) (Available at: *http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/technical-update-social-cost-of-carbon-for-regulator-impact-analysis.pdf*).

TABLE VII.2—ANNUAL SCC VALUES FROM 2013 INTERAGENCY REPORT, 2010–2050—Continued

[2007$ per metric ton CO_2]

Year	Discount rate			
	5%	3%	2.5%	3%
	Average	Average	Average	95th percentile
2020	12	43	64	128
2025	14	47	69	143
2030	16	52	75	159
2035	19	56	80	175
2040	21	61	86	191
2045	24	66	92	206
2050	26	71	97	220

It is important to recognize that a number of key uncertainties remain, and that current SCC estimates should be treated as provisional and revisable because they will evolve with improved scientific and economic understanding. The interagency group also recognizes that the existing models are imperfect and incomplete. The 2009 National Research Council report mentioned previously points out that there is tension between the goal of producing quantified estimates of the economic damages from an incremental ton of carbon and the limits of existing efforts to model these effects. There are a number of analytical challenges that are being addressed by the research community, including research programs housed in many of the Federal agencies participating in the interagency process to estimate the SCC. The interagency group intends to periodically review and reconsider those estimates to reflect increasing knowledge of the science and economics of climate impacts, as well as improvements in modeling.

In summary, in considering the potential global benefits resulting from reduced CO_2 emissions, DOE used the values from the 2013 interagency report adjusted to 2013$ using the implicit price deflator for gross domestic product (GDP) from the Bureau of Economic Analysis. For each of the four sets of SCC cases specified, the values for emissions in 2015 were $12.0, $40.5, $62.4, and $119 per metric ton avoided (values expressed in 2013$). DOE derived values after 2050 using the relevant growth rates for the 2040–2050 period in the interagency update.

DOE multiplied the CO_2 emissions reduction estimated for each year by the SCC value for that year in each of the four cases. To calculate a present value of the stream of monetary values, DOE discounted the values in each of the four cases using the specific discount rate that had been used to obtain the SCC values in each case.

2. Valuation of Other Emissions Reductions

As noted previously, DOE has taken into account how considered energy conservation standards would reduce site NO_X emissions nationwide and increase power sector NO_X emissions in those 22 States not affected by the CAIR. DOE estimated the monetized value of net NO_X emissions reductions resulting from each of the efficiency levels considered for this NOPR based on estimates found in the relevant scientific literature. Estimates of monetary value for reducing NO_X from stationary sources range from $476 to $4,893 per ton in 2013$.[55] DOE calculated monetary benefits using a medium value for NO_X emissions of $2,684 per short ton (in 2013$) and real discount rates of 3 percent and 7 percent.

DOE is evaluating appropriate monetization of avoided SO_2 and Hg emissions in energy conservation standards rulemakings. DOE has not included monetization of those emissions in the current analysis.

VIII. Analytical Results and Conclusions

A. Efficiency Levels Analyzed

1. Small Commercial Air-Cooled Air Conditioners and Heat Pumps Less Than 65,000 Btu/h

The methodology for small commercial air-cooled air conditioners and heat pumps less than 65,000 Btu/h was presented in section V of this NOPR. Table VIII.1 presents the market baseline efficiency level and the higher efficiency levels analyzed for each equipment class of small commercial air-cooled air conditioners and heat pumps less than 65,000 Btu/h subject to this proposed rule. The EPCA baseline efficiency levels correspond to the lowest efficiency levels currently available on the market. The efficiency levels above the baseline represent efficiency levels specified by ASHRAE Standard 90.1–2013 and efficiency levels more stringent than those specified in ASHRAE Standard 90.1–2013 where equipment is currently available on the market. Note that for the energy savings and economic analysis, efficiency levels above those specified in ASHRAE Standard 90.1–2013 are compared to ASHRAE Standard 90.1–2013 as the baseline rather than the EPCA baseline (*i.e.,* the current Federal standards). For split-system air conditioners, for which ASHRAE 90.1–2013 did not change the efficiency level, all efficiency levels are compared to the Federal or EPCA baseline.

[55] U.S. Office of Management and Budget, Office of Information and Regulatory Affairs, *2006 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities* (2006) (Available at: *www.whitehouse.gov/sites/default/files/omb/assets/omb/inforeg/2006_cb/2006_cb_final_report.pdf*).

TABLE VIII.1—EFFICIENCY LEVELS ANALYZED FOR SMALL COMMERCIAL AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

	Small three-phase air-cooled split-system air conditioners <65,000 Btu/h	Small three-phase air-cooled single-package air conditioners <65,000 Btu/h	Small three-phase air-cooled split-system heat pumps <65,000 Btu/h	Small three-phase air-cooled single-package heat pumps <65,000 Btu/h
Efficiency Level (SEER/HSPF)				
Baseline—Federal Standard	13	13	13/7.7	13/7.7
ASHRAE Level (0)	* 14	14	14/8.2	14/8.0
Efficiency Level 1	15	15	15/8.5	15/8.4
Efficiency Level 2	16	16	16/8.7	16/8.8
Efficiency Level 3	17	17	17/9.0	17/8.9
Efficiency Level 4 **	18	18	18.0/9.2	18.0/9.1
Efficiency Level 5 ***	19	19	.....	.....

* For split system air conditioners, the ASHRAE level is 13.0 SEER. DOE analyzed the 14.0 SEER level as a level more stringent than ASHRAE, but designated it as efficiency level 0 for consistency in SEER level across equipment classes.
** Efficiency Level 4 is ''Max-Tech'' for HP equipment classes.
*** Efficiency Level 5 is ''Max-Tech'' for AC equipment classes.

2. Water-Source Heat Pumps

Table VIII.2 presents the baseline efficiency level and the more-stringent efficiency levels analyzed for each equipment class of water-source heat pumps subject to this proposed rule. The baseline efficiency levels correspond to the lowest efficiency levels currently available on the market. The efficiency levels above the baseline represent efficiency levels specified in ASHRAE Standard 90.1–2013 and more-stringent efficiency levels where equipment is currently available on the market.

TABLE VIII.2—EFFICIENCY LEVELS ANALYZED FOR WATER-SOURCE HEAT PUMPS

	Water-source (water-to-air, water-loop) heat pumps <17,000 Btu/h	Water-source (water-to-air, water-loop) heat pumps ≥17,000 and <65,000 Btu/h	Water-source (water-to-air, water-loop) heat pumps ≥65,000 and <135,000 Btu/h
Efficiency Level (EER/COP)			
Baseline—Federal Standard	11.2/4.2	12.0/4.2	12.0/4.2
ASHRAE Level (0)	12.2/4.3	13.0/4.3	13.0/4.3
Efficiency Level 1	13.0/4.6	14.6/4.8	14.0/4.7
Efficiency Level 2	14.0/4.8	16.6/5.3	15.0/4.8
Efficiency Level 3	15.7/5.1	18.0/5.6	16.0/5.0
Efficiency Level 4 *	16.5/5.3	19.2/5.9	17.2/5.1
Efficiency Level 5 **	18.1/5.6	21.6/6.5	.....

* Efficiency Level 4 is ''Max-Tech'' for the largest equipment class.
** Efficiency Level 5 is ''Max-Tech'' for the two smaller equipment classes.

3. Commercial Oil-Fired Storage Water Heaters

The methodology for oil-fired storage water heating equipment was presented in the April 2014 NODA. 79 FR 20114, 20129–33 (April 11, 2014). Table VIII.3 presents the baseline efficiency level and the more-stringent efficiency levels analyzed for the class of oil-fired storage water heaters subject to this proposed rule. The baseline efficiency levels correspond to the lowest efficiency levels currently available on the market. The efficiency levels above the baseline represent efficiency levels specified in ASHRAE Standard 90.1–2013 and more-stringent efficiency levels where equipment is currently available on the market.

TABLE VIII.3—EFFICIENCY LEVELS ANALYZED FOR COMMERCIAL OIL-FIRED STORAGE WATER-HEATING EQUIPMENT

	Oil-fired storage water-heating equipment (≤105,000 Btu/h and <4,000 Btu/h/gal) (%)
Efficiency level (E_t)	
Baseline—Federal Standard	78
ASHRAE Level (0)	80
Efficiency Level 1	81

TABLE VIII.3—EFFICIENCY LEVELS ANALYZED FOR COMMERCIAL OIL-FIRED STORAGE WATER-HEATING EQUIPMENT—Continued

	Oil-fired storage water-heating equipment (≤105,000 Btu/h and <4,000 Btu/h/gal) (%)
Efficiency Level 2—"Max-Tech"—	82

B. Energy Savings and Economic Justification

1. Small Commercial Air-Cooled Air Conditioners and Heat Pumps Less Than 65,000 Btu/h

a. Economic Impacts on Commercial Customers

1. Life-Cycle Cost and Payback Period

To evaluate the net economic impact of potential amended energy conservation standards on commercial consumers of small commercial air-cooled air conditioners and heat pumps, DOE conducted LCC and PBP analyses for each efficiency level. In general, higher-efficiency equipment would affect commercial consumers in two ways: (1) Purchase price would increase, and (2) annual operating costs would decrease. Inputs used for calculating the LCC and PBP include total installed costs (*i.e.,* equipment price plus installation costs), and operating costs (*i.e.,* annual energy usage, energy prices, energy price trends, repair costs, and maintenance costs). The LCC calculation also uses equipment lifetime and a discount rate.

The output of the LCC model is a mean LCC savings (or cost [56]) for each equipment class, relative to the baseline small commercial air-cooled air conditioner and heat pump efficiency level. The LCC analysis also provides information on the percentage of commercial consumers that are negatively affected by an increase in the minimum efficiency standard.

DOE also performed a PBP analysis as part of the LCC analysis. The PBP is the number of years it would take for the commercial consumer to recover the increased costs of higher-efficiency equipment as a result of energy savings based on the operating cost savings. The PBP is an economic benefit-cost measure that uses benefits and costs without discounting. Chapter 6 of the NOPR TSD provides detailed information on the LCC and PBP analyses.

DOE's LCC and PBP analyses provided five key outputs for each efficiency level above the baseline (*i.e.,* efficiency levels above the current Federal standard for split-system air conditioners or efficiency levels more stringent than those in ASHRAE Standard 90.1–2013 for the three triggered equipment classes), as reported in Table VIII.4 through Table VIII.11 below. These outputs include the proportion of small commercial air-cooled air conditioner and heat pump purchases in which the purchase of such a unit that is compliant with the amended energy conservation standard creates a net LCC increase, no impact, or a net LCC savings for the commercial consumer. Another output is the average net LCC savings from standard-compliant equipment, as well as the average PBP for the consumer investment in standard-compliant equipment.

Chapter 6 of the NOPR TSD provides detailed information on the LCC and PBP analyses.

Table VIII.4 through Table VIII.11 show the LCC and PBP results for all efficiency levels considered for each class of small commercial air-cooled air conditioner and heat pump in this NOPR. In the first of each pair of tables, the simple payback is measured relative to the baseline equipment (*i.e.,* equipment at the current Federal standards for split-system air conditioners or equipment with the efficiency levels required in ASHRAE Standard 90.1–2013 for the three triggered equipment classes). In the second tables, the LCC savings are measured relative to the base-case efficiency distribution in the compliance year (*i.e.,* the range of equipment expected to be on the market in the absence of amended standards for split-system air conditioners or the default case where DOE adopts the efficiency levels in ASHRAE Standard 90.1–2013 for the three triggered equipment classes).

TABLE VIII.4—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR SMALL THREE-PHASE AIR-COOLED SPLIT-SYSTEM AIR CONDITIONERS <65,000 Btu/h

Efficiency level	Average costs 2013$				Simple payback (years)	Average lifetime (years)
	Installed cost	First year's operating cost	Lifetime operating cost	LCC		
Baseline	$3,859	$765	$7,424	$11,282	N/A	19
0	4,106	762	7,389	11,495	68	19
1	4,353	755	7,326	11,680	49	19
2	4,619	749	7,268	11,887	47	19
3	4,873	753	7,302	12,176	80	19
4	5,138	757	7,342	12,480	148	19
5	5,415	762	7,400	12,815	562	19

Note: The results for each efficiency level are calculated assuming that all commercial consumers use equipment with that efficiency level. The PBP is measured relative to the baseline equipment.

[56] An LCC cost is shown as a negative savings in the results presented.

TABLE VIII.5—LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR SMALL THREE-PHASE AIR-COOLED SPLIT-SYSTEM AIR CONDITIONERS <65,000 Btu/h

Efficiency level	Life-cycle cost savings	
	% of Customers that experience	Average savings *
	Net cost	2013$
0	26	(55)
1	75	(196)
2	97	(398)
3	100	(687)
4	100	(992)
5	100	(1,326)

* The calculation includes households with zero LCC savings (no impact).

TABLE VIII.6—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR SMALL THREE-PHASE AIR-COOLED SINGLE-PACKAGE AIR CONDITIONERS <65,000 Btu/h

Efficiency level	Average costs 2013$				Simple payback (years)	Average Lifetime (years)
	Installed cost	First year's operating cost	Lifetime operating cost	LCC		
ASHRAE Baseline	$4,731	$761	$7,408	$12,139	N/A	19
1	5,036	747	7,275	12,311	47	19
2	5,343	742	7,224	12,567	50	19
3	5,642	746	7,262	12,904	80	19
4	5,944	750	7,300	13,244	128	19
5	6,308	755	7,350	13,659	261	19

Note: The results for each efficiency level are calculated assuming that all commercial consumers use equipment with that efficiency level. The PBP is measured relative to the baseline equipment.

TABLE VIII.7—LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR SMALL THREE-PHASE AIR-COOLED SINGLE-PACKAGE AIR CONDITIONERS <65,000 Btu/h

Efficiency level	Life-cycle cost savings	
	% of Customers that experience	Average savings *
	Net cost	2013$
1	49	(89)
2	81	(297)
3	89	(596)
4	93	(913)
5	100	(1,326)

* The calculation includes households with zero LCC savings (no impact).

TABLE VIII.8—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR SMALL THREE-PHASE AIR-COOLED SPLIT-SYSTEM HEAT PUMPS <65,000 Btu/h

Efficiency level	Average costs 2013$				Simple payback (years)	Average lifetime (years)
	Installed cost	First year's operating cost	Lifetime operating cost	LCC		
ASHRAE Baseline	$4,467	$784	$6,969	$11,436	N/A	16
1	4,725	772	6,857	11,582	35	16
2	5,066	766	6,807	11,873	41	16
3	5,346	766	6,811	12,157	54	16
4	5,636	767	6,819	12,454	70	16

Note: The results for each efficiency level are calculated assuming that all commercial consumers use equipment with that efficiency level. The PBP is measured relative to the baseline equipment.

TABLE VIII.9—LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR SMALL THREE-PHASE AIR-COOLED SPLIT-SYSTEM HEAT PUMPS <65,000 Btu/h

Efficiency level	Life-cycle cost savings	
	% of customers that experience	Average savings *
	Net cost	2013$
1	75	(117)
2	99	(406)
3	100	(690)
4	100	(988)

* The calculation includes households with zero LCC savings (no impact).

TABLE VIII.10—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR SMALL THREE-PHASE AIR-COOLED SINGLE-PACKAGE HEAT PUMPS <65,000 Btu/h

Efficiency level	Average costs 2013$				Simple payback (years)	Average lifetime (years)
	Installed cost	First year's operating cost	Lifetime operating cost	LCC		
ASHRAE Baseline	$5,103	$786	$6,982	$12,085	N/A	16
1	5,444	773	6,869	12,313	50	16
2	5,771	766	6,810	12,581	50	16
3	6,099	767	6,817	12,915	67	16
4	6,484	768	6,823	13,307	87	16

Note: The results for each efficiency level are calculated assuming that all commercial consumers use equipment with that efficiency level. The PBP is measured relative to the baseline equipment.

TABLE VIII.11—LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR SMALL THREE-PHASE AIR-COOLED SINGLE-PACKAGE HEAT PUMPS <65,000 Btu/h

Efficiency level	Life-cycle cost savings	
	% of customers that experience	Average savings *
	Net cost	2013$
1	68	($157)
2	90	($399)
3	99	($728)
4	99	($1,117)

* The calculation includes households with zero LCC savings (no impact).

b. National Impact Analysis

1. Amount and Significance of Energy Savings

To estimate the lifetime energy savings for equipment shipped through 2046 (or 2048) due to amended energy conservation standards, DOE compared the energy consumption of small commercial air-cooled air conditioners and heat pumps less than 65,000 Btu/h under the ASHRAE Standard 90.1–2013 efficiency levels (or current Federal levels for split-system air conditioners) to energy consumption of the same small commercial air-cooled air conditioners and heat pumps under more-stringent efficiency standards. For the three equipment classes triggered by ASHRAE, DOE also compared the energy consumption of those small commercial air-cooled air conditioners and heat pumps under the ASHRAE Standard 90.1–2013 efficiency levels to energy consumption of small commercial air-cooled air conditioners and heat pumps under the current EPCA base case (*i.e.,* under current Federal standards). DOE examined up to five efficiency levels higher than those of ASHRAE Standard 90.1–2013. Table VIII.12 through Table VIII.15 show the projected national energy savings at each of the considered standard levels. (See chapter 8 of the NOPR TSD.)

TABLE VIII.12—POTENTIAL ENERGY SAVINGS FOR SMALL THREE-PHASE AIR-COOLED SPLIT-SYSTEM AIR CONDITIONERS <65,000 Btu/h

Efficiency level	Primary energy savings estimate (quads)	FFC energy savings estimate (quads)
Level 0—14 SEER	0.02	0.02
Level 1—15 SEER	0.08	0.08

TABLE VIII.12—POTENTIAL ENERGY SAVINGS FOR SMALL THREE-PHASE AIR-COOLED SPLIT-SYSTEM AIR CONDITIONERS <65,000 Btu/h—Continued

Efficiency level	Primary energy savings estimate (quads)	FFC energy savings estimate (quads)
Level 2—16 SEER	0.13	0.14
Level 3—17 SEER	0.16	0.17
Level 4—18 SEER	0.18	0.19
Level 5—"Max-Tech"—19 SEER	0.19	0.20

TABLE VIII.13—POTENTIAL ENERGY SAVINGS FOR SMALL THREE-PHASE AIR-COOLED SINGLE-PACKAGE AIR CONDITIONERS <65,000 Btu/h

Efficiency level	Primary energy savings estimate* (quads)	FFC energy savings estimate* (quads)
Level 0—ASHRAE—14 SEER	0.04	0.04
Level 1—15 SEER	0.05	0.06
Level 2—16 SEER	0.11	0.12
Level 3—17 SEER	0.15	0.15
Level 4—18 SEER	0.18	0.18
Level 5—"Max-Tech"—19 SEER	0.19	0.20

* The potential energy savings for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.

TABLE VIII.14—POTENTIAL ENERGY SAVINGS FOR SMALL THREE-PHASE AIR-COOLED SPLIT-SYSTEM HEAT PUMPS <65,000 Btu/h

Efficiency level	Primary energy savings estimate* (quads)	FFC energy savings estimate* (quads)
Level 0—ASHRAE—14 SEER	0.01	0.01
Level 1—15 SEER	0.01	0.01
Level 2—16 SEER	0.02	0.02
Level 3—17 SEER	0.03	0.03
Level 4—"Max-Tech"—18 SEER	0.03	0.03

* The potential energy savings for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.

TABLE VIII.15—POTENTIAL ENERGY SAVINGS FOR SMALL THREE-PHASE AIR-COOLED SINGLE-PACKAGE HEAT PUMPS <65,000 Btu/h

Efficiency level	Primary energy savings estimate* (quads)	FFC energy savings estimate* (quads)
Level 0—ASHRAE—14 SEER	0.01	0.01
Level 1—15 SEER	0.01	0.01
Level 2—16 SEER	0.02	0.02
Level 3—17 SEER	0.03	0.03
Level 4—"Max-Tech"—18 SEER	0.04	0.04

* The potential energy savings for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.

2. Net Present Value of Customer Costs and Benefits

The NPV analysis is a measure of the cumulative commercial consumer benefit or cost of standards to the Nation. In accordance with OMB's guidelines on regulatory analysis (OMB Circular A–4, section E (Sept. 17, 2003)), DOE calculated NPV using both a 7-percent and a 3-percent real discount rate. Table VIII.16 and Table VIII.17 provide an overview of the NPV results. (See chapter 8 of the NOPR TSD for further detail.)

TABLE VIII.16—SUMMARY OF CUMULATIVE NET PRESENT VALUE FOR SMALL THREE-PHASE AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

[Discounted at seven percent]
[Net present value (billion 2013$)]

Equipment class	Efficiency level 0	Efficiency level 1	Efficiency level 2	Efficiency level 3	Efficiency level 4	Efficiency level 5
Three-Phase Air-Cooled Split-System Air Conditioners <65,000 Btu/h	(0.04)	(0.16)	(0.36)	(0.61)	(0.88)	(1.08)
Three-Phase Air-Cooled Single-Package Air Conditioners <65,000 Btu/h	*N/A	(0.13)	(0.40)	(0.75)	(1.16)	(1.51)
Three-Phase Air-Cooled Split-System Heat Pumps <65,000 Btu/h	*N/A	(0.03)	(0.08)	(0.14)	(0.18)	**N/A
Three-Phase Air-Cooled Single-Package Heat Pumps <65,000 Btu/h	*N/A	(0.04)	(0.10)	(0.19)	(0.25)	**N/A

Notes: Numbers in parentheses indicate negative NPV.
The net present value for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.
* Economic analysis was not conducted for the ASHRAE levels (EL 0).
** The max-tech level for this equipment class is EL 4.

TABLE VIII.17—SUMMARY OF CUMULATIVE NET PRESENT VALUE FOR SMALL THREE-PHASE AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

[Discounted at three percent]
[Net present value (billion 2013$)]

Equipment class	Efficiency level 0	Efficiency level 1	Efficiency level 2	Efficiency level 3	Efficiency level 4	Efficiency level 5
Three-Phase Air-Cooled Split-System Air Conditioners <65,000 Btu/h	(0.07)	(0.26)	(0.61)	(1.11)	(1.64)	(2.01)
Three-Phase Air-Cooled Single-Package Air Conditioners <65,000 Btu/h	* N/A	(0.20)	(0.71)	(1.41)	(2.21)	(2.84)
Three-Phase Air-Cooled Split-System Heat Pumps <65,000 Btu/h	* N/A	(0.05)	(0.14)	(0.25)	(0.32)	** N/A
Three-Phase Air-Cooled Single-Package Heat Pumps <65,000 Btu/h	* N/A	(0.07)	(0.18)	(0.34)	(0.46)	** N/A

Notes: Numbers in parentheses indicate negative NPV.
The net present value for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.
* Economic analysis was not conducted for the ASHRAE levels (EL 0).
** The max-tech level for this equipment class is EL 4.

2. Water-Source Heat Pumps

a. Economic Impacts on Commercial Customers

1. Life-Cycle Cost and Payback Period

Table VIII.18 through Table VIII.23 show the LCC and PBP results for all efficiency levels considered for each class of water-source heat pump in this NOPR. In the first of each pair of tables, the simple payback is measured relative to the baseline equipment (*i.e.,* equipment with the efficiency level specified in ASHRAE Standard 90.1–2013). In the second tables, the LCC savings are measured relative to the base-case efficiency distribution in the compliance year (*i.e.,* the range of equipment expected to be on the market in the default case where DOE adopts the efficiency levels in ASHRAE Standard 90.1–2013).

TABLE VIII.18—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR WATER-SOURCE HEAT PUMPS (WATER-TO-AIR, WATER-LOOP) <17,000 Btu/h

Efficiency level	Average costs 2013$				Simple payback (years)	Average lifetime (years)
	Installed cost	First year's operating cost	Lifetime operating cost	LCC		
ASHRAE Baseline	$3,184	$645	$7,581	$10,765		$3,184
1	3,320	636	7,469	10,789	15	3,320
2	3,494	628	7,385	10,879	17	3,494
3	3,782	619	7,271	11,054	20	3,782
4	3,917	615	7,229	11,146	21	3,917
5	4,189	609	7,159	11,349	24	4,189

Note: The results for each efficiency level are calculated assuming that all commercial consumers use equipment with that efficiency level. The PBP is measured relative to the baseline equipment.

TABLE VIII.19—LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS <17,000 Btu/h

Efficiency level	Life-cycle cost savings	
	Percent of customers that experience	Average savings *
	Net cost	2013$
1	0	0
2	46	(46)
3	68	(173)
4	89	(259)
5	95	(458)

* The calculation includes households with zero LCC savings (no impact).

TABLE VIII.20—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS ≥17,000 Btu/h AND <65,000 Btu/h

Efficiency level	Average costs 2013$				Simple payback (years)	Average lifetime (years)
	Installed cost	First year's operating cost	Lifetime operating cost	LCC		
ASHRAE Baseline	$4,834	$1,102	$12,980	$17,814		19
1	5,111	1,059	12,473	17,584	6.2	19
2	5,458	1,024	12,057	17,515	7.3	19
3	5,700	1,008	11,868	17,569	8.2	19
4	5,908	999	11,759	17,667	9.1	19
5	6,328	982	11,564	17,892	10.8	19

Note: The results for each efficiency level are calculated assuming that all commercial consumers use equipment with that efficiency level. The PBP is measured relative to the baseline equipment.

TABLE VIII.21—LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS ≥17,000 Btu/h AND < 65,000 Btu/h

Efficiency level	Life-cycle cost savings	
	Percent of customers that experience	Average savings *
	Net cost	2013$
1	2	19
2	29	62
3	53	14
4	66	(80)
5	76	(303)

* The calculation includes households with zero LCC savings (no impact).

TABLE VIII.22—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS ≥65,000 Btu/h AND <135,000 Btu/h

Efficiency level	Average costs 2013$				Simple payback (years)	Average lifetime (years)
	Installed cost	First year's operating cost	Lifetime operating cost	LCC		
ASHRAE Baseline	$11,886	$2,170	$25,586	$37,471		19
1	12,832	2,095	24,705	37,537	14	19
2	13,780	2,057	24,246	38,026	16	19
3	14,681	2,024	23,865	38,546	17	19

TABLE VIII.22—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS ≥65,000 Btu/h AND <135,000 Btu/h—Continued

Efficiency level	Average costs 2013$				Simple payback (years)	Average lifetime (years)
	Installed cost	First year's operating cost	Lifetime operating cost	LCC		
4	15,817	1,993	23,492	39,309	20	19

Note: The results for each efficiency level are calculated assuming that all commercial consumers use equipment with that efficiency level. The PBP is measured relative to the baseline equipment.

TABLE VIII.23—LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS ≥65,000 Btu/h AND <135,000 Btu/h

Efficiency level	Life-cycle cost savings	
	Percent of customers that experience	Average savings*
	Net cost	2013$
1	**0	**0
2	27	(147)
3	72	(556)
4	93	(1,305)

*The calculation includes households with zero LCC savings (no impact).

**The base-case efficiency distribution has 0-percent market share at the ASHRAE baseline; therefore, there are no savings for EL1.

b. National Impact Analysis

1. Amount and Significance of Energy Savings

To estimate the lifetime energy savings for equipment shipped through 2045 due to amended energy conservation standards, DOE compared the energy consumption of commercial water-source heat pumps under the ASHRAE Standard 90.1–2013 efficiency levels to energy consumption of the same water-source heat pumps under more-stringent efficiency standards. DOE also compared the energy consumption of those commercial water-source heat pumps under the ASHRAE Standard 90.1–2013 efficiency levels to energy consumption of commercial water-source heat pumps under the current EPCA base case (*i.e.,* under current Federal standards). DOE examined up to five efficiency levels higher than those of ASHRAE Standard 90.1–2013. Table VIII.24 through Table VIII.26 show the projected national energy savings at each of the considered standard levels. (See chapter 8 of the NOPR TSD.)

TABLE VIII.24—POTENTIAL ENERGY SAVINGS FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS <17,000 Btu/h

Efficiency level	Primary energy savings estimate* (quads)	FFC energy savings estimate* (quads)
Level 0—ASHRAE—12.2 EER**.		
Level 1—13.0 EER	0.0002	0.0002
Level 2—14.0 EER	0.02	0.02
Level 3—15.7 EER	0.06	0.06
Level 4—16.5 EER	0.08	0.08
Level 5—"Max-Tech"—18.1 EER	0.11	0.11

*The potential energy savings for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.

**The base-case efficiency distribution has 0-percent market share at the Federal baseline; therefore, there are no savings for the ASHRAE level.

TABLE VIII.25—POTENTIAL ENERGY SAVINGS FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS ≥17,000 AND <65,000 Btu/h

Efficiency level	Primary energy savings estimate* (quads)	FFC energy savings estimate* (quads)
Level 0—ASHRAE—13.0 EER**.		
Level 1—14.6 EER	0.02	0.03
Level 2—16.6 EER	0.26	0.27
Level 3—18.0 EER	0.45	0.47
Level 4—19.2 EER	0.60	0.63
Level 5—"Max-Tech"—21.6 EER	0.83	0.87

*The potential energy savings for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.

**The base-case efficiency distribution has 0-percent market share at the Federal baseline; therefore, there are no savings for the ASHRAE level.

TABLE VIII.26—POTENTIAL ENERGY SAVINGS FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS ≥65,000 AND <135,000 Btu/h

Efficiency level	Primary energy savings estimate * (quads)	FFC energy savings estimate * (quads)
Level 0—ASHRAE—13.0 EER **.		
Level 1—14.0 EER **.		
Level 2—15.0 EER	0.01	0.01
Level 3—16.0 EER	0.03	0.03
Level 4—"Max-Tech"—17.2 EER	0.05	0.05

* The potential energy savings for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.
** The base-case efficiency distribution has 0-percent market share at the Federal baseline and the ASHRAE baseline; therefore, there are no savings for the ASHRAE level or EL1.

2. Net Present Value of Customer Costs and Benefits

Table VIII.27 and Table VIII.28 provide an overview of the NPV results. (See chapter 8 of the NOPR TSD for further detail.)

TABLE VIII.27—SUMMARY OF CUMULATIVE NET PRESENT VALUE FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS

[Discounted at seven percent]
[Net present value (billion 2013$)]

Equipment class	Efficiency level 1	Efficiency level 2	Efficiency level 3	Efficiency level 4	Efficiency level 5
Water-Source (Water-to-Air, Water-Loop) HP <17,000 Btu/h	(0.00)	(0.04)	(0.13)	(0.19)	(0.30)
Water-Source (Water-to-Air, Water-Loop) HP ≥17,000 to <65,000 Btu/h	0.01	0.01	(0.09)	(0.24)	(0.53)
Water-Source (Water-to-Air, Water-Loop) HP ≥65,000 to 135,000 Btu/h	*	(0.01)	(0.05)	(0.10)	** N/A

Notes: Numbers in parentheses indicate negative NPV.
The net present value for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted. Economic analysis was not conducted for the ASHRAE levels (EL 0).
* The base-case efficiency distribution has 0-percent market share at the ASHRAE baseline; therefore, there are no savings for EL1.
** The max-tech level for this equipment class is EL 4.

TABLE VIII.28—SUMMARY OF CUMULATIVE NET PRESENT VALUE FOR WATER-SOURCE (WATER-TO-AIR, WATER-LOOP) HEAT PUMPS

[Discounted at three percent]
[Net Present Value (Billion 2013$)]

Equipment class	Efficiency level 1	Efficiency level 2	Efficiency level 3	Efficiency level 4	Efficiency level 5
Water-Source (Water-to-Air, Water-Loop) HP <17,000 Btu/h	(0.00)	(0.05)	(0.19)	(0.29)	(0.46)
Water-Source (Water-to-Air, Water-Loop) HP ≥17,000 to <65,000 Btu/h	0.03	0.26	0.22	0.05	(0.31)
Water-Source (Water-to-Air, Water-Loop) HP ≥65,000 to 135,000 Btu/h	(*)	(0.02)	(0.07)	(0.14)	** N/A

Notes: Numbers in parentheses indicate negative NPV.
The net present value for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted. Economic analysis was not conducted for the ASHRAE levels (EL 0).
* The base-case efficiency distribution has 0-percent market share at the ASHRAE baseline; therefore, there are no savings for EL1.
** The max-tech level for this equipment class is EL 4.

3. Commercial Oil-Fired Storage Water Heaters

DOE estimated the potential primary energy savings in quads (*i.e.,* 10^{15} Btu) for each efficiency level considered within each equipment class analyzed. Table VIII.29 shows the potential energy savings resulting from the analyses conducted as part of the April 2014 NODA. 79 FR 20114, 20136 (April 11, 2014). In response to the NODA, AHRI stated that DOE's derivation of unit energy consumption for oil-fired storage water heaters based on a proportional relationship to gas-fired storage water heaters in the Commercial Building Energy Consumption Survey (CBECS) might not be fully correct because of regional variations between the two energy sources. (AHRI, No. 24 at p. 7) After re-examining the energy savings analysis for oil-fired storage water heaters, DOE has tentatively determined

that any resulting imprecision in this estimate would not be enough to make the energy-savings estimates for this class non-trivial, and, therefore, DOE did not adjust its analysis for the NOPR.

TABLE VIII.29—POTENTIAL ENERGY SAVINGS ESTIMATES FOR COMMERCIAL OIL-FIRED STORAGE WATER HEATERS >105,000 Btu/h AND <4,000 Btu/h/gal

Efficiency level	Primary energy savings estimate * (Quads)	FFC energy savings estimate * (Quads)
Level 0—ASHRAE—80% E_t	0.002	0.002
Level 1—81% E_t	0.001	0.001
Level 2—"Max-Tech"—82% E_t	0.002	0.002

* The potential energy savings for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.

As mentioned in section IV.B, DOE did not conduct an economic analysis for this oil-fired storage water heater equipment category because of the minimal energy savings.

C. Need of the Nation To Conserve Energy

An improvement in the energy efficiency of the equipment subject to this rule, where economically justified, is likely to improve the security of the nation's energy system by reducing overall demand for energy, to strengthen the economy, and to reduce the environmental impacts or costs of energy production. Reduced electricity demand may also improve the reliability of the electricity system, particularly during peak-load periods. Reductions in national electric generating capacity estimated for each efficiency level considered in this rulemaking, throughout the same analysis period as the NIA, are reported in chapter 11 of the NOPR TSD.

Energy savings from amended standards for the small air-cooled air conditioners and heat pumps less than 65,000 Btu/h, water-source heat pumps, and oil-fired storage water heaters covered in this NOPR could also produce environmental benefits in the form of reduced emissions of air pollutants and greenhouse gases.

Table VIII.30 and Table VIII.31 provide DOE's estimate of cumulative emissions reductions projected to result from the efficiency levels analyzed in this rulemaking.[57] The tables include both power sector emissions and upstream emissions. The upstream emissions were calculated using the multipliers discussed in section VII.A. DOE reports annual CO_2, NO_X, and Hg emissions reductions for each efficiency level in chapter 9 of the NOPR TSD. As discussed in section VII.A, DOE did not include NO_X emissions reduction from power plants in States subject to CAIR, because an energy conservation standard would not affect the overall level of NO_X emissions in those States due to the emissions caps mandated by CAIR.

TABLE VIII.30—CUMULATIVE EMISSIONS REDUCTION FOR POTENTIAL STANDARDS FOR SMALL THREE-PHASE AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

[2017–2046 for ASHRAE level; 2020–2046 for more-stringent levels; 2019–2048 for split-system air conditioners]

	Efficiency level					
	ASHRAE/0	1	2	3	4	5
Power Sector Emissions						
CO_2 (*million metric tons*)	3.7	8.9	16.8	20.8	24.3	25.9
SO_2 (*thousand tons*)	2.9	6.9	13.0	16.1	18.8	20.1
NO_X (*thousand tons*)	2.8	6.7	12.6	15.6	18.2	19.4
Hg (*tons*)	0.01	0.02	0.04	0.05	0.06	0.06
N_2O (*thousand tons*)	0.05	0.13	0.24	0.30	0.35	0.37
CH_4 (*thousand tons*)	0.38	0.90	1.69	2.10	2.45	2.61
Upstream Emissions						
CO_2 (*million metric tons*)	0.22	0.54	1.00	1.24	1.45	1.54
SO_2 (*thousand tons*)	0.04	0.09	0.17	0.22	0.25	0.27
NO_X (*thousand tons*)	3.2	7.6	14.3	17.7	20.7	22.0
Hg (*tons*)	0.0001	0.0002	0.0004	0.0005	0.0006	0.0006
N_2O (*thousand tons*)	0.002	0.005	0.009	0.011	0.012	0.013
CH_4 (*thousand tons*)	19	45	83	103	121	128
Total FFC Emissions						
CO_2 (*million metric tons*)	4.0	9.5	17.8	22.1	25.8	27.4
SO_2 (*thousand tons*)	2.9	7.0	13.2	16.4	19.1	20.3
NO_X (*thousand tons*)	6.0	14.3	26.8	33.4	38.9	41.4
Hg (*tons*)	0.01	0.02	0.04	0.05	0.06	0.06
N_2O (*thousand tons*)	0.06	0.13	0.25	0.31	0.36	0.39
CH_4 (*thousand tons*)	19	45	85	105	123	131

Note: The potential emissions reduction for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.

[57] Because DOE did not conduct additional analysis for oil-fired storage water heaters, estimates of environmental benefits for amended standards for that equipment type are not shown here.

TABLE VIII.31—CUMULATIVE EMISSIONS REDUCTION FOR POTENTIAL STANDARDS FOR WATER-SOURCE HEAT PUMPS

[2016–2045 for ASHRAE level; 2020–2045 for more-stringent levels]

	Efficiency level					
	ASHRAE/0 *	1	2	3	4	5
Power Sector Emissions						
CO_2 (*million metric tons*)	.....	1.4	16.3	30.5	41.6	56.8
SO_2 (*thousand tons*)	.....	1.1	12.9	24.2	32.9	44.9
NO_X (*thousand tons*)	.....	1.1	12.3	23.1	31.4	42.9
Hg (*tons*)	.....	0.003	0.040	0.075	0.101	0.139
N_2O (*thousand tons*)	.....	0.02	0.23	0.44	0.60	0.81
CH_4 (*thousand tons*)	.....	0.14	1.63	3.06	4.17	5.69
Upstream Emissions						
CO_2 (*million metric tons*)	.....	0.08	0.97	1.81	2.47	3.37
SO_2 (*thousand tons*)	.....	0.01	0.17	0.32	0.43	0.59
NO_X (*thousand tons*)	.....	1.2	13.8	25.9	35.2	48.0
Hg (*tons*)	.....	0.00003	0.00037	0.00070	0.00095	0.00130
N_2O (*thousand tons*)	.....	0.001	0.008	0.016	0.021	0.029
CH_4 (*thousand tons*)	.....	7.0	80.5	150.8	205.2	279.9
Total FFC Emissions						
CO_2 (*million metric tons*)	.....	1.5	17.3	32.4	44.0	60.1
SO_2 (*thousand tons*)	.....	1.1	13.1	24.5	33.3	45.5
NO_X (*thousand tons*)	.....	2.3	26.1	49.0	66.7	91.0
Hg (*tons*)	.....	0.004	0.040	0.075	0.102	0.140
N_2O (*thousand tons*)	.....	0.02	0.24	0.45	0.62	0.84
CH_4 (*thousand tons*)	.....	7.2	82.1	153.9	209.4	285.6

Note: The potential emissions reduction for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.

* There are no reductions for the ASHRAE level because there is no market share projected at the Federal baseline in the base case.

As part of the analysis for this NOPR, DOE estimated monetary benefits likely to result from the reduced emissions of CO_2 and NO_X estimated for each of the efficiency levels analyzed for small air-cooled air conditioners and heat pumps less than 65,000 Btu/h, water-source heat pumps, and oil-fired storage water heaters. As discussed in section VII.B.1, for CO_2, DOE used values for the SCC developed by an interagency process. The interagency group selected four sets of SCC values for use in regulatory analyses. Three sets are based on the average SCC from three integrated assessment models, at discount rates of 2.5 percent, 3 percent, and 5 percent. The fourth set, which represents the 95th-percentile SCC estimate across all three models at a 3-percent discount rate, is included to represent higher-than-expected impacts from temperature change further out in the tails of the SCC distribution. The four SCC values for CO_2 emissions reductions in 2015, expressed in 2013$, are $12.0/ton, $40.5/ton, $62.4/ton, and $119/ton. The values for later years are higher due to increasing emissions-related costs as the magnitude of projected climate change increases.

Table VIII.32 and Table VIII.33 present the global value of CO_2 emissions reductions at each efficiency level. For each of the four cases, DOE calculated a present value of the stream of annual values using the same discount rate as was used in the studies upon which the dollar-per-ton values are based. DOE calculated domestic values as a range from 7 percent to 23 percent of the global values, and these results are presented in chapter 10 of the NOPR TSD.

TABLE VIII.32—GLOBAL PRESENT VALUE OF CO_2 EMISSIONS REDUCTION FOR POTENTIAL STANDARDS FOR SMALL THREE-PHASE AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

Efficiency level	SCC scenario *			
	5% discount rate, average	3% discount rate, average	2.5% discount rate, average	3% discount rate, 95th ercentile
	million 2013$			
Power Sector Emissions				
ASHRAE/0	23	110	177	340
1	53	261	420	808
2	103	498	799	1541
3	127	617	990	1910
4	149	721	1156	2231
5	159	768	1232	2378

TABLE VIII.32—GLOBAL PRESENT VALUE OF CO_2 EMISSIONS REDUCTION FOR POTENTIAL STANDARDS FOR SMALL THREE-PHASE AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h—Continued

Efficiency level	SCC scenario *			
	5% discount rate, average	3% discount rate, average	2.5% discount rate, average	3% discount rate, 95th ercentile
Upstream Emissions				
ASHRAE/0	1.3	6.5	10	20
1	3.1	15	25	48
2	6.0	29	47	91
3	7.4	36	59	113
4	8.7	43	68	132
5	9.3	45	73	140
Total FFC Emissions				
ASHRAE/0	24	116	187	360
1	56	277	445	856
2	109	527	846	1632
3	135	654	1049	2023
4	157	763	1224	2362
5	168	814	1305	2518

Note: The potential emissions reduction for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.
* For each of the four cases, the corresponding SCC value for emissions in 2015 is $12.0, $40.5, $62.4 and $119 per metric ton (2013$).

TABLE VIII.33—GLOBAL PRESENT VALUE OF CO_2 EMISSIONS REDUCTION FOR POTENTIAL STANDARDS FOR WATER-SOURCE HEAT PUMPS

Efficiency level	SCC scenario *			
	5% discount rate, average	3% discount rate, average	2.5% discount rate, average	3% discount rate, 95th percentile
	million 2013$			
Power Sector Emissions				
ASHRAE/0 **	.....	.....	.....	.....
1	8.7	42	68	131
2	99	482	773	1491
3	186	902	1448	2794
4	253	1228	1972	3804
5	347	1681	2698	5206
Upstream Emissions				
ASHRAE/0 **	.....	.....	.....	.....
1	0.5	2.5	4.0	7.7
2	5.8	28	45	88
3	11	53	85	164
4	15	72	116	224
5	20	99	159	306
Total FFC Emissions				
ASHRAE/0 **	.....	.....	.....	.....
1	9.2	45	72	138
2	105	510	818	1579
3	196	955	1533	2958
4	267	1300	2088	4028
5	367	1780	2856	5512

Note: The potential emissions reduction for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.
* For each of the four cases, the corresponding SCC value for emissions in 2015 is $12.0, $40.5, $62.4 and $119 per metric ton (2013$).
** There are no reductions for the ASHRAE level because there is no market share projected at the Federal baseline in the base case.

DOE is well aware that scientific and economic knowledge about the contribution of CO_2 and other GHG emissions to changes in the future global climate and the potential resulting damages to the world economy

continues to evolve rapidly. Thus, any value placed in this rulemaking on reducing CO_2 emissions is subject to change. DOE, together with other Federal agencies, will continue to review various methodologies for estimating the monetary value of reductions in CO_2 and other GHG emissions. This ongoing review will consider the comments on this subject that are part of the public record for this and other rulemakings, as well as other methodological assumptions and issues. However, consistent with DOE's legal obligations, and taking into account the uncertainty involved with this particular issue, DOE has included in this NOPR the most recent values and analyses resulting from the interagency review process.

DOE also estimated a range for the cumulative monetary value of the economic benefits associated with NO_X emissions reductions anticipated to result from amended standards for the small air-cooled air conditioners and heat pumps less than 65,000 Btu/h, water-source heat pumps, and oil-fired storage water heaters that are the subject of this NOPR. The dollar-per-ton values that DOE used are discussed in section VII.B.2.

Table VIII.34 and Table VIII.35 present the present value of cumulative NO_X emissions reductions for each efficiency level calculated using the average dollar-per-ton values and 7-percent and 3-percent discount rates.

TABLE VIII.34—PRESENT VALUE OF NO_X EMISSIONS REDUCTION FOR POTENTIAL STANDARDS FOR SMALL THREE-PHASE AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

[2017–2046 for ASHRAE Level; 2020–2046 for More-Stringent Levels; 2019–2048 for Split-System Air Conditioners]

Efficiency level	3% discount rate	7% discount rate
	million 2013$	
	Power Sector Emissions	
ASHRAE/0	3.3	1.4
1	7.8	3.2
2	15	6.4
3	19	7.9
4	22	9.2
5	23	9.9
Upstream Emissions		
ASHRAE/0	3.6	1.4
1	8.6	3.3
2	17	6.6
3	21	8.2
4	24	9.5

TABLE VIII.34—PRESENT VALUE OF NO_X EMISSIONS REDUCTION FOR POTENTIAL STANDARDS FOR SMALL THREE-PHASE AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h—Continued

[2017–2046 for ASHRAE Level; 2020–2046 for More-Stringent Levels; 2019–2048 for Split-System Air Conditioners]

Efficiency level	3% discount rate	7% discount rate
5	26	10
Total FFC Emissions		
ASHRAE/0	7.0	2.8
1	16	6.5
2	32	13
3	39	16
4	46	19
5	49	20

Note: The potential emissions reduction for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.

TABLE VIII.35—PRESENT VALUE OF NO_X EMISSIONS REDUCTION FOR POTENTIAL STANDARDS FOR WATER-SOURCE HEAT PUMPS

[2016–2045 for ASHRAE Level; 2020–2045 for More-Stringent Levels]

Efficiency level	3% discount rate	7% discount rate
	million 2013$	
Power Sector Emissions		
ASHRAE/0*	.....	.....
1	1.3	0.5
2	15	6.0
3	27	11
4	37	15
5	51	21
Upstream Emissions		
ASHRAE/0*	.....	.....
1	1.4	0.5
2	16	6.2
3	30	12
4	41	16
5	56	22
Total FFC Emissions		
ASHRAE/0*.		
1	2.7	1.1
2	31	12
3	57	23
4	78	31
5	107	43

Note: The potential emissions reduction for efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013 were calculated relative to the efficiency levels that would result if ASHRAE Standard 90.1–2013 standards were adopted.

*There are no reductions for the ASHRAE level because there is no market share projected at the Federal baseline in the base case.

D. Proposed Standards

1. Small Commercial Air-Cooled Air Conditioners and Heat Pumps Less Than 65,000 Btu/h

As noted previously, EPCA specifies that, for any commercial and industrial equipment addressed under 42 U.S.C. 6313(a)(6)(A)(i), DOE may prescribe an energy conservation standard more stringent than the level for such equipment in ASHRAE Standard 90.1, as amended, only if ''clear and convincing evidence'' shows that a more-stringent standard would result in significant additional conservation of energy and is technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)(II)) This requirement also applies to split-system air conditioners evaluated under the 6-year look back. (42 U.S.C. 6313)(a)(6)(C)(i)(II))

In evaluating more-stringent efficiency levels than those specified by ASHRAE Standard 90.1–2013 for small air-cooled air conditioners and heat pumps less than 65,000 Btu/h, DOE reviewed the results in terms of their technological feasibility, significance of energy savings, and economic justification.

DOE has tentatively concluded that all of the SEER and HSPF levels considered by DOE are technologically feasible, as units with equivalent efficiency appeared to be available in the current market at all levels examined.

DOE examined the potential energy savings that would result from the efficiency levels specified in ASHRAE Standard 90.1–2013 and compared these to the potential energy savings that would result from efficiency levels more stringent than those in ASHRAE Standard 90.1–2013. DOE estimates that 0.05 quads of energy would be saved if DOE adopts the efficiency levels set in ASHRAE Standard 90.1–2013 for each small air-cooled air conditioner and heat pump class specified in that standard. If DOE were to adopt efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013, the potential additional energy savings range from 0.02 quads to 0.45 quads. Associated with proposing more-stringent efficiency levels for the three triggered equipment classes is a three-year delay in implementation compared to the adoption of energy conservation standards at the levels specified in ASHRAE Standard 90.1–2013 (see section V.E.10). This delay in

implementation of amended energy conservation standards would result in a small amount of energy savings being lost in the first years (2017 through 2020) compared to the savings from adopting the levels in ASHRAE Standard 90.1–2013; however, this loss may be compensated for by increased savings in later years. Taken in isolation, the energy savings associated with more-stringent standards might be considered significant enough to warrant adoption of such standards. However, as noted previously, energy savings are not the only factor that DOE must consider.

In considering whether potential standards are economically justified, DOE also examined the LCC savings and national NPV that would result from adopting efficiency levels more stringent than those set forth in ASHRAE Standard 90.1–2013. The analytical results show negative average LCC savings and negative national NPV at both 7-percent and 3-percent discount rate for all efficiency levels in all four equipment classes. These results indicate that adoption of efficiency levels more stringent than those in ASHRAE Standard 90.1–2013 as Federal energy conservation standards would likely lead to negative economic outcomes for the Nation. Consequently, this criterion for adoption of more-stringent standard levels does not appear to have been met.

As such, DOE does not have ''clear and convincing evidence'' that any significant additional conservation of energy that would result from adoption of more-stringent efficiency levels than those specified in ASHRAE Standard 90.1–2013 would be economically justified. Therefore, DOE is proposing to adopt the energy efficiency levels for these products as set forth in ASHRAE Standard 90.1–2013. For split-system air conditioners, for which the efficiency level was not updated in Standard 90.1–2013, DOE is making a determination that standards for the product do not need to be amended for the reasons stated above. Table VIII.36 presents the proposed amended energy conservation standards and compliance dates for small air-cooled air conditioners and heat pumps less than 65,000 Btu/h.

TABLE VIII.36—PROPOSED ENERGY CONSERVATION STANDARDS FOR SMALL THREE-PHASE AIR-COOLED AIR CONDITIONERS AND HEAT PUMPS <65,000 Btu/h

Equipment type	Efficiency level	Compliance date
Three-Phase Air-Cooled Split System Air Conditioners <65,000 Btu/h	13.0 SEER *	June 16, 2008.
Three-Phase Air-Cooled Single Package Air Conditioners <65,000 Btu/h	14.0 SEER	January 1, 2017.
Three-Phase Air-Cooled Split System Heat Pumps <65,000 Btu/h	14.0 SEER 8.2 HSPF	January 1, 2017.
Three-Phase Air-Cooled Single Package Heat Pumps <65,000 Btu/h	14.0 SEER 8.0 HSPF	January 1, 2017.

*13.0 SEER is the existing Federal minimum energy conservation standard for three-phase air-cooled split system air conditioners <65,000 Btu/h.

2. Water-Source Heat Pumps

In evaluating more-stringent efficiency levels for water-source heat pumps than those specified by ASHRAE Standard 90.1–2013, DOE reviewed the results in terms of their technological feasibility, significance of energy savings, and economic justification.

DOE has tentatively concluded that all of the EER and COP levels considered by DOE are technologically feasible, as units with equivalent efficiency appeared to be available in the current market at all levels examined.

DOE examined the potential energy savings that would result from the efficiency levels specified in ASHRAE Standard 90.1–2013 and compared these to the potential energy savings that would result from efficiency levels more stringent than those in ASHRAE Standard 90.1–2013. DOE does not estimate any energy savings from adopting the levels set in ASHRAE Standard 90.1–2013, as very few models exist on the market below that level, and by 2020, DOE expects those models to be off the market. If DOE were to adopt efficiency levels more stringent than those specified by ASHRAE Standard 90.1–2013, the potential additional energy savings range from 0.03 quads to 1.0 quads. Associated with proposing more-stringent efficiency levels is a four-and-a-half-year delay in implementation compared to the adoption of energy conservation standards at the levels specified in ASHRAE Standard 90.1–2013 (see section VI.E.10). This delay in implementation of amended energy conservation standards would result in a small amount of energy savings being lost in the first years (2016 through 2020) compared to the savings from adopting the levels in ASHRAE Standard 90.1–2013; however, this loss may be compensated for by increased savings in later years. Taken in isolation, the energy savings associated with more-stringent standards might be considered significant enough to warrant adoption of such standards. However, as noted above, energy savings are not the only factor which DOE must consider.

In considering whether potential standards are economically justified, DOE also examined the NPV that would result from adopting efficiency levels more stringent than those set forth in ASHRAE Standard 90.1–2013. With a 7-percent discount rate, EL 1 results in positive NPV, and ELs 2 through 5 result in negative NPV. With a 3-percent discount rate, ELs 1 and 2 create positive NPV, while ELs 3 through 5 result in negative NPVs. These results indicate that adoption of efficiency levels more stringent than those in ASHRAE Standard 90.1–2013 as Federal energy conservation standards might lead to negative economic outcomes for the Nation, except at EL1, which offers very little energy savings.

Furthermore, although DOE based it analyses on the best available data when examining the potential energy savings and the economic justification of efficiency levels more stringent than those specified in ASHRAE Standard 90.1–2013, DOE believes there are several limitations regarding that data which should be considered before proposing amended energy conservation standards for water-source heat pumps.

First, DOE reexamined the uncertainty in its analysis of water-source heat pumps. As noted in section VI.D, DOE relied on cooling energy use estimates from a 2000 study. While DOE applied a scaling factor to attempt to account for changes in buildings since

2000, this is only a rough estimate. DOE considered running building simulations by applying a water-source heat pump module to reference buildings. However, DOE has been unable to obtain reliable information on the distribution of water-source heat pump applications. Therefore, it is not clear which building types would be most useful to simulate and how DOE would weight the results of the simulations. Furthermore, DOE has no field data with which to corroborate the results of the simulations. The analysis of heating energy use is also very uncertain; DOE relied on estimates for air-source heat pumps, but it is unclear whether water-source heat pumps would have similar heating usage, as they tend to be used in different applications. Any inaccuracy in UEC directly impacts the energy savings estimates and consumer impacts.

Second, in developing its analysis, DOE made refinements to various inputs, such as heating UEC and repair cost. DOE observed that the NPV results were highly sensitive to small changes in these inputs, with NPV for EL 2, for example, changing from positive to negative and back over several iterations. This model sensitivity, combined with high uncertainty in various inputs, makes it difficult for DOE to determine that the results provide clear and convincing evidence that higher standards would be economically justified.

Third, DOE relied on shipments estimates from the U.S. Census. As noted in section VI.F.2, these estimates are considerably higher than those found in an EIA report. Furthermore, DOE disaggregated the shipments into equipment class using data from over a decade ago. Although DOE requested comment in the April 2014 NODA, DOE has not received any information or data regarding the shipments of this equipment. Any inaccuracy in the shipment projection in total or by equipment class contributes to the uncertainty of the energy savings results and, thus, makes it difficult for DOE to determine that any additional energy savings are significant.

Fourth, due to the limited data on the existing distribution of shipments by efficiency level or historical efficiency trends, DOE was not able to assess possible future changes in either the available efficiencies of equipment in the water-source heat pump market or the sales distribution of shipments by efficiency level in the absence of setting more-stringent standards. Instead, DOE applied an efficiency trend from a commercial air conditioner rulemaking published 10 years ago. DOE recognizes that manufacturers may continue to make future improvements in water-source heat pump efficiencies even in the absence of mandated energy conservation standards. In particular, water-source heat pumps tend to be a fairly efficient product, and the distribution of model availability indicates that many commercial consumers are already purchasing equipment well above the baseline. Consequently, it is likely that the true improvements in efficiency in the absence of a standard may be higher than estimated. This possibility increases the uncertainty of the energy savings estimates. To the extent that manufacturers improve equipment efficiency and commercial consumers choose to purchase improved products in the absence of standards, the energy savings estimates would likely be reduced.

In light of the above, DOE would again restate the statutory test for adopting energy conservation standards more stringent than the levels in ASHRAE Standard 90.1. DOE must have ''clear and convincing'' evidence in order to propose efficiency levels more stringent than those specified in ASHRAE Standard 90.1–2013, and for the reasons explained in this document, the totality of information does not meet the level necessary to support these more-stringent efficiency levels for water-source heat pumps. Consequently, DOE has tentatively decided to propose the efficiency levels in ASHRAE Standard 90.1–2013 as amended energy conservation standards for all three water-source heat pump equipment classes. Accordingly, Table VIII.37 presents the proposed amended energy conservation standards and compliance dates for water-source heat pumps.

TABLE VIII.37—PROPOSED ENERGY CONSERVATION STANDARDS FOR WATER-SOURCE HEAT PUMPS

Equipment type	Efficiency level	Compliance date
Water-Source (Water-to-Air, Water-Loop) HP <17,000 Btu/h	12.2 EER 4.3 COP	October 9, 2015.
Water-Source (Water-to-Air, Water-Loop) HP ≥17,000 to <65,000 Btu/h	13.0 EER 4.3 COP	October 9, 2015.
Water-Source (Water-to-Air, Water-Loop) HP ≥65,000 to 135,000 Btu/h	13.0 EER 4.3 COP	October 9, 2015.

DOE seeks comments from interested parties on its proposed amended energy conservation standards for water-source heat pumps, as well as the other efficiency levels considered. This is identified as Issue 12 under ''Issues on Which DOE Seeks Comment'' in section X.E of this NOPR. Although DOE currently believes that it would be appropriate to adopt the efficiency levels in ASHRAE Standard 90.1–2013 for water-source heat pumps, DOE may consider the possibility of setting standards at more-stringent efficiency levels if public comments and additional data supply clear and convincing evidence in support of such an approach.

3. Commercial Oil-Fired Storage Water Heaters

EPCA specifies that, for any commercial and industrial equipment addressed under 42 U.S.C. 6313(a)(6)(A)(i), DOE may prescribe an energy conservation standard more stringent than the level for such equipment in ASHRAE Standard 90.1, as amended, only if ''clear and convincing evidence'' shows that a more-stringent standard would result in significant additional conservation of energy and is technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)(II))

In evaluating more-stringent efficiency levels for oil-fired storage water-heating equipment than those specified by ASHRAE Standard 90.1–2013, DOE reviewed the results in terms of the significance of their additional energy savings. DOE believes that the energy savings from increasing national energy conservation standards for oil-fired storage water heaters above the levels specified by ASHRAE Standard 90.1–2013 would be minimal. As such, DOE does not have ''clear and convincing evidence'' that significant additional conservation of energy would

result from adoption of more-stringent standard levels. Therefore, DOE did not examine whether the levels are economically justified, and DOE is proposing to adopt the energy efficiency levels for this equipment type as set forth in ASHRAE Standard 90.1–2013. Table VIII.38 presents the proposed energy conservation standard and compliance date for oil-fired storage water heaters.

TABLE VIII.38—PROPOSED ENERGY CONSERVATION STANDARDS FOR OIL-FIRED STORAGE WATER HEATERS

Equipment type	Efficiency level (Et)	Compliance date
Oil-Fired Storage Water Heaters >105,000 Btu/h and <4,000 Btu/h/gal	80%	October 9, 2015.

IX. Procedural Issues and Regulatory Review

A. Review Under Executive Order 12866 and 13563

Section 1(b)(1) of Executive Order 12866, ''Regulatory Planning and Review,'' 58 FR 51735 (Oct. 4, 1993), requires each agency to identify the problem that it intends to address, including, where applicable, the failures of private markets or public institutions that warrant new agency action, as well as to assess the significance of that problem. The problems that the proposed standards set forth in this NOPR address are as follows:

(1) Insufficient information and the high costs of gathering and analyzing relevant information leads some customers to miss opportunities to make cost-effective investments in energy efficiency.

(2) In some cases the benefits of more efficient equipment are not realized due to misaligned incentives between purchasers and users. An example of such a case is when the equipment purchase decision is made by a building contractor or building owner who does not pay the energy costs.

(3) There are external benefits resulting from improved energy efficiency of small air-cooled air conditioners and heat pumps less than 65,000 Btu/h, water-source heat pumps, and oil-fired storage water heaters that are not captured by the users of such equipment. These benefits include externalities related to public health, environmental protection, and national energy security that are not reflected in energy prices, such as reduced emissions of air pollutants and greenhouse gases that impact human health and global warming. DOE attempts to quantify some of the external benefits through use of social cost of carbon values.

In addition, DOE has determined that the proposed regulatory action is not an ''economically significant regulatory action'' under section 3(f)(1) of Executive Order 12866. Accordingly, DOE has not prepared a regulatory impact analysis (RIA) for this rule, and the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget (OMB) has not reviewed this rule.

DOE has also reviewed this regulation pursuant to Executive Order 13563, issued on January 18, 2011 (76 FR 3281 (Jan. 21, 2011)). Executive Order 13563 is supplemental to and explicitly reaffirms the principles, structures, and definitions governing regulatory review established in Executive Order 12866. To the extent permitted by law, agencies are required by Executive Order 13563 to: (1) Propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify); (2) tailor regulations to impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations; (3) select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity); (4) to the extent feasible, specify performance objectives, rather than specifying the behavior or manner of compliance that regulated entities must adopt; and (5) identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public.

DOE emphasizes as well that Executive Order 13563 requires agencies to use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible. In its guidance, the Office of Information and Regulatory Affairs has emphasized that such techniques may include identifying changing future compliance costs that might result from technological innovation or anticipated behavioral changes. For the reasons stated in the preamble, DOE believes that this NOPR is consistent with these principles, including the requirement that, to the extent permitted by law, benefits justify costs and that net benefits are maximized.

B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires preparation of an initial regulatory flexibility analysis (IRFA) for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, ''Proper Consideration of Small Entities in Agency Rulemaking,'' 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel's Web site (*http://energy.gov/gc/office-general-counsel*).

For manufacturers of small air-cooled air conditioners and heat pumps less than 65,000 Btu/h, water-source heat pumps, and oil-fired storage water heaters, the Small Business Administration (SBA) has set a size threshold, which defines those entities classified as ''small businesses'' for the purposes of the statute. DOE used the SBA's small business size standards to determine whether any small entities would be subject to the requirements of the rule. 65 FR 30836, 30848 (May 15, 2000), as amended at 65 FR 53533, 53544 (Sept. 5, 2000) and 77 FR 49991, 50000 (August 20, 2012), as codified at 13 CFR part 121. The size standards are listed by North American Industry Classification System (NAICS) code and industry description and are available at *http://www.sba.gov/sites/default/files/Size_Standards_Table.pdf*. The ASHRAE equipment covered by this rule are classified under NAICS 333318, ''Other Commercial and Service Industry Machinery Manufacturing'' (oil-fired water heaters) and NAICS 333415, ''Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing'' (all other equipment

addressed by the document). For an entity to be considered as a small business, the SBA sets a threshold of 1,000 employees or fewer for the first category including commercial water heaters and 750 employees or fewer for the second category.

DOE examined each of the manufacturers it found during its market assessment and used publicly-available information to determine if any manufacturers identified qualify as a small business under the SBA guidelines discussed previously. (For a list of all manufacturers of ASHRAE equipment covered by this rule, see chapter 2 of the NOPR TSD.) DOE's research involved individual company Web sites and marketing research tools (*e.g.,* Hoovers reports [58]) to create a list of companies that manufacture the types of ASHRAE equipment affected by this rule. DOE screened out companies that do not have domestic manufacturing operations for ASHRAE equipment (*i.e.,* manufacturers that produce all of their ASHRAE equipment internationally). DOE also did not consider manufacturers that are subsidiaries of parent companies that exceed the applicable 1000-employee or 750-employee threshold set by the SBA to be small businesses. DOE identified 16 companies that qualify as small manufacturers: 5 central air conditioner manufacturers (of the 23 total identified), 7 water-source heat pump manufacturers (of the 18 total identified), and 7 oil-fired storage water heater manufacturers (of the 10 total identified). Please note that there are 3 small manufacturers that produce equipment in more than one of these categories.

Based on reviews of product listing data in the AHRI Directory for commercial equipment, DOE estimates that small manufacturers account for less than 1 percent of the market for covered three-phase central air conditioner equipment and less than 5 percent of the market for covered water-source heat pump equipment. In the oil-fired storage water heat market, DOE understands that one of the small manufacturers is a significant player in the market. That manufacturer accounts for 34 percent of product listings. DOE believes that the remaining oil-fired storage water heater manufacturers account for less than 5 percent of the market.

DOE has reviewed this proposed rule under the provisions of the Regulatory Flexibility Act and the policies and procedures published on February 19, 2003. 68 FR 7990. As part of this rulemaking, DOE examined the potential impacts of amended standard levels on manufacturers, as well as the potential implications of the proposed revisions to the commercial warm air furnace test procedures on compliance burdens.

DOE examined the impact of raising the standards to the proposed levels by examining the distribution of efficiencies of commercially-available models in the AHRI Directory. For water-source heat pumps and oil-fired storage water heaters, DOE found that all manufacturers in the directory, including the small manufacturers, already offer equipment at and above the efficiency levels being proposed. While these small manufacturers would have to discontinue a fraction of their models in order to comply with the standards proposed in this rulemaking, DOE does not believe that there would be a significant burden placed on industry, as the market would shift to the new baseline levels when compliance with the new standards is required.

For small commercial air-cooled air conditioners and heat pumps, DOE found one small manufacturer of single-package units in the directory with no models that could meet the proposed ASHRAE levels.

To estimate the impacts of the proposed standard, DOE researched prior energy conservation standard analyses of the covered equipment, as well as any analyses of comparable single-phase products. The 2011 direct final rule for residential furnaces, central air conditioners, and heat pumps included analysis for a 14 SEER efficiency level for split-system as well as single-package air conditioners and heat pumps. 76 FR 37408 (June 27, 2011). The 2011 analysis indicated that manufacturers would need to include additional heat exchanger surface area and to include modulating components to reach the 14 SEER level from a 13 SEER baseline. The 2011 analyses further concluded that these improvements could be made without significant investments in equipment and production assets. The proposed levels for oil-fired storage water heaters or water-source heat pumps have not been analyzed as a part of any prior energy conservation standard rulemakings.

However, DOE understands that the ASHRAE standards were developed through an industry consensus process, which included consideration of manufacturer input, including the impacts to small manufacturers, when increasing the efficiency of equipment. Because EPCA requires DOE to adopt the ASHRAE levels or to propose higher standards, DOE is limited in terms of the steps it can take to mitigate impacts to small businesses, but DOE reasons that such mitigation has already occurred since small manufacturers had input into the development of the industry consensus standard that DOE is statutorily required to adopt. DOE requests public comment on the number of small manufacturers producing covered three-phase central air conditioners, water-source heat pumps, and oil-fired storage water-heating equipment. Additionally, DOE requests data on the market shares of small manufactures covered in this rulemaking and the potential impacts of this rule on those manufacturers.

As for the specific changes being proposed for the commercial warm air furnace test procedure, the test procedures (ANSI Z21.47–2012 and ASHRAE 103–2007) that DOE is proposing to incorporate by reference do not include any updates to the methodology in those sections utilized in the DOE test procedure. Thus, DOE has tentatively concluded that this test procedure rulemaking would keep the DOE test procedure current with the latest version of the applicable industry testing standards, but it will not change the methodology used to generate ratings of commercial warm air furnaces. Consequently, the proposed test procedure amendments would not be expected to have a substantive impact on manufacturers, either large or small.

For the reasons stated previously, DOE did not prepare an initial regulatory flexibility analysis for the proposed rule. DOE will transmit its certification and a supporting statement of factual basis to the Chief Counsel for Advocacy of the SBA for review pursuant to 5 U.S.C. 605(b).

C. Review Under the Paperwork Reduction Act of 1995

Manufacturers of the ASHRAE equipment subject to this NOPR must certify to DOE that their equipment complies with any applicable energy conservation standards. In certifying compliance, manufacturers must test their equipment according to the applicable DOE test procedures for the relevant ASHRAE equipment, including any amendments adopted for those test procedures on the date that compliance is required. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment, including the ASHRAE equipment in this NOPR. 76

[58] For more information see: *http://www.hoovers.com/.*

FR 12422 (March 7, 2011). The collection-of-information requirement for the certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (PRA). This requirement has been approved by OMB under OMB control number 1910–1400. Public reporting burden for the certification is estimated to average 20 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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.

D. Review Under the National Environmental Policy Act of 1969

Pursuant to the National Environmental Policy Act (NEPA) of 1969, DOE has determined that the proposed rule fits within the category of actions included in Categorical Exclusion (CX) B5.1 and otherwise meets the requirements for application of a CX. See 10 CFR part 1021, App. B, B5.1(b); 1021.410(b) and Appendix B, B(1)–(5). The proposed rule fits within the category of actions because it is a rulemaking that establishes energy conservation standards for consumer products or industrial equipment, and for which none of the exceptions identified in CX B5.1(b) apply. Therefore, DOE has made a CX determination for this rulemaking, and DOE does not need to prepare an Environmental Assessment or Environmental Impact Statement for this proposed rule. DOE's CX determination for this proposed rule is available at *http://cxnepa.energy.gov/.*

E. Review Under Executive Order 13132

Executive Order 13132, ''Federalism,'' imposes certain requirements on Federal agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. 64 FR 43255 (August 10, 1999). The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this proposed rule and has tentatively determined that it 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. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the equipment types that are the subject of this proposed rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297) Therefore, no further action is required by Executive Order 13132.

F. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, ''Civil Justice Reform,'' imposes on Federal agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; and (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. 61 FR 4729 (Feb. 7, 1996). Regarding the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this proposed rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Public Law 104–4, sec. 201 (codified at 2 U.S.C. 1531). For a proposed regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector, of $100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal governments on a proposed ''significant intergovernmental mandate,'' and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect them. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820. DOE's policy statement is also available at *http://energy.gov/gc/office-general-counsel.*

This proposed rule contains neither an intergovernmental mandate nor a mandate that may result in the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector, of $100 million or more in any year. Accordingly, no assessment or analysis is required under the UMRA.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under Executive Order 12630

Pursuant to Executive Order 12630, ''Governmental Actions and Interference with Constitutionally Protected Property Rights,'' 53 FR 8859 (March 18, 1988),

DOE has determined that this proposed rule would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under the Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for Federal agencies to review most disseminations of information to the public under information quality guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE's guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed this NOPR under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Order 13211

Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OIRA at OMB, a Statement of Energy Effects for any proposed significant energy action. A ''significant energy action'' is defined as any action by an agency that promulgates or is expected to lead to promulgation of a final rule, and that: (1) Is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy, or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

DOE has tentatively concluded that this regulatory action, which sets forth proposed energy conservation standards for certain types of ASHRAE equipment, is not a significant energy action because the proposed standards are not a significant regulatory action under Executive Order 12866 and are not likely to have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as such by the Administrator at OIRA. Accordingly, DOE has not prepared a Statement of Energy Effects on the proposed rule.

L. Review Under the Information Quality Bulletin for Peer Review

On December 16, 2004, OMB, in consultation with the Office of Science and Technology Policy (OSTP), issued its Final Information Quality Bulletin for Peer Review (the Bulletin). 70 FR 2664 (Jan. 14, 2005). The Bulletin establishes that certain scientific information shall be peer reviewed by qualified specialists before it is disseminated by the Federal Government, including influential scientific information related to agency regulatory actions. The purpose of the bulletin is to enhance the quality and credibility of the Government's scientific information. Under the Bulletin, the energy conservation standards rulemaking analyses are ''influential scientific information,'' which the Bulletin defines as ''scientific information the agency reasonably can determine will have, or does have, a clear and substantial impact on important public policies or private sector decisions.'' *Id.* at 2667.

In response to OMB's Bulletin, DOE conducted formal in-progress peer reviews of the energy conservation standards development process and analyses and has prepared a Peer Review Report pertaining to the energy conservation standards rulemaking analyses. Generation of this report involved a rigorous, formal, and documented evaluation using objective criteria and qualified and independent reviewers to make a judgment as to the technical/scientific/business merit, the actual or anticipated results, and the productivity and management effectiveness of programs and/or projects. The ''Energy Conservation Standards Rulemaking Peer Review Report'' dated February 2007 has been disseminated and is available at the following Web site: *http://energy.gov/eere/buildings/peer-review.*

X. Public Participation

A. Attendance at the Public Meeting

The time, date, and location of the public meeting are listed in the **DATES** and **ADDRESSES** sections at the beginning of this document. If you plan to attend the public meeting, please notify Ms. Brenda Edwards at (202) 586–2945 or *Brenda.Edwards@ee.doe.gov.* As explained in the **ADDRESSES** section, foreign nationals visiting DOE Headquarters are subject to advance security screening procedures. Any foreign national wishing to participate in the meeting should advise DOE of this fact as soon as possible by contacting Ms. Brenda Edwards to initiate the necessary procedures.

In addition, you can attend the public meeting via webinar. Webinar registration information, participant instructions, and information about the capabilities available to webinar participants will be published on DOE's Web site at: *https://www1.gotomeeting.com/register/584170792.* Participants are responsible for ensuring their systems are compatible with the webinar software.

B. Procedure for Submitting Prepared General Statements for Distribution

Any person who has plans to present a prepared general statement may request that copies of his or her statement be made available at the public meeting. Such persons may submit requests, along with an advance electronic copy of their statement in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format, to the appropriate address shown in the **ADDRESSES** section at the beginning of this document. The request and advance copy of statements must be received at least one week before the public meeting and may be emailed, hand-delivered, or sent by mail. DOE prefers to receive requests and advance copies via email. Please include a telephone number to enable DOE staff to make follow-up contact, if needed.

C. Conduct of the Public Meeting

DOE will designate a DOE official to preside at the public meeting and may also use a professional facilitator to aid discussion. The meeting will not be a judicial or evidentiary-type public hearing, but DOE will conduct it in accordance with section 336 of EPCA (42 U.S.C. 6306). A court reporter will be present to record the proceedings and prepare a transcript. DOE reserves the right to schedule the order of presentations and to establish the procedures governing the conduct of the public meeting. There shall not be discussion of proprietary information, costs or prices, market share, or other commercial matters regulated by U.S. anti-trust laws. After the public meeting, interested parties may submit further comments on the proceedings, as well as on any aspect of the rulemaking, until the end of the comment period.

The public meeting will be conducted in an informal, conference style. DOE will present summaries of comments received before the public meeting, allow time for prepared general statements by participants, and encourage all interested parties to share their views on issues affecting this rulemaking. Each participant will be allowed to make a general statement (within time limits determined by DOE),

before the discussion of specific topics. DOE will allow, as time permits, other participants to comment briefly on any general statements.

At the end of all prepared statements on a topic, DOE will permit participants to clarify their statements briefly and comment on statements made by others. Participants should be prepared to answer questions by DOE and by other participants concerning these issues. DOE representatives may also ask questions of participants concerning other matters relevant to this rulemaking. The official conducting the public meeting will accept additional comments or questions from those attending, as time permits. The presiding official will announce any further procedural rules or modification of the above procedures that may be needed for the proper conduct of the public meeting.

A transcript of the public meeting will be included in the docket, which can be viewed as described in the *Docket* section at the beginning of this document and will be accessible on the DOE Web site. In addition, any person may buy a copy of the transcript from the transcribing reporter.

D. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule before or after the public meeting, but no later than the date provided in the **DATES** section at the beginning of this proposed rule. Interested parties may submit comments, data, and other information using any of the methods described in the **ADDRESSES** section at the beginning of this document.

Submitting comments via www.regulations.gov. The *www.regulations.gov* Web page will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment itself or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Otherwise, persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to *www.regulations.gov* information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (CBI)). Comments submitted through *www.regulations.gov* cannot be claimed as CBI. Comments received through the Web site will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section below.

DOE processes submissions made through *www.regulations.gov* before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that *www.regulations.gov* provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery/courier, or mail. Comments and documents submitted via email, hand delivery, or mail also will be posted to *www.regulations.gov.* If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information in a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via mail or hand delivery/courier, please provide all items on a CD, if feasible, in which case it is not necessary to submit printed copies. No telefacsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, that are written in English, and that are free of any defects or viruses. Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery/courier two well-marked copies: One copy of the document marked ''confidential'' including all the information believed to be confidential, and one copy of the document marked ''non-confidential'' with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

E. Issues on Which DOE Seeks Comment

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

1. DOE's proposed definition of ''water-source heat pump.''

2. Any relevant issues that would affect the test procedures for commercial warm-air furnaces. Interested parties are welcome to comment on any aspect of these test procedures as part of this comprehensive 7-year-review.

3. Is there a rebound effect in small air-cooled three-phase air conditioner and heat pump equipment less than 65,000 Btu/h or water-source heat pump energy use as a result of improvements in the efficiency of such units?

4. Would shipments of small air-cooled three-phase air conditioners and heat pump equipment less than 65,000 Btu/h or water-source heat pump equipment change at more-stringent standard levels?

5. The use of the projected base-case efficiency trend of an increase of 1 SEER or EER every 35 years for small air-cooled three-phase air conditioner and heat pump equipment less than 65,000 Btu/h and water-source heat pump equipment.

6. Should the mark-ups analysis for water-source heat pumps include national accounts?

7. DOE's methodology for developing heating UECs for water-source heat pumps. DOE also seeks relevant data on this issue.

8. The appropriate building types for the water-source heat pump energy use analysis, which currently include office, education, lodging, multi-family, and healthcare.

9. How maintenance costs for water-source heat pumps might be expected to differ from that for air-source heat pumps.

10. How repair costs for water-source heat pumps might be expected to differ from that for air-source heat pumps.

11. What is the appropriate retirement function for water-source heat pumps?

12. The proposed standard levels for water-source heat pumps, as well as the other efficiency levels considered.

XI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this notice of proposed rulemaking.

List of Subjects in 10 CFR Part 431

Administrative practice and procedure, Confidential business information, Energy conservation, Incorporation by reference, Reporting and recordkeeping requirements.

Issued in Washington, DC, on December 23, 2014.

Kathleen B. Hogan,

Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy.

For the reasons set forth in the preamble, DOE proposes to amend part 431 of Chapter II, Subchapter D, of Title 10 of the Code of Federal Regulations as set forth below:

PART 431—ENERGY EFFICIENCY PROGRAM FOR CERTAIN COMMERCIAL AND INDUSTRIAL EQUIPMENT

■ 1. The authority citation for part 431 continues to read as follows:

Authority: 42 U.S.C. 6291–6317.

■ 2. Section 431.75 is amended by revising paragraphs (b) and (c) to read as follows:

§ 431.75 Materials incorporated by reference.

* * * * *

(b) *ANSI.* American National Standards Institute. 25 W. 43rd Street, 4th Floor, New York, NY 10036. (212) 642–4900 or go to *http://www.ansi.org.*

(1) ANSI Z21.47–2012, (''ANSI Z21.47–2012''), ''*Gas-Fired Central Furnaces,''* ANSI approved on March 27, 2012, IBR approved for § 431.76.

(2) [Reserved]

(c) *ASHRAE.* American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc., 1791 Tullie Circle, NE., Atlanta, Georgia 30329, (404) 636–8400, or go to: *http://www.ashrae.org.*

(1) ASHRAE Standard 103–2007, sections 7.2.2.4, 7.8, 9.2, and 11.3.7, ''Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers,'' ANSI approved on March 25, 2008, IBR approved for § 431.76.

(2) [Reserved]

* * * * *

■ 3. Section 431.76 is revised to read as follows:

§ 431.76 Uniform test method for the measurement of energy efficiency of commercial warm air furnaces.

(a) *Scope.* This section covers the test requirements used to measure the energy efficiency of commercial warm air furnaces with a rated maximum input of 225,000 Btu per hour or more. On and after [DATE 360 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], any representations made with respect to the energy use or efficiency of commercial warm air furnaces must be made in accordance with the results of testing pursuant to this section. At that time, you must use the relevant procedures in ANSI Z21.47–2012 or UL 727–2006 (incorporated by reference, see § 431.75). On and after [DATE 30 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE **Federal Register**] and prior to [DATE 360 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], manufacturers must test commercial warm air furnaces in accordance with this section or the section as it appeared at 10 CFR part 430, subpart B in the 10 CFR parts 200 to 499 edition revised January 1, 2014. DOE notes that, because testing under this section is required as of [DATE 360 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], manufacturers may wish to begin using this amended test procedure immediately. Any representations made with respect to the energy use or efficiency of such commercial warm air furnaces must be made in accordance with whichever version is selected.

(b) *Testing.* Where this section prescribes use of ANSI Z21.47–2012 or UL Standard 727–2006 (incorporated by reference, see § 431.75), perform only the procedures pertinent to the measurement of the steady-state efficiency, as specified in paragraph (c) of this section.

(c) *Test set-up*—(1) *Test set-up for gas-fired commercial warm air furnaces.* The test set-up, including flue requirement, instrumentation, test conditions, and measurements for determining thermal efficiency is as specified in sections 1.1 (Scope), 2.1 (General), 2.2 (Basic Test Arrangements), 2.3 (Test Ducts and Plenums), 2.4 (Test Gases), 2.5 (Test Pressures and Burner Adjustments), 2.6 (Static Pressure and Air Flow Adjustments), 2.39 (Thermal Efficiency), and 4.2.1 (Basic Test Arrangements for Direct Vent Central Furnaces) of ANSI Z21.47–2012 (incorporated by reference, see § 431.75). The thermal efficiency test must be conducted only at the normal inlet test pressure, as specified in section 2.5.1 of ANSI Z21.47–2012, and at the maximum hourly Btu input rating specified by the manufacturer for the product being tested.

(2) *Test setup for oil-fired commercial warm air furnaces.* The test setup, including flue requirement, instrumentation, test conditions, and measurement for measuring thermal efficiency is as specified in sections 1 (Scope), 2 (Units of Measurement), 3 (Glossary), 37 (General), 38 and 39 (Test Installation), 40 (Instrumentation, except 40.4 and 40.6.2 through 40.6.7, which are not required for the thermal efficiency test), 41 (Initial Test Conditions), 42 (Combustion Test—Burner and Furnace), 43.2 (Operation Tests), 44 (Limit Control Cutout Test), 45 (Continuity of Operation Test), and 46 (Air Flow, Downflow or Horizontal Furnace Test), of UL 727–2006 (incorporated by reference, see § 431.75). You must conduct a fuel oil analysis for heating value, hydrogen content, carbon content, pounds per gallon, and American Petroleum Institute (API) gravity as specified in section 8.2.2 of HI BTS–2000 (incorporated by reference, see § 431.75). The steady-state combustion conditions, specified in Section 42.1 of UL 727–2006, are attained when variations of not more than 5 °F in the measured flue gas temperature occur for

three consecutive readings taken 15 minutes apart.

(d) *Additional test measurements*—(1) *Measurement of flue CO_2 (carbon dioxide) for oil-fired commercial warm air furnaces.* In addition to the flue temperature measurement specified in section 40.6.8 of UL 727–2006 (incorporated by reference, see § 431.75), you must locate one or two sampling tubes within six inches downstream from the flue temperature probe (as indicated on Figure 40.3 of UL 727–2006). If you use an open end tube, it must project into the flue one-third of the chimney connector diameter. If you use other methods of sampling CO_2, you must place the sampling tube so as to obtain an average sample. There must be no air leak between the temperature probe and the sampling tube location. You must collect the flue gas sample at the same time the flue gas temperature is recorded. The CO_2 concentration of the flue gas must be as specified by the manufacturer for the product being tested, with a tolerance of ±0.1 percent. You must determine the flue CO_2 using an instrument with a reading error no greater than ±0.1 percent.

(2) *Procedure for the measurement of condensate for a gas-fired condensing commercial warm air furnace.* The test procedure for the measurement of the condensate from the flue gas under steady-state operation must be conducted as specified in sections 7.2.2.4, 7.8, and 9.2 of ASHRAE 103–2007 (incorporated by reference, see § 431.75) under the maximum rated input conditions. You must conduct this condensate measurement for an additional 30 minutes of steady-state operation after completion of the steady-state thermal efficiency test specified in paragraph (c) of this section.

(e) *Calculation of thermal efficiency*—(1) *Gas-fired commercial warm air furnaces.* You must use the calculation procedure specified in section 2.39, Thermal Efficiency, of ANSI Standard Z21.47–2012 (incorporated by reference, see § 431.75).

(2) *Oil-fired commercial warm air furnaces.* You must calculate the percent flue loss (in percent of heat input rate) by following the procedure specified in sections 11.1.4, 11.1.5, and 11.1.6.2 of the HI BTS–2000 (incorporated by reference, see § 431.75). The thermal efficiency must be calculated as:

Thermal Efficiency (percent) = 100 percent − flue loss (in percent).

(f) *Procedure for the calculation of the additional heat gain and heat loss, and adjustment to the thermal efficiency, for a condensing commercial warm air furnace.* (1) You must calculate the latent heat gain from the condensation of the water vapor in the flue gas, and calculate heat loss due to the flue condensate down the drain, as specified in sections 11.3.7.1 and 11.3.7.2 of ASHRAE Standard 103–2007 (incorporated by reference, see § 431.75), with the exception that in the equation for the heat loss due to hot condensate flowing down the drain in section 11.3.7.2, the assumed indoor temperature of 70 °F and the temperature term T_{OA} must be replaced by the measured room temperature as specified in section 2.2.8 of ANSI Z21.47–2012 (incorporated by reference, see § 431.75).

(2) *Adjustment to the thermal efficiency for condensing furnaces.* You must adjust the thermal efficiency as calculated in paragraph (e)(1) of this section by adding the latent gain, expressed in percent, from the condensation of the water vapor in the flue gas, and subtracting the heat loss (due to the flue condensate down the drain), also expressed in percent, both as calculated in paragraph (f)(1) of this section, to obtain the thermal efficiency of a condensing furnace.

■ 4. Section 431.92 is amended by adding in alphabetical order a definition for ''Water-source heat pump'' to read as follows:

§ 431.92 Definitions concerning commercial air conditioners and heat pumps.

* * * * *

Water-source heat pump means a single-phase or three-phase reverse-cycle heat pump that uses a circulating water loop as the heat source for heating and as the heat sink for cooling. The main components are a compressor, refrigerant-to-water heat exchanger, refrigerant-to-air heat exchanger, refrigerant expansion devices, refrigerant reversing valve, and indoor fan. Such equipment includes, but is not limited to, water-to-air water-loop heat pumps.

■ 5. Section 431.97 is amended by:

■ a. Revising paragraph (b);

■ b. Redesignating Tables 4 through 8 as Tables 5 through 9 respectively, in paragraphs (c), (d), (e) and (f); and

■ c. Revising paragraph (c).

The revisions read as follows:

§ 431.97 Energy efficiency standards and their compliance dates.

* * * * *

(b) Each commercial air conditioner or heat pump (not including single package vertical air conditioners and single package vertical heat pumps, packaged terminal air conditioners and packaged terminal heat pumps, computer room air conditioners, and variable refrigerant flow systems) manufactured on or after the compliance date listed in the corresponding table must meet the applicable minimum energy efficiency standard level(s) set forth in Tables 1, 2, 3, and 4 of this section.

TABLE 1 TO § 431.97—MINIMUM COOLING EFFICIENCY STANDARDS FOR AIR-CONDITIONING AND HEATING EQUIPMENT

[Not including single package vertical air conditioners and single package vertical heat pumps, packaged terminal air conditioners and packaged terminal heat pumps, computer room air conditioners, and variable refrigerant flow multi-split air conditioners and heat pumps]

Equipment category	Cooling capacity	Sub-category	Heating type	Efficiency level	Compliance date: equipment manufactured on and after . . .
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Split-System).	<65,000 Btu/h	AC	All	SEER = 13	June 16, 2008.
		HP	All	SEER = 13	June 16, 2008.[1]
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Single-Package).	<65,000 Btu/h	AC	All	SEER = 13	June 16, 2008.[1]
		HP	All	SEER = 13	June 16, 2008.[1]

TABLE 1 TO § 431.97—MINIMUM COOLING EFFICIENCY STANDARDS FOR AIR-CONDITIONING AND HEATING EQUIPMENT—Continued

[Not including single package vertical air conditioners and single package vertical heat pumps, packaged terminal air conditioners and packaged terminal heat pumps, computer room air conditioners, and variable refrigerant flow multi-split air conditioners and heat pumps]

Equipment category	Cooling capacity	Sub-category	Heating type	Efficiency level	Compliance date: equipment manufactured on and after . . .
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥65,000 Btu/h and <135,000 Btu/h.	AC	No Heating or Electric Resistance Heating.	EER = 11.2	January 1, 2010.
			All Other Types of Heating	EER = 11.0	January 1, 2010.
		HP	No Heating or Electric Resistance Heating.	EER = 11.0	January 1, 2010.
			All Other Types of Heating	EER = 10.8	January 1, 2010.
Large Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥135,000 Btu/h and <240,000 Btu/h.	AC	No Heating or Electric Resistance Heating.	EER = 11.0	January 1, 2010.
			All Other Types of Heating	EER = 10.8	January 1, 2010.
		HP	No Heating or Electric Resistance Heating.	EER = 10.6	January 1, 2010.
			All Other Types of Heating	EER = 10.4	January 1, 2010.
Very Large Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥240,000 Btu/h and <760,000 Btu/h.	AC	No Heating or Electric Resistance Heating.	EER = 10.0	January 1, 2010.
			All Other Types of Heating	EER = 9.8	January 1, 2010.
		HP	No Heating or Electric Resistance Heating.	EER = 9.5	January 1, 2010.
			All Other Types of Heating	EER = 9.3	January 1, 2010.
Small Commercial Package Air-Conditioning and Heating Equipment (Water-Cooled).	<65,000 Btu/h	AC	All	EER = 12.1	October 29, 2003.
	≥65,000 Btu/h and <135,000 Btu/h.	AC	No Heating or Electric Resistance Heating.	EER = 12.1	June 1, 2013.
			All Other Types of Heating	EER = 11.9	June 1, 2013.
Large Commercial Package Air-Conditioning and Heating Equipment (Water-Cooled).	≥135,000 and <240,000 Btu/h.	AC	No Heating or Electric Resistance Heating.	EER = 12.5	June 1, 2014.
			All Other Types of Heating	EER = 12.3	June 1, 2014.
Very Large Commercial Package Air-Conditioning and Heating Equipment (Water-Cooled).	≥240,000 and <760,000 Btu/h.	AC	No Heating or Electric Resistance Heating.	EER = 12.4	June 1, 2014.
			All Other Types of Heating	EER = 12.2	June 1, 2014.
Small Commercial Package Air-Conditioning and Heating Equipment (Evaporatively-Cooled).	<65,000 Btu/h	AC	All	EER = 12.1	October 29, 2003.
	≥65,000 and <135,000 Btu/h.	AC	No Heating or Electric Resistance Heating.	EER = 12.1	June 1, 2013.
			All Other Types of Heating	EER = 11.9	June 1, 2013.
Large Commercial Package Air-Conditioning and Heating Equipment (Evaporatively-Cooled).	≥135,000 and <240,000 Btu/h.	AC	No Heating or Electric Resistance Heating.	EER = 12.0	June 1, 2014.
			All Other Types of Heating	EER = 11.8	June 1, 2014.
Very Large Commercial Package Air-Conditioning and Heating Equipment (Evaporatively-Cooled).	≥240,000 and <760,000 Btu/h.	AC	No Heating or Electric Resistance Heating.	EER = 11.9	June 1, 2014.
			All Other Types of Heating	EER = 11.7	June 1, 2014.
Small Commercial Packaged Air- Conditioning and Heating Equipment (Water-Source: Water-to-Air, Water-Loop).	<17,000 Btu/h	HP	All	EER = 11.2	October 29, 2003.[2]
	≥17,000 Btu/h and <65,000 Btu/h.	HP	All	EER = 12.0	October 29, 2003.[2]
	≥65,000 Btu/h and <135,000 Btu/h.	HP	All	EER = 12.0	October 29, 2003.[2]

[1] And manufactured before January 1, 2017. See Table 3 of this section for updated efficiency standards.
[2] And manufactured before October 9, 2015. See Table 3 of this section for updated efficiency standards.

TABLE 2 TO § 431.97—MINIMUM HEATING EFFICIENCY STANDARDS FOR AIR-CONDITIONING AND HEATING EQUIPMENT

[Heat Pumps]

Equipment category	Cooling capacity	Efficiency level	Compliance date: equipment manufactured on and after . . .
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Split-System).	<65,000 Btu/h	HSPF = 7.7	June 16, 2008.[1]
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Single-Package).	<65,000 Btu/h	HSPF = 7.7	June 16, 2008.[1]
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥65,000 Btu/h and <135,000 Btu/h.	COP = 3.3	January 1, 2010.

TABLE 2 TO § 431.97—MINIMUM HEATING EFFICIENCY STANDARDS FOR AIR-CONDITIONING AND HEATING EQUIPMENT—Continued

[Heat Pumps]

Equipment category	Cooling capacity	Efficiency level	Compliance date: equipment manufactured on and after . . .
Large Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥135,000 Btu/h and <240,000 Btu/h.	COP = 3.2	January 1, 2010.
Very Large Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥240,000 Btu/h and <760,000 Btu/h.	COP = 3.2	January 1, 2010.
Small Commercial Packaged Air-Conditioning and Heating Equipment (Water-Source: Water-to-Air, Water-Loop).	<135,000 Btu/h	COP = 4.2	October 29, 2003.[2]

[1] And manufactured before January 1, 2017. See Table 3 of this section for updated efficiency standards.
[2] And manufactured before October 9, 2015. See Table 3 of this section for updated efficiency standards.

TABLE 3 TO § 431.97—UPDATES TO THE MINIMUM COOLING EFFICIENCY STANDARDS FOR CERTAIN AIR-CONDITIONING AND HEATING EQUIPMENT

Equipment category	Cooling capacity	Sub-category	Heating type	Efficiency level	Compliance date: equipment manufactured on and after . . .
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Split-System).	<65,000 Btu/h	AC	All	SEER = 13.0	June 16, 2008.
		HP	All	SEER = 14.0	January 1, 2017.
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Single-Package).	<65,000 Btu/h	AC	All	SEER = 14.0	January 1, 2017.
		HP	All	SEER = 14.0	January 1, 2017.
Small Commercial Packaged Air-Conditioning and Heating Equipment (Water-Source: Water-to-Air, Water-Loop).	<17,000 Btu/h	HP	All	EER = 12.2	October 9, 2015.
	≥17,000 Btu/h and <65,000 Btu/h.	HP	All	EER = 13.0	October 9, 2015.
	≥65,000 Btu/h and <135,000 Btu/h.	HP	All	EER = 13.0	October 9, 2015.

TABLE 4 TO § 431.97—UPDATES TO THE MINIMUM HEATING EFFICIENCY STANDARDS FOR CERTAIN AIR-CONDITIONING AND HEATING EQUIPMENT

[Heat pumps]

Equipment category	Cooling capacity	Efficiency level	Compliance date: equipment manufactured on and after . . .
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Split-System).	<65,000 Btu/h	HSPF = 8.2	January 1, 2017.
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled, 3-Phase, Single-Package).	<65,000 Btu/h	HSPF = 8.0	January 1, 2017.
Small Commercial Packaged Air-Conditioning and Heating Equipment (Water-Source: Water-to-Air, Water-Loop).	<135,000 Btu/h	COP = 4.3	October 9, 2015.

(c) Each packaged terminal air conditioner (PTAC) and packaged terminal heat pump (PTHP) manufactured on or after January 1, 1994, and before October 8, 2012 (for standard size PTACs and PTHPs) and before October 7, 2010 (for non-standard size PTACs and PTHPs) must meet the applicable minimum energy efficiency standard level(s) set forth in Table 5 of this section. Each PTAC and PTHP manufactured on or after October 8, 2012 (for standard size PTACs and PTHPs) and on or after October 7, 2010 (for non-standard size PTACs and PTHPs) must meet the applicable minimum energy efficiency standard level(s) set forth in Table 6 of this section.

* * * * *

■ 6. Section 431.110 is revised to read as follows:

§ 431.110 Energy conservation standards and their effective dates.

Each commercial storage water heater, instantaneous water heater, unfired hot water storage tank and hot water supply boiler [1] must meet the applicable energy conservation standard level(s) as follows:

Equipment category	Size	Energy conservation standard [a]		
		Maximum standby loss [c] (equipment manufactured on and after October 29, 2003) [b]	Minimum thermal efficiency (equipment manufactured on and after October 29, 2003 and before October 9, 2015) [b]	Minimum thermal efficiency (equipment manufactured on and after October 9, 2015) [b]
Electric storage water heaters	All	$0.30 + 27/V_m$ (%/hr)	N/A	N/A.
Gas-fired storage water heaters	≤155,000 Btu/hr	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)	80%	80%.
	>155,000 Btu/hr	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)	80%	80%.
Oil-fired storage water heaters	≤155,000 Btu/hr	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)	78%	80%.
	>155,000 Btu/hr	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)	78%	80%.
Gas-fired instantaneous water heaters and hot water supply boilers.	<10 gal	N/A	80%	80%.
	≥10 gal	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)	80%	80%.
Oil-fired instantaneous water heaters and hot water supply boilers.	<10 gal	N/A	80%	80%.
	≥10 gal	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)	78%	78%.
Equipment category	**Size**	**Minimum thermal insulation**		
Unfired hot water storage tank	All	R–12.5		

[a] V_m is the measured storage volume, and V_r is the rated volume, both in gallons. Q is the nameplate input rate in Btu/hr.

[b] For hot water supply boilers with a capacity of less than 10 gallons: (1) The standards are mandatory for products manufactured on and after October 21, 2005, and (2) products manufactured prior to that date, and on or after October 23, 2003, must meet either the standards listed in this table or the applicable standards in subpart E of this part for a ''commercial packaged boiler.''

[c] Water heaters and hot water supply boilers having more than 140 gallons of storage capacity need not meet the standby loss requirement if: (1) The tank surface area is thermally insulated to R–12.5 or more; (2) a standing pilot light is not used; and (3) for gas or oil-fired storage water heaters, they have a fire damper or fan assisted combustion.

[FR Doc. 2014–30839 Filed 1–7–15; 8:45 am]

BILLING CODE 6450–01–P

[1] Any packaged boiler that provides service water, that meets the definition of ''commercial packaged boiler'' in subpart E of this part, but does not meet the definition of '' hot water supply boiler'' in this subpart, must meet the requirements that apply to it under subpart E.

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Part IV

Federal Communications Commission

47 CFR Parts 1 and 17

Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies; Final Rule

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1 and 17

[WT Docket Nos. 13–238, 13–32; WC Docket No. 11–59; FCC 14–153]

Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal Communications Commission (Commission) adopts rules to update and tailor the manner in which it evaluates the impact of proposed deployments of wireless infrastructure on the environment and historic properties. The Commission also adopts rules to clarify and implement statutory requirements applicable to State and local governments in their review of wireless infrastructure siting applications, and it adopts an exemption from its environmental public notification process for towers that are in place for only short periods of time. Taken together, these steps will reduce the cost and delays associated with facility siting and construction, and thereby facilitate the delivery of more wireless capacity in more locations to consumers throughout the United States.

DATES: Effective February 9, 2015, except for § 1.40001, which shall be effective April 8, 2015; however, §§ 1.40001(c)(3)(i), 1.40001(c)(3)(iii), 1.140001(c)(4), and 17.4(c)(1)(vii), which have new information collection requirements, will not be effective until approved by the Office of Management and Budget (OMB). The Commission will publish a document in the **Federal Register** announcing OMB approval and the relevant effective date.

FOR FURTHER INFORMATION CONTACT: Peter Trachtenberg, Spectrum and Competition Policy Division, Wireless Telecommunications Bureau, (202) 418–7369, email *Peter.Trachtenberg@fcc.gov.*

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Report and Order (R&O), WT Docket Nos. 13–238, 13–32; WC Docket No. 11–59; FCC 14–153, adopted October 17, 2014 and released October 21, 2014. The full text of this document is available for inspection and copying during business hours in the FCC Reference Information Center, Portals II, 445 12th Street SW., Room CY–A257, Washington, DC 20554. Also, it may be purchased from the Commission's duplicating contractor at Portals II, 445 12th Street SW., Room CY–B402, Washington, DC 20554; the contractor's Web site, *http://www.bcpiweb.com;* or by calling (800) 378–3160, facsimile (202) 488–5563, or email *FCC@BCPIWEB.com.* Copies of the R&O also may be obtained via the Commission's Electronic Comment Filing System (ECFS) by entering the docket number WT Docket 13–238. Additionally, the complete item is available on the Federal Communications Commission's Web site at *http://www.fcc.gov.*

I. NEPA and NHPA Review of Small Wireless Facilities

1. The Commission first adopts measures to update its review processes under the National Environmental Policy Act of 1969 (NEPA) and section 106 of the National Historic Preservation Act of 1966 (NHPA or section 106), with a particular emphasis on accommodating new wireless technologies that use smaller antennas and compact radio equipment to provide mobile voice and broadband service. These technologies, including distributed antenna systems (DAS), small cells, and others, can be deployed on a variety of non-traditional structures such as utility poles, as well as on rooftops and inside buildings, to enhance capacity or fill in coverage gaps. Updating the Commission's environmental and historic preservation rules will enable these innovations to flourish, delivering more broadband service to more communities, while reducing the need for potentially intrusive new construction and safeguarding the values the rules are designed to protect.

2. The Commission's environmental and historic preservation rules have traditionally been directed toward the deployment of macrocells on towers and other tall structures. Since 1974, these rules have excluded collocations of antennas from most of the requirements under the Commission's NEPA review process, recognizing the benefits to the environment and historic properties from the use of existing support structures over the construction of new structures. These exclusions have limitations. The collocation exclusion under NEPA, which was first established in 1974, on its face encompasses only deployments on existing towers and buildings, as these were the only support structures widely used 40 years ago, and does not encompass collocations on existing utility poles, for example. The collocation exclusions in the Commission's process for historic preservation review under section 106 do not consider the scale of small wireless facility deployments.

3. Thus, while small wireless technologies are increasingly deployed to meet the growing demand for high mobile data speeds and ubiquitous coverage, the Commission's rules and processes under NEPA and section 106, even as modified over time, have not reflected those technical advances. Accordingly, the Commission concludes that it will serve the public interest to update its environmental and historic preservation rules in large measure to account for innovative small facilities, and the Commission takes substantial steps to advance the goal of widespread wireless deployment, including clarifying and amending its categorical exclusions. The Commission concludes that these categorical exclusions, as codified in Section 1.1306(c) and Note 1 of its rules, do not have the potential for individually or cumulatively significant environmental impacts. The Commission finds that these clarifications and amendments will serve both the industry and the conservation values its review process was intended to protect. These steps will eliminate many unnecessary review processes and the sometimes cumbersome compliance measures that accompany them, relieving the industry of review process requirements in cases where they are not needed. These steps will advance the goal of spurring efficient wireless broadband deployment while also ensuring that the Commission continues to protect environmental and historic preservation values.

A. NEPA Categorical Exclusions

1. Regulatory Background

4. Section 1.1306 (Note 1) clarifies that the requirement to file an Environmental Assessment (EA) under section 1.1307(a) generally does not apply to ''the mounting of antenna(s) on an existing building or antenna tower'' or to the installation of wire or cable in an existing underground or aerial corridor, even if an environmentally sensitive circumstance identified in section 1.1307(a) is present. Note 1 reflects a preference first articulated by the Commission in 1974, and codified into Note 1 in 1986, that ''[t]he use of existing buildings, towers or corridors is an environmentally desirable alternative to the construction of new facilities and is encouraged.''

2. Antennas Mounted on Existing Buildings and Towers

a. Clarification of ''Antenna''

5. The Commission first clarifies that the term ''antenna'' as used in Note 1 encompasses all on-site equipment associated with the antenna, including transceivers, cables, wiring, converters, power supplies, equipment cabinets and shelters, and other comparable equipment. The Commission concludes that this is the only logically consistent interpretation of the term, as associated equipment is a standard part of such collocations, and the antennas subject to NEPA review cannot operate without it. Thus, interpreting the term ''antenna'' as omitting associated equipment would eviscerate the categorical exclusion by requiring routine NEPA review for nearly every collocation. Such an interpretation would frustrate the categorical exclusion's purpose. The Commission also notes that its interpretation of ''antenna'' in this context is consistent with how the Commission has defined the term ''antenna'' in the comparable context of its process for reviewing effects of proposed deployments on historic properties. Specifically, the Commission's section 106 historic preservation review is governed by two programmatic agreements, and in both, the term ''antenna'' encompasses all associated equipment.

6. Further, if associated equipment presented significant concerns, the Commission would expect that otherwise excluded collocations that included such equipment would, at some point over the past 40 years, have been subject to environmental objections or petitions to deny. The Commission is unaware of any such objections or petitions directed at backup generators or any other associated equipment, or of any past EAs that found any significant environmental effect from such equipment. The Commission finds some commenters' generalized assertions of a risk of environmental effects to be unpersuasive, and the Commission reaffirms that the collocations covered by Note 1, including the collocation of associated equipment addressed by its clarification, will not individually or cumulatively have a significant effect on the human environment. While Alexandria *et al.* submit a declaration from Joseph Monaco asserting that ''[m]inor additions to existing facilities could have significant effects even if only incremental to past disturbances,'' the Commission finds this position is inconsistent with the Commission's finding that the mounting of antennas on existing towers and buildings will not have significant effects, and with the Commission's experience administering the NEPA process, in which a collocation has never been identified by the Commission or the public to have caused a significant environmental effect. The Commission further notes that the proffered examples appear to confuse consideration under the Commission's NEPA process with review under local process, which the Commission does not address here. To the extent that rare circumstances exist where ''even the smallest change could result in a significant effect, based on the intrinsic sensitivity of a particular resource,'' the Commission concludes that such extraordinary circumstances are appropriately addressed through sections 1.1307(c) and (d), as necessary.

7. The Commission finds unpersuasive Tempe's argument that the NEPA categorical exclusion for collocation should not encompass backup generators in particular. Tempe argues that generators cause ''fumes, noise, and the potential for exposure to hazardous substances if there is a leak or a spill'' and ''should not be allowed to be installed without the appropriate oversight.'' The Wireless Telecommunications Bureau addressed all of these potential impacts in its Final Programmatic Environmental Assessment for the Antenna Structure Registration Program (PEA), and did not find any to be significant. Tempe's own comments, moreover, confirm that backup generators are already subject to extensive local, State, and Federal regulation, suggesting that further oversight from the Commission would not meaningfully augment existing environmental safeguards. In assessing environmental effect, an agency may factor in an assumption that the action is performed in compliance with other applicable regulatory requirements in the absence of a basis in the record beyond mere speculation that the action threatens violations of such requirements. Tempe's comments support the Commission's conclusion that such regulations applicable to backup generators address Tempe's concerns. The Commission finds that cell sites with such generators will rarely if ever be grouped in sufficient proximity to present a risk of cumulative effects.

8. The Commission finds no reason to interpret ''antenna'' in the Note 1 NEPA collocation categorical exclusion to omit backup generators or other kinds of backup power equipment. The Commission finds that the term ''antenna'' as used in the categorical exclusion should be interpreted to encompass the on-site equipment associated with the antenna, including backup power sources. Further, the need for such power sources at tower sites is largely undisputed, as backup power is critical for continued service in the event of natural disasters or other power disruptions—times when the need and demand for such service is often at its greatest. The Commission amends Note 1 to clarify that the categorical exclusion encompasses equipment associated with the antenna, including the critical component of backup power.

9. Finally, the Commission notes that sections 1.1306(b)(1)–(3) and 1.1307(c) and (d) of its rules provide for situations where environmental concerns are presented and, as called for by the requirement that categorical exclusions include consideration of extraordinary circumstances, closer scrutiny and potential additional environmental review are appropriate. The Commission concludes that individual cases presenting extraordinary circumstances in which collocated generators or other associated equipment may have a significant effect on the environment, including cases in which closely spaced generators may have a significant cumulative effect or where the deployment of such generators would violate local codes in a manner that raises environmental concerns, will be adequately addressed through these provisions.

b. Antennas Mounted in the Interior of Buildings

10. The Commission clarifies that the existing NEPA categorical exclusion for mounting antennas ''on'' existing buildings applies to installations in the interior of existing buildings. An antenna mounted on a surface inside a building is as much ''on'' the building as an antenna mounted on a surface on the exterior, and the Commission finds nothing in the language of the categorical exclusion, in the adopting order, or in the current record supporting a distinction between collocations on the exterior or in the interior that would limit the scope of the categorical exclusion to exterior collocations. To the contrary, it is even more likely that indoor installations will have no significant environmental effects in the environmentally sensitive areas in which proposed deployments would generally trigger the need to prepare an EA, such as wilderness areas, wildlife preserves, and flood plains. The existing Note 1 collocation categorical exclusion reflects a finding that collocations do not individually or cumulatively have a significant effect on

the human environment, even if they would otherwise trigger the requirement of an EA under the criteria identified in sections 1.1307(a)(1)–(3) and (5)–(8). The Commission finds that this conclusion applies equally or even more strongly to an antenna deployed inside a building than to one on its exterior, since the building's exterior structure would serve as a buffer against any effects. The Commission notes that the First Responder Network Authority (FirstNet), the National Telecommunications and Information Administration (NTIA), and other agencies have adopted categorical exclusions covering internal modifications and equipment additions inside buildings and structures. For example, in adopting categorical exclusions as part of its implementation of the Broadband Technology Opportunities Program, NTIA noted that excluding interior modifications and equipment additions reflects long-standing categorical exclusions and administrative records, including in particular ''the legacy categorical exclusions from the U.S. Department of Agriculture, U.S. Department of Homeland Security, and the Federal Emergency Management Agency.'' While a Federal agency cannot apply another agency's categorical exclusion to a proposed Federal action, it may substantiate a categorical exclusion of its own based on another agency's experience with a comparable categorical exclusion. This long-standing practice of numerous agencies that conduct comparable activities, reflecting experience that confirms the propriety of the categorical exclusion, provides further support for the conclusion that internal collocations will not individually or cumulatively have a significant effect on the human environment. With respect to Tempe's concern about generators being placed inside buildings as the result of collocations, the Commission relies on local building, noise, and safety regulations to address these concerns, and the Commission anticipates that such regulations will almost always require generators to be outside of any residential buildings where their use would present health or safety concerns or else place very strict requirements on any placement in the interior. The Commission finds it appropriate to amend Note 1 to clarify that the Note 1 collocation categorical exclusion applies to the mounting of antennas in the interior of buildings as well as the exterior.

c. Antennas Mounted on Other Structures

11. The Commission adopts its proposal to extend the categorical exclusion for collocations on towers and buildings to collocations on other existing man-made structures. The Commission concludes that deployments covered by this extension will not individually or cumulatively have a significant impact on the human environment. The Commission updates the categorical exclusion adopted as part of Note 1 in 1986 to reflect the modern development of wireless technologies that can be collocated on a much broader range of existing structures. This measure will facilitate collocations and speed deployment of wireless broadband to consumers without significantly affecting the environment.

12. In finding that it is appropriate to broaden the categorical exclusion contained in section 1.1306 Note 1 to apply to other structures, the Commission relies in part on its prior findings regarding the environmental effects of collocations. In implementing NEPA requirements in 1974, for example, the Commission found that mounting an antenna on an existing building or tower ''has no significant aesthetic effect and is environmentally preferable to the construction of a new tower, provided there is compliance with radiation safety standards.'' In revising its NEPA rules in 1986, the Commission found that antennas mounted on towers and buildings are among those deployments that will normally have no significant impact on the environment. The Commission notes in particular that collocations will typically add only marginal if any extra height to a structure, and that in 2011, in a proceeding addressing the Commission's NEPA requirements with respect to migratory birds, the Commission reaffirmed that collocations on towers and buildings are unlikely to have environmental effects and thus such collocations are categorically excluded from review for impact on birds. Further, given that towers and buildings are typically much taller than other man-made structures on which antennas will be collocated, the Commission expects that there will be even less potential for significant effects on birds from collocations on such other structures.

13. In the *Infrastructure NPRM,* the Commission tentatively concluded that the same determination applies with regard to collocations on other structures such as utility poles and water towers. Numerous commenters support this determination, and opponents offer no persuasive basis to distinguish the environmental effects of collocations on antenna towers and buildings from the effects of collocations on other existing structures. Indeed, in this regard, the Commission notes that buildings and towers, which are already excluded under Note 1, are typically taller than structures such as utility poles and road signs. While some commenters raise concerns about possible water-tank contamination or driver distraction, these concerns do not present persuasive grounds to limit the categorical exclusion. Under sections 1.1306(a) and (b), collocations on structures such as water tanks and road signs are already categorically excluded from the obligation to file an EA unless they occur in the environmentally sensitive circumstances identified in sections 1.1307(a) or (b) (such as in wildlife preserves or flood plains). Nothing in the record leads the Commission to find that collocations in such sensitive areas that currently require EAs present greater risks of water tank contamination or driver distraction than collocations outside such areas. For similar reasons, the Commission is also not persuaded by Springfield's argument that extending the categorical exclusion to other structures without ''qualifying delimitations for how DAS facilities are defined and where they may be installed may have unacceptable impacts on historic and other sensitive neighborhoods.'' Springfield offers no argument to explain why the NEPA categorical exclusion for collocations on utility poles should be more restrictive than the exclusion for collocations on buildings. Moreover, the Commission notes that the NEPA categorical exclusion the Commission addresses here does not exclude the proposed collocation from NHPA review for effects on historic properties or historic districts.

14. The Commission also notes that the exclusion from section 106 review in the Collocation Agreement is not limited to collocations on towers and buildings but also specifically includes collocations on other existing non-tower structures. Further, the U.S. Fish and Wildlife Service has found collocations on existing non-tower structures to be environmentally desirable with regard to impacts on birds, noting that they will in virtually every circumstance have less impact than would construction of a new tower.

15. Considering that collocating on these structures is necessary for broadband deployment, and in light of the environmental benefits of

encouraging collocation rather than the construction of new structures, the Commission finds that extending the categorical exclusion to other structures advances the public interest and meets its obligations under NEPA.

3. Categorical Exclusion of Deployments in Communications or Utilities Rights-of-Way

16. The Commission adopts a categorical exclusion for certain wireless facilities deployed in above-ground utility and communications rights-of-way. The Commission finds that such deployments will not individually or cumulatively have a significant effect on the environment. Given that DAS and small-cell nodes are often deployed in communications and utilities rights-of-way, the Commission concludes that the categorical exclusion will significantly advance the deployment of such facilities in a manner that safeguards environmental values.

17. Specifically, this categorical exclusion, which the Commission incorporates into its rules as section 1.1306(c), covers construction of wireless facilities, including deployments on new or replacement poles, only if: (1) The facility will be located in a right-of-way that is designated by a Federal, State, local, or Tribal government for communications towers, above-ground utility transmission or distribution lines, or any associated structures and equipment; (2) the right-of-way is in active use for such designated purposes; and (3) the facility will not constitute a substantial increase in size over existing support structures that are located in the right-of-way within the vicinity of the proposed construction.

18. Although the Commission sought comment, in the *Infrastructure NPRM,* on whether to adopt a categorical exclusion that covered facilities also located within fifty feet of a communications or utility right-of-way, similar to the exclusion from section 106 review in section III.E. of the National Programmatic Agreement (NPA), the Commission limits its NEPA categorical exclusion to facilities deployed within existing communications and utility rights-of-way. Industry commenters that support applying the categorical exclusion to deployments within fifty feet of a right-of-way do not explain why the conclusion that deployments in the right-of-way will not have a significant effect on the human environment also apply outside of a right-of-way. Such ground would not necessarily be in active use for the designated purposes, and there could well be a greater potential outside the right-of-way for visual impact or new or significant ground disturbance that might have the potential for significant environmental effects. Finally, the record supports the conclusion that a categorical exclusion limited to deployments within the rights-of-way will address most of the deployments that would be covered by a categorical exclusion that also encompassed deployments nearby. Sprint, for example, emphasizes that ''many DAS and small cells will be attached to existing structures and installed *within utility rights-of-way corridors*.''

19. For purposes of this categorical exclusion, the Commission defines a substantial increase in size in similar fashion to how it is defined in the Collocation Agreement. Thus, a deployment would result in a substantial increase in size if it would: (1) Exceed the height of existing support structures that are located in the right-of-way within the vicinity of the proposed construction by more than 10% or twenty feet, whichever is greater; (2) involve the installation of more than four new equipment cabinets or more than one new equipment shelter; (3) add an appurtenance to the body of the structure that would protrude from the edge of the structure more than twenty feet, or more than the width of the structure at the level of the appurtenance, whichever is greater (except that the deployment may exceed this size limit if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable); or (4) involve excavation outside the current site, defined as the area that is within the boundaries of the leased or owned property surrounding the deployment or that is in proximity to the structure and within the boundaries of the utility easement on which the facility is to be deployed, whichever is more restrictive.

20. The Commission notes that it has found a similar test appropriate in other contexts, including under its environmental rules. In particular, the first three criteria that the Commission specifies above to define the scope of the NEPA rights-of-way categorical exclusion also define the scope of the rights-of-way exclusion from historic preservation review under the NPA. Similarly, for purposes of Antenna Structure Registration, the Commission does not require environmental notice for a proposed tower replacement if, among other criteria, the deployment will not cause a substantial increase in size under the first three criteria of the Collocation Agreement, and there will be no construction or excavation more than 30 feet beyond the existing antenna structure property. Further, given that the industry now has almost a decade of experience applying this substantial increase test to construction in the rights-of-way under the NPA exclusion, and in light of the efficiencies to be gained from using a similar test here, the Commission finds the Collocation Agreement test, as modified here, to be appropriate in this context.

21. The Commission concludes that facilities subject to this categorical exclusion will not have a significant effect on the environment either individually or cumulatively, and that the categorical exclusion is appropriate. In the *NPA Report and Order,* 70 FR 556 Jan 4, 2005, the Commission found that excluding construction in utilities or communications rights-of-way from historic preservation review was warranted because, ''[w]here such structures will be located near existing similar poles, . . . the likelihood of an incremental adverse impact on historic properties is minimal.'' The Commission finds that the potential incremental impacts on the environment are similarly minimal. Indeed, deploying these facilities should rarely involve more than minimal new ground disturbance, given that constructing the existing facilities likely disturbed the ground already and given the limitations on the size of any new poles. Moreover, any new pole will also cause minimal visual effect because by definition comparable structures must already exist in the vicinity of the new deployment in that right-of-way, and new poles covered by this categorical exclusion will not be substantially larger. Further, because such corridors are already employed for utility or communications uses, and the new deployments will be comparable in size to such existing uses, these additional uses are unlikely to trigger new NEPA concerns. Any such concerns would have already been addressed when such corridors were established, and the size of the deployments the Commission categorically excludes will not be substantial enough to raise the prospect of cumulative effects.

22. The Commission also finds support for these conclusions in the categorical exclusions adopted by other agencies, including FirstNet. In establishing its own categorical exclusions, FirstNet noted as part of its Administrative Record that its anticipated activities in constructing a nationwide public safety broadband network would primarily include ''the installation of cables, cell towers, antenna collocations, buildings, and

power units,'' for example in connection with ''Aerial Plant/Facilities,'' ''Towers,'' ''Collocations,'' ''Power Units,'' and ''Wireless Telecommunications Facilit[ies.]'' It defined a ''Wireless Telecommunications Facility'' as ''[a]n installation that sends and/or receives radio frequency signals, including directional, omni-directional, and parabolic antennas, structures, or towers (no more than 199 feet tall with no guy wires), to support receiving and/or transmitting devices, cabinets, equipment rooms, accessory equipment, and other structures, and the land or structure on which they are all situated.'' To address its NEPA obligations in connection with these activities, FirstNet adopted a number of categorical exclusions, including a categorical exclusion for ''[c]onstruction of wireless telecommunications facilities involving no more than five acres (2 hectares) of physical disturbance at any single site.'' In adopting this categorical exclusion, FirstNet found that it was ''supported by long-standing categorical exclusions and administrative records. In particular, these include categorical exclusions from the U.S. Department of Commerce, U.S. Department of Agriculture, and U.S. Department of Energy.''

23. The Commission finds that FirstNet's anticipated activities encompass the construction of wireless facilities and support structures in the rights-of-way, and are therefore comparable to the wireless facility deployments the Commission addresses here. Further, the Commission notes that the categorical exclusions adopted by FirstNet are broader in scope than the categorical exclusion the Commission adopts for facilities deployed within existing rights-of-way. The Commission further notes that several other agencies have found it appropriate to categorically exclude other activities in existing rights-of-way unrelated to telecommunications.

24. The Commission finds that the categorical exclusion addresses some concerns raised by municipalities, and the Commission finds that other concerns they raise are not relevant to the environmental review process. First, the Commission notes that the categorical exclusion it adopts addresses Coconut Creek's objection to above-ground deployments in areas with no above-ground infrastructure because the Commission limits it to rights-of-way in active use for above-ground utility structures or communications towers. Second, concerns about hazards to vehicular or pedestrian traffic are logically inapplicable. As the Commission noted in connection with deployments on structures other than communications towers and buildings, such concerns do not currently warrant the submission of an EA. Rather, EAs are routinely required for deployments in communications or utility rights-of-way only if they meet one of the criteria specified in section 1.1307(a) or (b). Deployments in the communications or utility rights-of-way have never been identified in the Commission's rules as an environmentally sensitive category; indeed, the use of such rights-of-way for antenna deployments is environmentally desirable as compared to deployments in other areas. Finally, the Commission finds it unnecessary to adopt Tempe's proposed limitation, whether it is properly understood as a proposal to categorically exclude only one non-substantial increase at a particular site or in the same general vicinity, as such limitation has proven unnecessary in the context of historic preservation review. Having concluded that wireless facility deployments in communications or utility rights-of-way have no potentially significant environmental effects individually or cumulatively, the Commission finds no basis to limit the number of times such a categorical exclusion is used either at a particular site or in the same general vicinity. Indeed, the categorical exclusion encourages an environmentally responsible approach to deployment given that, as Note 1 and section 1.1306(c) make clear, the use of existing corridors ''is an environmentally desirable alternative to the construction of new facilities.'' And, apart from environmental considerations, it would be contrary to the public interest to unnecessarily limit the application of this categorical exclusion.

25. To the extent that commenters propose extending the Note 1 aerial and underground corridor categorical exclusion to include components of telecommunications systems other than wires and cables, the Commission declines to do so. The Commission finds that the new section 1.1306(c) categorical exclusion the Commission adopts for deployments in communications or utilities rights-of-way will provide substantial and appropriate relief, and that the record in this proceeding does not justify a further expansion of the Note 1 categorical exclusion. Further, the existing Note 1 categorical exclusion for wires and cables in underground and aerial corridors is broader than the categorical exclusion for installations on existing buildings or antenna towers because it is not limited by section 1.1307(a)(4) (section 106 review) or 1.1307(b) (RF emissions), while collocations on existing buildings or towers are subject to these provisions. The Commission notes that even parties advocating an extension of the categorical exclusion for installation of wire and cable to additional telecommunications components concede that the extension should not apply to review of RF emissions exposure, as the existing categorical exclusion does. This distinction underscores that the existing categorical exclusion of cables and wires in aerial and underground corridors is based on an analysis that does not directly apply to other communications facilities.

B. NHPA Exclusions

1. Regulatory Background

26. Section 1.1307(a)(4) of the Commission's rules directs licensees and applicants, when determining whether a proposed action may affect historic properties, to follow the procedures in the rules of the Advisory Council on Historic Preservation (ACHP) as modified by the Collocation Agreement and the NPA, two programmatic agreements that took effect in 2001 and 2005, respectively. The Collocation Agreement excludes collocations on buildings or other non-tower structures outside of historic districts from routine section 106 review unless: (1) The structure is inside the boundary of a historic district, or it is within 250 feet of the boundary of a historic district and the antenna is visible from ground level within the historic district; (2) the structure is a designated National Historic Landmark or is listed in or eligible for listing in the National Register of Historic Places (National Register); (3) the structure is over 45 years old; or (4) the proposed collocation is the subject of a pending complaint alleging adverse effect on historic properties.

2. New Exclusions

27. In addition to seeking comment on whether the Commission should add an exclusion from section 106 review for DAS and small cells generally, the *Infrastructure NPRM* sought comment on whether to expand the existing categorical exclusion for collocations to cover collocations on structures subject to review solely because of the structure's age—that is, to deployments that are more than 45 years old but that are not (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a

designated National Historic Landmark or is listed in or eligible for listing in the National Register; or (3) the subject of a pending complaint alleging adverse effect on historic properties.

28. As an initial matter, the Commission finds no basis to hold categorically that small wireless facilities such as DAS and small cells are not Commission undertakings. While PCIA argues that small facilities could be distinguished, it does not identify any characteristic of such deployments that logically removes them from the analysis applicable to other facilities. Having determined that DAS and small cell deployments constitute Federal undertakings subject to section 106, the Commission considers its authority based on section 800.3(a)(1) of ACHP's rules to exclude such small facility deployments from section 106 review. It is clear under the terms of section 800.3(a)(1) that a Federal agency may determine that an undertaking is a type of activity that does not have the potential to cause effects to historic properties, assuming historic properties were present, in which case, ''the agency has no further obligations under section 106 or this part [36 part 800, subpart B].''

29. The commenters that propose a general exclusion for DAS and small cell deployments assert that under any circumstances, such deployments have the potential for at most minimal effects, but they do not provide evidence to support such a broad conclusion. Moreover, several commenters, including several SHPOs, express concerns that such deployments do have the potential for effects in some cases. The Commission cannot find on this record that DAS and small-cell facilities qualify for a general exclusion, and the Commission therefore concludes, after consideration of the record, that any broad exclusion of such facilities must be implemented at this time through the development of a ''program alternative'' as defined under ACHP's rules. The Commission is committed to making deployment processes as efficient as possible without undermining the values that section 106 protects. The Commission staff are working on a program alternative that, through consultation with stakeholders, will ensure thorough consideration of all applicable interests, and will culminate in a system that eliminates additional bureaucratic processes for small facilities to the greatest extent possible consistent with the purpose and requirements of section 106.

30. The Commission further concludes that it is in the public interest to immediately adopt targeted exclusions from its section 106 review process that will apply to small facilities (and in some instances larger antennas) in many circumstances and thereby substantially advance the goal of facilities deployment. The Commission may exclude activities from section 106 review upon determining that they have no potential to cause effects to historic properties, assuming such properties are present. As discussed in detail below, the Commission finds two targeted circumstances that meet this test, one applicable to utility structures and the other to buildings and any other non-tower structures. Pursuant to these findings the Commission establishes two exclusions.

31. First, the Commission excludes collocations on existing utility structures, including utility poles and electric transmission towers, to the extent they are not already excluded in the Collocation Agreement, if: (1) The collocated antenna and associated equipment, when measured together with any other wireless deployment on the same structure, meet specified size limitations; and (2) the collocation will involve no new ground disturbance. Second, the Commission excludes collocations on a building or other non-tower structure, to the extent they are not already excluded in the Collocation Agreement, if: (1) There is an existing antenna on the building or other structure; (2) certain requirements of proximity to the existing antenna are met, depending on the visibility and size of the new deployment; (3) the new antenna will comply with all zoning conditions and historic preservation conditions on existing antennas that directly mitigate or prevent effects, such as camouflage or concealment requirements; and (4) the deployment will involve no new ground disturbance. With respect to both of these categories—utility structures and other non-tower structures—the Commission extends the exclusion only to deployments that are not (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a designated National Historic Landmark or is listed in or eligible for listing in the National Register; or (3) the subject of a pending complaint alleging adverse effect on historic properties. In other words, these exclusions address collocations on utility structures and other non-tower structures where historic preservation review would otherwise be required under existing rules only because the structures are more than 45 years old. The Commission's action here is consistent with its determination in the NPA to apply a categorical exclusion based upon a structure's proximity to a property listed in or eligible to be listed in the National Register rather than whether a structure is over 45 years old regardless of eligibility. Consistent with section 800.3(a)(1), the Commission finds collocations meeting the conditions stated above have no potential to affect historic properties even if such properties are present. The Commission nevertheless finds it appropriate to limit the adopted exclusions. Given the sensitivities articulated in the record, particularly those from the National Conference of State Historic Preservation Officers (NCSHPO) and other individual commenting SHPOs, regarding deployments in historic districts or on historic properties, the Commission concludes that any broader exclusions require additional consultation and consideration, and are more appropriately addressed and developed through the program alternative process that Commission staff have already begun.

a. Collocations on Utility Structures

32. Pursuant to section 800.3(a)(1) of ACHP's rules, the Commission finds that antennas mounted on existing utility structures have no potential for effects on historic properties, assuming such properties are present, where the deployment meets the following conditions: (1) The antenna and any associated equipment, when measured together with any other wireless deployments on the same structure, meets specified size limitations; and (2) the deployment will involve no new ground disturbance. Notwithstanding this finding of no potential for effects even assuming historic properties are present, the Commission limits this exclusion (as described above) in light of the particular sensitivities related to historic properties and districts. Accordingly, this exclusion does not apply to deployments that are (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a designated National Historic Landmark or is listed in or eligible for listing in the National Register; or (3) the subject of a pending complaint alleging adverse effect on historic properties. In other words, this new targeted exclusion addresses collocations on utility structures where historic preservation review would otherwise be required under existing rules only because the structures are more than 45 years old.

33. For purposes of this exclusion, the Commission defines utility structures as utility poles or electric transmission towers in active use by a ''utility'' as defined in section 224 of the Communications Act, but not including light poles, lamp posts, and other structures whose primary purpose is to provide public lighting. Utility structures are, by their nature, designed to hold a variety of electrical, communications, or other equipment, and they already hold such equipment. Their inherent characteristic thus incorporates the support of attachments, and their uses have continued to evolve with changes in technology since they were first used in the mid-19th century for distribution of telegraph services. Indeed, the Commission notes that other, often larger facilities are added to utility structures without review. For example, deployments of equipment supporting unlicensed wireless operations like Wi-Fi access occur without the Commission's section 106 review in any case, as do installations of non-communication facilities such as municipal traffic management equipment or power equipment such as electric distribution transformers. The addition of DAS or small cell facilities to these structures is therefore fully consistent with their existing use.

34. While the potential for effects from any deployments on utility structures is remote at most, the Commission concludes that the additional conditions described above support a finding that there is no such potential at all, assuming the presence of historic properties. First, the Commission limits the size of equipment covered by this exclusion. In doing so, the Commission draws on a PCIA proposal, which includes separate specific volumetric limits for antennas and for enclosures of associated equipment, but the Commission modifies the definition in certain respects to meet the standard in ACHP's rules that the undertaking must have no potential for effects. Specifically, the Commission provides that the deployment may include covered antenna enclosures no more than three cubic feet in volume per enclosure, or exposed antennas that fit within an imaginary enclosure of no more than three cubic feet in volume per imaginary enclosure, up to an aggregate maximum of six cubic feet. The Commission further provides that all equipment enclosures (or imaginary enclosures) associated with the collocation on any single structure, including all associated equipment but not including separate antennas or enclosures for antennas, must be limited cumulatively to seventeen cubic feet in volume. Further, collocations under this rule will be limited to collocations that cause no new ground disturbance.

35. Because the Commission finds that multiple collocations on a utility structure could have a cumulative impact, the Commission further applies the size limits defined above on a cumulative basis taking into account all pre-existing collocations. Specifically, if there is a pre-existing wireless deployment on the structure, and any of this pre-existing equipment would remain after the collocation, then the volume limits apply to the cumulative volume of such pre-existing equipment and the new collocated equipment. Thus, for the new equipment to come under this exclusion, the sum of the volume of all pre-existing associated equipment that remains after the collocation and the new equipment must be no greater than seventeen cubic feet, and the sum of the volume of all collocated antennas, including pre-existing antennas that remain after the collocation, must be no greater than six cubic feet. The Commission further provides that the cumulative limit of seventeen cubic feet for wireless equipment applies to all equipment on the ground associated with an antenna on the structure as well as associated equipment physically on the structure. Thus, application of the limit is the same regardless of whether equipment associated with a particular deployment is deployed on the ground next to a structure or on the structure itself. While some commenters oppose an exclusion based solely on PCIA's volumetric definition, the Commission finds that the Commission's exclusion addresses their concerns. For example, Tempe and the CA Local Governments express concern that PCIA's definition would allow an unlimited number of ground-mounted cabinets. The Commission's approach provides that associated ground equipment must also come within the volumetric limit for equipment enclosures, however, and therefore does not allow for unlimited ground-based equipment. Further, because the Commission applies the size limit on a cumulative basis, the Commission's exclusion directly addresses concerns that the PCIA definition would allow multiple collocations that cumulatively exceed the volumetric limits. Consistent with a proposal by PCIA, the Commission finds that certain equipment should be omitted from the calculation of the equipment volume, including: (1) Vertical cable runs for the connection of power and other services, the volume of which may be impractical to calculate and which should in any case have no effect on historic properties, consistent with the established exclusion of cable in pre-existing aerial or underground corridors; (2) ancillary equipment installed by other entities that is outside of the applicant's ownership or control, such as a power meter installed by the electric utility in connection with the wireless deployment, and (3) comparable equipment from pre-existing wireless deployments on the structure.

36. To meet the standard under section 800.3(a)(1), the Commission further imposes a requirement of no new ground disturbance, consistent for the most part with the NPA standard. Under the NPA standard, no new ground disturbance occurs so long as the depth of previous disturbance exceeds the proposed construction depth (excluding footings and other anchoring mechanisms) by at least two feet. The Commission finds that footings and anchorings should be included in this context to ensure no potential for effects. Therefore, the Commission's finding is limited to cases where there is no ground disturbance or the depth and width of previous disturbance exceeds the proposed construction depth and width, including the depth and width of any proposed footings or other anchoring mechanisms, by at least two feet. Some Tribal Nations have indicated that exclusions of small facilities from section 106 review might be reasonable if there is no excavation but that any ground disturbance would be cause for concern. The Commission finds that the restrictions it places on both of the Commission's new section 106 exclusions are sufficient to address this concern and ensure that there is no potential for effects on historic properties of Tribal religious or cultural significance. These restrictions include a strict requirement for both exclusions of no new ground disturbance and restrictions on the size and placement of equipment. Furthermore, both exclusions are limited to collocations (and therefore do not include new or replacement support structures).

37. Adoption of this exclusion will provide significant efficiencies in the section 106 process for DAS and small-cell deployments. Many DAS and small-cell installations involve collocations on utility structures. PCIA also estimates that excluding collocations on these wooden poles would increase the estimated number of excluded collocation structures by a factor of 10—which would dramatically advance wireless infrastructure deployment

without impacting historic preservation values.

b. Collocations on Buildings and Other Non-Tower Structures

38. Verizon proposes an exclusion for collocations on any building or other structure over 45 years old if: (1) The antenna will be added in the same location as other antennas previously deployed; (2) the height of the new antenna will not exceed the height of the existing antennas by more than three feet, or the new antenna will not be visible from the ground regardless of the height increase; and (3) the new antenna will comply with any requirements placed on the existing antennas by the State or local zoning authority or as a result of any previous historic preservation review process.

39. Section 800.3(a)(1) of ACHP rules authorizes an exclusion only where the undertaking does not have the potential to cause effects on historic properties, assuming such historic properties are present. While the Commission concludes that this standard allows for an exclusion applicable to many collocations on buildings and other structures that already house collocations, the Commission finds insufficient support in the record to adopt Verizon's proposed exclusion in its entirety. While Verizon states that adding an antenna to a building within the scope of its proposal would not have an effect that differs from those caused by existing antennas, the Commission must also consider the cumulative effects of additional deployments on the integrity of a historic property to the extent that they add incompatible visual elements. Further, while Verizon relies heavily on the requirement that any new deployment must meet the same conditions as the existing deployment, the Commission cannot assume that conditions placed on a previous deployment are always sufficient to prevent any effects, particularly in the event of multiple additional deployments. Indeed, it is often the case that mitigating conditions are designed to offset effects rather than eliminate or reduce them entirely. The Commission concludes that with certain modifications to Verizon's proposal, deployments covered by the test would have no potential for effects.

40. Specifically, the Commission finds that collocations on buildings or other non-tower structures over 45 years old will have no potential for effects on historic properties if: (1) There is an existing antenna on the building or structure; (2) one of the following criteria is met: (a) The new antenna will not be visible from any adjacent streets or surrounding public spaces and will be added in the same vicinity as a pre-existing antenna; (b) the new antenna will be visible from adjacent streets or surrounding public spaces, provided that (i) it will replace a pre-existing antenna, (ii) the new antenna will be located in the same vicinity as the pre-existing antenna, (iii) the new antenna will be visible only from adjacent streets and surrounding public spaces that also afford views of the pre-existing antenna, (iv) the new antenna will not be more than three feet larger in height or width (including all protuberances) than the pre-existing antenna, and (v) no new equipment cabinets will be visible from the adjacent streets or surrounding public spaces; or (c) the new antenna will be visible from adjacent streets or surrounding public spaces, provided that (i) it will be located in the same vicinity as a pre-existing antenna, (ii) the new antenna will be visible only from adjacent streets and surrounding public spaces that also afford views of the pre-existing antenna, (iii) the pre-existing antenna was not deployed pursuant to the exclusion based on this finding, (iv) the new antenna will not be more than three feet larger in height or width (including all protuberances) than the pre-existing antenna, and (v) no new equipment cabinets will be visible from the adjacent streets or surrounding public spaces; (3) the new antenna will comply with all zoning conditions and historic preservation conditions applicable to existing antennas in the same vicinity that directly mitigate or prevent effects, such as camouflage or concealment requirements; and (4) the deployment of the new antenna will involve no new ground disturbance. Notwithstanding its finding of no potential for effects even assuming historic properties are present, the Commission limits this exclusion in light of many parties' particular sensitivities related to historic properties and districts. As with the exclusion for collocations on utility poles, this exclusion does not apply to deployments that are (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a designated National Historic Landmark or is listed in or eligible for listing in the National Register; or (3) the subject of a pending complaint alleging adverse effect on historic properties. In other words, this new targeted exclusion addresses collocations on non-tower structures where historic preservation review would otherwise be required under existing rules only because the structures are more than 45 years old.

41. Consistent with the Verizon proposal, the Commission requires that there must already be an antenna on the building or other structure and that the new antenna be in the same vicinity as the pre-existing antenna. For this purpose, a non-visible new antenna is in the ''same vicinity'' as a pre-existing antenna if it will be collocated on the same rooftop, façade or other surface, and a visible new antenna is in the ''same vicinity'' as a pre-existing antenna if it is on the same rooftop, façade, or other surface and the centerpoint of the new antenna is within 10 feet of the centerpoint of the pre-existing antenna. Combined with the other criteria discussed below, this requirement is designed to assure that a new antenna will not have any incremental effect on historic properties, assuming they exist, as there will be no additional incompatible elements.

42. In addition to Verizon's proposed requirement that the deployment be in the same vicinity as an existing antenna, the Commission also adopts a condition of no-visibility from adjoining streets or any surrounding public spaces, with two narrow exceptions. For the general case, the Commission's no-effects finding will apply only to a new antenna that is not visible from any adjacent streets or surrounding public spaces and is added in the same vicinity as a pre-existing antenna. In adopting this standard, the Commission is informed by the record and also in part by General Services Administration (GSA) Preservation Note 41, entitled ''Administrative Guide for Submitting Antenna Projects for External Review.'' Preservation Note 41 recommends that an agency may recommend a finding of no effect where the antenna will not be visible from the surrounding public space or streets and the antenna will not harm original historic materials or their replacements-in-kind. The Commission notes that, in addition to the measures ensuring that there are no incremental visual effects from covered facilities, the Commission's finding of no effects in this case is also implicitly based on a requirement, as the GSA Note recommends, that the deployment will not harm original historic materials. Even assuming a building is historic, however, as required by section 800.3(a)(1), this ''no harm'' criterion would be satisfied by ensuring that any anchoring on the building was not performed on the historic materials of the property or their replacements-in-kind. It is therefore unnecessary to expressly impose a ''no harm'' condition

in this case, as the exclusion the Commission adopts does not apply to historic properties. Necessarily, any anchoring of deployments subject to the exclusion will not be in any historic materials of the property. The Commission also notes that, under the criteria the Commission adopts, the deployment will occur only where another antenna has already been reviewed under section 106 and approved for deployment in the same vicinity, and any conditions imposed on that prior deployment to minimize or eliminate historic impact, including specifications of where, how, or under what conditions to construct, are part of the Commission's ''no effect'' finding and would apply as a condition of the exclusion.

43. The Commission makes a narrow exception to the no-visibility requirement where the new antenna would replace an existing antenna in the same vicinity and where the addition of the new antenna would not constitute a substantial increase in size over the replaced antenna. In this situation, no additional incompatible visual element is being added, as one antenna is a substitution for the other. The Commission permits an insubstantial increase in size in this situation. For purposes of this criterion, the replacement facility would represent a substantial increase in size if it is more than three feet larger in height or width (including all protuberances) than the existing facility, or if it involves any new equipment cabinets that are visible from the street or adjacent public spaces. The Commission declines to adopt the NPA definition of ''substantial increase,'' which allows greater increases in height or width in some cases, because it applies to towers, not to antenna deployments, and it is therefore overbroad with respect to the replacement of an existing antenna. The Commission further notes that no one has objected to Verizon's proposed limit on increases of three feet in this context. Also, since the Commission is required to ensure no potential for effects on historic properties assuming such properties are present, the Commission finds it appropriate to adopt a more stringent test than in the context of a program alternative. For these reasons, any increase in the number of equipment cabinets that are visible from the street or adjacent public spaces in connection with a replacement antenna constitutes a substantial increase in size. In combination with the requirements that the new antenna be within 10 feet of the replaced antenna and that the pre-existing antenna be visible from any ground perspective that would afford a view of the new antenna these requirements ensure that the replacement deployment will not have an additional visual effect.

44. Under its second partial exception to the no-visibility requirement, the new antenna may be in addition to, rather than a replacement of, a pre-existing antenna, but must meet the other requirements applicable to replacement antennas. The Commission requires that the pre-existing antenna itself not have been deployed pursuant to this exception. While this exception will allow an additional visual element to be added, the element is again limited to a comparably-sized antenna in the same viewshed (and again does not include any new visible associated equipment). Further, because the pre-existing antenna may not itself have been deployed pursuant to this no-effects finding, deployments cannot be daisy-chained across the structure, which might present a potential for cumulative effects.

45. Consistent with the Verizon proposal, the Commission requires that the new antenna comply with all zoning and historic preservation conditions applicable to existing antennas in the same vicinity that directly mitigate or prevent effects, such as camouflage, concealment, or painting requirements. The Commission does not extend that requirement to conditions that have no direct relationship to the facility's effect or how the facility is deployed, such as a condition that requires the facility owner to pay for historic site information signs or other conditions intended to offset harms rather than prevent them. Its goal is to assure that any new deployments have no effects on historic properties. Payments or other forms of mitigation applied to antennas previously deployed on the building or structure that were intended to compensate for any adverse effect on historic properties caused by those antennas but were not intended to prevent that effect from occurring do not advance its goal of assuring no effects from such collocations. The Commission does not require that the new antenna comply with such conditions.

46. As with the exclusion the Commission adopts for collocations on utility structures, the Commission imposes a strict requirement of no new ground disturbance. Thus, the exclusion will permit ground disturbance only where the depth and width of previous disturbance exceeds the proposed construction depth and width (including footings and other anchoring mechanisms) by at least two feet.

3. Antennas Mounted in the Interior of Buildings

47. The Collocation Agreement provides that ''[a]n antenna may be mounted on a building'' without section 106 review except under certain circumstances, *e.g.,* the building is a historic property or over 45 years of age. The Commission clarifies that section V of the Collocation Agreement covers collocations in buildings' interiors. Given the limited scope of the exclusion of collocations on buildings under the Collocation Agreement (*e.g.,* the building may not itself be listed in or eligible for listing in the National Register or in or near a historic district), there is no reason to distinguish interior collocations from exterior collocations for purposes of assessing impacts on historic properties.

II. Environmental Notification Exemption for Registration of Temporary Towers

48. If pre-construction notice of a tower to the FAA is required, the Commission's rules also require the tower owner to register the antenna structure in the Commission's Antenna Structure Registration (ASR) system, prior to construction or alteration. To fulfill responsibilities under NEPA, the Commission requires owners of proposed towers, including temporary towers that must be registered in the ASR system to provide local and national notice prior to submitting a completed ASR application. Typically, the ASR notice process takes approximately 40 days.

49. On May 15, 2013, in the *Environmental Notification Waiver Order* (*Waiver Order*), the Commission granted an interim waiver of the ASR environmental notification requirements for temporary towers meeting certain criteria. The Commission provided that the interim waiver would remain in effect pending the completion of a rulemaking to address the issues raised in the petition. In the *Infrastructure NPRM,* the Commission proposed to adopt a permanent exemption from the ASR pre-construction environmental notification requirements consistent with the interim exemption granted in the *Waiver Order.*

50. The Commission now adopts a permanent exemption from its ASR environmental notification requirements for temporary towers that (1) will be in place for no more than 60 days; (2) require notice of construction to the FAA; (3) do not require marking or lighting under FAA regulations; (4) will be less than 200 feet in height; and (5) will either involve no excavation or

involve excavation only where the depth of previous disturbance exceeds the proposed construction depth (excluding footings and other anchoring mechanisms) by at least two feet. The Commission finds that establishing the proposed exemption is consistent with its obligations under NEPA and the Council on Environmental Quality (CEQ) regulations, and will serve the public interest.

51. As the Commission observed in the *Infrastructure NPRM,* the ASR notice process takes approximately 40 days and can take as long as two months. The record confirms that absent the exemption, situations would arise where there is insufficient time to complete this process before a temporary tower must be deployed to meet near-term demand. The record, as well as the Commission's own experience in administering the environmental notice rule, shows that a substantial number of temporary towers that would qualify for the exemption require registration. The Commission finds that absent an exemption, application of the ASR notice process to these temporary towers will interfere with the ability of service providers to meet important short term coverage and capacity needs.

52. At the same time, the benefits of environmental notice are limited in the case of temporary towers meeting these criteria. The purpose of environmental notice is to facilitate public discourse regarding towers that may have a significant environmental impact. The Commission finds that towers meeting the specified criteria are highly unlikely to have significant environmental effects due to their short duration, limited height, absence of marking or lighting, and minimal to no excavation. As the Commission explained in the *Waiver Order,* its experience in administering the ASR public notice process confirms that antenna structures meeting the waiver criteria rarely if ever generate public comment regarding potentially significant environmental effects or are determined to require further environmental processing. In particular, since the *Waiver Order* has been in place, the Commission has seen no evidence that a temporary tower exempted from notification by the waiver has had or may have had a significant environmental effect. The Commission finds that the limited benefits of notice in these cases do not outweigh the potential detriment to the public interest of prohibiting the deployment of towers in circumstances in which the notification process cannot be completed quickly enough to address short-term deployment needs. Further, having concluded that pre-construction environmental notification is categorically unnecessary in the situations addressed here, the Commission finds it would be inefficient to require the filing and adjudication of individual waiver requests for these temporary towers. The Commission concludes that adoption of the exemption is warranted.

53. The Commission also adopts the proposal to require no post-construction environmental notice for temporary towers that qualify for the exemption. Ordinarily, when pre-construction notice is waived due to an emergency situation, the Commission requires environmental notification shortly after construction because such a deployment may be for a lengthy or indefinite period of time. The Commission finds that requiring post-construction notification for towers intended to be in place for the limited duration covered by the exemption is not in the public interest as the exempted period is likely to be over or nearly over by the time the notice period ends. Additionally, the Commission notes again that it has rarely seen temporary antenna structures generate public comment regarding potentially significant environmental effects. The Commission further notes that of the many commenters supporting an exemption, none opposed its proposal to exempt qualifying temporary towers from post-construction environmental notification.

54. The Commission finds that the objections to the proposed exemption raised by Lee County, Tempe, and Orange County are misplaced. They express concerns that a temporary towers exemption would eliminate local review (including local environmental review) and antenna structure registration requirements. The exemption the Commission adopts does neither of these things. First, the temporary towers measure does not exempt any deployment from any otherwise applicable requirement under the Commission's rules to provide notice to the FAA, to obtain an FAA ''no-hazard'' determination, or to complete antenna structure registration. In raising its concern, Orange County notes that it ''operates . . . a large regional airport that has recently expanded through construction of a third terminal.'' The Commission finds the exemption poses no threat to air safety. As noted, deployments remains subject to all applicable requirements to notify the FAA and register the structure in the ASR system. If the Commission or the FAA requires either painting or lighting, *i.e.,* because of a potential threat to aviation, the exemption does not apply. Nor does the exemption impact any local requirements. Further, the Commission provides, as proposed in the *Infrastructure NPRM,* that towers eligible for the notification exemption are still required to comply with the Commission's other NEPA requirements, including filing an EA in any of the environmentally sensitive circumstances identified by the rules. The Commission further provides that if an applicant determines that it needs to complete an EA for a temporary tower otherwise eligible for the exemption, or if the relevant bureau makes this determination pursuant to section 1.1307(c) or (d) of the Commission's rules, the application will not be exempt from the environmental notice requirement.

55. The Commission concludes that making the exemption available for towers less than 200 feet above ground level is appropriate and adequate to ensure that the exemption serves the public interest both by minimizing potential significant environmental effects and by enabling wireless providers to more effectively respond to large or unforeseen spikes in demand for service. CTIA indicates that carriers deploy temporary towers more than 150 feet tall to replace damaged towers of similar height, and that having to use shorter towers to stand in for damaged towers may reduce coverage and thereby limit the availability of service during emergencies. The Commission agrees with CTIA that reducing the maximum tower height could undermine the intended purpose of the exemption. Further, the proposed limit of less than 200 feet will allow appropriate flexibility for taller temporary models, as they become available.

56. The Commission concludes that 60 days is an appropriate time limit for the deployment of towers under this exemption. This time limit has substantial support in the record, and the Commission finds that 60 days strikes the proper balance between making this exemption a useful and effective tool for facilitating urgently needed short term communications deployments and facilitating public involvement in Commission decisions that may affect the environment. The brief duration of the covered deployments renders post-construction notification unnecessary in the public interest because the deployment will be removed by the time a post-construction notice period is complete or shortly thereafter. As the intended deployment period grows, however, the applicability of that reasoning erodes. For emergency deployments that may last up to six months or even longer, post-

construction notice will generally be warranted, as the Commission has indicated previously. Thus, the Commission finds that the existing procedure—*i.e.,* site-specific waivers that are generally conditioned on post-construction notice—remains appropriate for emergency towers that will be deployed for longer periods than those covered by the narrow exemption the Commission establishes in this proceeding.

57. The Commission declines to define consequences or to adopt special enforcement mechanisms for misuse of the exemption, as proposed by some commenters. The Commission agrees with Springfield, however, that the Commission should adopt a measure to prevent the use of consecutive deployments under the exemption to effectively exceed the time limit. The Commission therefore requires that at least 30 days must pass following the removal of one exempted temporary tower before the same applicant may rely on the exemption for another temporary tower covering substantially the same service area. While AT&T argues that the Commission should not adopt measures to prevent ''speculative abuses,'' the Commission concludes that this narrow limitation on the consecutive use of the exemption will help to ensure that it applies only to deployments of brief duration, as intended. Further, the Commission is not persuaded by CTIA's argument that such a restriction would interfere with a carrier's flexibility to respond to unforeseen events. The restriction places no limit on the number of exempt towers that can be deployed at any one time to cover a larger combined service area. The Commission also notes that its rule provides for extensions of the 60-day period in appropriate cases, which should further ensure that applicants have sufficient flexibility to respond to unforeseen events.

58. The Commission further clarifies that under appropriate conditions, such as natural disasters or national emergencies, the relevant bureau may grant waivers of this limitation applicable to defined geographic regions and periods. In addition, a party subject to this limitation at a particular site may still request a site-specific waiver of the notice requirements for a subsequent temporary deployment at that site.

59. To implement the new temporary towers exemption, Commission staff will modify FCC Form 854. The Commission notes that the modification of the form is subject to approval by the Office of Management and Budget (OMB). To ensure clarity, the Commission provides that the exemption will take effect only when the Wireless Telecommunications Bureau issues a Public Notice announcing OMB's approval. The Commission further provides that, until the new exemption is effective, the interim waiver of notification requirements for temporary towers remains available.

III. Implementation of Section 6409(a)

A. Background

60. Congress adopted section 6409 in 2012 as a provision of Title VI of the Middle Class Tax Relief and Job Creation Act of 2012, which is more commonly known as the Spectrum Act. Section 6409(a), entitled ''Facility Modifications,'' has three provisions. Subsection (a)(1) provides that ''[n]otwithstanding section 704 of the Telecommunications Act of 1996 [codified as 47 U.S.C. 332(c)(7)] or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.'' Subsection (a)(2) defines the term ''eligible facilities request'' as any request for modification of an existing wireless tower or base station that involves (a) collocation of new transmission equipment; (b) removal of transmission equipment; or (c) replacement of transmission equipment. Subsection (a)(3) provides that ''[n]othing in paragraph (a) shall be construed to relieve the Commission from the requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969.'' Aside from the definition of ''eligible facilities request,'' section 6409(a) does not define any of its terms. Similarly, neither the definitional section of the Spectrum Act nor that of the Communications Act contains definitions of the section 6409(a) terms. In the *Infrastructure NPRM,* the Commission sought comment on whether to address the provision more conclusively and comprehensively. The Commission found that it would serve the public interest to seek comment on implementing rules to define terms that the provision left undefined, and to fill in other interstices that may serve to delay the intended benefits of section 6409(a).

B. Discussion

61. After reviewing the voluminous record in this proceeding, the Commission decides to adopt rules clarifying the requirements of section 6409(a), and implementing and enforcing these requirements, in order to prevent delay and confusion in such implementation. As the Commission noted in the *Infrastructure NPRM,* collocation on existing structures is often the most efficient and economical solution for mobile wireless service providers that need new cell sites to expand their existing coverage area, increase their capacity, or deploy new advanced services. The Commission agrees with industry commenters that clarifying the terms in section 6409 will eliminate ambiguities in interpretation and thus facilitate the zoning process for collocations and other modifications to existing towers and base stations. Although these issues could be addressed over time through judicial decisions, the Commission concludes that addressing them now in a comprehensive and uniform manner will ensure that the numerous and significant disagreements over the provision do not delay its intended benefits.

62. The record demonstrates very substantial differences in the views advanced by local government and wireless industry commenters on a wide range of interpretive issues under the provision. While many localities recommend that the Commission defer to best practices to be developed on a collaborative basis, the Commission finds that there has been little progress in that effort since enactment of section 6409(a) well over two years ago. While the Commission generally encourages the development of voluntary best practices, the Commission is also concerned that voluntary best practices, on their own, may not effectively resolve many of the interpretive disputes or ensure uniform application of the law in this instance. In light of these disputes, the Commission takes this opportunity to provide additional certainty to parties.

63. *Authority.* The Commission finds that it has authority under section 6003 of the Spectrum Act to adopt rules to clarify the terms in section 6409(a) and to establish procedures for effectuating its requirements. The Commission also has broad authority to ''take any action necessary to assist [FirstNet] in effectuating its duties and responsibilities'' to construct and operate a nationwide public safety broadband network. The rules the Commission adopts reflect the authority conferred by these provisions, as they will facilitate and expedite infrastructure deployment in qualifying cases and thus advance wireless broadband deployment by commercial entities as well as FirstNet.

1. Definition of Terms in Section 6409(a)

a. Scope of Covered Services

64. The Commission first addresses the scope of wireless services to which the provision applies through the definitions of both ''transmission equipment'' and ''wireless tower or base station.'' After considering the arguments in the record, the Commission concludes that section 6409(a) applies both to towers and base stations and to transmission equipment used in connection with any Commission-authorized wireless communications service. The Commission finds strong support in the record for this interpretation. With respect to towers and base stations, the Commission concludes that this interpretation is warranted given Congress's selection of the broader term ''wireless'' in section 6409(a) rather than the narrow term ''personal wireless service'' it previously used in section 332(c)(7), as well as Congress's express intent that the provisions of the Spectrum Act ''advance wireless broadband service,'' promoting ''billions of dollars in private investment,'' and further the deployment of FirstNet. The Commission finds that interpreting ''wireless'' in the narrow manner that some municipal commenters suggest would substantially undermine the goal of advancing the deployment of broadband facilities and services, and that interpreting section 6409(a) to facilitate collocation opportunities on a broad range of suitable structures will far better contribute to meeting these goals, and is particularly important to further the deployment of FirstNet. The Spectrum Act directs the FirstNet authority, in carrying out its duty to deploy and operate a nationwide public safety broadband network, to ''enter into agreements to utilize, to the maximum extent economically desirable, existing . . . commercial or other communications infrastructure; and . . . Federal, State, tribal, or local infrastructure.'' For all of these reasons, the Commission finds it appropriate to interpret section 6409(a) as applying to collocations on infrastructure that supports equipment used for all Commission-licensed or authorized wireless transmissions.

65. The Commission is not persuaded that Congress's use of the term ''base station'' implies that the provision applies only to mobile service. As noted in the *Infrastructure NPRM,* the Commission's rules define ''base station'' as a feature of a mobile communications network, and the term has commonly been used in that context. It is important, however, to interpret ''base station'' in the context of Congress's intention to advance wireless broadband service generally, including both mobile and fixed broadband services. The Commission notes, for example, that the Spectrum Act directs the Commission to license the new commercial wireless services employing H Block, AWS–3, and repurposed television broadcast spectrum under ''flexible-use service rules''—*i.e.,* for fixed as well as mobile use. Moreover, in the context of wireless broadband service generally, the term ''base station'' describes fixed stations that provide fixed wireless service to users as well as those that provide mobile wireless service. Indeed, this is particularly true with regard to Long Term Evolution (LTE), in which base stations can support both fixed and mobile service. The Commission finds that, in the context of section 6409(a), the term ''base station'' encompasses both mobile and fixed services.

66. The Commission is also not persuaded that it should exclude ''broadcast'' from the scope of section 6409(a), both with respect to ''wireless'' towers and base stations and with respect to transmission equipment. The Commission acknowledges that the term ''wireless providers'' appears in other sections of the Spectrum Act that do not encompass broadcast services. The Commission does not agree, however, that use of the word ''wireless'' in section 6409's reference to a ''tower or base station'' can be understood without reference to context. The Commission interprets the term ''wireless'' as used in section 6409(a) in light of the purpose of this provision in particular and the larger purposes of the Spectrum Act as a whole. The Commission finds that Congress intended the provision to facilitate collocation in order to advance the deployment of commercial and public safety broadband services, including the deployment of the FirstNet network. The Commission agrees with NAB that including broadcast towers significantly advances this purpose by ''supporting the approximately 25,000 broadcast towers as collocation platforms.'' The Commission notes that a variety of industry and municipal commenters likewise support the inclusion of broadcast towers for similar reasons. Finally, the Commission observes that this approach is consistent with the Collocation Agreement and the NPA, both of which define ''tower'' to include broadcast towers. These agreements address ''wireless'' communications facilities and collocation for any ''communications'' purposes. They extend to any ''tower'' built for the sole or primary purpose of supporting any ''FCC-licensed'' facilities. The Commission finds these references particularly persuasive in ascertaining congressional intent, since section 6409(a) expressly references the Commission's continuing obligations to comply with NEPA and NHPA, which form the basis for these agreements.

67. The Commission further concludes that a broad interpretation of ''transmission equipment'' is similarly appropriate in light of the purposes of section 6409(a) in particular and the Spectrum Act more generally. The statute's Conference Report expresses Congress's intention to advance wireless broadband service generally, and as PCIA states, a broad definition of this term will ensure coverage for all wireless broadband services, including future services not yet contemplated. Defining ''transmission equipment'' broadly will facilitate the deployment of wireless broadband networks and will ''minimize the need to continually redefine the term as technology and applications evolve.'' The Commission also notes that a broad definition reflects Congress's definition of a comparable term in the context of directly related provisions in the same statute; in section 6408, the immediately preceding provision addressing uses of adjacent spectrum, Congress defined the term ''transmission system'' broadly to include ''any telecommunications, broadcast, satellite, commercial mobile service, or other communications system that employs radio spectrum.''

68. The Commission disagrees with commenters who contend that including broadcast equipment within covered transmission equipment does not advance the goals of the Spectrum Act. While broadcast equipment does not itself transmit wireless broadband signals, its efficient collocation pursuant to section 6409(a) will expedite and minimize the costs of the relocation of broadcast television licensees that are reassigned to new channels in order to clear the spectrum that will be offered for broadband services through the incentive auction, as mandated by the Spectrum Act. The Commission concludes that inclusion of broadcast service equipment in the scope of transmission equipment covered by the provision furthers the goals of the legislation and will contribute in particular to the success of the post-incentive auction transition of television broadcast stations to their new channels. The Commission notes that the language of section 6409(a) is broader than that used in section

332(c)(7), and it is reasonable to construe it in a manner that does not differentiate among various Commission-regulated services, particularly in the context of mandating approval of facilities that do not result in any substantial increase in physical dimensions.

69. The Commission further rejects arguments that Congress intended these terms to be restricted to equipment used in connection with personal wireless services and public safety services. The Communications Act and the Spectrum Act already define those narrower terms, and Congress chose not to employ them in section 6409(a), determining instead to use the broader term, ''wireless.'' The legislative history supports the conclusion that Congress intended to employ broader language. In the Conference Report, Congress emphasized that a primary goal of the Spectrum Act was to ''advance wireless broadband service,'' which would ''promot[e] billions of dollars in private investment, and creat[e] tens of thousands of jobs.'' In light of its clear intent to advance wireless broadband deployment through enactment of section 6409(a), the Commission finds it implausible that Congress meant to exclude facilities used for such services.

b. Transmission Equipment

70. The Commission adopts the proposal in the *Infrastructure NPRM* to define ''transmission equipment'' to encompass antennas and other equipment associated with and necessary to their operation, including power supply cables and backup power equipment. The Commission finds that this definition reflects Congress's intent to facilitate the review of collocations and minor modifications, and it recognizes that Congress used the broad term ''transmission equipment'' without qualifications that would logically limit its scope.

71. The Commission is further persuaded by wireless industry commenters that power supplies, including backup power, are a critical component of wireless broadband deployment and that they are necessary to ensure network resiliency. Indeed, including backup power equipment within the scope of ''transmission equipment'' under section 6409(a) is consistent with Congress's directive to the FirstNet Authority to ''ensure the . . . resiliency of the network.'' Tempe's assertion that backup power is not technically ''necessary'' because transmission equipment can operate without it is unpersuasive. Backup power is certainly necessary to operations during those periods when primary power is intermittent or unavailable. The Commission also concludes that ''transmission equipment'' should be interpreted consistent with the term ''antenna'' in the NPA and, given that the NPA term encompasses ''power sources'' without limitation, the Commission finds that ''transmission equipment'' includes backup power sources. Finally, while the Commission recognizes the concerns raised by local government commenters regarding the potential hazards of backup power generators, the Commission finds that these concerns are fully addressed in the standards applicable to collocation applications discussed below.

72. The Commission defines ''transmission equipment'' under section 6409(a) as any equipment that facilitates transmission for any Commission-licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas and other relevant equipment associated with and necessary to their operation, including coaxial or fiber-optic cable, and regular and backup power supply. This definition includes equipment used in any technological configuration associated with any Commission-authorized wireless transmission, licensed or unlicensed, terrestrial or satellite, including commercial mobile, private mobile, broadcast, and public safety services, as well as fixed wireless services such as microwave backhaul or fixed broadband.

c. Existing Wireless Tower or Base Station

73. The Commission adopts the definitions of ''tower'' and ''base station'' proposed in the *Infrastructure NPRM* with certain modifications and clarifications, in order to give independent meaning to both of these statutory terms, and consistent with Congress's intent to promote the deployment of wireless broadband services. First, the Commission concludes that the term ''tower'' is intended to reflect the meaning of that term as it is used in the Collocation Agreement. The Commission defines ''tower'' to include any structure built for the sole or primary purpose of supporting any Commission-licensed or authorized antennas and their associated facilities.

74. As proposed in the *Infrastructure NPRM,* the Commission interprets ''base station'' to extend the scope of the provision to certain support structures other than towers. Specifically, the Commission defines that term as the equipment and non-tower supporting structure at a fixed location that enable Commission-licensed or authorized wireless communications between user equipment and a communications network. The Commission finds that the term includes any equipment associated with wireless communications service including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supply, and comparable equipment. The Commission notes that this definition reflects the types of equipment included in its definition of ''transmission equipment,'' and that the record generally supports this approach. For example, DC argues that the Commission should define a base station as ''generally consist[ing] of radio transceivers, antennae, coaxial cable, a regular and backup power supply, and other associated electronics.'' TIA concurs that the term ''base station'' encompasses transmission equipment, including antennas, transceivers, and other equipment associated with and necessary to their operation, including coaxial cable and regular and backup power equipment.

75. The Commission further finds, consistent with the Commission's proposal, that the term ''existing . . . base station'' includes a structure that, at the time of the application, supports or houses an antenna, transceiver, or other associated equipment that constitutes part of a ''base station'' as defined above, even if the structure was not built for the sole or primary purpose of providing such support. As the Commission noted in the *Infrastructure NPRM,* while ''tower'' is defined in the Collocation Agreement and the NPA to include only those structures built for the sole or primary purpose of supporting wireless communications equipment, the term ''base station'' is not used in these agreements. The Commission rejects the proposal to define a ''base station'' to include any structure that is merely capable of supporting wireless transmission equipment, whether or not it is providing such support at the time of the application. The Commission agrees with municipalities' comments that by using the term ''existing,'' section 6409(a) preserves local government authority to initially determine what types of structures are appropriate for supporting wireless transmission equipment if the structures were not built (and thus were not previously approved) for the sole or primary purpose of supporting such equipment. Some wireless industry commenters also support its interpretation that,

while a tower that was built for the primary purpose of housing or supporting communications facilities should be considered ''existing'' even if it does not currently host wireless equipment, other structures should be considered ''existing'' only if they support or house wireless equipment at the time the application is filed.

76. The Commission finds that the alternative definitions proposed by many municipalities are unpersuasive. First, the Commission rejects arguments that a ''base station'' includes only the transmission system equipment, not the structure that supports it. This reading conflicts with the full text of the provision, which plainly contemplates collocations on a base station as well as a tower. Section 6409(a) defines an ''eligible facilities request'' as a request to modify an existing wireless tower or *base station* by collocating on it (among other modifications). This statutory structure precludes the Commission from limiting the term ''base station'' to transmission equipment; collocating on base stations, which the statute envisions, would be conceptually impossible unless the structure is part of the definition as well. The Commission further disagrees that defining ''base station'' to include supporting structures will deprive ''tower'' of all independent meaning. The Commission interprets ''base station'' not to include wireless deployments on towers. Further, the Commission interprets ''tower'' to include all structures built for the sole or primary purpose of supporting Commission-licensed or authorized antennas, and their associated facilities, regardless of whether they currently support base station equipment at the time the application is filed. Thus, ''tower'' denotes a structure that is covered under section 6409(a) by virtue of its construction. In contrast, a ''base station'' includes a structure that is not a wireless tower only where it already supports or houses such equipment.

77. The Commission is also not persuaded by arguments that ''base station'' refers only to the equipment compound associated with a tower and the equipment located upon it. First, no commenters presented evidence that ''base station'' is more commonly understood to mean an equipment compound as opposed to the broader definition of all equipment associated with transmission and reception and its supporting structures. Furthermore, the Collocation Agreement's definition of ''tower,'' which the Commission adopts in the R&O, treats equipment compounds as part of the associated towers for purposes of collocations; if towers include their equipment compounds, then defining base stations as equipment compounds alone would render the term superfluous. The Commission also notes that none of the State statutes and regulations implementing section 6409(a) has limited its scope to equipment and structures associated with towers. In addition, the Commission agrees with commenters who argue that limiting the definition of ''base station'' (and thus the scope of section 6409(a)) to structures and equipment associated with towers would compromise the core policy goal of bringing greater efficiency to the process for collocations. Other structures are increasingly important to the deployment of wireless communications infrastructure; omitting them from the scope of section 6409(a) would mean the statute's efficiencies would not extend to many if not most wireless collocations, and would counterproductively exclude virtually all of the small cell collocations that have the least impact on local land use.

78. Some commenters arguing that section 6409(a) covers no structures other than those associated with towers point to the Conference Report, which, in describing the equivalent provision in the House bill, states that the provision ''would require approval of requests for modification of cell towers.'' The Commission does not find this ambiguous statement sufficient to overcome the language of the statute as enacted, which refers to ''modification of an existing wireless tower *or base station.''* Moreover, this statement from the report does not expressly state a limitation on the provision, and thus may reasonably be read as a simplified reference to towers as an important application of its mandate. The Commission does not view this language as indicating Congress's intention that the provision encompasses only modifications of structures that qualify as wireless towers.

79. The Commission thus adopts the proposed definition of ''base station'' to include a structure that currently supports or houses an antenna, transceiver, or other associated equipment that constitutes part of a base station at the time the application is filed. The Commission also finds that ''base station'' encompasses the relevant equipment in any technological configuration, including DAS and small cells. The Commission disagrees with municipalities that argue that ''base station'' should not include DAS or small cells. As the record supports, there is no statutory language limiting the term ''base station'' in this manner. The definition is sufficiently flexible to encompass, as appropriate to section 6409(a)'s intent and purpose, future as well as current base station technologies and technological configurations, using either licensed or unlicensed spectrum.

80. While the Commission does not accept municipal arguments to limit section 6409(a) to equipment or structures associated with towers, the Commission rejects industry arguments that section 6409(a) should apply more broadly to include certain structures that neither were built for the purpose of housing wireless equipment nor have base station equipment deployed upon them. The Commission finds no persuasive basis to interpret the statutory provision so broadly. The Commission agrees with Alexandria et al. that the scope of section 6409(a) is different from that of the Collocation Agreement, as the statutory provision clearly applies only to collocations on an existing ''wireless tower or base station'' rather than any existing ''tower or structure.'' Further, interpreting ''tower'' to include structures ''similar to a tower'' would be contrary to the very Collocation Agreement to which these commenters point, which defines ''tower'' in the narrower fashion that the Commission adopts. The Commission also agrees with municipalities as a policy matter that local governments should retain authority to make the initial determination (subject to the constraints of section 332(c)(7)) of which non-tower structures are appropriate for supporting wireless transmission equipment; its interpretations of ''tower'' and ''base station'' preserve that authority.

81. Finally, the Commission agrees with Fairfax that the term ''existing'' requires that wireless towers or base stations have been reviewed and approved under the applicable local zoning or siting process or that the deployment of existing transmission equipment on the structure received another form of affirmative State or local regulatory approval (*e.g.,* authorization from a State public utility commission). Thus, if a tower or base station was constructed or deployed without proper review, was not required to undergo siting review, or does not support transmission equipment that received another form of affirmative State or local regulatory approval; the governing authority is not obligated to grant a collocation application under section 6409(a). The Commission further clarifies that a wireless tower that does not have a permit because it was not in a zoned area when it was built, but was lawfully constructed, is an ''existing'' tower. The Commission finds that its

interpretation of ''existing'' is consistent with the purposes of section 6409(a) to facilitate deployments that are unlikely to conflict with local land use policies and preserve State and local authority to review proposals that may have impacts. First, it ensures that a facility that was deployed unlawfully does not trigger a municipality's obligation to approve modification requests under section 6409(a). Further, it guarantees that the structure has already been the subject of State or local review. This interpretation should also minimize incentives for governing authorities to increase zoning or other regulatory review in cases where minimally intrusive deployments are currently permitted without review. For example, under this interpretation, a homeowner's deployment of a femtocell that is not subject to any zoning or other regulatory requirements will not constitute a base station deployment that triggers obligations to allow deployments of other types of facilities at that location under section 6409(a). By thus preserving State and local authority to review the first base station deployment that brings any non-tower structure within the scope of section 6409(a), the Commission ensures that subsequent collocations of additional transmission equipment on that structure will be consistent with congressional intent that deployments subject to section 6409(a) will not pose a threat of harm to local land use values.

82. On balance, the Commission finds that the foregoing definitions are consistent with congressional intent to foster collocation on various types of structures, while addressing municipalities' valid interest in preserving their authority to determine which structures are suitable for wireless deployment, and under what conditions.

d. Collocation, Replacement, Removal, Modification

83. The Commission concludes again that it is appropriate to look to the Collocation Agreement for guidance on the meaning of analogous terms, particularly in light of section 6409(a)(3)'s specific recognition of the Commission's obligations under NHPA and NEPA. As proposed in the *Infrastructure NPRM* and supported by the record, the Commission concludes that the definition of ''collocation'' for purposes of section 6409(a) should be consistent with its definition in the Collocation Agreement. The Commission defines ''collocation'' under section 6409(a) as ''the mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.'' The term ''eligible support structure'' means any structure that falls within the definitions of ''tower'' or ''base station.'' Consistent with the language of section 6409(a)(2)(A)–(C), the Commission also finds that a ''modification'' of a ''wireless tower or base station'' includes collocation, removal, or replacement of an antenna or any other transmission equipment associated with the supporting structure.

84. The Commission disagrees with municipal commenters who argue that collocations are limited to mounting equipment on structures that already have transmission equipment on them. That limitation is not consistent with the Collocation Agreement's definition of ''collocation,'' and would not serve any reasonable purpose as applied to towers built for the purpose of supporting transmission equipment. Nevertheless, the Commission observes that the Commission's approach leads to the same result in the case of ''base stations;'' since its definition of that term includes only structures that already support or house base station equipment, section 6409(a) will not apply to the first deployment of transmission equipment on such structures. Thus, the Commission disagrees with CA Local Governments that adopting the Commission's proposed definition of collocation would require local governments to approve deployments on anything that could house or support a component of a base station. Rather, section 6409(a) will apply only where a State or local government has approved the construction of a structure with the sole or primary purpose of supporting covered transmission equipment (*i.e.,* a wireless tower) or, with regard to other support structures, where the State or local government has previously approved the siting of transmission equipment that is part of a base station on that structure. In both cases, the State or local government must decide that the site is suitable for wireless facility deployment before section 6409(a) will apply.

85. The Commission finds that the term ''eligible facilities request'' encompasses hardening through structural enhancement where such hardening is necessary for a covered collocation, replacement, or removal of transmission equipment, but does not include replacement of the underlying structure. The Commission notes that the term ''eligible facilities request'' encompasses any ''modification of an existing wireless tower or base station that involves'' collocation, removal, or replacement of transmission equipment. Given that structural enhancement of the support structure is a modification of the relevant tower or base station, the Commission notes that permitting structural enhancement as a part of a covered request may be particularly important to ensure that the relevant infrastructure will be available for use by FirstNet because of its obligation to ''ensure the safety, security, and resiliency of the [public safety broadband] network. . . .'' In addition to hardening for Public Safety, commercial providers may seek structural enhancement for many reasons, for example, to increase load capacity or to repair defects due to corrosion or other damage. The Commission finds that such modification is part of an eligible facilities request so long as the modification of the underlying support structure is performed in connection with and is necessary to support a collocation, removal, or replacement of transmission equipment. The Commission further clarifies that, to be covered under section 6409(a), any such structural enhancement must not constitute a substantial change as defined below.

86. The Commission agrees with Alexandria et al., that ''replacement,'' as used in section 6409(a)(2)(C), relates only to the replacement of ''transmission equipment,'' and that such equipment does not include the structure on which the equipment is located. Even under the condition that it would not substantially change the physical dimensions of the structure, replacement of an entire structure may affect or implicate local land use values differently than the addition, removal, or replacement of transmission equipment, and the Commission finds no textual support for the conclusion that Congress intended to extend mandatory approval to new structures. Thus, the Commission declines to interpret ''eligible facilities requests'' to include replacement of the underlying structure.

e. Substantial Change and Other Conditions and Limitations

87. After careful review of the record, the Commission adopts an objective standard for determining when a proposed modification will ''substantially change the physical dimensions'' of an existing tower or base station. The Commission provides that a modification substantially changes the physical dimensions of a tower or base station if it meets any of the following criteria: (1) for towers

outside of public rights-of-way, it increases the height of the tower by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater; for those towers in the rights-of-way and for all base stations, it increases the height of the tower or base station by more than 10% or 10 feet, whichever is greater; (2) for towers outside of public rights-of-way, it protrudes from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater; for those towers in the rights-of-way and for all base stations, it protrudes from the edge of the structure more than six feet; (3) it involves installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets; (4) it entails any excavation or deployment outside the current site of the tower or base station; (5) it would defeat the existing concealment elements of the tower or base station; or (6) it does not comply with conditions associated with the prior approval of construction or modification of the tower or base station unless the non-compliance is due to an increase in height, increase in width, addition of cabinets, or new excavation that does not exceed the corresponding ''substantial change'' thresholds identified above. The Commission further provides that the changes in height resulting from a modification should be measured from the original support structure in cases where the deployments are or will be separated horizontally, such as on buildings' rooftops; in other circumstances, changes in height should be measured from the dimensions of the tower or base station inclusive of originally approved appurtenances and any modifications that were approved prior to the passage of the Spectrum Act. Beyond these standards for what constitutes a substantial change in the physical dimensions of a tower or base station, the Commission further provides that for applications covered by section 6409(a), States and localities may continue to enforce and condition approval on compliance with generally applicable building, structural, electrical, and safety codes and with other laws codifying objective standards reasonably related to health and safety.

88. The Commission initially concludes that it should adopt a test that is defined by specific, objective factors rather than the contextual and entirely subjective standard advocated by the Intergovernmental Advisory Committee (IAC) and municipalities. Congress took care to refer, in excluding certain modifications from mandatory approval requirements, to those that would substantially change the tower or base station's ''physical dimensions.'' The Commission also finds that Congress intended approval of covered requests to occur in a timely fashion. While the Commission acknowledges that the IAC approach would provide municipalities with maximum flexibility to consider potential effects, the Commission is concerned that it would invite lengthy review processes that conflict with Congress's intent. Indeed, some municipal commenters anticipate their review of covered requests under a subjective case-by-case approach could take even longer than their review of collocations absent section 6409(a). The Commission also anticipates that disputes arising from a subjective approach would tend to require longer and more costly litigation to resolve given the more fact-intensive nature of the IAC's open-ended and context-specific approach. The Commission finds that an objective definition, by contrast, will provide an appropriate balance between municipal flexibility and the rapid deployment of covered facilities. The Commission finds further support for this approach in State statutes that have implemented section 6409(a), all of which establish objective standards.

89. The Commission further finds that the objective test for ''substantial increase in size'' under the Collocation Agreement should inform its consideration of the factors to consider when assessing a ''substantial change in physical dimensions.'' This reflects its general determination that definitions in the Collocation Agreement and NPA should inform its interpretation of similar terms in section 6409(a). Further, as noted in the *Infrastructure NPRM,* the Commission has previously relied on the Collocation Agreement's test in comparable circumstances, concluding in the *2009 Declaratory Ruling* that collocation applications are subject to a shorter shot clock under section 332(c)(7) to the extent that they do not constitute a ''substantial increase in size of the underlying structure.'' The Commission has also applied a similar objective test to determine whether a modification of an existing registered tower requires public notice for purposes of environmental review. The Commission notes that some municipalities support this approach, and the Commission further observes that the overwhelming majority of State collocation statutes adopted since the passage of the Spectrum Act have adopted objective criteria similar to the Collocation Agreement test for identifying collocations subject to mandatory approval. The Commission notes as well that there is nothing in the record indicating that any of these objective State-law tests have resulted in objectionable collocations that might have been rejected under a more subjective approach. The Commission is persuaded that it is reasonable to look to the Collocation Agreement test as a starting point in interpreting the very similar ''substantial change'' standard under section 6409(a). The Commission further decides to modify and supplement the factors to establish an appropriate balance between promoting rapid wireless facility deployment and preserving States' and localities' ability to manage and protect local land-use interests.

90. First, the Commission declines to adopt the Collocation Agreement's exceptions that allow modifications to exceed the usual height and width limits when necessary to avoid interference or shelter the antennas from inclement weather. The Commission agrees with CA Local Governments that these issues pose technically complex and fact-intensive questions that many local governments cannot resolve without the aid of technical experts; modifications that would not fit within the Collocation Agreement's height and width exceptions are thus not suitable for expedited review under section 6409(a).

91. Second, the Commission concludes that the limit on height and width increases should depend on the type and location of the underlying structure. Under the Collocation Agreement's ''substantial increase in size'' test, which applies only to towers, a collocation constitutes a substantial increase in size if it would increase a tower's height by 10% or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater. In addition, the Collocation Agreement authorizes collocations that would protrude by twenty feet, or by the width of the tower structure at the level of the appurtenance, whichever is greater. The Commission finds that the Collocation Agreement's height and width criteria are generally suitable for towers, as was contemplated by the Agreement.

92. These tests were not designed with non-tower structures in mind, and the Commission finds that they may often fail to identify substantial changes to non-tower structures such as

buildings or poles, particularly insofar as they would permit height and width increases of 20 feet under all circumstances. Instead, considering the proposals and arguments in the record and the purposes of the provision, the Commission concludes that a modification to a non-tower structure that would increase the structure's height by more than 10% or 10 feet, whichever is greater, constitutes a substantial change under section 6409(a). Permitting increases of up to 10% has significant support in the record. Further, the Commission finds that the adoption of a fixed minimum best serves the intention of Congress to advance broadband service by expediting the deployment of minor modifications of towers and base stations. Without such a minimum, the Commission finds that the test will not properly identify insubstantial increases on small buildings and other short structures, and may undermine the facilitation of collocation, as vertically collocated antennas often need 10 feet of separation and rooftop collocations may need such height as well. Further, the fact that the 10-foot minimum is substantially less than the 20-foot minimum limit under the Collocation Agreement and many State statutes or the 15-foot limit proposed by some commenters provides additional assurance that the Commission's interpretation of what is considered substantial under section 6409(a) is reasonable.

93. The Commission also provides, as suggested by Verizon and PCIA, that a proposed modification of a non-tower structure constitutes a ''substantial change'' under section 6409(a) if it would protrude from the edge of the structure more than six feet. The Commission finds that allowing for width increases up to six feet will promote the deployment of small facility deployments by accommodating installation of the mounting brackets/arms often used to deploy such facilities on non-tower structures, and that it is consistent with small facility deployments that municipalities have approved on such structures. The Commission further notes that it is significantly less than the limits in width established by most State collocation statutes adopted since the Spectrum Act. The Commission finds that six feet is the appropriate objective standard for substantial changes in width for non-tower structures, rather than the alternative proposals in the record.

94. The Commission declines to apply the same substantial change criteria to utility structures as apply to towers. While Verizon argues in an *ex parte* that this approach is justified because of the ''significant similarities'' between towers and utility structures, its own comments note that in contrast to ''macrocell towers,'' utility structures are ''smaller sites[.]'' Because utility structures are typically much smaller than traditional towers, and because utility structures are often located in easements adjacent to vehicular and pedestrian rights-of-way where extensions are more likely to raise aesthetic, safety, and other issues, the Commission does not find it appropriate to apply to such structures the same substantial change criteria applicable to towers. The Commission further finds that towers in the public rights-of-way should be subject to the more restrictive height and width criteria applicable to non-tower structures rather than the criteria applicable to other towers. The Commission notes that, to deploy DAS and small-cell wireless facilities, carriers and infrastructure providers must often deploy new poles in the rights-of-way. Because these structures are constructed for the sole or primary purpose of supporting Commission-licensed or authorized antennas, they fall under the definition of ''tower.'' They are often identical in size and appearance to utility poles in the area, which do not constitute towers. As a consequence, applying the tower height and width standards to these poles constructed for DAS and small-cell support would mean that two adjacent and nearly identical poles could be subject to very different standards. To ensure consistent treatment of structures in the public rights-of-way, and because of the heightened potential for impact from extensions in such locations, the Commission provides that structures qualifying as towers that are deployed in public rights-of-way will be subject to the same height and width criteria as non-tower structures.

95. The Commission agrees with commenters that its substantial change criteria for changes in height should be applied as limits on cumulative changes; otherwise, a series of permissible small changes could result in an overall change that significantly exceeds the adopted standards. Specifically, the Commission finds that whether a modification constitutes a substantial change must be determined by measuring the change in height from the dimensions of the ''tower or base station'' as originally approved or as of the most recent modification that received local zoning or similar regulatory approval prior to the passage of the Spectrum Act, whichever is greater.

96. The Commission declines to provide that changes in height should always be measured from the original tower or base station dimensions, as suggested by some municipalities. As with the original tower or base station, discretionary approval of subsequent modifications reflects a regulatory determination of the extent to which wireless facilities are appropriate, and under what conditions. At the same time, the Commission declines to adopt industry commenters' proposal always to measure changes from the last approved change or the effective date of the rules. Measuring from the last approved change in all cases would provide no cumulative limit at all. In particular, since the Spectrum Act became law, approval of covered requests has been mandatory and approved changes after that time may not establish an appropriate baseline because they may not reflect a siting authority's judgment that the modified structure is consistent with local land use values. Because it is impractical to require parties, in measuring cumulative impact, to determine whether each pre-existing modification was or was not required by the Spectrum Act, the Commission provides that modifications of an existing tower or base station that occur after the passage of the Spectrum Act will not change the baseline for purposes of measuring substantial change. Consistent with the determination that a tower or base station is not covered by section 6409(a) unless it received such approval, this approach will in all cases limit modifications that are subject to mandatory approval to the same modest increments over what the relevant governing authority has previously deemed compatible with local land use values. The Commission further finds that, for structures where collocations are separated horizontally rather than vertically (such as building rooftops), substantial change is more appropriately measured from the height of the original structure, rather than the height of a previously approved antenna. Thus, for example, the deployment of a 10-foot antenna on a rooftop would not mean that a nearby deployment of a 20-foot antenna would be considered insubstantial.

97. Again drawing on the Collocation Agreement's test, the Commission further provides that a modification is a substantial change if it entails any excavation or deployment outside the current site of the tower or base station. As in the Collocation Agreement, the Commission defines the ''site'' for

towers outside of the public rights-of-way as the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site. For other towers and all base stations, the Commission further restricts the site to that area in proximity to the structure and to other transmission equipment already deployed on the ground.

98. The Commission also rejects the PCIA and Sprint proposal to expand the Collocation Agreement's fourth prong, as modified by the 2004 NPA, to allow applicants to excavate outside the leased or licensed premises. Under the NPA, certain undertakings are excluded from the section 106 review, including ''construction of a replacement for an existing communications tower and any associated excavation that . . . does not expand the boundaries of the leased or owned property surrounding the tower by more than 30 feet in any direction or involve excavation outside these expanded boundaries or outside any existing access or utility easement related to the site.'' The NPA exclusion from section 106 review applies to replacement of ''an existing communications tower.'' In contrast, ''replacement,'' as used in section 6409(a)(2)(C), relates only to the replacement of ''transmission equipment,'' not the replacement of the supporting structures. Thus, the activities covered under section 6409(a) are more nearly analogous to those covered under the Collocation Agreement than under the replacement towers exclusion in the NPA. The Commission agrees with localities comments that any eligible facilities requests that involve excavation outside the premises should be considered a substantial change, as under the fourth prong of the Collocation Agreement's test.

99. Based on its review of the record and various state statutes, the Commission further finds that a modification constitutes a substantial change in physical dimensions under section 6409(a) if the change (1) would defeat the existing concealment elements of the tower or base station, or (2) does not comply with pre-existing conditions associated with the prior approval of construction or modification of the tower or base station. The first of these criteria is widely supported by both wireless industry and municipal commenters, who generally agree that a modification that undermines the concealment elements of a stealth wireless facility, such as painting to match the supporting façade or artificial tree branches, should be considered substantial under section 6409(a). The Commission agrees with commenters that in the context of a modification request related to concealed or ''stealth''-designed facilities—*i.e.,* facilities designed to look like some feature other than a wireless tower or base station—any change that defeats the concealment elements of such facilities would be considered a ''substantial change'' under section 6409(a). Commenters differ on whether any other conditions previously placed on a wireless tower or base station should be considered in determining substantial change under section 6409(a). After consideration, the Commission agrees with municipal commenters that a change is substantial if it violates any condition of approval of construction or modification imposed on the applicable wireless tower or base station, unless the non-compliance is due to an increase in height, increase in width, addition of cabinets, or new excavation that does not exceed the corresponding ''substantial change'' thresholds. In other words, modifications qualify for section 6409(a) only if they comply, for example, with conditions regarding fencing, access to the site, drainage, height or width increases that exceed the thresholds the Commission adopted and other conditions of approval placed on the underlying structure. This approach, the Commission finds, properly preserves municipal authority to determine which structures are appropriate for wireless use and under what conditions, and reflects one of the three key priorities identified by the IAC in assessing substantial change.

100. The Commission agrees with PCIA that legal, non-conforming structures should be available for modification under section 6409(a), as long as the modification itself does not ''substantially change'' the physical dimensions of the supporting structure as defined here. The Commission rejects municipal arguments that any modification of an existing wireless tower or base station that has ''legal, non-conforming'' status should be considered a ''substantial change'' to its ''physical dimensions.'' As PCIA argues, the approach urged by municipalities could thwart the purpose of section 6409(a) altogether, as simple changes to local zoning codes could immediately turn existing structures into legal, non-conforming uses unavailable for collocation under the statute. Considering Congress's intent to promote wireless facilities deployment by encouraging collocation on existing structures, and considering the requirement in section 6409(a) that States and municipalities approve covered requests ''[n]otwithstanding . . . any other provision of law,'' the Commission finds the municipal commenters' proposal to be unsupportably restrictive.

101. The record also reflects general consensus that wireless facilities modification under section 6409(a) should remain subject to building codes and other non-discretionary structural and safety codes. As municipal commenters indicate, many local jurisdictions have promulgated code provisions that encourage and promote collocations and replacements through a streamlined approval process, while ensuring that any new facilities comply with building and safety codes and applicable Federal and State regulations. Consistent with that approach on the local level, the Commission finds that Congress did not intend to exempt covered modifications from compliance with generally applicable laws related to public health and safety. The Commission concludes that States and localities may require a covered request to comply with generally applicable building, structural, electrical, and safety codes or with other laws codifying objective standards reasonably related to health and safety, and that they may condition approval on such compliance. In particular, the Commission clarifies that section 6409(a) does not preclude States and localities from continuing to require compliance with generally applicable health and safety requirements on the placement and operation of backup power sources, including noise control ordinances if any. The Commission further clarifies that eligible facility requests covered by section 6409(a) must still comply with any relevant Federal requirement, including any applicable Commission, FAA, NEPA, or section 106 requirements. The Commission finds that this interpretation is supported in the record, addresses a concern raised by several municipal commenters and the IAC, and is consistent with the express direction in section 6409(a) that the provision is not intended to relieve the Commission from the requirements of NEPA and NHPA.

102. In sum, the Commission finds that the definitions, criteria, and related clarifications it adopts for purposes of section 6409(a) will provide clarity and certainty, reducing delays and litigation, and thereby facilitate the rapid deployment of wireless infrastructure and promote advanced wireless broadband services. At the same time, the Commission concludes that its approach also addresses concerns

voiced by municipal commenters and reflects the priorities identified by the IAC. The Commission concludes that this approach reflects a reasonable interpretation of the language and purposes of section 6409(a) and will serve the public interest.

2. Application Review Process, Including Timeframe for Review

103. As an initial matter, the Commission finds that State or local governments may require parties asserting that proposed facilities modifications are covered under section 6409(a) to file applications, and that these governments may review the applications to determine whether they constitute covered requests. As the Bureau observed in the *Section 6409(a) PN,* the statutory provision requiring a State or local government to approve an ''eligible facilities request'' implies that the relevant government entity may require an applicant to file a request for approval. Further, nothing in the provision indicates that States or local governments must approve requests merely because applicants claim they are covered. Rather, under section 6409(a), only requests that do in fact meet the provision's requirements are entitled to mandatory approval. Therefore, States and local governments must have an opportunity to review applications to determine whether they are covered by section 6409(a), and if not, whether they should in any case be granted.

104. The Commission further concludes that section 6409(a) warrants the imposition of certain requirements with regard to application processing, including a specific timeframe for State or local government review and a limitation on the documentation States and localities may require. While section 6409(a), unlike section 332(c)(7), does not expressly provide for a time limit or other procedural restrictions, the Commission concludes that certain limitations are implicit in the statutory requirement that a State or local government ''may not deny, and shall approve'' covered requests for wireless facility siting. In particular, the Commission concludes that the provision requires not merely approval of covered applications, but approval within a reasonable period of time commensurate with the limited nature of the review, whether or not a particular application is for ''personal wireless service'' facilities covered by section 332(c)(7). With no such limitation, a State or local government could evade its statutory obligation to approve covered applications by simply failing to act on them, or it could impose lengthy and onerous processes not justified by the limited scope of review contemplated by the provision. Such unreasonable delays not only would be inconsistent with the mandate to approve but also would undermine the important benefits that the provision is intended to provide to the economy, competitive wireless broadband deployment, and public safety. The Commission requires that States and localities grant covered requests within a specific time limit and pursuant to other procedures outlined below.

105. The Commission finds substantial support in the record for adopting such requirements. It is clear from the record that there is significant dispute as to whether any time limit applies at all under section 6409(a) and, if so, what that limit is. The Commission also notes that there is already some evidence in the record, albeit anecdotal, of significant delays in the processing of covered requests under this new provision, which may be partly a consequence of the current uncertainty regarding the applicability of any time limit. Because the statutory language does not provide guidance on these requirements, the Commission is concerned that, without clarification, future disputes over the process could significantly delay the benefits associated with the statute's implementation. Moreover, the Commission finds it important that all stakeholders have a clear understanding of when an applicant may seek relief from a State or municipal failure to act under section 6409(a). The Commission finds further support for establishing these process requirements in analogous State statutes, nearly all of which include a timeframe for review.

106. Contrary to the suggestion of municipalities, the Commission disagrees that the Tenth Amendment prevents the Commission from exercising its authority under the Spectrum Act to implement and enforce the limitations imposed thereunder on State and local land use authority. These limitations do not require State or local authorities to review wireless facilities siting applications, but rather preempt them from choosing to exercise such authority under their laws other than in accordance with Federal law—*i.e.,* to deny any covered requests. The Commission therefore adopts the following procedural requirements for processing applications under section 6409(a).

107. First, the Commission provides that in connection with requests asserted to be covered by section 6409(a), State and local governments may only require applicants to provide documentation that is reasonably related to determining whether the request meets the requirements of the provision. The Commission finds that this restriction is appropriate in light of the limited scope of review applicable to such requests and that it will facilitate timely approval of covered requests. At the same time, under this standard, State or local governments have considerable flexibility in determining precisely what information or documentation to require. The Commission agrees with PCIA that States and localities may not require documentation proving the need for the proposed modification or presenting the business case for it. The Commission anticipates that over time, experience and the development of best practices will lead to broad standardization in the kinds of information required. As discussed above, even as to applications covered by section 6409(a), State and local governments may continue to enforce and condition approval on compliance with non-discretionary codes reasonably related to health and safety, including building and structural codes. The Commission finds that municipalities should have flexibility to decide when to require applicants to provide documentation of such compliance, as a single documentation submission may be more efficient than a series of submissions, and municipalities may also choose to integrate such compliance review into the zoning process. Accordingly, the Commission clarifies that this documentation restriction does not prohibit States and local governments from requiring documentation needed to demonstrate compliance with any such applicable codes.

108. In addition to defining acceptable documentation requirements, the Commission establishes a specific and absolute timeframe for State and local processing of eligible facilities requests under section 6409(a). The Commission finds that a 60-day period for review, including review to determine whether an application is complete, is appropriate. In addressing this issue, it is appropriate to consider not only the record support for a time limit on review but also State statutes that facilitate collocation applications. Many of these statutes impose review time limits, thus providing valuable insight into States' views on the appropriate amount of time. Missouri, New Hampshire, and Wisconsin, for example, have determined that 45 days is the maximum amount of time available to a municipality to review applications, while Georgia, North

Carolina, and Pennsylvania have adopted a 90-day review period, including review both for completeness and for approval. Michigan's statute provides that after the application is filed, the locality has 14 days to deem the application complete and an additional 60 days to review. The Commission finds it appropriate to adopt a 60-day time period as the time limit for review of an application under section 6409(a).

109. The Commission finds that a period shorter than the 90-day period applicable to review of collocations under section 332(c)(7) of the Communications Act is warranted to reflect the more restricted scope of review applicable to applications under section 6409(a). The Commission further finds that a 60-day period of review, rather than the 45-day period proposed by many industry commenters, is appropriate to provide municipalities with sufficient time to review applications for compliance with section 6409(a), because the timeframe sets an absolute limit that—in the event of a failure to act—results in a deemed grant. Thus, whereas a municipality may rebut a claim of failure to act under section 332(c)(7) if it can demonstrate that a longer review period was reasonable, that is not the case under section 6409(a). Rather, if an application covered by section 6409(a) has not been approved by a State or local government within 60 days from the date of filing, accounting for any tolling, as described below, the reviewing authority will have violated section 6409(a)'s mandate to approve and not deny the request, and the request will be deemed granted.

110. The Commission further provides that the foregoing section 6409(a) timeframe may be tolled by mutual agreement or in cases where the reviewing State or municipality informs the applicant in a timely manner that the application is incomplete. As with tolling for completeness under section 332(c)(7) (as discussed in the R&O), an initial determination of incompleteness tolls the running of the period only if the State or local government provides notice to the applicant in writing within 30 days of the application's submission. The Commission also requires that any determination of incompleteness must clearly and specifically delineate the missing information in writing, similar to determinations of incompleteness under section 332(c)(7). Further, consistent with the documentation restriction established above, the State or municipality may only specify as missing information and supporting documents that are reasonably related to determining whether the request meets the requirements of section 6409(a).

111. The timeframe for review will begin running again when the applicant makes a supplemental submission, but may be tolled again if the State or local government provides written notice to the applicant within 10 days that the application remains incomplete and specifically delineates which of the deficiencies specified in the original notice of incompleteness have not been addressed. The timeframe for review will be tolled in this circumstance until the applicant supplies the relevant authority with the information delineated. Consistent with determinations of incompleteness under section 332(c)(7) as described below, any second or subsequent determination that an application is incomplete may be based only on the applicant's failure to provide the documentation or information the State or municipality required in its initial request for additional information. Further, if the 10-day period passes without any further notices of incompleteness from the State or locality, the period for review of the application may not thereafter be tolled for incompleteness.

112. The Commission further finds that the timeframe for review under section 6409(a) continues to run regardless of any local moratorium. This is once again consistent with its approach under section 332(c)(7), and is further warranted in light of section 6409(a)'s direction that covered requests shall be approved ''[n]otwithstanding . . . any other provision of law.''

113. Some additional clarification of time periods and deadlines will assist in cases where both section 6409(a) and section 332(c)(7) apply. In particular, the Commission notes that States and municipalities reviewing an application under section 6409(a) will be limited to a restricted application record tailored to the requirements of that provision. As a result, the application may be complete for purposes of section 6409(a) review but may not include all of the information the State or municipality requires to assess applications not subject to section 6409(a). In such cases, if the reviewing State or municipality finds that section 6409(a) does not apply (because, for example, it proposes a substantial change), the Commission provides that the presumptively reasonable timeframe under section 332(c)(7) will start to run from the issuance of the State's or municipality's decision that section 6409(a) does not apply. To the extent the State or municipality needs additional information at that point to assess the application under section 332(c)(7), it may seek additional information subject to the same limitations applicable to other section 332(c)(7) reviews. The Commission recognizes that, in such cases, there might be greater delay in the process than if the State or municipality had been permitted to request the broader documentation in the first place. The Commission finds that applicants are in a position to judge whether to seek approval under section 6409(a), and the Commission expects they will have strong incentives to do so in a reasonable manner to avoid unnecessary delays. Finally, as the Commission proposed in the *Infrastructure NPRM,* the Commission finds that where both section 6409(a) and section 332(c)(7) apply, section 6409(a) governs, consistent with the express language of section 6409(a) providing for approval ''[n]otwithstanding'' section 332(c)(7) and with canons of statutory construction that a more recent statute takes precedence over an earlier one and that ''normally the specific governs the general.''

114. Beyond the guidance provided in the R&O, the Commission declines to adopt the other proposals put forth by commenters regarding procedures for the review of applications under section 6409(a) or the collection of fees. The Commission concludes that its clarification and implementation of this statutory provision strikes the appropriate balance of ensuring the timely processing of these applications and preserving flexibility for State and local governments to exercise their rights and responsibilities. Given the limited record of problems implementing the provision, further action to specify procedures would be premature.

3. Remedies

115. After a careful assessment of the statutory provision and a review of the record, the Commission establishes a deemed granted remedy for cases in which the applicable State or municipal reviewing authority fails to issue a decision within 60 days (subject to any tolling, as described above) on an application submitted pursuant to section 6409(a). The Commission further concludes that a deemed grant does not become effective until the applicant notifies the reviewing jurisdiction in writing, after the time period for review by the State or municipal reviewing authority as prescribed in the Commission's rules has expired, that the application has been deemed granted.

116. The Commission's reading of section 6409(a) supports this approach.

The provision states without equivocation that the reviewing authority ''may not deny, and shall approve'' any qualifying application. This directive leaves no room for a lengthy and discretionary approach to reviewing an application that meets the statutory criteria; once the application meets these criteria, the law forbids the State or local government from denying it. Moreover, while State and local governments retain full authority to approve or deny an application depending on whether it meets the provision's requirements, the statute does not permit them to delay this obligatory and non-discretionary step indefinitely. In the R&O, the Commission defines objectively the statutory criteria for determining whether an application is entitled to a grant under this provision. Given the objective nature of this assessment, then, the Commission concludes that withholding a decision on an application indefinitely, even if an applicant can seek relief in court or in another tribunal, would be tantamount to denying it, in contravention of the statute's pronouncement that reviewing authorities ''may not deny'' qualifying applications. The Commission finds that the text of section 6409(a) supports adoption of a deemed granted remedy, which will directly serve the broader goal of promoting the rapid deployment of wireless infrastructure. The Commission notes as well that its approach is consistent with other Federal agencies' processes to address inaction by State and local authorities.

117. Many municipalities oppose the adoption of a deemed granted remedy primarily on the ground that it arguably represents an intrusion into local decision-making authority. The Commission fully acknowledges and values the important role that local reviewing authorities play in the siting process, and, as the Commission stated in the *Infrastructure NPRM,* ''[the Commission's] goal is not to 'operate as a national zoning board.' '' At the same time, its authority and responsibility to implement and enforce section 6409(a) as if it were a provision of the Communications Act obligate the Commission to ensure effective enforcement of the congressional mandate reflected therein. To do so, given its ''broad grant of rulemaking authority,'' the importance of ensuring rapid deployment of commercial and public safety wireless broadband services as reflected in the adoption of the Spectrum Act, and in light of the record of disputes in this proceeding, as well as the prior experience of the Commission with delays in municipal action on wireless facility siting applications that led to the *2009 Declaratory Ruling,* the Commission concludes it is necessary to balance these federalism concerns against the need for ensuring prompt action on section 6409(a) applications. The Commission adopts this approach in tandem with several measures that safeguard the primacy of State and local government participation in local land use policy, to the extent consistent with the requirements of section 6409(a). First, the Commission has adopted a 60-day time period for States and localities to review applications submitted under section 6409(a). While many industry commenters proposed a 45-day review period based on the non-discretionary analysis that the provision requires, the Commission has provided more time in part to ensure that reviewing authorities have sufficient time to assess the applications.

118. Second, the Commission is establishing a clear process for tolling the 60-day period when an applicant fails to submit a complete application, thus ensuring that the absence of necessary information does not prevent a State or local authority from completing its review before the time period expires.

119. Third, even in the event of a deemed grant, the section 106 historic preservation review process—including coordination with State and Tribal historic preservation officers—will remain in place with respect to any proposed deployments in historic districts or on historic buildings (or districts and buildings eligible for such status).

120. Fourth, a State or local authority may challenge an applicant's written assertion of a deemed grant in any court of competent jurisdiction when it believes the underlying application did not meet the criteria in section 6409(a) for mandatory approval, would not comply with applicable building codes or other non-discretionary structural and safety codes, or for other reasons is not appropriately ''deemed granted.''

121. Finally, and perhaps most importantly, the deemed granted approach does not deprive States and localities of the opportunity to determine whether an application is covered; rather, it provides a remedy for a failure to act within the fixed but substantial time period within which they must determine, on a non-discretionary and objective basis, whether an application fits within the parameters of section 6409(a).

122. The Commission emphasizes as well that it expects deemed grants to be the exception rather than the rule. To the extent there have been any problems or delays due to ambiguity in the provision, the Commission anticipates that the framework it has established, including the specification of substantive and procedural rights and applicable remedies, will address many of these problems. The Commission anticipates as well that the prospect of a deemed grant will create significant incentives for States and municipalities to act in a timely fashion.

123. With respect to the appropriate forum for redress or for resolving disputes, including disputes over the application of the deemed grant rule, the Commission finds that the most appropriate course for a party aggrieved by operation of section 6409(a) is to seek relief from a court of competent jurisdiction. Although the Commission finds that it has authority to resolve such disputes under its authority to implement and enforce that provision, the Commission also finds that requiring that these disputes be resolved in court, and not by the Commission, will better accommodate the role of the States and local authorities and serve the public interest for the reasons the municipal commenters identify and as discussed in the R&O.

124. A number of factors persuade the Commission to require parties to adjudicate claims under section 6409(a) in court rather than before the Commission. First, Commission adjudication would impose significant burdens on localities, many of which are small entities with no representation in Washington, DC and no experience before the Commission. The possible need for testimony to resolve disputed factual issues, which may occur in these cases, would magnify the burden. The Commission is also concerned that it may simply lack the resources to adjudicate these matters in a timely fashion if the Commission enables parties to seek its review of local zoning disputes arising in as many as 38,000 jurisdictions, thus thwarting Congress's goal of speeding up the process. The Commission also agrees with municipalities that it does not have any particular expertise in resolving local zoning disputes, whereas courts have been adjudicating claims of failure to act on wireless facility siting applications since the adoption of section 332(c)(7).

125. The Commission requires parties to bring claims related to section 6409(a) in a court of competent jurisdiction. Such claims would appear likely to fall into one of three categories. First, if the State or local authority has denied the application, an applicant might seek to challenge that denial. Second, if an

applicant invokes its deemed grant right after the requisite period of State or local authority inaction, that reviewing authority might seek to challenge the deemed grant. Third, an applicant whose application has been deemed granted might seek some form of judicial imprimatur for the grant by filing a request for declaratory judgment or other relief that a court may find appropriate. In light of the policy underlying section 6409(a) to ensure that covered requests are granted promptly, and in the self-interest of the affected parties, the Commission would expect that these parties would seek judicial review of any such claims relating to section 6409(a) expeditiously. The enforcement of such claims is a matter appropriately left to such courts of competent jurisdiction. Given the foregoing Federal interest reflected in section 6409(a), it would appear that the basis for equitable judicial remedies would diminish significantly absent prompt action by the aggrieved party. In its judgment, based on the record established in this proceeding, the Commission finds no reason why (absent a tolling agreement by parties seeking to resolve their differences) such claims cannot and should not be brought within 30 days of the date of the relevant event (*i.e.,* the date of the denial of the application or the date of the notification by the applicant to the State or local authority of a deemed grant in accordance with the Commission's rules).

4. Non-application to States or Municipalities in Their Proprietary Capacities

126. As proposed in the *Infrastructure NPRM* and supported by the record, the Commission concludes that section 6409(a) applies only to State and local governments acting in their role as land use regulators and does not apply to such entities acting in their proprietary capacities. As discussed in the record, courts have consistently recognized that in ''determining whether government contracts are subject to preemption, the case law distinguishes between actions a State entity takes in a proprietary capacity—actions similar to those a private entity might take—and its attempts to regulate.'' As the Supreme Court has explained, ''[i]n the absence of any express or implied implication by Congress that a State may not manage its own property when it pursues its purely proprietary interests, and when analogous private conduct would be permitted, this Court will not infer such a restriction.'' Like private property owners, local governments enter into lease and license agreements to allow parties to place antennas and other wireless service facilities on local-government property, and the Commission finds no basis for applying section 6409(a) in those circumstances. The Commission finds that this conclusion is consistent with judicial decisions holding that sections 253 and 332(c)(7) of the Communications Act do not preempt ''non regulatory decisions of a state or locality acting in its proprietary capacity.''

127. The Commission declines at this time to further elaborate as to how this principle should apply to any particular circumstance in connection with section 6409(a). The Commission agrees with Alexandria et al. that the record does not demonstrate a present need to define what actions are and are not proprietary, and the Commission concludes in any case that such a task is best undertaken, to the extent necessary, in the context of a specific municipal action and associated record.

5. Effective Date

128. Based on its review of the record, the Commission is persuaded that a transition period is necessary and appropriate. The Commission agrees with certain municipal commenters that affected State and local governments may need time to make modifications to their laws and procedures to conform to and comply with the rules the Commission adopts in the R&O implementing and enforcing section 6409(a), and that a transition period is warranted to give them time to do so. The Commission concludes as proposed by the IAC and other parties that the rules adopted to implement section 6409(a) will take effect 90 days after **Federal Register** publication.

IV. Section 332(c)(7) and the 2009 Declaratory Ruling

A. Background

129. In 2009, the Commission adopted a Declaratory Ruling in response to a petition requesting clarification on two points: what constitutes a ''reasonable period of time'' after which an aggrieved applicant may file suit asserting a failure to act under section 332(c)(7), and whether a zoning authority may restrict competitive entry by multiple providers in a given area under section 332(c)(7)(B)(i)(II). In the *2009 Declaratory Ruling,* the Commission interpreted a ''reasonable period of time'' under section 332(c)(7)(B)(ii) to be 90 days for processing collocation applications, and 150 days for processing applications other than collocations. The Commission further determined that failure to meet the applicable timeframe presumptively constitutes a failure to act under section 332(c)(7)(B)(v), enabling an applicant to pursue judicial relief within the next 30 days.

130. In the *Infrastructure NPRM,* while stating that it would not generally revisit the *2009 Declaratory Ruling,* the Commission sought comment on six discrete issues arising under section 332(c)(7) and the *2009 Declaratory Ruling:* (1) Whether and how to clarify when a siting application is considered complete for the purpose of triggering the *2009 Declaratory Ruling*'s shot clock; (2) whether to clarify that the presumptively reasonable period for State or local government action on an application runs regardless of any local moratorium; (3) whether the *2009 Declaratory Ruling* applies to DAS and small-cell facilities; (4) whether to clarify the types of actions that constitute ''collocations'' for purposes of triggering the shorter shot clock; (5) whether local ordinances establishing preferences for deployment on municipal property violate section 332(c)(7)(B)(i)(I); and (6) whether to adopt an additional remedy for failures to act in violation of section 332(c)(7).

B. Discussion

1. Completeness of Applications

131. The Commission finds that it should clarify under what conditions the presumptively reasonable timeframes may be tolled on grounds that an application is incomplete. As an initial matter, the Commission notes that under the *2009 Declaratory Ruling,* the presumptively reasonable timeframe begins to run when an application is first submitted, not when it is deemed complete. Accordingly, to the extent municipalities have interpreted the clock to begin running only after a determination of completeness, that interpretation is incorrect.

132. Further, consistent with proposals submitted by Crown Castle and PCIA, the Commission clarifies that, following a submission in response to a determination of incompleteness, any subsequent determination that an application remains incomplete must be based solely on the applicant's failure to supply information that was requested within the first 30 days. The shot clock will begin running again after the applicant makes a supplemental submission. The State or local government will have 10 days to notify the applicant that the supplemental submission did not provide the information identified in the original notice delineating missing information. In other words, a subsequent

determination of incompleteness can result in further tolling of the shot clock only if the local authority provides it to the applicant in writing within 10 days of the supplemental submission, specifically identifying the information the applicant failed to supply in response to the initial request. Once the 10-day period passes, the period for review of the application may not thereafter be tolled for incompleteness.

133. The Commission further provides that, in order to toll the timeframe for review on grounds of incompleteness, a municipality's request for additional information must specify the code provision, ordinance, application instruction, or otherwise publically-stated procedures that require the information to be submitted. This requirement will avoid delays due to uncertainty or disputes over what documents or information are required for a complete application. Further, while some municipal commenters argue that ''[n]ot all jurisdictions codify detailed application submittal requirements because doing so would require a code amendment for even the slightest change,'' the Commission's approach does not restrict them to reliance on codified documentation requirements.

134. Beyond these procedural requirements, the Commission declines to enumerate what constitutes a ''complete'' application. The Commission finds that State and local governments are best suited to decide what information they need to process an application. Differences between jurisdictions make it impractical for the Commission to specify what information should be included in an application.

135. The Commission finds that these clarifications will provide greater certainty regarding the period during which the clock is tolled for incompleteness. This in turn provides clarity regarding the time at which the clock expires, at which point an applicant may bring suit based on a ''failure to act.'' Further, the Commission expects that these clarifications will result in shared expectations among parties, thus limiting potential miscommunication and reducing the potential or need for serial requests for more information. These clarifications will facilitate faster application processing, reduce unreasonable delay, and accelerate wireless infrastructure deployment.

2. Moratoria

136. The Commission clarifies that the shot clock runs regardless of any moratorium. This is consistent with a plain reading of the *2009 Declaratory Ruling,* which specifies the conditions for tolling and makes no provision for moratoria. Moreover, its conclusion that the clock runs regardless of any moratorium means that applicants can challenge moratoria in court when the shot clock expires without State or local government action, which is consistent with the case-by-case approach that courts have generally applied to moratoria under section 332(c)(7). This approach, which establishes clearly that an applicant can seek redress in court even when a jurisdiction has imposed a moratorium, will prevent indefinite and unreasonable delay of an applicant's ability to bring suit.

137. Some commenters contend that this approach would, in effect, improperly require municipal staff to simultaneously review and update their regulations to adapt to new technologies while also reviewing applications. The Commission recognizes that new technologies may in some cases warrant changes in procedures and codes, but finds no reason to conclude that the need for any such change should freeze all applications. The Commission is confident that industry and local governments can work together to resolve applications that may require more staff resources due to complexity, pending changes to the relevant siting regulations, or other special circumstances. Moreover, in those instances in which a moratorium may reasonably prevent a State or municipality from processing an application within the applicable timeframe, the State or municipality will, if the applicant seeks review, have an opportunity to justify the delay in court. The Commission clarifies that the shot clock continues to run regardless of any moratorium.

138. The Commission declines at this time to determine that a moratorium that lasts longer than six months constitutes a *per se* violation of the obligation to take action in a reasonable period of time. Although some have argued that a six-month limit would ''discourage localities from circumventing the intent of the Commission's shot clock rules,'' others disagree, and the record provides insufficient evidence to support a *per se* determination at this juncture. Given its clarification that the presumptively reasonable timeframes apply regardless of moratoria, any moratorium that results in a delay of more than 90 days for a collocation application or 150 days for any other application will be presumptively unreasonable.

3. Application to DAS and Small Cells

139. The Commission clarifies that to the extent DAS or small-cell facilities, including third-party facilities such as neutral host DAS deployments, are or will be used for the provision of personal wireless services, their siting applications are subject to the same presumptively reasonable timeframes that apply to applications related to other personal wireless service facilities. The Commission notes that courts have addressed the issue and, consistent with its conclusion, have found that the timeframes apply to DAS and small-cell deployments.

140. Some commenters argue that the shot clocks should not apply because some providers describe DAS and small-cell deployments as wireline, not wireless, facilities. Determining whether facilities are ''personal wireless service facilities'' subject to section 332(c)(7) does not rest on a provider's characterization in another context; rather, the analysis turns simply on whether they are facilities used to provide personal wireless services. Based on its review of the record, the Commission finds no evidence sufficient to compel the conclusion that the characteristics of DAS and small-cell deployments somehow exclude them from section 332(c)(7) and the *2009 Declaratory Ruling.* For similar reasons, the Commission rejects Coconut Creek's argument that the shot clocks should apply only to neutral host deployments.

141. Some commenters suggest revising the Commission's proposal on the grounds that the unique qualities of DAS and small-cell systems require longer timeframes for municipal review. The Commission declines to adjust the timelines as these commenters suggest. The Commission notes that the timeframes are presumptive, and the Commission expects applicants and State or local governments to agree to extensions in appropriate cases. Moreover, courts will be positioned to assess the facts of individual cases—including whether the applicable time period ''t[ook] into account the nature and scope of [the] request''—in instances where the shot clock expires and the applicant seeks review. The Commission also notes that DAS and small-cell deployments that involve installation of new poles will trigger the 150-day time period for new construction that many municipal commenters view as reasonable for DAS and small-cell applications. The Commission finds it unnecessary to modify the presumptive timeframes as they apply to DAS applications.

4. Definition of Collocation

142. After reviewing the record, the Commission declines to make any changes or clarifications to the existing standard established in the *2009 Declaratory Ruling* for applying the 90-day shot clock for collocations. In particular, the Commission declines to apply the ''substantial change'' test that the Commission establishes in the R&O for purposes of section 6409(a). The Commission observes that sections 6409(a) and 332(c)(7) serve different purposes, and the Commission finds that the tests for ''substantial change'' and ''substantial increase in size'' are appropriately distinct. More specifically, the test for a ''substantial increase in size'' under section 332(c)(7) affects only the length of time for State or local review, while the test the Commission adopts under section 6409(a) identifies when a State or municipality must grant an application. This is a meaningful distinction that merits a more demanding standard under section 6409(a).

143. Considering that these provisions cover different (though overlapping) pools of applications, it is appropriate to apply them differently. Further, the Commission finds no compelling evidence in the record that using the same test for both provisions would provide significant administrative efficiencies or limit confusion, as some have argued. The Commission preserves distinct standards under the two provisions.

5. Preferences for Deployments on Municipal Property

144. The Commission finds insufficient evidence in the record to make a determination that municipal property preferences are *per se* unreasonably discriminatory or otherwise unlawful under section 332(c)(7). To the contrary, most industry and municipal commenters support the conclusion that many such preferences are valid. Consistent with the majority of comments on this issue, the Commission declines at this time to find municipal property preferences per se unlawful under section 332(c)(7).

6. Remedies

145. After reviewing the record, the Commission declines to adopt an additional remedy for State or local government failures to act within the presumptively reasonable time limits. The Commission also notes that a party pursuing a ''failure to act'' claim may ask the reviewing court for an injunction granting the application. Moreover, in the case of a failure to act within the reasonable timeframes set forth in the Commission's rules, and absent some compelling need for additional time to review the application, the Commission believes that it would also be appropriate for the courts to treat such circumstances as significant factors weighing in favor of such relief.

V. Procedural Matters

A. Final Regulatory Flexibility Analysis

146. As required by section 603 of the Regulatory Flexibility Act (RFA), the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) of the expected impact on small entities of the requirements adopted in the R&O. To the extent that any statement contained in the FRFA is perceived as creating ambiguity with respect to the Commission's rules, or statements made in the R&O, the rules and R&O statements shall be controlling.

1. Need for, and Objectives of, the Report and Order

147. In the R&O, the Commission takes important steps to promote the deployment of wireless infrastructure, recognizing that it is the physical foundation that supports all wireless communications. The R&O adopts and clarifies rules in four specific areas in an effort to reduce regulatory obstacles and bring efficiency to wireless facility siting and construction. The Commission does this by eliminating unnecessary reviews, thus reducing the burden on State and local jurisdictions and also on industry, including small businesses. In particular, the Commission updates and tailors the manner in which the Commission evaluates the impact of proposed deployments on the environment and historic properties. The Commission also adopts rules to clarify and implement statutory requirements related to State and local government review of infrastructure siting applications, and the Commission adopts an exemption from its environmental public notification process for towers that are in place for only short periods of time. Taken together, these steps will further facilitate the delivery of more wireless capacity in more locations to consumers throughout the United States. Its actions will expedite the deployment of equipment that does not harm the environment or historic properties, as well as recognize the limits on Federal, State, Tribal, and municipal resources available to review those cases that may adversely affect the environment or historic properties.

148. First, the Commission adopts measures to refine its environmental and historic preservation review processes under NEPA and NHPA to account for new wireless technologies, including physically small facilities like those used in DAS networks and small-cell systems that are a fraction of the size of macrocell installations. Among these, the Commission expands an existing categorical exclusion from NEPA review so that it applies not only to collocations on buildings and towers, but also to collocations on other structures like utility poles. The Commission also adopts a new categorical exclusion from NEPA review for some kinds of deployments in utilities or communications rights-of-way. With respect to NHPA, the Commission creates new exclusions from section 106 review to address certain collocations that are currently subject to review only because of the age of the supporting structure. The Commission takes these steps to assure that, as the Commission continues to meet its responsibilities under NEPA and NHPA, the Commission also fulfills its obligation under the Communications Act to ensure that rapid, efficient, and affordable radio communications services are available to all Americans.

149. Second, regarding temporary towers, the Commission adopts a narrow exemption from the Commission's requirement that owners of proposed towers requiring ASR provide 30 days of national and local notice to give members of the public an opportunity to comment on the proposed tower's potential environmental effects. The exemption from notification requirements applies only to proposed temporary towers meeting defined criteria, including limits on the size and duration of the installation, that greatly reduce the likelihood of any significant environmental effects. Allowing licensees to deploy temporary towers meeting these criteria without first having to complete the Commission's environmental notification process will enable them to more effectively respond to emergencies, natural disasters, and other planned and unplanned short-term spikes in demand without undermining the purposes of the notification process. This exemption will ''remove an administrative obstacle to the availability of broadband and other wireless services during major events and unanticipated periods of localized high demand'' where expanded or substitute service is needed quickly.

150. Third, the Commission adopts rules to implement and enforce section 6409(a) of the Spectrum Act. Section 6409(a) provides, in part, that ''a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.'' By requiring timely approval of eligible requests, Congress intended to advance wireless broadband service for both public safety and commercial users. Section 6409(a) includes a number of undefined terms that bear directly on how the provision applies to infrastructure deployments, and the record confirms that there are substantial disputes on a wide range of interpretive issues under the provision. The Commission adopts rules that clarify many of these terms and enforce their requirements, thus advancing Congress's goal of facilitating rapid deployment. These rules will serve the public interest by providing guidance to all stakeholders on their rights and responsibilities under the provision, reducing delays in the review process for wireless infrastructure modifications, and facilitating the rapid deployment of wireless infrastructure and promoting advanced wireless broadband services.

151. Finally, the Commission clarifies issues related to section 332(c)(7) of the Communications Act and the Commission's *2009 Declaratory Ruling.* Among other things, the Commission explains when a siting application is complete so as to trigger the presumptively reasonable timeframes for local and State review of siting applications under the *2009 Declaratory Ruling,* and how the shot clock timeframes apply to local moratoria and DAS or small-cell facilities. These clarifications will eliminate many disputes under section 332(c)(7), provide certainty about timing related to siting applications (including the time at which applicants may seek judicial relief), and preserve State and municipal governments' critical role in the siting application process.

152. Taken together, the actions the Commission takes in the R&O will enable more rapid deployment of vital wireless facilities, delivering broadband and wireless innovations to consumers across the country. At the same time, they will safeguard the environment, preserve historic properties, protect the interest of Tribal Nations in their ancestral lands and cultural legacies, and address municipalities' concerns over impacts to aesthetics and other local values.

2. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

153. No commenters directly responded to the IRFA. Some commenters raised issues of particular relevance to small entities, and the Commission addresses those issues in the FRFA.

3. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

154. Pursuant to the Small Business Jobs Act of 2010, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments. The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

4. Description and Estimate of the Number of Small Entities To Which Rules Will Apply

155. The RFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the rules, if adopted. The RFA generally defines the term ''small entity'' as having the same meaning as the terms ''small business,'' ''small organization,'' and ''small government jurisdiction.'' In addition, the term ''small business'' has the same meaning as the term ''small business concern'' under the Small Business Act. A small business concern is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

156. The R&O adopts rule changes regarding local and Federal regulation of the siting and deployment of communications towers and other wireless facilities. Due to the number and diversity of owners of such infrastructure and other responsible parties, including small entities that are Commission licensees as well as non-licensees, the Commission classifies and quantify them in the remainder of this section.

157. Small Businesses, Small Organizations, and Small Governmental Jurisdictions. The Commission's action may, over time, affect a variety of small entities. To assist in assessing the R&O's effect on these entities, the Commission describes three comprehensive categories—small businesses, small organizations, and small governmental jurisdictions—that encompass entities that could be directly affected by the rules the Commission adopts. As of 2010, there were 27.9 million small businesses in the United States, according to the SBA. A ''small organization'' is generally ''any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.'' Nationwide, as of 2007, there were approximately 1,621,315 small organizations. Finally, the term ''small governmental jurisdiction'' is defined generally as ''governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.'' Census Bureau data for 2007 indicate that there were 89,527 governmental jurisdictions in the United States. The Commission estimates that, of this total, as many as 88,761 entities may qualify as ''small governmental jurisdictions.'' Thus, the Commission estimates that most governmental jurisdictions are small.

158. Wireless Telecommunications Carriers (except satellite). The Census Bureau defines this category as follows: ''This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular phone services, paging services, wireless Internet access, and wireless video services.'' The appropriate size standard under SBA rules is for the category Wireless Telecommunications Carriers (except Satellite). In this category, a business is small if it has 1,500 or fewer employees. For this category, census data for 2007 show that there were 1,383 firms that operated for the entire year. Of this total, 1,368 firms had employment of 999 or fewer employees and 15 had employment of 1000 employees or more. According to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, PCS, and Specialized Mobile Radio (SMR) telephony services. Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, the Commission estimates that the majority of wireless firms can be considered small.

159. Personal Radio Services. Personal radio services provide short-range, low-power radio for personal communications, radio signaling, and business communications not provided

for in other services. Personal radio services include services operating in spectrum licensed under part 95 of the Commission's rules. These services include Citizen Band Radio Service, General Mobile Radio Service, Radio Control Radio Service, Family Radio Service, Wireless Medical Telemetry Service, Medical Implant Communications Service, Low Power Radio Service, and Multi-Use Radio Service. There are a variety of methods used to license the spectrum in these rule parts, from licensing by rule, to conditioning operation on successful completion of a required test, to site-based licensing, to geographic area licensing. Under the RFA, the Commission is required to make a determination of which small entities are directly affected by the rules the Commission adopts. Since all such entities are wireless, the Commission applies the definition of Wireless Telecommunications Carriers (except Satellite), pursuant to which a small entity is defined as employing 1,500 or fewer persons. Many of the licensees in these services are individuals, and thus are not small entities. In addition, due to the mostly unlicensed and shared nature of the spectrum utilized in many of these services, the Commission lacks direct information upon which to base an estimation of the number of small entities under an SBA definition that might be directly affected by the R&O.

160. Public Safety Radio Services. Public safety radio services include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services. There are a total of approximately 127,540 licensees within these services. Governmental entities as well as private businesses comprise the licensees for these services. All governmental entities in jurisdictions with populations of less than 50,000 fall within the definition of a small entity.

161. Private Land Mobile Radio. Private Land Mobile Radio (PLMR) systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories that operate and maintain switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular phone services, paging services, wireless Internet access, and wireless video services. The SBA has not developed a definition of small entity specifically applicable to PLMR licensees due to the vast array of PLMR users. The Commission believes that the most appropriate classification for PLMR is Wireless Communications Carriers (except satellite). The size standard for that category is that a business is small if it has 1,500 or fewer employees. For this category, census data for 2007 show that there were 11,163 establishments that operated for the entire year. Of this total, 10,791 establishments had employment of 999 or fewer employees and 372 had employment of 1000 employees or more. Thus under this category and the associated small business size standard, the Commission estimates that the majority of PLMR licensees are small entities that may be affected by its action.

162. Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, PCS, and SMR telephony services. Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, the Commission estimates that the majority of wireless firms can be considered small.

163. The Commission's 1994 Annual Report on PLMRs indicates that at the end of fiscal year 1994 there were 1,087,267 licensees operating 12,481,989 transmitters in the PLMR bands below 512 MHz. Because any entity engaged in a commercial activity is eligible to hold a PLMR license, the rules the Commission adopts could potentially impact every small business in the United States.

164. Multiple Address Systems. Entities using Multiple Address Systems (MAS) spectrum, in general, fall into two categories: (1) Those using the spectrum for profit-based uses, and (2) those using the spectrum for private internal uses. With respect to the first category, the Commission defines ''small entity'' for MAS licensees as an entity that has average annual gross revenues of less than $15 million over the three previous calendar years. ''Very small business'' is defined as an entity that, together with its affiliates, has average annual gross revenues of not more than $3 million over the preceding three calendar years. The SBA has approved these definitions. The majority of MAS operators are licensed in bands where the Commission has implemented a geographic area licensing approach that requires the use of competitive bidding procedures to resolve mutually exclusive applications. The Commission's licensing database indicates that, as of April 16, 2010, there were a total of 11,653 site-based MAS station authorizations. Of these, 58 authorizations were associated with common carrier service. In addition, the Commission's licensing database indicates that, as of April 16, 2010, there were a total of 3,330 Economic Area market area MAS authorizations. The Commission's licensing database indicates that, as of April 16, 2010, of the 11,653 total MAS station authorizations, 10,773 authorizations were for private radio service. In addition, an auction for 5,104 MAS licenses in 176 EAs was conducted in 2001. Seven winning bidders claimed status as small or very small businesses and won 611 licenses. In 2005, the Commission completed an auction (Auction 59) of 4,226 MAS licenses in the Fixed Microwave Services from the 928/959 and 932/941 MHz bands. Twenty-six winning bidders won a total of 2,323 licenses. Of the 26 winning bidders in this auction, five claimed small business status and won 1,891 licenses.

165. With respect to the second category, which consists of entities that use, or seek to use, MAS spectrum to accommodate their own internal communications needs, MAS serves an essential role in a range of industrial, safety, business, and land transportation activities. MAS radios are used by companies of all sizes, operating in virtually all U.S. business categories, and by all types of public safety entities. For the majority of private internal users, the definition developed by the SBA would be more appropriate than the Commission's definition. The applicable definition of small entity in this instance appears to be the ''Wireless Telecommunications Carriers (except satellite)'' definition under the SBA rules. Under that SBA category, a business is small if it has 1,500 or fewer employees. For this category, census data for 2007 show that there were 11,163 establishments that operated for the entire year. Of this total, 10,791 establishments had employment of 99 or fewer employees and 372 had employment of 100 employees or more. Thus under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by its action.

166. Broadband Radio Service and Educational Broadband Service. Broadband Radio Service systems—previously referred to as Multipoint

Distribution Service (MDS) and Multichannel Multipoint Distribution Service systems, and ''wireless cable''—transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service). In connection with the 1996 BRS auction, the Commission established a small business size standard as an entity that had annual average annual gross revenues of no more than $40 million over the previous three calendar years. The BRS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. BRS also includes licensees of stations authorized prior to the auction. The Commission previously estimated that of the 61 small business BRS auction winners, based on its review of licensing records, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 86 incumbent BRS licensees that are considered small entities; 18 incumbent BRS licensees do not meet the small business size standard. After adding the number of small business auction licensees to the number of incumbent licensees not already counted, there are currently approximately 133 BRS licensees that are defined as small businesses under either the SBA's rules or the Commission's rules. In 2009, the Commission conducted Auction 86, which involved the sale of 78 licenses in the BRS areas. The Commission established three small business size standards that were used in Auction 86: (i) An entity with attributed average annual gross revenues that exceeded $15 million and did not exceed $40 million for the preceding three years was considered a small business; (ii) an entity with attributed average annual gross revenues that exceeded $3 million and did not exceed $15 million for the preceding three years was considered a very small business; and (iii) an entity with attributed average annual gross revenues that did not exceed $3 million for the preceding three years was considered an entrepreneur. Auction 86 concluded in 2009 with the sale of 61 licenses. Of the 10 winning bidders, two bidders that claimed small business status won four licenses; one bidder that claimed very small business status won three licenses; and two bidders that claimed entrepreneur status won six licenses. The Commission notes that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service.

167. In addition, the SBA's placement of Cable Television Distribution Services in the category of Wired Telecommunications Carriers is applicable to cable-based educational broadcasting services. Since 2007, Wired Telecommunications Carriers have been defined as follows: ''This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.'' Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services; wired (cable) audio and video programming distribution; and wired broadband Internet services. Establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry. The SBA has determined that a business in this category is a small business if it has 1,500 or fewer employees. Census data for 2007 shows that there were 3,188 firms in this category that operated for the duration of that year. Of those, 3,144 had fewer than 1000 employees, and 44 firms had more than 1000 employees. Thus under this category and the associated small business size standard, the majority of such firms can be considered small. In addition to Census data, the Commission's Universal Licensing System indicates that as of July 2013, there are 2,236 active EBS licenses. The Commission estimates that of these 2,236 licenses, the majority are held by non-profit educational institutions and school districts, which are by statute defined as small businesses.

168. Location and Monitoring Service (LMS). LMS systems use non-voice radio techniques to determine the location and status of mobile radio units. For purposes of auctioning LMS licenses, the Commission has defined a ''small business'' as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not to exceed $15 million. A ''very small business'' is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not to exceed $3 million. These definitions have been approved by the SBA. An auction for LMS licenses commenced on February 23, 1999 and closed on March 5, 1999. Of the 528 licenses auctioned, 289 licenses were sold to four small businesses.

169. Television Broadcasting. This Economic Census category ''comprises establishments primarily engaged in broadcasting images together with sound. These establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public.'' The SBA has created the following small business size standard for such businesses: Those having $38.5 million or less in annual receipts. The 2007 U.S. Census indicates that 2,076 television stations operated in that year. Of that number, 1,515 had annual receipts of $10,000,000 dollars or less, and 561 had annual receipts of more than $10,000,000. Since the Census has no additional classifications on the basis of which to identify the number of stations whose receipts exceeded $38.5 million in that year, the Commission concludes that the majority of television stations were small under the applicable SBA size standard.

170. Apart from the U.S. Census, the Commission has estimated the number of licensed commercial television stations to be 1,387. In addition, according to Commission staff review of the BIA Advisory Services, LLC's *Media Access Pro Television Database* on March 28, 2012, about 950 of an estimated 1,300 commercial television stations (or approximately 73 percent) had revenues of $14 million or less. The Commission estimates that the majority of commercial television broadcasters are small entities.

171. The Commission notes, that in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations must be included. Its estimate likely overstates the number of small entities that might be affected by its action because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. In addition, an element of the definition of ''small business'' is that the entity not be dominant in its field of operation. The Commission is unable at this time to define or quantify the criteria that would establish whether a specific television station is dominant in its field of operation. The estimate of small businesses to which rules may apply does not exclude any television station

from the definition of a small business on this basis and is possibly over-inclusive to that extent.

172. In addition, the Commission has estimated the number of licensed noncommercial educational (NCE) television stations to be 395. These stations are non-profit, and considered to be small entities.

173. There are also 2,414 LPTV stations, including Class A stations, and 4,046 TV translator stations. Given the nature of these services, the Commission will presume that all of these entities qualify as small entities under the above SBA small business size standard.

174. Radio Broadcasting. The SBA defines a radio broadcast station as a small business if it has no more than $35.5 million in annual receipts. Business concerns included in this category are those ''primarily engaged in broadcasting aural programs by radio to the public.'' According to review of the BIA Publications, Inc. Master Access Radio Analyzer Database as of November 26, 2013, about 11,331 (or about 99.9 percent) of 11,341 commercial radio stations have revenues of $38.5 million or less and thus qualify as small entities under the SBA definition. The Commission notes that in assessing whether a business concern qualifies as small under the above definition, revenues from business (control) affiliations must be included. This estimate likely overstates the number of small entities that might be affected, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies.

175. In addition, an element of the definition of ''small business'' is that the entity not be dominant in its field of operation. The Commission is unable at this time to define or quantify the criteria that would establish whether a specific radio station is dominant in its field of operation. The estimate of small businesses to which rules may apply does not exclude any radio station from the definition of a small business on this basis and may be over-inclusive to that extent. Also, as noted, an additional element of the definition of ''small business'' is that the entity must be independently owned and operated. The Commission notes that it can be difficult to assess this criterion in the context of media entities and the estimates of small businesses to which they apply may be over-inclusive to this extent.

176. FM translator stations and low power FM stations. The rules and clarifications the Commission adopts could affect licensees of FM translator and booster stations and low power FM (LPFM) stations, as well as potential licensees in these radio services. The same SBA definition that applies to radio broadcast licensees would apply to these stations. The SBA defines a radio broadcast station as a small business if such station has no more than $38.5 million in annual receipts. Currently, there are approximately 6,155 licensed FM translator and booster stations and 864 licensed LPFM stations. Given the nature of these services, the Commission will presume that all of these licensees qualify as small entities under the SBA definition.

177. Multichannel Video Distribution and Data Service (MVDDS). MVDDS is a terrestrial fixed microwave service operating in the 12.2–12.7 GHz band. The Commission adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits. It defined a very small business as an entity with average annual gross revenues not exceeding $3 million for the preceding three years; a small business as an entity with average annual gross revenues not exceeding $15 million for the preceding three years; and an entrepreneur as an entity with average annual gross revenues not exceeding $40 million for the preceding three years. These definitions were approved by the SBA. On January 27, 2004, the Commission completed an auction of 214 MVDDS licenses (Auction No. 53). In this auction, ten winning bidders won a total of 192 MVDDS licenses. Eight of the ten winning bidders claimed small business status and won 144 of the licenses. The Commission also held an auction of MVDDS licenses on December 7, 2005 (Auction 63). Of the three winning bidders who won 22 licenses, two winning bidders, winning 21 of the licenses, claimed small business status.

178. Satellite Telecommunications. Two economic census categories address the satellite industry. Both establish a small business size standard of $32.54 million or less in annual receipts.

179. The first category, ''Satellite Telecommunications,'' ''comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.'' Census Bureau data for 2007 show that 607 Satellite Telecommunications establishments operated for that entire year. Of this total, 533 had annual receipts of under $10 million, and 74 establishments had receipts of $10 million or more. Consequently, the Commission estimates that the majority of Satellite Telecommunications firms are small entities that might be affected by its action.

180. The second category, ''All Other Telecommunications,'' comprises ''establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry.'' For this category, Census data for 2007 shows that there were a total of 2,639 establishments that operated for the entire year. Of those, 2,333 operated with annual receipts of less than $10 million and 306 with annual receipts of $10 million or more. Consequently, the Commission estimates that a majority of All Other Telecommunications establishments are small entities that might be affected by its action.

181. Non-Licensee Tower Owners. Although at one time most communications towers were owned by the licensee using the tower to provide communications service, many towers are now owned by third-party businesses that do not provide communications services themselves but lease space on their towers to other companies that provide communications services. The Commission's rules require that any entity, including a non-licensee, proposing to construct a tower over 200 feet in height or within the glide slope of an airport must register the tower with the Commission on FCC Form 854. Thus, non-licensee tower owners may be subject to the environmental notification requirements associated with ASR registration, and may benefit from the exemption for certain temporary antenna structures that the Commission adopts in the R&O. In addition, non-licensee tower owners may be affected by its interpretations of section 6409(a) of the Spectrum Act or by its revisions to its interpretation of section 332(c)(7) of the Communications Act.

182. As of September 5, 2014, the ASR database includes approximately 116,643 registration records reflecting a ''Constructed'' status and 13,972 registration records reflecting a ''Granted, Not Constructed'' status. These figures include both towers registered to licensees and towers registered to non-licensee tower owners. The Commission does not keep information from which it can easily determine how many of these towers are registered to non-licensees or how many non-licensees have registered towers. Regarding towers that do not require ASR registration, the Commission does not collect information as to the number of such towers in use and cannot estimate the number of tower owners that would be subject to the rules the Commission adopts. Moreover, the SBA has not developed a size standard for small businesses in the category ''Tower Owners.'' The Commission is unable to determine the number of non-licensee tower owners that are small entities. The Commission believes that when all entities owning 10 or fewer towers and leasing space for collocation are included, non-licensee tower owners number in the thousands, and that nearly all of these qualify as small businesses under the SBA's definition for ''All Other Telecommunications.'' In addition, there may be other non-licensee owners of other wireless infrastructure, including DAS and small cells that might be affected by the regulatory measures the Commission adopts. The Commission does not have any basis for estimating the number of such non-licensee owners that are small entities.

5. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

183. The R&O adopts a narrow exemption from the Commission's requirement that owners of proposed towers requiring ASR registration provide 30 days of national and local notice to give members of the public an opportunity to comment on the proposed tower's potential environmental effects. The exemption from the notice requirements applies only to applicants seeking to register temporary antenna structures meeting certain criteria that greatly reduce the likelihood of any significant environmental effects. Specifically, proposed towers exempted from the Commission's local and national environmental notification requirement are those that (i) will be in use for 60 days or less, (ii) require notice of construction to the Federal Aviation Administration (FAA), (iii) do not require marking or lighting pursuant to FAA regulations, (iv) will be less than 200 feet in height, and (v) will involve minimal or no excavation.

184. The Commission's rules require that any entity, including a non-licensee, proposing to construct a tower over 200 feet in height or within the glide slope of an airport must register the tower with the Commission on FCC Form 854. An applicant seeking to claim the temporary towers exemption from the environmental notification process must indicate on its FCC Form 854 that it is claiming the exemption for a new, proposed temporary tower and demonstrate that the proposed tower satisfies the applicable criteria. While small entities must comply with these requirements in order to take advantage of the exemption, on balance, the relief from compliance with local and national environmental notification requirements provided by the exemption greatly reduces burdens and economic impacts on small entities.

185. The applicant may seek an extension of the exemption from the Commission's local and national environmental notification requirement of up to sixty days through another filing of Form 854, if the applicant can demonstrate that the extension of the exemption period is warranted due to changed circumstances or information that emerged after the exempted tower was deployed. The exemption adopted in the R&O is intended specifically for proposed towers that are intended and expected to be deployed for no more than 60 days, and the option to apply for an extension is intended only for cases of unforeseen or changed circumstances or information. Small entities, like all applicants, are expected to seek extensions of the exemption period only rarely and any burdens or economic impacts incurred by applying for such extensions should be minimal.

6. Steps Taken To Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

186. The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): ''(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.'' The FRFA incorporates by reference all discussion in the R&O that considers the impact on small entities of the rules adopted by the Commission. In addition, the Commission's consideration of those issues as to which the impact on small entities was specifically discussed in the record is summarized below.

187. The actions taken in the R&O encourage and promote the deployment of advanced wireless broadband and other services by tailoring the regulatory review of new wireless network infrastructure consistent with the law and the public interest. The Commission anticipates that the steps taken in the R&O will not impose any significant economic impacts on small entities, and will in fact help reduce burdens on small entities by reducing the cost and delay associated with the deployment of such infrastructure.

188. In the R&O, the Commission takes action in four major areas relating to the regulation of wireless facility siting and construction. In each area, the rules the Commission adopts and clarifications the Commission makes will not increase burdens or costs on small entities. To the contrary, its actions will reduce costs and burdens associated with deploying wireless infrastructure.

189. First, the Commission adopts measures with regard to its NEPA process for review of environmental effects regarding wireless broadband deployment that should reduce existing regulatory costs for small entities that construct or deploy wireless infrastructure, and will not impose any additional costs on such entities. Specifically, the Commission clarifies that the existing NEPA categorical exclusion for antenna collocations on buildings and towers includes equipment associated with the antennas (such as wiring, cabling, cabinets, or backup-power), and that it also covers collocations in a building's interior. The Commission also expands the NEPA collocation categorical exclusion to cover collocations on structures other than buildings and towers, and adopts a new NEPA categorical exclusion for deployments, including deployments of new poles, in utility or communications rights-of-way that are in active use for such purposes, where the deployment does not constitute a substantial increase in size over the existing utility or communications uses. The Commission also adopts measures concerning its section 106 process for review of impact on historic properties. First, the Commission adopts certain

exclusions from section 106 review, and the Commission clarifies that the existing exclusions for certain collocations on buildings under the Commission's programmatic agreements extend to collocations inside buildings. These new exclusions and clarifications will reduce environmental compliance costs of small entities by providing that eligible proposed deployments of small wireless facilities do not require the preparation of an Environmental Assessment.

190. Second, the Commission adopts an exemption from the Commission's requirement that ASR applicants must provide local and national environmental notification prior to submitting a completed ASR application for certain temporary antenna structures meeting criteria that makes them unlikely to have significant environmental effects. Specifically, the Commission exempts antenna structures that (1) will be in place for 60 days or less; (2) require notice of construction to the FAA; (3) do not require marking or lighting under FAA regulations; (4) will be less than 200 feet above ground level; and (5) will involve minimal or no ground excavation. This exemption will reduce the burden on wireless broadband providers and other wireless service providers, including small entities.

191. Third, the Commission adopts several rules to clarify and implement the requirements of section 6409(a) of the Spectrum Act. In interpreting the statutory terms of this provision, such as ''wireless tower or base station,'' ''transmission equipment,'' and ''substantially change the physical dimensions,'' the Commission generally does not distinguish between large and small entities, as the statute provides no indication that such distinctions were intended, and such distinctions have been proposed. Further, these clarifications will help limit potential ambiguities within the rule and thus reduce the burden associated with complying with this statutory provision, including the burden on small entities. Generally, the Commission clarifies that section 6409(a) applies only to State and local governments acting in their regulatory role and does not apply to such entities acting in their proprietary capacities.

192. With regard to the process for reviewing an application under section 6409(a), the Commission provides that a State or local government may only require applicants to provide documentation that is reasonably related to determining whether the eligible facility request meets the requirements of section 6409(a) and that, within 60 days from the date of filing (accounting for tolling), a State or local government shall approve an application covered by section 6409(a). Where a State or local government fails to act on an application covered under section 6409(a) within the requisite time period, the application is deemed granted. Parties may bring claims under section 6409(a) to a court of competent jurisdiction. The Commission declines to entertain such disputes in a Commission adjudication, which would impose significant burdens on localities, many of which are small entities with no representation in Washington, DC or experience before the Commission. Limiting relief to court adjudication lessens the burden on applicants in general, and small entities specifically.

193. Lastly, the Commission adopts clarifications of its 2009 Declaratory Ruling, which established the time periods after which a State or local government has presumptively failed to act on a facilities siting application ''within a reasonable period of time'' under section 332(c)(7) of the Act. Specifically, the Commission clarifies that the timeframe begins to run when an application is first submitted, not when it is deemed complete by the reviewing government. Further, a determination of incompleteness tolls the shot clock only if the State or local government provides notice to the applicant in writing within 30 days of the application's submission, specifically delineating all missing information. Following a submission in response to a determination of incompleteness, any subsequent determination that an application remains incomplete must be based solely on the applicant's failure to supply missing information that was identified within the first 30 days. These clarifications will provide greater certainty in the application process and reduce the potential or need for serial requests for more information. These clarifications will facilitate faster application processing, reduce unreasonable delay, and reduce the burden on regulated entities, including small businesses.

194. The Commission also clarifies that to the extent DAS or small-cell facilities, including third-party facilities such as neutral host DAS deployments, are or will be used for the provision of personal wireless services, their siting applications are subject to the same presumptively reasonable timeframes that apply to applications related to other personal wireless service facilities under section 332(c)(7). The Commission clarifies further that the presumptively reasonable timeframes run regardless of any applicable moratoria, and that municipal property preferences are not per se unreasonably discriminatory or otherwise unlawful under section 332(c)(7). Finally, the Commission concludes that the explicit remedies under section 332(c)(7) preclude adoption of a deemed granted remedy for failures to act. These clarifications reduce confusion and delay within the siting process which in turn reduces the burden on industry and State and local jurisdictions alike, which may include small entities.

7. Federal Rules That Might Duplicate, Overlap, or Conflict With the Rules

195. None.

8. Report to Congress

196. The Commission will send a copy of the R&O, including the FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.

9. Report to Small Business Administration

197. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of the R&O, including the FRFA, to the Chief Counsel for Advocacy of the SBA.

B. Paperwork Reduction Act

198. The R&O contains revised information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104–13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on the modified information collection requirements contained in this proceeding in a separate **Federal Register** Notice. In addition, the Commission notes that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, see 44 U.S.C. 3506(c)(4), the Commission previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees. In addition, the Commission has described impacts that might affect small businesses, which includes most businesses with fewer than 25 employees, in the FRFA.

C. Congressional Review Act

199. The Commission will send a copy of the R&O in a report to be sent to Congress and the Government Accountability Office pursuant to the

Congressional Review Act (CRA), see 5 U.S.C. 801(a)(1)(A).

VI. Ordering Clauses

200. *It is ordered,* pursuant to sections 1, 2, 4(i), 7, 201, 301, 303, 309, and 332 of the Communications Act of 1934, as amended, sections 6003, 6213, and 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, Public Law 112–96, 126 Stat. 156, 47 U.S.C. 151, 152, 154(i), 157, 201, 301, 303, 309, 332, 1403, 1433, and 1455(a), section 102(C) of the National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4332(C), and section 106 of the National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470f, that the R&O IS *hereby adopted.* If any section, subsection, paragraph, sentence, clause or phrase of the R&O or the rules adopted therein is declared invalid for any reason, the remaining portions of the R&O and the rules adopted therein *shall be* severable from the invalid part and *shall remain* in full force and effect.

201. *It is further ordered* that parts 1 and 17 of the Commission's Rules ARE *amended* as set forth in Appendix B of the R&O (see the Final Rules contained in this summary), and that these changes *shall be effective* 30 days after publication in the **Federal Register**, except for section 1.40001, which *shall be effective* 90 days after publication in the **Federal Register**; provided that those rules and requirements that require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act *shall become effective* after the Commission publishes a notice in the **Federal Register** announcing such approval and the relevant effective date.

202. *It is further ordered* that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, *shall send* a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects

47 CFR Part 1

Administrative practice and procedure, Communications common carriers, Environmental impact statements, Federal buildings and facilities, Radio, Reporting and recordkeeping requirements, Satellites, Telecommunications.

47 CFR Part 17

Aviation safety, Communications equipment, Reporting and recordkeeping requirements.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR part 1 and part 17 as follows:

PART 1—PRACTICE AND PROCEDURE

■ 1. The authority citation for part 1 is amended to read as follows:

Authority: 15 U.S.C. 79, *et seq.;* 47 U.S.C. 151, 154(i), 154(j), 155, 157, 160, 201, 225, 227, 303, 309, 332, 1403, 1404, 1451, 1452, and 1455.

■ 2. Section 1.1306 is amended by adding paragraph (c) and revising the first sentence of Note 1 read as follows:

§ 1.1306 Actions which are categorically excluded from environmental processing.

* * * * *

(c)(1) Unless § 1.1307(a)(4) is applicable, the provisions of § 1.1307(a) requiring the preparation of EAs do not encompass the construction of wireless facilities, including deployments on new or replacement poles, if:

(i) The facilities will be located in a right-of-way that is designated by a Federal, State, local, or Tribal government for communications towers, above-ground utility transmission or distribution lines, or any associated structures and equipment;

(ii) The right-of-way is in active use for such designated purposes; and

(iii) The facilities would not

(A) Increase the height of the tower or non-tower structure by more than 10% or twenty feet, whichever is greater, over existing support structures that are located in the right-of-way within the vicinity of the proposed construction;

(B) Involve the installation of more than four new equipment cabinets or more than one new equipment shelter;

(C) Add an appurtenance to the body of the structure that would protrude from the edge of the structure more than twenty feet, or more than the width of the structure at the level of the appurtenance, whichever is greater (except that the deployment may exceed this size limit if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable); or

(D) Involve excavation outside the current site, defined as the area that is within the boundaries of the leased or owned property surrounding the deployment or that is in proximity to the structure and within the boundaries of the utility easement on which the facility is to be deployed, whichever is more restrictive.

(2) Such wireless facilities are subject to § 1.1307(b) and require EAs if their construction would result in human exposure to radiofrequency radiation in excess of the applicable health and safety guidelines cited in § 1.1307(b).

Note 1: The provisions of § 1.1307(a) requiring the preparation of EAs do not encompass the mounting of antenna(s) and associated equipment (such as wiring, cabling, cabinets, or backup-power), on or in an existing building, or on an antenna tower or other man-made structure, unless § 1.1307(a)(4) is applicable. * * *

* * * * *

■ 3. Section 1.1307 is amended by redesignating paragraph (a)(4) as (a)(4)(i), and by adding new paragraph (a)(4)(ii) and a Note to paragraph (a)(4)(ii) to read as follows:

§ 1.1307 Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

(a) * * *

(4) * * *

(ii) The requirements in paragraph (a)(4)(i) of this section do not apply to:

(A) The mounting of antennas (including associated equipment such as wiring, cabling, cabinets, or backup-power) on existing utility structures (including utility poles and electric transmission towers in active use by a ''utility'' as defined in Section 224 of the Communications Act, 47 U.S.C. 224, but not including light poles, lamp posts, and other structures whose primary purpose is to provide public lighting) where the deployment meets the following conditions:

(*1*) All antennas that are part of the deployment fit within enclosures (or if the antennas are exposed, within imaginary enclosures) that are individually no more than three cubic feet in volume, and all antennas on the structure, including any pre-existing antennas on the structure, fit within enclosures (or if the antennas are exposed, within imaginary enclosures) that total no more than six cubic feet in volume;

(*2*) All other wireless equipment associated with the structure, including pre-existing enclosures and including equipment on the ground associated with antennas on the structure, are cumulatively no more than seventeen cubic feet in volume, exclusive of

(i) Vertical cable runs for the connection of power and other services;

(*ii*) Ancillary equipment installed by other entities that is outside of the applicant's ownership or control, and

(*iii*) Comparable equipment from pre-existing wireless deployments on the structure;

(*3*) The deployment will involve no new ground disturbance; and

(*4*) The deployment would otherwise require the preparation of an EA under paragraph (a)(4)(i) of this section solely because of the age of the structure; or

(B) The mounting of antennas (including associated equipment such as wiring, cabling, cabinets, or backup-power) on buildings or other non-tower structures where the deployment meets the following conditions:

(*1*) There is an existing antenna on the building or structure;

(*2*) One of the following criteria is met:

(*i*) *Non-Visible Antennas.* The new antenna is not visible from any adjacent streets or surrounding public spaces and is added in the same vicinity as a pre-existing antenna;

(*ii*) *Visible Replacement Antennas.* The new antenna is visible from adjacent streets or surrounding public spaces, provided that

(*A*) It is a replacement for a pre-existing antenna,

(*B*) The new antenna will be located in the same vicinity as the pre-existing antenna,

(*C*) The new antenna will be visible only from adjacent streets and surrounding public spaces that also afford views of the pre-existing antenna,

(*D*) The new antenna is not more than 3 feet larger in height or width (including all protuberances) than the pre-existing antenna, and

(*E*) No new equipment cabinets are visible from the adjacent streets or surrounding public spaces; or

(*iii*) *Other Visible Antennas.* The new antenna is visible from adjacent streets or surrounding public spaces, provided that

(*A*) It is located in the same vicinity as a pre-existing antenna,

(*B*) The new antenna will be visible only from adjacent streets and surrounding public spaces that also afford views of the pre-existing antenna,

(*C*) The pre-existing antenna was not deployed pursuant to the exclusion in this subsection (§ 1.1307(a)(4)(ii)(B)(*2*)(*iii*)),

(*D*) The new antenna is not more than three feet larger in height or width (including all protuberances) than the pre-existing antenna, and

(*E*) No new equipment cabinets are visible from the adjacent streets or surrounding public spaces;

(*3*) The new antenna complies with all zoning conditions and historic preservation conditions applicable to existing antennas in the same vicinity that directly mitigate or prevent effects, such as camouflage or concealment requirements;

(*4*) The deployment of the new antenna involves no new ground disturbance; and

(*5*) The deployment would otherwise require the preparation of an EA under paragraph (a)(4) of this section solely because of the age of the structure.

Note to paragraph (a)(4)(ii): A non-visible new antenna is in the ''same vicinity'' as a pre-existing antenna if it will be collocated on the same rooftop, façade or other surface. A visible new antenna is in the ''same vicinity'' as a pre-existing antenna if it is on the same rooftop, façade, or other surface and the centerpoint of the new antenna is within ten feet of the centerpoint of the pre-existing antenna. A deployment causes no new ground disturbance when the depth and width of previous disturbance exceeds the proposed construction depth and width by at least two feet.

* * * * *

■ 4. Add Subpart CC to part 1 to read as follows:

Subpart CC—State and Local Review of Applications for Wireless Service Facility Modification

§ 1.40001 Wireless Facility Modifications.

(a) *Purpose.* These rules implement section 6409 of the Spectrum Act (codified at 47 U.S.C. 1455), which requires a State or local government to approve any eligible facilities request for a modification of an existing tower or base station that does not substantially change the physical dimensions of such tower or base station.

(b) *Definitions.* Terms used in this section have the following meanings.

(1) *Base station.* A structure or equipment at a fixed location that enables Commission-licensed or authorized wireless communications between user equipment and a communications network. The term does not encompass a tower as defined in this subpart or any equipment associated with a tower.

(i) The term includes, but is not limited to, equipment associated with wireless communications services such as private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

(ii) The term includes, but is not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration (including Distributed Antenna Systems and small-cell networks).

(iii) The term includes any structure other than a tower that, at the time the relevant application is filed with the State or local government under this section, supports or houses equipment described in paragraphs (b)(1)(i) through (ii) of this section that has been reviewed and approved under the applicable zoning or siting process, or under another State or local regulatory review process, even if the structure was not built for the sole or primary purpose of providing such support.

(iv) The term does not include any structure that, at the time the relevant application is filed with the State or local government under this section, does not support or house equipment described in paragraphs (b)(1)(i)–(ii) of this section.

(2) *Collocation.* The mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.

(3) *Eligible facilities request.* Any request for modification of an existing tower or base station that does not substantially change the physical dimensions of such tower or base station, involving:

(i) Collocation of new transmission equipment;

(ii) Removal of transmission equipment; or

(iii) Replacement of transmission equipment.

(4) *Eligible support structure.* Any tower or base station as defined in this section, provided that it is existing at the time the relevant application is filed with the State or local government under this section.

(5) *Existing.* A constructed tower or base station is existing for purposes of this section if it has been reviewed and approved under the applicable zoning or siting process, or under another State or local regulatory review process, provided that a tower that has not been reviewed and approved because it was not in a zoned area when it was built, but was lawfully constructed, is existing for purposes of this definition.

(6) *Site.* For towers other than towers in the public rights-of-way, the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site, and, for other eligible support structures, further restricted to that area in proximity to the structure and to other transmission equipment already deployed on the ground.

(7) *Substantial change.* A modification substantially changes the physical dimensions of an eligible

support structure if it meets any of the following criteria:

(i) For towers other than towers in the public rights-of-way, it increases the height of the tower by more than 10% or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater; for other eligible support structures, it increases the height of the structure by more than 10% or more than ten feet, whichever is greater;

(A) Changes in height should be measured from the original support structure in cases where deployments are or will be separated horizontally, such as on buildings' rooftops; in other circumstances, changes in height should be measured from the dimensions of the tower or base station, inclusive of originally approved appurtenances and any modifications that were approved prior to the passage of the Spectrum Act.

(ii) For towers other than towers in the public rights-of-way, it involves adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater; for other eligible support structures, it involves adding an appurtenance to the body of the structure that would protrude from the edge of the structure by more than six feet;

(iii) For any eligible support structure, it involves installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets; or, for towers in the public rights-of-way and base stations, it involves installation of any new equipment cabinets on the ground if there are no pre-existing ground cabinets associated with the structure, or else involves installation of ground cabinets that are more than 10% larger in height or overall volume than any other ground cabinets associated with the structure;

(iv) It entails any excavation or deployment outside the current site;

(v) It would defeat the concealment elements of the eligible support structure; or

(vi) It does not comply with conditions associated with the siting approval of the construction or modification of the eligible support structure or base station equipment, provided however that this limitation does not apply to any modification that is non-compliant only in a manner that would not exceed the thresholds identified in § 1.40001(b)(7)(i) through (iv).

(8) *Transmission equipment.* Equipment that facilitates transmission for any Commission-licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply. The term includes equipment associated with wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

(9) *Tower.* Any structure built for the sole or primary purpose of supporting any Commission-licensed or authorized antennas and their associated facilities, including structures that are constructed for wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul, and the associated site.

(c) *Review of applications.* A State or local government may not deny and shall approve any eligible facilities request for modification of an eligible support structure that does not substantially change the physical dimensions of such structure.

(1) *Documentation requirement for review.* When an applicant asserts in writing that a request for modification is covered by this section, a State or local government may require the applicant to provide documentation or information only to the extent reasonably related to determining whether the request meets the requirements of this section. A State or local government may not require an applicant to submit any other documentation, including but not limited to documentation intended to illustrate the need for such wireless facilities or to justify the business decision to modify such wireless facilities.

(2) *Timeframe for review.* Within 60 days of the date on which an applicant submits a request seeking approval under this section, the State or local government shall approve the application unless it determines that the application is not covered by this section.

(3) *Tolling of the timeframe for review.* The 60-day period begins to run when the application is filed, and may be tolled only by mutual agreement or in cases where the reviewing State or local government determines that the application is incomplete. The timeframe for review is not tolled by a moratorium on the review of applications.

(i) To toll the timeframe for incompleteness, the reviewing State or local government must provide written notice to the applicant within 30 days of receipt of the application, clearly and specifically delineating all missing documents or information. Such delineated information is limited to documents or information meeting the standard under paragraph (c)(1) of this section.

(ii) The timeframe for review begins running again when the applicant makes a supplemental submission in response to the State or local government's notice of incompleteness.

(iii) Following a supplemental submission, the State or local government will have 10 days to notify the applicant that the supplemental submission did not provide the information identified in the original notice delineating missing information. The timeframe is tolled in the case of second or subsequent notices pursuant to the procedures identified in this paragraph (c)(3). Second or subsequent notices of incompleteness may not specify missing documents or information that were not delineated in the original notice of incompleteness.

(4) *Failure to act.* In the event the reviewing State or local government fails to approve or deny a request seeking approval under this section within the timeframe for review (accounting for any tolling), the request shall be deemed granted. The deemed grant does not become effective until the applicant notifies the applicable reviewing authority in writing after the review period has expired (accounting for any tolling) that the application has been deemed granted.

(5) *Remedies.* Applicants and reviewing authorities may bring claims related to Section 6409(a) to any court of competent jurisdiction.

PART 17—CONSTRUCTION, MARKING, AND LIGHTING OF ANTENNA STRUCTURES

■ 5. The authority citation for part 17 continues to read as follows:

Authority: Sections 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply sections 301, 309, 48 Stat. 1081, 1085 as amended; 47 U.S.C. 301, 309.

■ 6. Amend § 17.4 by revising paragraphs (c)(1)(v) and (c)(1)(vi), and adding paragraph (c)(1)(vii) to read as follows:

§ 17.4 Antenna structure registration.

* * * * *

(c) * * *

(1) * * *

(v) For any other change that does not alter the physical structure, lighting, or geographic location of an existing structure;

(vi) For construction, modification, or replacement of an antenna structure on Federal land where another Federal agency has assumed responsibility for evaluating the potentially significant environmental effect of the proposed antenna structure on the quality of the human environment and for invoking any required environmental impact statement process, or for any other structure where another Federal agency has assumed such responsibilities pursuant to a written agreement with the Commission (*see* § 1.1311(e) of this chapter); or

(vii) For the construction or deployment of an antenna structure that will:

(A) Be in place for no more than 60 days,

(B) Requires notice of construction to the FAA,

(C) Does not require marking or lighting under FAA regulations,

(D) Will be less than 200 feet in height above ground level, and

(E) Will either involve no excavation or involve excavation only where the depth of previous disturbance exceeds the proposed construction depth (excluding footings and other anchoring mechanisms) by at least two feet. An applicant that relies on this exception must wait 30 days after removal of the antenna structure before relying on this exception to deploy another antenna structure covering substantially the same service area.

* * * * *

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Part V

Department of Transportation

Federal Aviation Administration

14 CFR Part 93

Slot Management and Transparency for LaGuardia Airport, John F. Kennedy International Airport, and Newark Liberty International Airport; Proposed Rule

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 93

[Docket No.: FAA–2014–1073; Notice No. 14–11]

RIN 2120–AJ89

Slot Management and Transparency for LaGuardia Airport, John F. Kennedy International Airport, and Newark Liberty International Airport

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to replace the Orders limiting scheduled operations at John F. Kennedy International Airport (JFK), limiting scheduled operations at Newark Liberty International Airport (EWR), and limiting scheduled and unscheduled operations at LaGuardia Airport (LGA). The Orders are scheduled to expire when this proposed rule becomes effective but not later than October 29, 2016. This proposal is intended to provide a longer-term and comprehensive approach to slot management at JFK, EWR, and LGA. The FAA proposes to maintain the limits on scheduled and unscheduled operations in place under the Orders, limit unscheduled operations at JFK and EWR, and require use of an allocated slot 80% of the time for the same flight or series of flights to retain historic precedence. The FAA also proposes five alternatives for a secondary market that would allow carriers to buy, sell, lease, and trade slots. The DOT proposes to review certain slot transfer transactions for significant anti-competitive effects and harms to the public interest. Finally, the FAA proposes minor miscellaneous amendments to remove inapplicable references in the High Density Rule.

DATES: Send comments on or before April 8, 2015.

ADDRESSES: Send comments identified by docket number FAA–2014–1073 using any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov* and follow the online instructions for sending your comments electronically.
- *Mail:* Send comments to Docket Operations, M–30; U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.
- *Hand Delivery or Courier:* Take comments to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- *Fax:* Fax comments to Docket Operations at 202–493–2251.

Privacy: 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.*

Docket: Background documents or comments received may be read at *http://www.regulations.gov* at any time. Follow the online instructions for accessing the docket or Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: For technical questions concerning this action, contact Molly Smith, Office of Aviation Policy and Plans, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone (202) 267–3274; email *molly.w.smith@faa.gov;* Susan Pfingstler, System Operations Services, Air Traffic Organization, Federal Aviation Administration, 600 Independence Avenue SW., Washington, DC 20591; telephone (202) 267–6462; email *susan.pfingstler@faa.gov;* or Peter Irvine, U.S. Department of Transportation, Office of Aviation Analysis, 1200 New Jersey Avenue SE., Washington, DC 20590; telephone (202) 366–3156; email: *peter.irvine@dot.gov.*

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SUPPLEMENTARY INFORMATION: See the ''Additional Information'' section for information on how to comment on this proposal and how the FAA will handle comments received. The ''Additional Information'' section also contains related information about the docket, privacy, the handling of proprietary or confidential business information. In addition, there is information on obtaining copies of related rulemaking documents.

Authority for This Rulemaking

This rulemaking is promulgated under the authority described in Title 49 of the United States Code, Subtitle VII, Part A, Subpart I, Sections 40101, 40103, 40105, and 41712

The Secretary of Transportation (Secretary) is the head of the DOT and has broad oversight of significant FAA decisions.[1] In addition, under 49 U.S.C. 41712, the Secretary has the authority to investigate and prohibit unfair and deceptive practices and unfair methods of competition in air transportation or the sale of air transportation. The Secretary is required to consider several objectives as being in the public interest, including, without limitation, the following: Keeping available a variety of adequate, economic, efficient, and low-priced air services; placing maximum reliance on competitive market forces and on actual and potential competition; avoiding airline industry conditions that would tend to allow at least one air carrier unreasonably to increase prices, reduce services, or exclude competition in air transportation; encouraging, developing, and maintaining an air transportation system relying on actual and potential competition; encouraging entry into air transportation markets by new and existing air carriers and the continued strengthening of small air carriers to ensure a more effective and competitive airline industry; and ensuring that consumers in all regions of the United States, including those in small communities and rural and remote areas, have access to affordable, regularly-scheduled air service.

The FAA has broad authority under 49 U.S.C. 40103 to regulate the use of the navigable airspace of the United States. This section authorizes the FAA to develop plans and policy for the use of navigable airspace and to assign the use the FAA deems necessary for safe and efficient utilization. It further directs the FAA to prescribe air traffic rules and regulations governing the efficient utilization of navigable airspace. The FAA should ensure efficient use of navigable airspace in a manner that does not effectively shut out potential operators at the airport and in a manner that takes account of competitive market forces. The FAA should take steps to ensure the operational limits imposed and the rules

[1] *See* 49 U.S.C. 102 and 106.

governing their allocation and transfer do not inefficiently constrain competitive market forces. Competition at an airport benefits the flying public by providing price competition and expanded service. The ability of carriers to initiate or expand service at the airport is hindered, in large part, by the imposition of operations limits. Accordingly, the FAA believes it must strike a balance between (1) promoting competition and permitting access to new entrants and (2) recognizing historical investments in the airport and the need to provide continuity.

These authorities empower the DOT to ensure the efficient utilization of airspace by limiting the number of scheduled and unscheduled aircraft operations at JFK, EWR, and LGA, while balancing between promoting competition and recognizing historical investments in the airport and the need to provide continuity. They also authorize the DOT to review proposed transfers of slots and to limit or prohibit transfers where they present a potential for significant anticompetitive effects or adverse effects on the public interest.

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I. Executive Summary

This proposed rule would replace the Orders limiting scheduled operations at JFK and EWR and the Order limiting scheduled and unscheduled operations at LGA. Those Orders remain effective until this proposed rule becomes effective but not later than October 29, 2016. If adopted, this proposed rule would apply to all scheduled and unscheduled operations every day at JFK and EWR between the hours of 0600 and 2259, local time. This proposed rule would apply to all scheduled and unscheduled operations at LGA Monday through Friday between the hours of 0600 and 2159, local time, and Sunday between the hours of 1200 and 2159, local time. This proposed rule would apply, in large part, the International Air Transport Association (IATA) Worldwide Slot Guidelines (WSG) to administering slots at each airport.

The following tables provide a comparison between requirements under the current Orders and under this proposal. The first table summarizes existing requirements for each airport under the Orders. The second table summarizes this proposal's establishment of an initial slot base based on carrier holdings under the Orders, the slot-controlled periods, hourly and daily limits for scheduled operations, hourly limits for unscheduled operations, and the general processes that would be used to allocate slots or reservations for scheduled and unscheduled flights. It also identifies differences between the five potential alternatives for a secondary market to buy, sell, lease, or otherwise transfer slots between carriers and introduces a review of slot transfer transactions for significant anti-competitive effect.

CURRENT ORDERS FOR JFK, EWR, AND LGA

Feature	JFK	EWR	LGA
Slot Base	Seasonal slot holdings, as approved by the FAA.	Seasonal slot holdings, as approved by the FAA.	Slot holdings, as approved by the FAA.
Slot (called Operating Authorization under the Orders).	Operational authority to conduct an arrival or departure operation on a particular day of the week during a specific 30-minute period.	Operational authority to conduct an arrival or departure operation on a particular day of the week during a specific 30-minute period.	Operational authority to conduct an arrival or departure operation during a specific 30-minute period.
Slot-controlled hours	Daily: 0600 to 2259, Eastern time	Daily: 0600 to 2259, Eastern time	M–F: 0600 to 2159, Eastern time Su: 1200 to 2159, Eastern time.
Hourly slot limits	81 per hour or in any 60-minute period.	81 per hour or in any 60-minute period.	71 per hour or in any 60-minute period.
Daily slot limits	Not formally set but based on accepted schedules and modeled delay when Orders adopted.		
Hourly unscheduled operations limits.	None	None	3.
Unscheduled operations reservation system.	None	None	Reservations available through the Enhanced Computer Voice Reservation System (e-CVRS) 72 hours in advance; reservations for certain public charter operations available through the Slot Administration Office 6 months in advance.
Allocation of slots	Adapted from IATA WSG	Adapted from IATA WSG	Lottery.
Scheduling season	IATA WSG	IATA WSG	Slot usage reporting on bimonthly basis.

CURRENT ORDERS FOR JFK, EWR, AND LGA—Continued

Feature	JFK	EWR	LGA
Use-or-lose	Must use allocated slot 80% of the time throughout the previous corresponding season; waiver for highly unusual and unpredictable condition lasting 5 or more consecutive days; waiver for Thanksgiving, the Friday after Thanksgiving, and the period from December 24 through the first Sunday of January.		
Secondary market	Privately-negotiated lease and trade that extend no longer than terms of Order; request for FAA approval.		
Logistical slot swaps	Permitted.		
Competitive review	None.		

PROPOSED REGULATION FOR JFK, EWR, AND LGA

Feature	JFK	EWR	LGA
Slot Base	Seasonal slot holdings, as approved by the FAA.		
Slot	Operational authority to conduct an arrival or departure operation on a particular day of the week during a specific 30-minute period.		
Slot-controlled hours	Daily: 0600 to 2259, Eastern time	Daily: 0600 to 2259, Eastern time	M–F: 0600 to 2159, Eastern time Su: 1200 to 2159, Eastern time.
Hourly slot limits	81 per hour or in any 60-minute period and 44 in any 30-minute period.	81 per hour or in any 60-minute period and 44 in any 30-minute period.	71 per hour or in any 60-minute period and 38 in any 30-minute period.
Daily slot limits	1205 for hours 0600 to 2159	1205 for hours 0600 to 2159	1136.
Hourly unscheduled operations limits.	2	1	3.
Unscheduled operations reservation system.	Reservations available through the e-CVRS 72 hours in advance; reservations for certain public charter operations available through Slot Administration Office 6 months in advance.		
Allocation of slots	Adapted from IATA WSG.		
Scheduling season	IATA WSG.		
Use-or-lose	Must use allocated slot 80% of the time for the same flight or series of flights throughout the previous corresponding season; waiver for strike; waiver for highly unusual and unpredictable condition lasting 5 or more consecutive days; waiver for slot allocation or acquisition by new entrant carrier.		
Secondary market (Alternative 1)	Privately-negotiated buy, sell, lease, and trade without prior public notice; request for FAA approval must include terms of transaction; terms of final transaction posted on the FAA Web site.		
Secondary market (Alternative 2)	FAA publishes a bulletin board notice of buy, sell, lease, and trade; bidding and negotiation between seller and bidders after public notice; request for FAA approval must include terms of transaction; terms of final transaction posted on the FAA Web site.		
Secondary market (Alternative 3)	FAA publishes a bulletin board notice of buy, sell, lease, and trade; negotiations prior to public notice permitted; bidding and negotiation between seller and bidders; request for FAA approval must include terms of transaction; terms of final transaction posted on the FAA Web site.		
Secondary market (Alternative 4)	FAA publishes a bulletin board notice of buy, sell, lease, and trade; bids posted on bulletin board; request for FAA approval must include terms of transaction; terms of final transaction posted on the FAA Web site.		
Secondary market (Alternative 5)	FAA publishes a bulletin board notice of buy, sell, and lease without identifying poster; cash-only bids posted on bulletin board without identifying bidders; seller must accept highest bid; request for FAA approval must include terms of transaction; terms of final transaction posted on the FAA Web site.		
Logistical slot swaps	Permitted.		
Competitive/Public Interest review	Performed by DOT based on submitted transaction terms; DOT has 14 days to decide whether to review transaction; DOT approval or non-objection required for FAA approval of transfer.		

The FAA developed this analysis using 2009 data to model the behaviors of carriers based on meeting the minimum requirement of the proposed rule. Under this assumption, carriers would incrementally increase actual operations in year one to meet the new usage requirement, and this new operating level would grow by the FAA's Terminal Area Forecast (TAF) until it reached the daily limits. The analysis period is the first year because compliance cost is the highest in that year, and if benefits exceed the cost in the first year, this relationship will continue until passenger demand forces operations up to 100% of the available slots. In the first year, carrier utilization of slots will be at least 80%. Thereafter, increases in operations and slot utilization are a result of an increase in forecasted demand. Assuming the highest cost secondary market alternative (either alternative four or five) is adopted, the total benefits and costs are estimated at $74,696,596 ($65,242,900 Present Value at 7%) for benefits and $53,056,768 ($46,341,836 Present Value at 7%) for costs. These costs and benefits result from the changed behavior concerning use-or-lose, secondary market, and reporting requirements under this proposal as compared to current behavior under the existing Orders for each airport. Moreover, the FAA believes that this rule would improve utilization of existing slots, possibly increase a carrier's penalty for retaining slots of limited value and thus result in the return of some slots, and would result in net benefits.

TOTAL COST AND BENEFITS OF ALTERNATIVES FOUR OR FIVE OF THE PROPOSED RULE

First year	Benefits	Present value (7%)	Costs	Present value (7%)	Net benefits
Regulatory Case	$74,696,596	$65,242,900	$53,056,768	$46,341,836	$18,901,064

II. Background

A. The High Density Rule and AIR–21

To manage airspace congestion, in 1968, the FAA adopted the High Density Rule (HDR), which limited take-offs and landings at JFK, EWR, LGA, Washington National Airport (DCA), and Chicago O'Hare International Airport (ORD).[2] In 1970, the FAA suspended the HDR's application at EWR because airport capacity could meet demand.[3] To operate during the slot-controlled hours, a flight needed a reservation, commonly known as a ''slot.'' The HDR divided the allowable slots by categories of users (*i.e.,* air carriers other than air taxis, scheduled air taxis, and others).[4] These reservations applied to both scheduled and unscheduled (*i.e.,* ''Other'') operations. While LGA, DCA, and ORD were constrained throughout much of the day, JFK was constrained for only 5 hours from 1500 through 1959, Eastern Time.

Under the HDR, air carrier slots were allocated through airline scheduling committees, operating under then-authorized antitrust immunity, and the airlines would agree to the allocation. The FAA's role was limited to determining how many operations air traffic control (ATC) could reasonably handle during congested periods and enforcing operator compliance with the rules. After the Airline Deregulation Act in 1978, new entrant airlines sought access to, and legacy carriers sought expansion at, slot-controlled airports. This increased competition made it more difficult for airlines to reach agreement on slot allocation, and the scheduling committees began to deadlock. The Civil Aeronautics Board or DOT periodically stepped in to resolve the deadlocks. In resolving a 1980 deadlock at DCA, the DOT divested a small percentage of slots from incumbent airlines and reallocated them to a requesting new entrant. The DOT noted that additional reduced fare service was likely to increase competition and thus be consistent with the general pro-competitive policy of the Airline Deregulation Act of 1978.[5] The U.S. Court of Appeals upheld the DOT's action on review following an airline challenge.[6]

In 1981, the FAA responded to a nationwide shortage of air traffic controllers by reducing the level of air traffic operations and imposing slot controls on the nation's 22 busiest airports.[7] Through that experience, the FAA implemented new allocation and slot management methods. In 1982, the FAA utilized a lottery allocation and imposed a minimum usage requirement for the first time.[8] Also in 1982, the FAA implemented an experimental ''Buy/Sell'' program, permitting transfers of slots in any number and for any consideration, to provide for ''adjustments in slot assignments that may be occasioned by seasonal variation in demand, competitive pressures, or economic decisions of the carriers'' and to increase flexibility of the slot allocation system.[9] For the 6 weeks the ''Buy/Sell'' program was in place, approximately 190 slots were transferred by sale among carriers.[10] Thereafter, the FAA no longer permitted slot sales (though trades continued to be permitted) because the necessity for slots was diminishing as the ATC system was being restored.[11]

The FAA established more permanent allocation procedures for slots under the HDR in 1985 when it adopted the Buy/Sell Rule, which allowed carriers to buy, sell, lease, and trade most slots.[12] In a companion rulemaking to the Buy/Sell Rule, the FAA provided for the withdrawal of up to five percent of slots at slot-controlled airports through a reverse lottery to provide a pool of slots for new entrants and limited incumbents.[13] The Buy/Sell Rule included use-or-lose provisions and explicitly stated slots were an operating privilege and not the carriers' property.

For the next 15 years the agency relied primarily on the secondary market authorized by the Buy/Sell Rule to address access issues at HDR airports, particularly for domestic operations. However, carriers without a substantial presence at HDR airports increasingly criticized the Buy/Sell Rule because their access to slot-controlled airports was severely limited. Those carriers complained to the FAA that grandfathering 95 percent of slots at slot-controlled airports to incumbent carriers left insufficient capacity available for reallocation. Carriers further criticized the Buy/Sell Rule for failing to foster a robust secondary market and complained about a lack of transparency that permitted private transactions arranged to reduce competition. Some carriers also complained they were unaware of slots potentially available for sale or lease even when they were seeking to initiate or expand service. Finally, a small number of carriers contended they were effectively denied access to the airports because their competitors refused to sell slots or provide meaningful lease terms.

In 1994, Congress began to relax the HDR by authorizing the Secretary, upon making a public interest finding, to grant exemptions from the HDR to enable new entrant carriers[14] to provide air transportation at certain slot-controlled airports, including JFK and LGA.[15] At JFK, the DOT granted 75 slot exemptions to new entrant carrier JetBlue Airways (JetBlue) under this authority in 1999, which were phased in over a 5-year period.[16] The order stated

[2] 33 FR 17896 (Dec. 3, 1968) (codified at 14 CFR part 93 subpart K).

[3] 35 FR 16591 (Oct. 24, 1970).

[4] 33 FR 17896 (Dec. 3, 1968).

[5] SFAR 43, 45 FR 72637 (Nov. 3, 1980).

[6] *Northwest Airlines, Inc.* v. *Goldschmidt,* 645 F.2d 1309 (8th Cir. 1981).

[7] *See* SFAR 44, 46 FR 39606 (Aug. 4, 1981); SFAR 44–1, 46 FR 44424 (Sept. 4, 1981); SFAR 44–2, 46 FR 48906 (Oct. 5, 1981). Those were then William B. Hartsfield Atlanta International Airport, Boston's Logan International Airport, ORD, Cleveland Hopkins International Airport, then Dallas/Fort Worth Regional Airport, Denver's Stapleton International Airport, Detroit Metropolitan Wayne County Airport, Fort Lauderdale-Hollywood International Airport, then Houston Intercontinental Airport, Kansas City International Airport, JFK, LGA, Las Vegas' McCarran International Airport, Los Angeles International Airport, Miami International Airport, Minneapolis/St. Paul International Airport, EWR, Philadelphia International Airport, Pittsburgh International Airport, San Francisco International Airport, Lambert-St. Louis International Airport, and DCA. SFAR 44–3, 47 FR 7816 (Feb. 22, 1982).

[8] SFAR 44–3, 47 FR 7816 (Feb. 22, 1982).

[9] 47 FR 19989 (May 10, 1982).

[10] 47 FR 29814 (Jul. 8, 1982).

[11] *Id.* at 29815.

[12] 50 FR 52195 (Dec. 20, 1985).

[13] SFAR 88, 51 FR 8630 (Mar. 12, 1986).

[14] The term ''new entrant carrier'' was defined as ''an air carrier that does not hold a slot at the airport concerned and has never sold or given up a slot at that airport after December 16, 1985, and a limited incumbent carrier.'' 49 U.S.C. 41714(h)(3).

[15] Pub. L. 103–305 § 206(a)(1) (Jan. 25, 1994) (codified at 49 U.S.C. 41714).

[16] Application of New Air Corporation for Exemption from 14 CFR part 93, subparts K and S

Continued

that JetBlue would operate the majority of its flights outside the 5 HDR slot-controlled hours. The Secretary also granted 30 slot exemptions at LGA to new entrant carriers.

On April 5, 2000, Congress enacted the Wendell H. Ford Aviation and Investment Reform Act of the 21st Century (AIR–21).[17] AIR–21 phased out and terminated the HDR at JFK, LGA, and ORD.[18] In phasing out the HDR, AIR–21 directed the Secretary to grant two types of exemptions from the HDR's flight restrictions at LGA and JFK. The first type of exemption was designed to promote more competition at slot-controlled airports and required the Secretary to grant exemptions to a new entrant or limited incumbent, defined as a carrier holding fewer than 20 slots or slot exemptions.[19] The second type of exemption was aimed at improving service to small communities and required the Secretary to grant exemptions to a carrier operating an aircraft with less than 71 seats to small-hub or non-hub airports for an unrestricted number of flights.[20] AIR–21 also preserved the FAA's authority to impose flight restrictions by stating that ''[n]othing in this section . . . shall be construed . . . as affecting the Federal Aviation Administration's authority for safety and the movement of air traffic.'' [21]

B. LaGuardia Airport After AIR–21

LGA, which provides almost exclusively domestic service,[22] consistently has been one of the most congested airports in the nation. Its proximity to midtown Manhattan makes it a desirable airport for many travelers, and airlines attempt to meet that demand by operating many flights to LGA. Physical constraints of the airfield limit the ability to expand capacity.

The slot exemptions mandated by Congress under AIR–21 facilitated access for new entrants and small community service at LGA, but the trade-off for this service was increased airport congestion and delays. By fall 2000, carriers had added over 300 new scheduled flights at LGA and had plans to operate even more, resulting from more than 600 exemption requests. While the number of allowable scheduled operations under the HDR remained constant at 62 per hour, the actual number of scheduled operations rose to over 100 in several hours with the additional AIR–21 slot exemptions. With no new airport infrastructure, overall airport capacity remained the same while the number of aircraft operations and delays soared. Additional operations following AIR–21 resulted in significantly higher delays at LGA than existed before 2000. The average minutes of delay for all arriving flights at LGA increased 144% from 15.52 minutes in March 2000 (the month before AIR–21 was enacted) to 37.86 minutes in September 2000.[23] The increase in delay as a result of AIR–21 was not limited to delays at LGA. Flights that arrived and departed late at LGA affected flights at other airports and in the national airspace system (NAS). By September 2000, flight delays at LGA accounted for 25 percent of the nation's delays, compared to 10 percent for the previous year.[24]

Using its authority under 49 U.S.C. 40103, and pending the development of a long-term solution, the FAA published a Notice of Intent in the **Federal Register** on November 15, 2000, announcing its intent to temporarily limit AIR–21 slot exemptions at LGA and to allocate them via a lottery.[25] The lottery, which was conducted on December 4, 2000, was premised on the imposition of an airfield and airspace capacity management limit of 75 scheduled operations per hour (plus six unscheduled operations primarily used by the general aviation community) beginning January 31, 2001.[26] This limit still allowed a significant increase in operations at the airport above the HDR's regulatory limits, thus serving Congressional objectives while stretching capacity to its practical limits. The number of AIR–21 slot exemptions at LGA was restricted to a total of 159 a day between the hours of 0700 and 2159. As a result of the hourly restrictions, the average number of aircraft delays at LGA fell from 330 per day in October 2000 to 98 per day in April 2001.

Under AIR–21, slots allocated under the HDR at LGA were scheduled to expire on January 1, 2007. Based on its experience in 2000, the FAA determined that simply lifting the HDR at LGA would result in a significant increase in delays and adversely impact the airspace around New York City and the NAS as a whole.

In August 2006, the FAA published a notice of proposed rulemaking (LGA NPRM) proposing a continuation of the existing cap of 75 scheduled and six unscheduled hourly operations as well as a new method of allocating capacity.[27] In addition to retaining the existing cap, the FAA proposed to impose an average minimum aircraft size requirement for much of the fleet serving the airport. By incentivizing carriers to use larger aircraft, the proposal was designed to maximize passenger throughput consistent with the airport's physical constraints. The FAA also proposed to implement a limit on the duration of slots that would assure 10 percent of the capacity at the airport would be available annually for reallocation by the FAA.

The FAA recognized that it would be unable to complete its rulemaking by January 1, 2007, when the HDR was scheduled to expire. After providing for notice and comment, the agency published an FAA Order Operating Limitations at New York LaGuardia Airport (LGA Order).[28] The LGA Order retained the existing limit of 75 scheduled operations and a reservation system for unscheduled operations that permitted six unscheduled operations per hour. The LGA Order did not distinguish between operations conducted pursuant to HDR slots and AIR–21 slot exemptions; rather, flights conducted pursuant to exemptions were included in the hourly cap without restriction. The slots and exemptions were grandfathered to the then-current holder as ''Operating Authorizations.'' The LGA Order also explicitly linked its duration to the publication of a final rule and noted that no rights to Operating Authorizations allocated under the Order would survive beyond the Order. No one challenged the terms of the LGA Order or the FAA's authority to re-impose caps at the airport following the expiration of the HDR.

In August 2008, the FAA reduced the number of reservations available for unscheduled operations at LGA from six

of 49 U.S.C. 41714(c), Order 99–9–11 (Sep. 16, 1999).

[17] Pub. L. 106–181.

[18] Congress directed the HDR phase-out for JFK and LGA by January 1, 2007. 49 U.S.C. 41715(a)(2). Congress directed the HDR phase-out for ORD by July 1, 2002. 49 U.S.C. 41715(a)(1). AIR–21 did not phase out the HDR at DCA, and it remains the only HDR airport.

[19] AIR–21 also granted authority for this type of exemption at DCA and ORD.

[20] AIR–21 also granted authority for this type of exemption at ORD.

[21] 49 U.S.C. 41715(b).

[22] The Port Authority of New York and New Jersey limits the distance to which commercial flights may operate on a nonstop basis.

[23] FAA Aviation System Performance Metrics (ASPM).

[24] Calculated from the FAA's Air Traffic Operations Network Database (OPSNET).

[25] 65 FR 69126 (Nov. 15, 2000).

[26] 65 FR 75765 (Dec. 4, 2000).

[27] 71 FR 51360 (Aug. 29, 2006).

[28] 71 FR 77854 (Dec. 27, 2006). The LGA Order was amended on November 8, 2007 (72 FR 63224), on August 19, 2008 (73 FR 48428), on January 15, 2009 (74 FR 2646), on October 7, 2009 (74 FR 51653), on April 4, 2011 (76 FR 18616), on May 14, 2013 (78 FR 28278), and on March 27, 2014 (79 FR 17222).

to three.[29] In January 2009, the FAA reduced the limits on scheduled operations to 71 per hour.[30] Although the FAA did not withdraw Operating Authorizations to reach 71 operations, it stated it would retire any returned Operating Authorizations to reach that limit. These two actions were intended to further reduce congestion and delays at LGA.

C. John F. Kennedy International Airport After AIR–21

Until recently, most operations at JFK took place during relatively pronounced arrival and departure banks corresponding to the operating windows of transatlantic flights. The FAA accommodated those banks and achieved maximum efficiency by using either two arrival runways and one departure runway, or two departure runways and one arrival runway. Air traffic controllers have employed that configuration to facilitate the historical transatlantic traffic flows.

Beginning in the spring of 2006, U.S. air carriers serving JFK significantly increased their domestic scheduled operations throughout the day, changing the historical arrival and departure patterns. For example, the traditional transatlantic arrival and departure periods now have significant levels of departing and arriving flights, respectively. While demand is somewhat more balanced, some loss of efficiency associated with a two-arrival or two-departure runway configuration has resulted.

While operations at LGA remained capped throughout 2007, caps on afternoon operations at JFK were lifted on January 1, 2007, when the HDR expired at that airport. Operations at JFK already had begun to increase during the morning hours, but the increase in operations in the afternoon hours soon led to long delays, especially for departing flights during the evening transatlantic departure bank.

During fiscal year 2007, the average daily operations at JFK increased 21 percent over fiscal year 2006. At the same time, on-time performance and other delay metrics declined year over year. The on-time performance at JFK, which is defined as the arrival at the gate within 15 minutes of the scheduled time, declined from 68.5 percent in fiscal year 2006 to 62.19 percent in fiscal year 2007. On-time arrivals during the peak travel months of June, July, and August declined from 63.37 percent in 2006 to 58.89 percent in 2007, while on-time departures declined from 67.49 percent to 59.89 percent during that period. For fiscal year 2007, the average daily arrival delays exceeding 1 hour increased by 87 percent over fiscal year 2006 levels. Additionally, taxi-out delays, which measure the time that aircraft wait prior to departing the runway, increased by 15 percent. Taxi-out delays in the evening departure periods frequently exceeded 1 hour in duration.

In September 2007, the FAA re-designated JFK as a Level 2 Schedules Facilitated Airport[31] for the summer 2008 scheduling season in accordance with the WSG.[32] Under the WSG, carriers must inform the schedules facilitator of projected operations at a Level 2 airport for the next scheduling season. When submitting the required information, the airlines expressed their intent to add new flights at JFK during peak and off-peak hours for summer 2008.

Also in September 2007, the Secretary and the Administrator determined that a delay reduction meeting was necessary to discuss flight reductions with U.S. air carriers to reduce over-scheduling and flight delays at JFK during peak operating hours.[33] On October 22, 2007, the FAA opened a docket for information on the establishment of flight reduction targets at JFK during peak hours.[34] To address increases in demand by U.S. and foreign air carriers and to provide a process for schedule actions, the FAA designated JFK a Level 3 Coordinated Airport.[35]

To address the projected increased demand for summer 2008 and the previous over-scheduling in summer 2007 when the airport lacked scheduling limits, the FAA convened a scheduling reduction meeting on October 23–24, 2007. The FAA's goal was to obtain voluntary schedule reductions from historically operated and planned flights. Subsequent in-person and telephonic meetings took place as well. American Airlines, Delta Air Lines, and JetBlue, which together accounted for three-quarters of the total JFK operations, withdrew the schedule increases each had proposed for summer 2008 during the airport's 1500 to 1959 peak hours. They also adjusted the timing of operations throughout the day to smooth out peaks. Other airlines agreed to retime peak operations. Consequently, the FAA was able to offer additional operations during non-peak hours, which increased the daily total of operations while decreasing delays over the previous summer season. As a result of the agreements reached at that meeting and other discussions held with carriers regarding their planned summer 2008 schedules, the FAA issued a temporary Order limiting scheduled operations at JFK to 81 per hour from 0600 to 2259 (JFK Order).[36] That temporary Order allocated slots to carriers operating at the airport based on the number and timing of operations negotiated during the schedule reduction meetings. Because the schedule reductions were voluntary, slot allocations in some hours exceeded 81. The Order permits the FAA to retire slots that exceed the hourly limit if those slots are returned to the FAA until the slot limit is reached. On February 14, 2008, the FAA amended the JFK Order to modify the use-or-lose provisions so that they would correspond to the WSG.[37] The JFK Order temporarily responds to the carriers' desire to schedule operations above the airport's capacity during peak operating hours, relieves the substantial inconvenience to the traveling public caused by excessive congestion-related flight delays at the airport (which rippled through the NAS), reduces the average length of delays, improves carriers' ability to plan operations and network connections, and provides for more efficient use of airspace.

In July 2008, the FAA proposed to limit unscheduled operations at JFK to two hourly reservations from 0600 through 1359, to one hourly reservation from 1400 through 2159, and to two from 2200 through 2259 at JFK.[38] The FAA never adopted that proposed Order, but the unscheduled limits were incorporated in the 2008 Congestion Management Rule for JFK and EWR, which is discussed later.

[29] 73 FR 48428 (Aug. 19, 2008).

[30] 74 FR 2646 (Jan. 15, 2009).

[31] An airport is designated an IATA Level 2 Schedules Facilitated Airport when demand is approaching capacity, and a more formal level of cooperation is required to avoid the circumstances of over-capacity. At a Level 2-designated airport, a schedules facilitator seeks the cooperation and voluntary agreement of carriers serving the airport to avoid congestion.

[32] 72 FR 54317 (Sept. 24, 2007).

[33] Under 49 U.S.C. 41722, the Secretary may request a delay reduction meeting if "(1) the Administrator determines that it is necessary to convene such a meeting; and (2) the Secretary determines that the meeting is necessary to meet a serious transportation need or achieve an important public benefit."

[34] 72 FR 59579 (Oct. 22, 2007).

[35] 72 FR 60710 (Oct. 25, 2007). When demand for an airport exceeds capacity, voluntary cooperation is unlikely to resolve the problem, and short-term capacity enhancements are not available, an airport may be designated as an IATA Level 3 to inform airlines that scheduling increases may be disallowed.

[36] 73 FR 3519 (Jan. 18, 2008), as amended by 73 FR 8737 (Feb. 14, 2008), 74 FR 51650 (Oct. 7, 2009), 76 FR 18620 (Apr. 4, 2011), 78 FR 28276 (May 14, 2013), and 79 FR 16854 (Mar. 26, 2014).

[37] 73 FR 8737.

[38] 73 FR 41156 (Jul. 17, 2008).

D. Congestion at Newark Liberty International Airport

EWR has grown to be one of the most delay-prone airports in the country. In 2007, demand during peak hours approached or exceeded the average runway capacity, resulting in significant volume-related delays. These delays were aggravated by weather or other adverse operating conditions.

Comparing fiscal year 2007 to fiscal year 2000, the percent of on-time gate arrivals decreased from 70.66 percent to 61.71 percent, and arrival delays greater than one hour increased, on average, from 54 to 93 per day. EWR's on-time arrival performance of 61.8 percent was the second worst among the 35 busiest airports. Based on ''the airport's performance metrics and imbalance between ATC capacity and demand that is expected to continue in the near term,'' the FAA designated EWR a Level 2 IATA Schedules Facilitated Airport for the summer 2008 scheduling season.[39] The FAA explained that ''increased levels of air traffic operations, congestion and delay at [both JFK and EWR] and a tangible decrease in operational performance'' warranted this designation.[40] The FAA found the peak morning and afternoon hours were particularly congested, but that capacity otherwise was available for retiming of flights or new operations.

The information provided by carriers for the summer 2008 scheduling season reflected a projected increase in flight schedules, especially during the peak hours. U.S. and foreign carriers had planned about 100 new operations per day at EWR, many during the afternoon and early evening hours. For several consecutive hours, the number of hourly arrivals and departures would have reached between the upper 80s and mid-90s. These operations would have significantly exceeded the airport's average of 83 total operations per hour over the 12-month period ending August 2007. These additional flights would have caused a spike in congestion and delays at EWR and also would have adversely affected other airports in the New York-New Jersey region and the NAS.

In the autumn of 2007, the FAA found it necessary to informally discuss summer 2008 schedules with carriers operating at EWR because it was concerned proposed operations would cause excessive congestion-related delays. Modeling indicated a potential delay increase of almost 50 percent if the scheduled flights were operated as planned. The FAA asked carriers to consider scheduling flights at times when there was available capacity. However, the FAA realized some carriers intended to proceed with their plans to begin operating their proposed schedules during the busiest hours, regardless of the potential impact on delay. The FAA also believed limiting operations at JFK would create a spillover effect at EWR, thus exacerbating historical and projected delays. To prevent carriers from adding flights to already oversubscribed hours at EWR and from shifting flights from JFK to EWR, the FAA designated EWR as a Level 3 Coordinated Airport effective for summer 2008.[41] After the designation, a series of discussions with the FAA led some carriers to move a few of their historical flights from the most oversubscribed hours. The movement of these flights permitted addition of a few new entrant operations without a net increase in delays.

In May 2008, the FAA placed temporary limits on peak hour operations at EWR to mitigate persistent congestion and delays at the airport (EWR Order).[42] The EWR Order limited scheduled operations during constrained hours to an average of 81 per hour.[43] That temporary Order allocated slots to carriers operating at the airport based on the number and timing of operations negotiated during the schedule discussions. Because the schedule reductions and retimings were voluntary, slot allocations in some hours exceeded 81. The Order permits the FAA to retire slots that exceed the hourly limit if those slots are returned to the FAA until the slot limit is reached. The provisions regarding the use of the WSG for use-or-lose mirrored those in place for JFK. In July 2008, the FAA proposed to limit unscheduled operations at EWR to two hourly reservations from 0600 through 1159, to one hourly reservation from 1200 through 2159, and two from 2200 through 2259.[44] The FAA never adopted that proposed Order, but the unscheduled limits were incorporated in the 2008 Congestion Management Rule for JFK and EWR, which is discussed later.

E. Exploration of Long-Term Congestion Management

Following the enactment of AIR–21, the FAA and the DOT began investigating a long-term congestion management plan for the New York City area airports. In June 2001, the FAA published a variety of congestion management alternatives for public comment, including the use of auctions, congestion pricing, and administrative alternatives.[45] Additionally, the FAA and the DOT, in conjunction with the National Center of Excellence for Aviation Operations Research (NEXTOR), conducted research initiatives of these alternatives.

The level of interest in a long-term plan increased as the sunset of the HDR neared and following the experience of increased operations at the airports. Nationally, the summer of 2007 was the second worst on record for flight delays. Delays impacted all three New York City area airports and cascaded throughout the NAS. On September 27, 2007, the Secretary announced the formation of the New York Aviation Rulemaking Committee (NYARC) to help the DOT and FAA explore available options for congestion management and how changes to current policy for JFK, EWR, and LGA would affect the airline access and utilization of the airports.

The NYARC was designed to provide opportunity for extensive input by all stakeholders, having members from every major U.S. air carrier, several foreign carriers, associations representing different aviation interests, and the Port Authority of New York and New Jersey (Port Authority). The NYARC submitted a report of its findings and recommendations to the Secretary, dated December 13, 2007.[46]

The increased congestion and associated delays at JFK, EWR, and LGA impact each other and the NAS. The airspace redesign for the New York/New Jersey/Philadelphia metropolitan area, approved in 2007, documents the costs and far-reaching impacts of delays that originate from this area.[47] Implementing

[39] 72 FR 54317 (Sept. 24, 2007).

[40] *Id.*

[41] 72 FR 73418 (Dec. 27, 2007).

[42] 73 FR 29550 (May 21, 2008), as amended by 74 FR 51648 (Oct. 7, 2009), 76 FR 18618 (Apr. 4, 2011), and 78 FR 28280 (May 14, 2013), and 79 FR 16857 (Mar. 26, 2014).

[43] The appendix to the Order included a few operations for summer 2008 above the 81 per hour limit.

[44] 73 FR 41156 (Jul. 17, 2008).

[45] 66 FR 31731 (Jun. 12, 2001).

[46] A copy of the ARC Report may be found at *http://www.faa.gov/regulations_policies/rulemaking/committees/documents/media/NY.ARC.Final.Report.20071213.pdf.* The report contained recommendations for operational improvements for the airports and associated airspace; discussed the use of market-based systems to allocate airport capacity at the airports; explored a gate utilization system at LGA proposed by the Port Authority; explored a US Airways proposal to relax the LGA perimeter rule; examined priority air traffic preferences; and considered the adoption of IATA WSG at the airports.

[47] *See http://www.faa.gov/air_traffic/nas_redesign/regional_guidance/eastern_reg/nynjphl_redesign/documentation/.*

airspace redesign will provide increased efficiency and congestion relief by, among other things, opening additional arrival and departure routes in the New York City area, and the FAA has begun that process.

Further, the FAA continues to work with stakeholders to implement short-term initiatives to improve the efficiency of airport operations and air traffic control, particularly during severe weather. Additionally, the FAA has increased the use of a second departure runway at JFK when conditions permit. However, none of these initiatives offer an immediate or complete solution.

F. Congestion Management Rules of 2008

With the three temporary Orders limiting operations in place, the FAA determined to pursue a long-term solution for limiting operations and allocating slots for all three airports. After evaluating comments to the LGA NPRM and input from the NYARC, the FAA decided not to adopt its earlier proposal to require upgauging aircraft size and to reallocate 10 percent of the existing capacity each year. Instead, the FAA published a supplemental notice of proposed rulemaking (LGA SNPRM) in April 2008.[48] The LGA SNPRM proposed to allocate the majority of slots to historical operators. The agency also proposed to develop a robust market and encourage competition by withdrawing some slots and auctioning them during the first 5 years of the rule. The LGA SNPRM would have allocated any new or returned capacity via auctions. Finally, the FAA proposed to sunset the rule in 10 years.

In conjunction with the LGA SNPRM, the FAA published an NPRM for JFK and EWR that sought to provide a longer-term solution and address a number of congestion-related issues (JFK/EWR NPRM).[49] Similar to the LGA SNPRM, the FAA proposed to continue the hourly limits on flight operations at JFK and EWR, and to allocate the majority of slots at each airport to the historical operators. Similar to the proposal in the LGA SNPRM, the agency proposed to develop a robust market and induce competition by annually auctioning a limited number of slots during the first 5 years of the rule. Given the significant international presence at both airports, the JFK/EWR NPRM proposed to use WSG procedures instead of auctions to allocate new or returned capacity. Additionally, the JFK/EWR NPRM contained provisions for adoption of the WSG for use-or-lose, historic precedence, unscheduled operations, and slot withdrawal for operational needs. The FAA proposed to sunset the rule in 10 years.

The FAA issued a final rule for JFK and EWR, which was consistent with the JFK/EWR NPRM, in October 2008 with a published effective date of December 9, 2008.[50] The FAA issued a final rule for LGA, which was consistent with the LGA SNPRM, in October 2008 with an effective date of December 9, 2008.[51] Multiple parties challenged these final rules under the Administrative Procedure Act, and the U.S. Court of Appeals for the District of Columbia Circuit stayed their effectiveness pending litigation.[52] The FAA rescinded both final rules on October 9, 2009.[53]

G. Current Slot Management at LGA, JFK, and EWR

Currently, the JFK and EWR Orders remain in effect, limiting scheduled operations to 81 per hour at each airport, until this proposed rule becomes effective.[54] The LGA Order remains in effect, limiting scheduled operations to 71 per hour and unscheduled operations to three per hour, until this proposed rule becomes effective.[55] The following tables show a comparison of allocated slots and average actual operations for each airport for August 2012.[56]

[48] 73 FR 20846 (Apr. 17, 2008).

[49] 73 FR 29626 (May 21, 2008).

[50] 73 FR 60544 (Oct. 10, 2008), amended by 73 FR 66516 (Nov. 10, 2008).

[51] 73 FR at 60574 (Oct. 10, 2008), amended by 73 FR 66517 (Nov. 10, 2008).

[52] 74 FR 52132 (Oct. 9, 2009) (JFK and EWR); 74 FR 52134 (Oct. 9, 2009) (LGA).

[53] 74 FR 52132 (Oct. 9, 2009) (JFK and EWR); 74 FR 52134 (Oct. 9, 2009) (LGA). The FAA rescinded the rules because of the uncertainty caused by an Omnibus Appropriations Act provision prohibiting the agency from conducting slot auctions and the possible impact of the significantly changed economic circumstances on the slot auction program. *Id.; see also* Division I, section 115 of the Omnibus Appropriations Act of 2009, Pub. L. 111–8, 123 Stat. 115 (Feb. 17, 2009).

[54] 79 FR 16854 (Mar. 26, 2014) (JFK); 79 FR 16857 (Mar. 26, 2014) (EWR).

[55] 79 FR 17222 (Mar. 27, 2014).

[56] Allocated slots represent slot allocations for Thursdays during August 2012 as reflected in slot records maintained by the FAA's Slot Administration Office. For actual operations, an average was calculated from Aviation System Performance Metrics (ASPM) data for each Thursday during August 2012. The ASPM data used for this comparison reflects runway arrival or departure time and may vary from a flight's scheduled arrival or departure (slot) time due to taxi time or other operational reasons.

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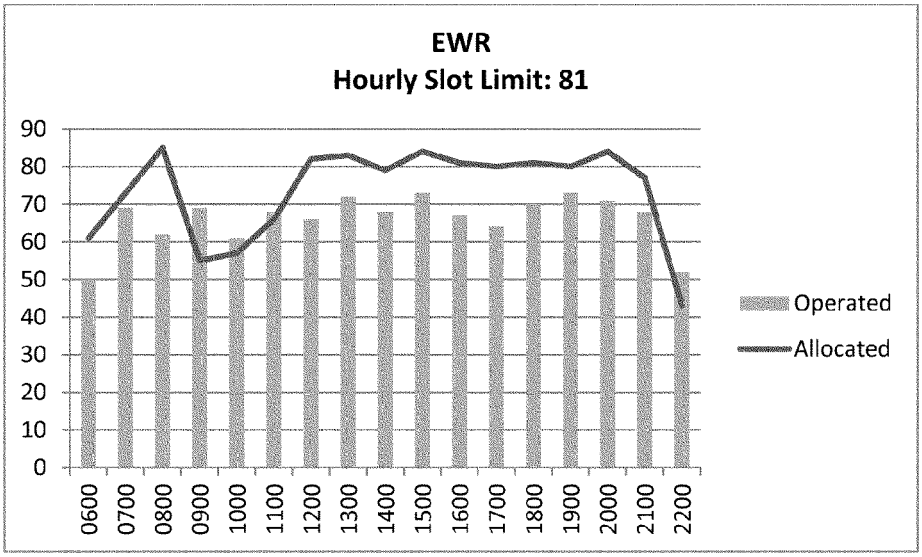

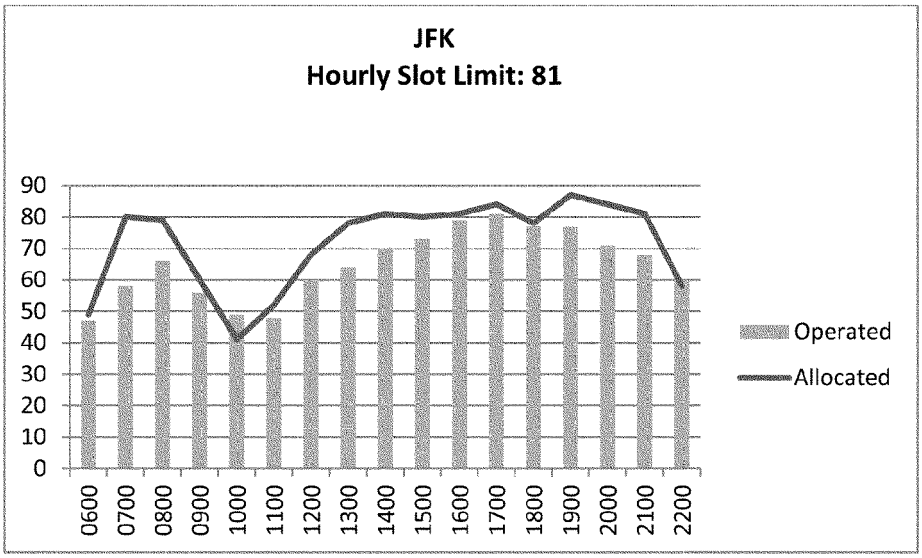

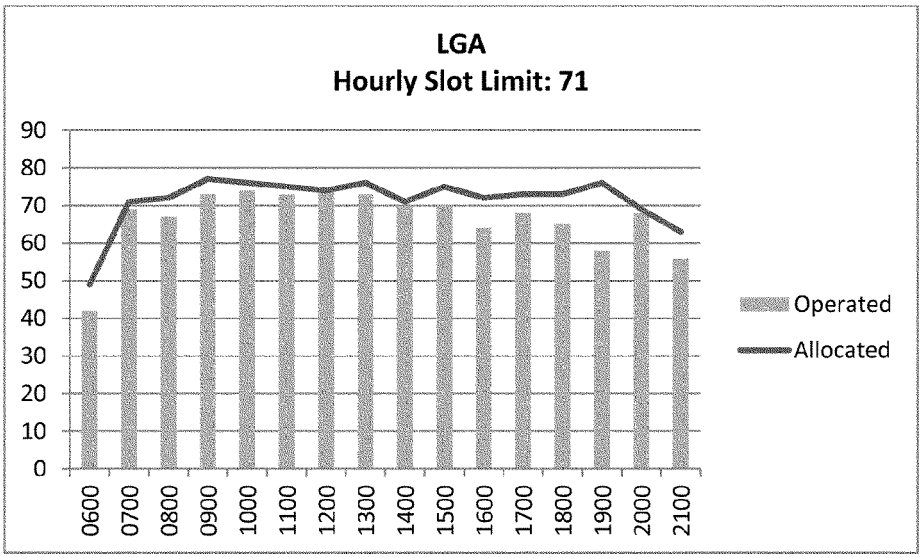

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JFK and EWR currently have similar demand profiles, with an early morning peak followed by lower demand in the mid-morning. Demand then approaches the average runway capacity in the early afternoon and typically continues until about 2200. LGA, on the other hand, has consistently high demand at or above the average runway capacity throughout the entire day.

To determine the scheduling limits and associated delay mitigation goals under the Orders, the FAA modeled congestion and delays for each airport.[57] To determine the average adjusted capacity for an airport, the FAA considered the airport's capacity to be the higher value of either the aircraft throughput at the airport in a given hour or the number of arrivals and departures that ATC personnel identified as achievable in that hour. As a result, the FAA accepted the higher number when the airport's performance exceeded expectations, as well as when the airport's potential capacity exceeded demand. This measurement reflects the airport's demonstrated and potential performance over time under actual meteorological and operational conditions. The FAA reviewed weekday operations over a two-year period to capture the variables in daily ATC operations. Delay and congestion modeling used by the FAA assumes that all flights operate as scheduled. Average unscheduled demand is randomized within the hour. These assumptions ensure the modeling reflects full utilization of the airport under various limits and allows the modeled queuing delay to be measured consistently as the scheduling limits are varied against demand. The model calculates arrival delay and departure delay relative to schedule, mean delay, and delay greater than 0, 15, 60 and 120 minutes. The model shows delay by time of day to ensure consideration of peak period delays.

When developing the scheduled and unscheduled limits (of 71 and 3, respectively) for LGA, modeling showed a reduction in the scheduled limit from 75 to 71 could generate a 41% decrease in mean delays. As discussed earlier, the FAA established a limit of 75 in December 2000 to reduce delays associated with new flights operating under AIR–21 slot exemptions.[58] Subsequently the FAA reduced the hourly scheduled limit from 75 to 71 to provide an opportunity for delay reduction at LGA from voluntary returns or slots failing to meet the minimum usage rules.[59] The FAA did not withdraw operating authority to achieve the lower limit, but reserved the authority to retire returned slots exceeding the limit.

When developing the scheduled limits for JFK, operational analysis showed that the average adjusted capacity was steadily increasing over time.[60] Additionally, a procedural change in early 2007 allowed departures on Runway 31L beginning at Taxiway KK, thereby providing increased runway capacity and reduced departure delays. Modeling for JFK used the higher adjusted airport capacity numbers since early 2007, rather than over the two-year historical period initially reviewed to capture that increased capacity. The FAA conducted discussions with carriers to seek voluntary agreement to retime flights at JFK from the busiest hours to less congested times when they could be accommodated with a lower delay impact. The FAA also restricted carriers from adding flights in the peak periods. The FAA's goal was to reduce the peak evening departure delays from the summer 2007 average of about 80 minutes.[61] The limit of 81 scheduled operations per hour in the JFK Order reflected that goal and permitted a margin for unscheduled operations.[62] As a result, modeled peak departure delays decreased to about 50 minutes, or by 30 minutes per flight when compared to summer 2007. As part of the schedule discussions for JFK, the FAA accepted some flights that exceeded the scheduling limits but reserved the authority to retire returned slots exceeding the limits and work with carriers to continue to further depeak their schedules.

When developing the scheduled limits for EWR, modeling showed an average adjusted capacity of 83 total operations per hour with high sustained delays throughout the day. Additionally, the FAA modeled the proposed 2008 schedules and projected an even higher level of congestion and delays from those proposed schedules with EWR already one of the most delay-prone airports in the system. The FAA established a goal of no increase in delays at EWR while permitting additional operations to the extent practicable. The limit of 81 scheduled operations per hour reflected that goal and permitted a margin for unscheduled operations.[63] Although the FAA accepted some flights above the hourly limits, it reserved the authority to retire returned slots exceeding the limits and work with carriers to depeak their schedules.

The FAA has continued to monitor the three New York City area airports since the Orders were put in place to determine whether the limits continue to be appropriate. Actual performance in summer 2008 through 2012 was compared to the modeled projections to ensure that the model results were consistent with actual experience. Adjusted airport capacity information for 2008 through 2012 was updated. This information includes hourly arrival and departure rates based on runway configuration, demand, operating conditions, and actual hourly runway operations. Peak summer unscheduled demand for each hour between 0600 and 2259, Eastern time, was reviewed for 2008 through 2011.

Performance at JFK and EWR has improved in each year when compared to summer 2007. In some cases, actual operations were below allocated slot levels, and this contributed to delay reduction. However, as discussed later in this proposal, underutilization of

[57] This modeling used an aircraft queuing model produced for the FAA by the MITRE Corporation's Center for Advanced Aviation System Development (CAASD). When determining airport capacity, delay targets, and slot limits, the FAA relies on modeled delay data because it establishes the peak of congestion and delays. Modeled delay and actual delay may differ because a variety of things occur on the day of operation that a model cannot consider (such as not scheduled or cancelled operations). Actual delay statistics for airports are published by the Office of the Assistant Secretary for Research and Technology Bureau of Transportation Statistics and can be found at *http://www.rita.dot.gov/bts/data_and_statistics/by_mode/airline_and_airports/index.html.*

[58] These hourly limits were adopted in the LGA Order.

[59] In early 2009, the FAA sought voluntary schedule reductions from carriers to reduce LGA delays. American Airlines voluntarily returned 13 Operating Authorizations in February 2009.

[60] The FAA reviewed JFK's hourly operations over a 2-year period, from July 2005 through July 2007. Over the entire period, the average adjusted capacity was 77 hourly operations. During the first year, from July 2005 through June 2006, the airport had an average adjusted capacity of 74 hourly operations. Over the final 6 months of the period (February 2007 through July 2007), the average adjusted capacity increased to 81 hourly operations. Changes in capacity can result from a number of factors, and it often is difficult to determine the specific cause of the capacity change. These factors can include changes in runway configurations, taxiway configurations, ground movement procedures, airspace procedures, and the interplay of regional demand. The FAA strives to increase efficiency of operations at all airports with a specific focus on safely and efficiently meeting the daily operational demand.

[61] Schedules initially submitted by carriers for summer 2008 would have increased the evening departure delays to more than 120 minutes per flight.

[62] The Order also adopted an Appendix that contained the actual schedules then existing at the airport. In some hours, scheduled operations exceeded the limit of 81 scheduled operations.

[63] The Order also adopted an Appendix that contained the actual schedules then existing at the airport. In some hours, scheduled operations exceeded the limit of 81 scheduled operations.

slots at a carrier's discretion also has potential competitive and service consequences that must be considered along with delay mitigation goals. The 2012 analyses indicated that daily unscheduled flights have decreased slightly compared to 2008 while peak morning and afternoon demand are similar to 2007. The adjusted airport capacity analysis indicated modest changes at EWR and JFK, but the FAA is not proposing to change the current scheduling limits. The FAA will continue to monitor whether changes in adjusted airport capacity are long-term trends that warrant adjustment of the scheduling limits at one or more airports.

During summer 2010, one of the main runways at JFK was closed or partially closed so a valid comparison to earlier periods is not practical. Carriers voluntarily reduced scheduled operations, and the FAA waived the usage requirements to mitigate delay impacts from the construction and reduced airport capacity. The FAA used non-preferred runway configurations and waived slot usage requirements to facilitate temporary carrier schedule reductions to mitigate delays. In addition, the Port Authority has adopted an automated departure queuing program at JFK to manage when aircraft are released from the gate. This program reduces taxi-out delays for aircraft waiting to depart. Many of these procedural changes, including the departure queuing program, have been permanently implemented.

As stated earlier, delay modeling for EWR and JFK analyzed the effects of both scheduled and unscheduled operations. Although not adopted, the FAA had proposed limits on unscheduled operations at the airports, while accommodating existing scheduled operations without creating high levels of congestion and delays. For 2007, unscheduled operations at the two airports averaged two per hour with several hours exceeding that average. The FAA had proposed limits for each airport of one and two operations per hour depending on the time of day. For summer 2010, actual operations were down at JFK and EWR to an hourly average of roughly one unscheduled operation. Unscheduled operations averaged just less than two per hour at both airports during the afternoon hours.

The current Orders limit a carrier's ability to transfer a slot (either by trade, lease, or sale) beyond the duration of the Orders. The Orders were intended as a short-term measure to allow time for development of a long-term, comprehensive rule that included a secondary market mechanism. The transfer mechanisms in place under the Orders differ significantly from those permitted under the HDR, currently in place only at DCA, which allow slots to be bought, sold, leased, or otherwise transferred for any duration and to any person.

The following tables show the approximate percentage of slots held at each airport by carriers holding more than one percent of total slots.[64] Since 2008, numerous carriers have obtained slots at EWR, JFK, and LGA through either FAA allocations or slot transactions with incumbent airlines.[65] At EWR, new carriers include: Austrian Airlines, Avianca Airlines, Cathay Pacific Airways, Icelandair, Iceland Express Airlines, La Compagnie, Southwest Airlines, Virgin America, and Vision Airlines. At JFK, new carriers include: Arik Air, Brussels Airlines, Fly Jamaica Airways, Hawaiian Airlines, Hellenic Imperial Airways, Interjet, LAN Peru, Nippon Cargo Airlines, Nordic Global Airlines, Norwegian Air Shuttle, Qatar Airways, Transaero Airlines, Virgin America, WestJet, and XL Airways France. At LGA, new carriers include: Southwest Airlines, Virgin America, and WestJet.

EWR

	Percent
United Airlines	73
American Airlines	7
Delta Air Lines	5
JetBlue	2
FedEx	2
Air Canada	2
Porter Airlines	2
Southwest Airlines	1

JFK

	Percent
Delta Air Lines	31
JetBlue	26
American Airlines	17
United Airlines	4
British Airways	2
Virgin America	2

LGA

	Percent
Delta Air Lines	45
American Airlines	29

LGA—Continued

	Percent
United Airlines	8
Southwest Airlines	5
Air Canada	4
JetBlue	3
Spirit Airlines	2
WestJet	1
Republic Airline	1
Virgin America	12

[64] This information is current as of August 2014 as reflected in slot records maintained by the FAA's Slot Administration Office.

[65] This information is current as of August 2014 as reflected in slot records maintained by the FAA's Slot Administration Office. Not all indicated carriers may be currently operating at the airports.

III. Discussion of the Proposal

Because of the combination of high demand and limited ability to increase capacity at JFK, EWR, and LGA, the FAA must address a dilemma: How can the agency manage delays while promoting access to carriers wishing to operate at the airport, thus encouraging competition? This proposed rule attempts to address that dilemma.

Ongoing implementation of the New York/New Jersey/Philadelphia Metropolitan Area Airspace Redesign project and Next Generation Air Transportation System (NextGen) technologies are expected to increase the efficiency and reliability of the airspace structure and ATC system and reduce delays within the next 10 years. Although the FAA continues to develop and implement these improvements, which it believes over time will reduce congestion and delays at the New York City area airports, it does not anticipate these airspace improvements will provide significant benefits at JFK, EWR, and LGA in the immediate future. Letting the Orders expire without replacing them with a more permanent solution likely would result in a growth in operations and consequently high levels of congestion and delays, as was experienced following AIR–21.

Rather than take repeated and piecemeal approaches to manage slots and efficient use of airspace at JFK, EWR, and LGA, the FAA believes a longer-term and comprehensive rule is prudent. The FAA's longstanding preference for addressing capacity limitations is to expand airport infrastructure, increase airport throughput, and improve airspace and airport surface efficiency. The FAA currently is implementing ways to utilize the airspace in the New York City area more efficiently and to decrease delays, but there are physical limitations to expanding these airports in the foreseeable future. This proposed rule would complement planned airspace and airport capacity improvements by encouraging more efficient use of existing capacity.

This proposed rule would treat all three New York City area airports

similarly. To achieve the goal of delay management, it would limit scheduled and unscheduled operations. To achieve the goals of promoting market access and competition, it would permit transfer of slots between carriers in a secondary market that encourages transparency. Proposed changes to the usage requirement also could improve competition and market access at the airports by increasing the number of scheduled operations that are actually operated. Under the current Orders, some slots are allocated but not scheduled and operated. The FAA believes it is necessary to address allocation and distribution of slots at JFK, EWR, and LGA in a coordinated manner because traffic at each of these airports affect each other and the NAS as a whole. The airports are located close to each other and consistently have been among the most delay-prone airports. This proposal presents five different alternatives the FAA is considering for how slot transfers would operate in a secondary market, and these alternatives are discussed in detail later in the preamble. The FAA intends that any final rule would become effective at the beginning of a scheduling season to facilitate the transition from the Orders to a final rule.

Currently, hourly scheduled operations are limited under the Orders to 81 at JFK, 81 at EWR, and 71 at LGA, and hourly unscheduled operations at LGA are limited to three under the LGA Order. This proposal, if adopted, would replace those Orders. It would adopt the current limits on operations, limit hourly unscheduled operations to two at JFK and one at EWR, and establish daily limits on scheduled operations at all three airports.

For seasonal allocations of available slots, the FAA proposes to substantially follow the WSG at each airport. The WSG generally provides a consistent, transparent, and fair method of slot allocation. This proposed rule specifically addresses the WSG processes being applied. For WSG processes not specifically addressed in this proposal or for future changes to the WSG, the FAA would consider whether they are consistent with this proposed rule or other U.S. statutes or regulations. The current allocation mechanisms at JFK and EWR generally are consistent with the WSG. The FAA proposes to extend this allocation approach to LGA, even though it is an overwhelmingly domestic airport, because these international guidelines are widely understood by carriers. One allocation mechanism for all airports also maintains consistency and reduces the opportunity for confusion on how slot management applies at an individual airport. The allocation mechanism is discussed later and any significant deviations from the WSG are noted.

The FAA also proposes to retain the 80 percent usage requirement, which is consistent with the WSG, at each of the airports. The usage requirement would be applied to slots on an individual day-of-week basis over the entire season at each of the airports, similar to the method currently used at JFK and EWR. However, the FAA proposes a change in the way the utilization rules were applied under the Orders and under the HDR. The FAA proposes a specific flight or series of flights be identified for each requested slot throughout the entire season. Because each slot has a corresponding series of flights, a flight associated with one slot in the same 30-minute slot time period could not be used to help another slot meet the minimum usage rules.

A. Hourly and Daily Slot Limits

Based on modeling of airport capacity and demand at each of the airports, the FAA has determined that limits should apply throughout most of the day. As discussed in the Background section, operational demand is steady and approaches airport capacity throughout the day. The FAA proposes to retain the slot-controlled hours as they exist under the Orders. Accordingly, the FAA proposes the following slot-controlled hours: for JFK, daily from 0600 through 2259; for EWR, daily from 0600 through 2259; and for LGA, Monday through Friday from 0600 through 2159 and Sunday from 1200 through 2159. All times are expressed in Eastern time, which is the local time for all three airports. The FAA would use the 24-hour clock because carriers currently submit schedules using that international standard in local time or Coordinated Universal Time (UTC).

Although not proposed, the FAA is considering changing the slot-controlled hours to daily from 0600 to 2259 for LGA to maintain consistency across all airports. The FAA believes a consistent approach across the three airports would reduce confusion for carriers as to when slots are required for an operation and reduce the carriers' burden when submitting slot requests. If the FAA changed the slot-controlled hours at LGA, it would have to allocate slots in those new hours. The FAA tentatively is considering allocating daily slots to each carrier for the summer and winter scheduling seasons that correspond to the maximum number of flights that actually were operated by the carrier in that hour from the last Sunday in March 2014 through the first Saturday in September 2014. Carriers would be afforded an opportunity to return unneeded slots to the FAA. Any modifications to allocations in those hours due to operational changes between the publication of the NPRM and effective date of any final rule would be handled on an individual basis and could be temporarily allocated until a permanent (historic precedence) allocation is made for the subsequent corresponding season. The FAA requests comments, including specific benefits and drawbacks, on whether it should adopt a common definition of ''slot-controlled hours'' across the three airports.

The FAA proposes to limit scheduled operations to no more than 81 per hour (or any 60-minute period) at JFK, 81 per hour at EWR, and 71 per hour at LGA. The FAA also proposes to assign slots specifically as an arrival or departure in 30-minute windows, a practice already in place under the Orders, to manage peaking of operations within the hour. These proposed schedule limits would be 44 in any 30-minute period at JFK, 44 in any 30-minute period at EWR, and 38 in any 30-minute period at LGA. While the FAA does not propose to change the limits from those currently in effect, it may change them in the future. Enhanced capacity or delay reduction resulting from technological advances or procedural changes (*e.g.,* NextGen or wake turbulence recategorization) may result in future increases in slot limits at the airports. The FAA will continue to review each airport's capacity and operations before each scheduling season when determining whether to change slot limits.

The FAA acknowledges that allocated slots exceed these schedule limits in several hours at each airport, but the FAA does not propose to withdraw any allocated slots. As applies under the Orders, the FAA would reserve authority to retire any returned slots until allocations in an hour no longer exceed the limits. The FAA would continue to work with carriers and encourage retiming of operations to depeak individual time periods, as necessary to mitigate congestion and delays.

The nature of operations at JFK, and to a lesser extent at EWR, is such that demand has historically been less in mid-morning and very early afternoon. Therefore, many of those lower demand hours have allocations below the hourly limits of 81. These low demand hours currently provide a recovery period that reduces delays and prevents them from continuing into the peak afternoon

hours. The FAA has determined that allowing allocations in these hours to grow to the limit would result in higher and sustained delays throughout the entire day because total operations would exceed the airport's actual capacity. To mitigate increasing delays while preserving historic allocations, the FAA proposes a daily slot limit. This daily limit would apply to the slot-controlled hours at LGA and from hours 0600 to 2159 at JFK and EWR. The FAA believes applying the daily limit to the 2200 hour at JFK and EWR is unnecessary because operations in that hour contribute little to cumulative daily delays. The daily limit would not affect operations outside of those hours. A daily limit would provide flexibility to carriers scheduling flights because the FAA could approve new flights or retime existing flights to less congested hours while preventing a build-up of the schedule across the day that would result in significant increases in delays.

The FAA acknowledges the benefits of a daily limit at LGA are not as significant as at JFK and EWR because allocations in most hours at LGA currently are at or above the hourly limit. A daily LGA limit would limit additional allocations in hours that may be below 71 scheduled operations, now or in the future, providing modest delay-management benefits. Nevertheless, the FAA proposes a daily limit at LGA for consistency purposes and to ensure the operational impacts of additional flights are considered.

The FAA considered actual allocations accepted in 2008 and what was currently operating at each airport to determine this daily limit. These 2008 allocations, and subsequent slot allocation decisions made with respect to the Orders, establish the upper bound of allocations at the airport to meet the established delay goals. The FAA proposes a daily slot limit of 1,205 at both JFK and EWR and 1,136 at LGA. This proposed limit would not result in any withdrawal of slots. Based on current allocations at JFK, there would be roughly 20 slots in low demand hours available for allocation. At EWR or LGA, there would be no slots available for allocation. Additionally, like the hourly limit at LGA, actual allocations currently exceed the LGA daily limit. Because slot allocation and usage are dynamic, this number of available slots is likely to change prior to the FAA issuing a final rule.

B. Allocation of Slots

The FAA proposes to grandfather all existing slot allocations made under the Orders for both the summer and winter scheduling seasons. This grandfathering recognizes that carriers have made investment, marketing, operating, and business decisions based on the assignment of Operating Authorizations under the Orders and the expectation that those slots would continue to be available in future seasons subject to the usage and other general Order provisions. On the proposed rule's effective date, at JFK and EWR, the FAA would assign, according to its records, each carrier all slots for the summer scheduling season that had been approved for the previous summer scheduling season as amended through the slot allocation process. Similarly, the FAA would assign, according to its records, each carrier all slots for the winter scheduling season that had been approved for the previous winter season as amended through the slot allocation process. At LGA, for the hours of 0600 through 2159 or 1200 through 2159 on Sunday, the FAA would assign each carrier all slots held as of the effective date for both the summer and winter scheduling seasons and for each day-of-week.

Temporary, one season-only, and other contingent allocations would not automatically receive historic precedence at the same times. For all other slots allocated under this transitional mechanism, carriers would have historic precedence, provided all other proposed conditions are met, for the subsequent corresponding scheduling season. The FAA tentatively has determined this is the most efficient method of transitioning from the temporary Orders to a more permanent regime. These allocated slots, however, would be subject to reversion to the FAA under the proposal's minimum usage requirements and could be withdrawn for operational reasons.

When making decisions regarding the allocation of available slots, the FAA would seek to allocate in a manner that ensures efficient use of a scarce resource and maximizes the benefits to both airport users and the traveling public. Except as indicated in the following discussion, the proposed allocation priorities mirror current WSG priorities. The FAA believes the WSG approach is well-understood and is an internationally-recognized system of slot allocation at airports. These allocation procedures would apply to JFK, EWR, and LGA. A WSG-like allocation process already applies under the JFK and EWR Orders because those airports have a significant international presence, and the WSG is commonly applied to international slot-controlled airports and understood by carriers with international service. Although a WSG procedure previously has not applied to LGA, the FAA proposes to do so to maintain consistency between the airports. A common approach to allocating slots reduces the administrative burden of multiple procedures for both the FAA and carriers. A common approach also reduces confusion with respect to the rules for each airport. The FAA understands that carriers with only domestic service would have some adjustment to the new rules at LGA, but most of these carriers already operate at JFK or EWR (and would have familiarity with the WSG at those airports). The FAA does not anticipate changing the allocation and usage mechanisms at LGA would be overly burdensome.

Like the WSG, the FAA proposes to afford priority treatment for slot requests by new entrants. The FAA proposes to define a ''new entrant'' as a U.S. or foreign air carrier that holds or operates fewer than 20 slots on any day of the week, in any combination during the slot-controlled hours, at the respective airport. That number would include any slots that had been returned to FAA after the slot return deadline, or that had been revoked by the FAA for insufficient use, during the two corresponding scheduling seasons immediately preceding the scheduling season for which a slot allocation is being conducted. A carrier would not be eligible for slot allocation as a new entrant if it had returned slots to the FAA after the slot return deadline, or had slots revoked by the FAA for insufficient use, during the two corresponding scheduling seasons immediately preceding the scheduling season for which a slot allocation is being conducted.

The proposed ''new entrant'' definition differs from the definition contemplated under the WSG, which sets a threshold of five slots, because the lower threshold would provide little opportunity for a new entrant to establish its operations before losing new entrant status and thereafter being able to expand in those markets only through slots obtained in the secondary market. With up to 20 slots, a carrier would have sufficient flexibility to establish a competitive presence at a large metropolitan airport such as LGA, JFK, or EWR, giving the carrier not only a basic foothold but also a critical mass of frequencies that would allow it to compete effectively. The FAA also proposes the definition be applicable at each airport, thus establishing a uniform definition that is easily understood by all stakeholders.

For purposes of slot allocation, the FAA historically has treated U.S. air carriers conducting operations solely

under another carrier's marketing control with unified inventory control as a single carrier. Also, U.S. carriers having more than 50 percent common ownership have been treated as a single carrier for slot allocation purposes; however, individual foreign carriers, regardless of their ownership, have been treated as separate carriers. Under international obligations, Canadian carriers are treated the same as U.S. carriers for slot purposes at U.S. high-density airports. The FAA does not propose to change this approach.

Prior to the start of the scheduling season, and according to the schedule published by IATA, the FAA would publish a notice in the **Federal Register** announcing the deadline for submitting schedule requests for the upcoming season. Prior to announcing the submission deadline, the FAA would conduct an informal airport capacity review for each airport, which is consistent with its historical practice at JFK and EWR and with the WSG. The FAA also would provide each carrier with a listing of its historic slots. The method for calculating historic precedence is discussed in more detail later in this document. By the deadline stated in the **Federal Register** notice, each carrier would submit its proposed requests for each airport noting which requests are in addition to, or changes from, the previous corresponding season. If a carrier wishes to make a change from an historic slot, it should submit a request to retain that slot and indicate that it also is requesting the change to avoid losing the historic slot if the FAA could not confirm the change. Based on the FAA experience with carriers' slot trading when developing domestic schedules, the FAA believes that many carriers would not be ready to submit their schedules for LGA according to the IATA schedule, which requires slot request decisions several months before the start of the scheduling season. The FAA requests comment on whether the FAA should set a later submission deadline for LGA and what any later deadline should be.

The FAA is not proposing a particular format for the submission of schedule requests because it wants to avoid an unnecessary burden, especially for carriers that operate a large number of slots at the airports, and wants to maximize carrier flexibility. However, each slot request would be required to indicate the effective dates of the request, proposed days of operation, proposed time of operation (indicated as either UTC or local time), whether the operation is an arrival or departure, flight number, and aircraft type. Although not required under this proposal, the FAA would accept schedule submissions in IATA Standard Schedules Information Manual (SSIM) format or another similar format.

The FAA would accommodate these requests by allocating available slots according to the priorities set forth in proposed § 93.41. First, the FAA would confirm any requests for historic slots, including those that have adjustments within the same 30-minute period or other minor changes that do not affect operations, prior to the IATA Slot Conference. The FAA then would split the remaining available slots into two pools: One pool for new entrants as defined in proposed § 93.36 and another pool for all carrier requests. The FAA acknowledges this method of establishing two pools prior to accommodating retimings differs from the WSG, but the FAA believes that it provides new entrants with a better opportunity to access desirable slot times. The FAA would allocate any available slots according to these priorities until there were no available slots remaining in each pool.

Within each pool, the FAA first would accommodate carrier requests to retime slots for operational reasons. The FAA recognizes that a carrier may request a retiming of a slot in a particular time period that the FAA cannot accommodate, and the FAA may offer a slot in a different time period. The carrier may then trade the slot with another carrier to conduct its desired operation or may operate in the allocated time period. A carrier in this situation that makes a request for a retiming to its desired slot time for a subsequent corresponding season will receive priority treatment within the set of requests for retimings. The FAA would use the carrier's previous requests and slot transfer records to make this determination of priority.

After addressing requests for retimings within each pool, the FAA then would accommodate requests by carriers to extend an allocated seasonal slot to year-round service. Consistent with the WSG, the FAA gives priority to requests for year-round service because that service most efficiently uses the scarce resource of available slots.

Finally, the FAA would accommodate any remaining requests. The FAA would consider the extent and regularity of the intended slot use by giving priority to intended year-round service and greater weight to requests for daily service. The FAA would consider the effective period of operation by giving greater weight to intended use throughout the entire season. The FAA also would consider schedule constraints of the carriers requesting slots, especially if the carrier is operating to or from another slot-controlled airport. Finally, the FAA would consider the overall operational impacts of schedule requests, including the distribution of flights and mix of arrivals and departures. This holistic approach allows the FAA to best manage airport and airspace congestion.

Because the FAA expects that requests for slots would exceed the number of slots available in most seasons, the FAA proposes to include some tie-breaker factors to aid in allocation decision-making. Although the FAA does not intend these factors to be determinative, it could consider airport facilities constraints (such as constraints on gates, terminals, aircraft parking, customs and immigration, and curfews) and impacts to competition and markets served when weighing which request to accommodate.

C. Usage Requirement

The FAA proposes to retain the current 80% usage requirement for historic precedence, but the methodology for calculating usage would change. The proposed calculation method would be used to determine historic precedence only for slots allocated for summer and winter scheduling seasons after this proposed rule becomes effective. Determining historic precedence for the first summer and winter scheduling seasons after this proposed rule becomes effective would use the calculation method under the rules in effect when the slots were allocated and operated.

The 80% usage requirement provides a reasonable allowance for planned and unplanned cancellations. The usage calculation would be applied on an individual day-of-week basis. This method currently is used for JFK and EWR slots, and using this method for LGA slots would ensure consistency among the airports and afford carriers greater flexibility for slot allocations.

A carrier must use the allocated slot at least 80% of the time for the same flight or series of flights throughout the period for which it is allocated during the scheduling season. The same series of flights would be at least five flights at approximately the same time on the same day-of-week, generally with the same flight number, generally serving the same market, and distributed regularly in the same season (for example, a 1035 JFK–LAX flight on every Monday of the summer season). This definition of same series of flights allows the FAA to see the intent to operate a series of flights but is not intended to preclude a carrier from

changing the flight number, origin/destination, or flight time (within the same 30-minute slot time period) during the scheduling season. The requirement to identify markets served with a particular slot is not intended to restrict a carrier's service in a particular market; it is simply a tool to assist the FAA in tracking the use of a specific slot. The FAA recognizes tying a slot to a series of flights for usage calculation is a departure from how it has historically applied usage rules. This change, however, is consistent with the WSG in that a carrier should hold only slots it plans to operate. This change is intended to address actions by some carriers that report a series of flights in different slots on various days during the reporting period to record usage on multiple slots with a single flight. Although those actions are not prohibited by the current Orders, they artificially allow carriers to meet the minimum usage rules without scheduling a flight for each slot.

The FAA has found that the practice of spreading individual flights over a set of slots to achieve 80% usage potentially underutilizes slots because the full allocation of slots is not being scheduled and operated. Theoretically, operating four flights 100% of the time could meet the 80% usage requirement for five slots, which could result in non-utilization of 20% of the allocated slots (thereby limiting market access). While the FAA acknowledges scheduling realities make underutilization to this extent impractical, the FAA has observed some underutilization behavior at JFK, EWR, and LGA. The FAA believes this behavior could adversely affect the opportunities for new entrants to begin service at a particular airport or could reduce the choices available to consumers.

This proposal would better ensure that the scarce resource of slots is used optimally. The FAA acknowledges that requiring carriers to operate their full allocation of slots could increase the number of operations. However, any increase in delays over current levels should remain within the accepted delay levels that were modeled at the time the current Orders, and corresponding hourly slot limits, were implemented. This model assumed full slot usage. It is likely that any increase in flights also would increase the number of flight choices available to consumers. The FAA believes another result of the changed usage calculation could be that a carrier that operates fewer flights than its slot holdings could dispose of the excess slots on the secondary market. The exchange of these slots could increase competition at the airport and provide consumer benefits, especially if the slots were acquired by a new entrant. Although the FAA believes it unlikely, especially in the peak demand hours, a carrier with excess slots could return those slots to the FAA, and they could be retired in hours exceeding the slot limits (providing delay-reduction benefits) or could be allocated to other carriers (providing consumer and economic benefits).

The FAA requests comment on whether the proposed usage rate is appropriate. Additionally, in theory, it is possible that usage requirements may encourage carriers to fly smaller-than-optimal aircraft or to fly less-than-full aircraft. The FAA requests comment on how the proposed usage requirement might impact utilization of slots. Please provide data supporting the comments.

The FAA would have discretion to waive the usage requirements when a carrier ceases operation at an airport due to a strike. The FAA also would retain discretion to waive the usage requirements in the event of a highly unusual and unpredictable condition beyond the carrier's control and affecting operations for 5 or more consecutive days. These exceptions allow carriers and the FAA flexibility to adapt to unusual and unexpected cancellations in contrast to the usual localized weather and mechanical cancellations the 80-percent usage rule permits. These usage waivers are similar to those under the WSG, and they previously have been successfully applied at U.S. slot-controlled airports. In certain circumstances, the FAA also could waive the usage requirements for a period up to 180 days for a new entrant acquiring slots at an airport either through FAA allocation or the secondary market.

Under the HDR and the Orders limiting operations, slots held by a carrier were treated as used on Thanksgiving Day, the Friday following Thanksgiving Day, and the period from December 24 through the first Sunday of January. Under those rules, a carrier was allocated slots for the entire season rather than according to the schedule submitted by the carrier. Under this proposed rule, a carrier may give back a slot to the FAA for short periods of time (*e.g.,* the week between Christmas and New Year's Day) when the slot would not be scheduled. These periods of time are not included in the usage calculation. The carrier also would not receive historic precedence for the periods of time when the slot is given back to the FAA. However, because of the anticipated limited duration of these returns, the FAA believes it is unlikely the carrier would be prohibited from scheduling during that period in the subsequent corresponding season. Accordingly, the FAA proposes to eliminate general waivers for holiday periods. The FAA requests comment on whether the elimination of these general waivers would create a hardship on carriers that the FAA has not considered. Comments should be supported by specific data demonstrating a hardship.

To aid in the usage calculation, the FAA proposes to require carriers to submit an interim and final usage report to the FAA, as is required under the JFK and EWR Orders. The interim report would be due by September 1 for the summer scheduling season and February 1 for the winter scheduling season. The final report would be due no later than 30 days after the end of the respective scheduling season. The interim and final reports should detail slot usage for each day of the respective scheduling season and report the following information for each slot held: The slot number, airport code, time, and arrival or departure designation; the operating carrier; the date and scheduled time of the actual operation, the flight number, origin and destination, and aircraft type identifier; and whether the flight was actually conducted. These reporting requirements are similar to those under the HDR and Orders. In addition to analyzing slot usage reports, the FAA would monitor slot usage throughout the scheduling season.

D. Transfer of Slots

When the FAA adopted the Buy/Sell Rule, it recognized slots have value in the secondary market. The FAA believes the development of a robust secondary market ultimately is the best way to maximize competition. Over the years, the FAA has received complaints that carriers were unaware of possible opportunities to buy or lease slots, that incumbent carriers were colluding to constrain new entrant carriers' market access to an airport, and that there was uncertainty about the value of slots. The DOT and FAA believe increased transparency in the secondary market would address these concerns as well as allow interested parties to better understand the nature of slot transactions. For these reasons, the FAA proposes a secondary market and offers five alternatives for proposed § 93.45. The FAA requests comments on each of these alternatives and assumptions associated with these alternatives. The most helpful comments would include a weighing of the benefits and drawbacks of how each alternative

addresses transparency of the market, efficiency of the transfer process, and carrier flexibility in transferring slots to meet operational or business goals.

Under the first alternative, the FAA would permit a carrier to buy, sell, or lease a slot to another carrier or to trade a slot with another carrier for a slot at any U.S. or foreign slot-controlled airport. This alternative is similar to what was permitted under the Buy/Sell Rule and would permit privately-negotiated transactions between carriers. The FAA believes this alternative creates the least administrative burden on carriers, but it does not address previously-voiced concerns about lack of knowledge of opportunities to acquire slots. Transparency benefits would be realized largely through the transaction approval process, which is discussed later.

Under the second alternative, a carrier seeking to sell, lease, or trade a slot with another carrier would be required to follow a formal process to negotiate the terms of the transaction. This alternative would require a public notice on an FAA-managed bulletin board system. The carrier would have to submit a notice to the FAA that it intended to engage in a slot transaction, and the notice would include the carrier's intended terms. These terms would include the slots available for transfer (slot time and slot number), the type of transfer intended (trade, sale, lease), the proposed duration of a lease if applicable, and the intended effective date. The FAA requests comments on any additional information that the transferring carrier should provide.

The carrier would make its request to the FAA at least 4 months in advance of its intended effective date. The FAA would post a notice of the offer to transfer and relevant details on the FAA Web site. The FAA would post that notice at least 3 weeks in advance of the opening date for bidding, and the notice would state the opening and closing dates for bidding and the contact information for submitting bids. The bidding period would last 2 weeks unless the transferring carrier requested a longer period of time. Carriers (and other interested parties) would be able to register to receive automatic notices when a new posting is published on the FAA bulletin board. The transferring carrier would not be permitted to negotiate terms prior to the start of the bidding period. The FAA intends all bids would be submitted directly to the transferring carrier. The transferring carrier could conduct negotiations during the bidding period to clarify and refine the bid. The transferring carrier, however, would be able to consider and negotiate only bids submitted during the bidding period, but that carrier could request an extension of the bidding period. Once the bidding period closes, the transferring carrier could select its preferred offer and negotiate the final terms of the transaction.

The proposed rule would allow the transferring carrier flexibility in determining the best offer. The FAA would not require the carrier to select the highest-dollar offer because a carrier could place a higher value on non-cash assets and on the overall impact of the proposed transaction on its operations.

The FAA requests comments on the timeframes being proposed. Is a 4-month advance notice to the FAA enough time to complete the proposed process for completing a transfer transaction? Is this advance notice period too long to be practical in light of operational necessity? Does a 3-week public notice provide sufficient time for a carrier to obtain necessary approvals to bid on a slot? With a system where bids are submitted directly to the transferring carrier for review and further negotiation, would a 1-week bidding period be sufficient?

The third alternative is similar to the second alternative, except that carriers would be permitted to privately negotiate tentative terms of a transaction before publishing its intent to transfer slots on the bulletin board. Carriers could approach any prospective transferor or transferee to evaluate the market or assess how to package the slots for transfer. Those tentative terms would be submitted to the FAA and posted on the bulletin board, and other carriers would be permitted to submit counter-offers. The transferring carrier could then select its preferred offer and privately negotiate the final transaction terms. Like the second alternative, the transferring carrier would be able to consider only counter-offer bids submitted during the bidding period. Under this alternative, a carrier would be able to submit a notice of intent to engage in a slot transaction, as under Alternative 2, without prior private negotiation.

The fourth alternative attempts to encourage the greatest transparency by requiring bidders to post their bids on the bulletin board during the bidding period. A carrier would submit a notice to the FAA that it intended to engage in a slot transaction, and the bidding time frames would be the same as under the second alternative. Bidding carriers would post their bids, and any counterbids, on the bulletin board. Therefore, negotiations in the form of iterative bids would be available to all registered interested parties. Because this alternative may require posting of proprietary or confidential business information, a bidding carrier would have the option of posting a summary bid with more detailed information submitted directly to the transferring carrier. The FAA requests comment on whether the option for submitting both a publicly-available summary bid and private detailed bid adequately ensures protection of proprietary or confidential business information. What level of detail for the publicly-available summary bid is adequate to inform other potential bidders of the transaction value?

The fifth alternative is similar to the fourth alternative, but the identities of the offering carrier and bidders would not be revealed. Bids under this alternative would be cash only because non-monetary assets could reveal the identity of the parties. Under this alternative, the offering carrier would be required to accept the highest bid posted. This alternative would mitigate the possibility of any collusion between carriers (*e.g.,* by a carrier signaling the precise value of its bid to the selling carrier). It would also ensure that the winning carrier is the carrier that places the greatest economic value on the slots, leading to more efficient use of slots. The FAA requests comment on whether a blind bidding process would facilitate a more robust secondary market.

Under the bulletin board alternatives, the FAA anticipates the transferring carrier would structure its notice in a way that permits a transaction involving multiple slots in any desirable combination. For example, the transferring carrier could require multiple slots be transferred as a set or it would consider bids for smaller groupings of slots. The FAA intends to allow maximum flexibility for transferring slots provided prospective bidders have adequate information on which to act. The FAA expects that if the material terms of the transaction change during or after the bidding period, the transferring carrier would repost the notice of intent to transfer for a new bidding period. The FAA requests comment on whether it should implement additional procedures for a subsequent bidding period that included shorter notice and bidding time frames. Does allowing the transferring carrier to craft a notice in a way to allow transfer of multiple combinations of slots ensure both that the transferring carrier would have sufficient flexibility in transferring the slots, and that bidding carriers would have an adequate opportunity to acquire the slots?

Under alternatives one through four, transactions could include both cash and non-cash consideration, and the transactions via the bulletin board would not have to be blind. A carrier also would need to know the identity of a bidder offering non-cash assets to accurately value those assets. The FAA requests comment on whether non-cash bids promote competition by enlarging the pool of potential bidders, which could result in more bidders and more valuable bids.

Do the bulletin board processes adequately accommodate complex transactions involving consideration other than cash? Do the bulletin board processes adequately accommodate transactions that are initiated by the transferee? The FAA also is willing to consider additional proposals for, and comments on, alternative secondary market mechanisms. These additional proposals should encourage the efficient transfer and use of slots in a transparent environment that permits meaningful opportunities for all carriers to participate.

Under each of these alternatives, the transferee would not be able to use the slot until the FAA approved the transaction.[66] Each party to the negotiated transaction would submit a request for approval to the FAA along with the final terms of the transaction including the names of all parties, the consideration offered by each party, the effective date of the transfer, and, if appropriate, the length of the lease. This information would be publicly available to provide the market with information to better value slots as well as provide information to the DOT for determining any anti-competitive effect of the transaction, which is discussed later in more detail. The FAA believes this knowledge would help establish a more robust secondary market and reduce the likelihood of collusive or anti-competitive behavior.

The FAA acknowledges submitting detailed terms of a transaction could in rare circumstances involve legitimate proprietary or confidential business information. A carrier may request confidential treatment of the request for approval while it is under review. The FAA's general practice has been to not make this type of information public until after approval is granted, consistent with the Freedom of Information Act. In addition to confidential treatment while the request is under review, the FAA requests comment on whether it should develop a process for confidential treatment of certain information after the transaction is approved. If so, under what limited circumstances should this confidential treatment be granted to ensure a transparent secondary market? The FAA also requests comment on whether the transaction terms should not be made publicly available for a period of time after the transaction is approved. If so, what is a reasonable period of time?

Under alternatives two, three, four, and five, the FAA proposes some limited exceptions to using the bulletin board system. The FAA proposes these exceptions because it believes they would facilitate transfers made for operational reasons, or as part of a transaction that does not raise concerns about a transparent secondary market. A carrier may trade a slot on a one-for-one basis with another carrier without submitting a bulletin board notice, but no consideration or promise of consideration may be offered for these trades. A carrier also may lease a slot to another carrier for a period of time no longer than two scheduling seasons. The FAA would review a series of short-term leases to determine whether a carrier is effectively engaging in a longer-term transaction. For example, a one-season transfer that is executed for multiple seasons would be construed as a longer-term transfer. In this situation, the FAA may disapprove the transaction. Carriers would have the option of posting a notice on the bulletin board and negotiating a new transaction. Trades among carriers with unified marketing control are permitted without using the bulletin board, thus effectively allowing those carriers to treat slots as one inventory because these transactions do not have the characteristics of a normal arms-length transaction. Finally, slot transfers that take place as a result of a carrier merger or acquisition would not be subject to the bulletin board requirements. These transactions are subject to Federal agency review under antitrust and other authorities. While the bulletin board process would be suitable for purposes of transparency and competitive opportunity for standalone slot transactions, the proposed process is not designed for slot transfers that result from a carrier merger or acquisition.

Under these alternatives, it may be necessary for the DOT to conduct a public interest or competitive review of a transaction for anti-competitive effect, which is discussed later in this document. The FAA would not approve any transaction until it had received an approval or non-objection from the Secretary or the initial 14-day review period had elapsed. To be clear, the FAA would monitor compliance with any required bid procedures.

The FAA requests comments on whether variations to the five alternatives presented would better achieve the stated goals of the rulemaking, including creating a vibrant secondary market. For example, under each alternative, the FAA would post the final terms of the transaction. Please comment on whether the availability of this information facilitates transactions in the secondary market.

While the FAA seeks comment on the proposed secondary market alternatives noted above, the FAA also is open to other mechanisms to more efficiently allocate slots in the secondary market. For this reason, the FAA requests comments regarding lessons learned from the use of secondary markets in other regulated industries (such as market for pollution permits, CAFE credits, or wireless spectrum). This information may assist the FAA in designing a more robust, flexible, and efficient secondary market for slots. Additionally, the FAA requests comments regarding lessons learned from historical secondary market mechanisms implemented by the FAA (such as the HDR or 2006 Chicago O'Hare final rule).

The FAA acknowledges that many carriers have engaged in short-term trades and leases at JFK, EWR, and LGA that extend until the termination date of the Orders. Carriers may intend these transactions be permanent rather than temporary, if permitted by FAA rules. In many cases a permanent transaction has operational or competition-enhancing benefits, but the Orders prohibit a transaction lasting beyond their effective dates. To facilitate the transition of these transactions from the Orders to this proposed rule, the FAA proposes to waive any bulletin board requirements, if adopted, for 90 days after the effective date of the final rule to allow carriers to negotiate and execute these transfers. These transactions still would be subject to the FAA approval process and DOT review.

Under the Orders, carriers must transfer slots among various carriers operating on behalf of the marketing carrier. Some of these carriers are commonly owned while others are contracted service providers. Because the carriers operate under their own DOT and FAA operating authorities and communicate with ATC using their discrete call signs, the FAA has a valid interest in ensuring that carriers operating at a slot-controlled airport have the proper slot authorizations. The FAA proposes a simplified process in

[66] Because the DOT would be able to review the terms of the transaction under this proposal, the FAA would strictly enforce the prohibition against using transferred slots prior to approval of the transfer transaction.

§ 93.46 for managing the slot holdings of carriers with unified inventory and marketing control. The FAA believes this process would reduce the administrative burden on both the FAA and on carriers and their regional partners. The marketing and operating carriers would provide advance information to the FAA including the planned airport(s), the flight number ranges that would be used for marketing and ATC purposes, statements by the carriers as to which carrier would be responsible for ensuring that a slot is available, and reporting after the fact which carrier(s) operated the slots. Only flights meeting the proposed criteria would be permitted an exception to the advance transfer requirements. Carriers would retain the option to transfer slots to carriers under their marketing control. The FAA requests comments on whether this simplified process would reduce the administrative burden.

E. Oversight of Competitive and Public Interest Issues

Over the course of the last several years, the DOT has heard many airlines, communities, and airports express concerns that incumbent slot holders have acted to limit competitors' access to slots. Arguments have been made that incumbent carriers have chosen not to transact with low-cost carriers or new entrants, preferring instead to deal with other incumbent carriers that hold a large portfolio of slots in order to preserve a competitive position in the market and forestall more rigorous competition. Similarly, there have been complaints that incumbent slot holders transfer slots for short periods to avoid losing slots under the application of the usage requirement. Consequently, some have sought more rigorous oversight and transparency of slot transactions.

This section describes the DOT's proposal to draw upon existing authority to review certain slot transactions at the New York City area airports that may raise potential competitive or public interest issues. First, this section will explain the DOT's authorities that allow for review of standalone transactions.[67] In addition, this section will provide a summary of how DOT has previously exercised these authorities. Next, this section will set forth the DOT's proposal for reviewing standalone slot transactions for competition and public interest impacts. Finally, this section will explain the DOT's proposed processes for engaging with the public regarding tentative determinations and protecting confidential information submitted in the course of such reviews. Through this proposal, the DOT would establish a more consistent, transparent, and predictable procedure for all stakeholders.

1. Legal Authorities for Reviewing Standalone Slot Transactions

The DOT's authority to review slot transfers resulting from standalone slot transactions derives from several statutory provisions. The DOT has authority under 49 U.S.C. 41712 to prohibit airline conduct comparable to antitrust violations. Section 41712 authorizes the DOT to prohibit conduct that it determines is an ''unfair method of competition.''[68] Although the DOT has not, in the past, relied on Section 41712 to take enforcement action in the context of airline slot transactions, the DOT nonetheless will consider exercising this enforcement authority as appropriate.

In addition, the DOT is directed by statute, under 49 U.S.C. 40101(a), to carry out the pro-competitive aspects of the Airline Deregulation Act, in the course of carrying out the agency's duties and responsibilities. These pro-competitive objectives include maintaining the availability of a variety of adequate, economic, efficient, and low-priced air services; placing maximum reliance on competitive market forces and on actual and potential competition; avoiding airline industry conditions that would tend to allow at least one air carrier unreasonably to increase prices, reduce services, or exclude competition in air transportation; encouraging, developing, and maintaining an air transportation system relying on actual and potential competition; encouraging entry into air transportation markets by new and existing air carriers and the continued strengthening of small air carriers to ensure a more effective and competitive airline industry.[69]

Furthermore, the DOT also is directed by statute, under 49 U.S.C. 40101(a), to consider certain factors as being in the public interest, in the course of carrying out the agency's duties and responsibilities. Many of these public interest considerations are enumerated in the statute, while others are left to the Secretary's discretion.[70] Enumerated considerations include, among others, maintaining and enhancing service to small communities and encouraging transportation through secondary or satellite airports.[71]

2. Historical Application of Authorities

Recently, the DOT/FAA has had occasion to apply the Section 40101(a) pro-competitive policy considerations in responding to joint requests of two carriers with large slot holdings to waive, under 49 U.S.C. 40109,[72] the prohibition on purchasing LGA slots.[73] In that proceeding, Delta Air Lines and US Airways sought to exchange slot interests at LGA and DCA. The DOT evaluated the competitive impact of the transaction because of its unique scope and scale: the transaction would have dramatically enhanced the respective market positions of Delta at LGA and US Airways at DCA. The combination of an increased concentration of slot holdings at both airports, an increase in the number of monopoly or dominant markets in which increased pricing power could be exercised, and the potential for use of the transferred slot interests in an anti-competitive manner, led the DOT to seek remedy of the potential anti-competitive effects by requiring a divestiture of slot interest at LGA and DCA.[74]

[67] A standalone slot transaction is a slot transfer by one carrier to another carrier (whether by sale, purchase, lease, or trade), akin to monetizing a slot. The Delta/US Airways slot swap described below would be an example of a standalone slot transaction, for purposes of this NPRM. A standalone slot transaction would occur independently of any slot transfers that would result from a carrier merger or acquisition, defined as a transaction that combines the ownership/operation/control of two (or possibly more) carriers into a single entity. The term ''carrier merger or acquisition'' is drawn from the statutory provision governing transfers of HDR slot exemptions, prohibiting their purchase, sale, lease, or other transfers, but permitting such transfers ''through an air carrier merger or acquisition.'' *See* 49 U.S.C. 41714(j). Slot divestitures undertaken in response to a DOJ investigation of an airline merger or acquisition under the Hart Scott Rodino Antitrust Improvements Act of 1976, 15 U.S.C. 18a, would not be considered standalone slot transactions, and thus, would be exempt from the secondary marketplace alternatives proposed in this rule, unless otherwise directed by DOJ.

[68] *See* 49 U.S.C. 41712, authorizing the DOT to investigate and prohibit any unfair or deceptive practice or an unfair method of competition of an air carrier, foreign air carrier, or ticket agent.

[69] *See* 49 U.S.C. 40101(a)(9), (10), (12), (13), and (16).

[70] *See* 49 U.S.C. 40101(a), which directs the Secretary to consider identified matters, ''among others,'' as being in the public interest.

[71] 49 U.S.C. 40101(a)(8), (11), (16).

[72] Section 40109(b) authorizes the FAA to grant an exemption from Section 40103(b)(1), the FAA's authority over use of navigable airspace, ''when the Administrator decides the exemption is in the public interest.''

[73] *See* Notice of a Petition for Waiver of the Terms of the Order Limited Scheduled Operations at LaGuardia Airport, 75 FR 7306 (Feb. 18, 2010); Notice on Petition for Waiver of the Terms of the Order Limiting Scheduled Operations at LaGuardia Airport, 75 FR 26322 (May 11, 2010); Petition for Waiver of the Terms of the Order Limited Scheduled Operations at LaGuardia Airport, 76 FR 63702 (Oct. 13, 2011).

[74] 75 FR at 26324 (May 11, 2010); 76 FR 63702 (Oct. 13, 2011). In reaching these conclusions, the DOT calculated each airline's share of slots and

Continued

In the course of that process, the Department of Justice (DOJ) and the DOT informally agreed that the DOT would have primary responsibility to consider the carriers' waiver request and DOJ would consider the carriers' Hart-Scott-Rodino Act (HSR) notification and report.[75] Under that arrangement, the DOT obtained waivers from the parties to the transaction and thereby gained access to the documents submitted to DOJ pursuant to the HSR process. Using the documents and its expertise in the airline industry, the DOT assisted DOJ in that agency's analysis of the transaction. DOJ also participated in the DOT's independent determination of the joint waiver request by submitting comments, as a party, to the DOT docket. In its 2010 grant of waiver with conditions, the DOT explained that its analysis was complementary to that of DOJ. Rather than attempting to enforce antitrust laws, the DOT explained that it was invoking its authority to protect the traveling public by fostering competition in the context of the requested waiver. Further, the DOT clarified that DOJ's authority under Section 7 of the Clayton Act to reject anticompetitive transactions ''did not remove the DOT's responsibility to carry out its programs consistently with the public interest criteria'' under the pro-competitive considerations in Section 40101.[76] DOJ's submissions and analyses of the effects of the requested waiver on the availability of slots, competition between US Airways and Delta, low-cost carrier competition, fares, and mitigations of the anticompetitive effects were helpful to the DOT's decision-making process.

3. Review of Standalone Slot Transactions for Competitive and/or Public Interest Factors

With respect to standalone slot transactions between or among carriers, the DOT proposes to conduct reviews for purposes of evaluating the effects of the transaction based on competitive, or other public interest, factors. For purposes of the DOT's review based on competitive factors, the DOT proposes to limit its review to circumstances where the standalone slot transaction has the potential to substantially reduce competition or create unreasonable concentration. For purposes of the DOT's review based on public interest factors, the review may examine the adverse effects of the slot transfers on service to small communities, the traveling public, or other statutory public interest objectives.[77] The DOT, however, would not review, on either competitive or public interest factors, certain routine types of actions involving small numbers of slots or a lease of slots to new entrants or limited incumbents, as explained further below.

The FAA would forward each request for a standalone slot transaction approval and the final terms of the transaction, required under proposed § 93.45, to the Office of the Secretary. The DOT would determine, within 14 days of receiving the request for approval, whether it needed to request and evaluate additional information for either competitive or public interest concerns, or both. As part of the Secretary's determination of those slot transactions for which additional review is necessary, the Secretary would specifically identify the additional information required. If the DOT requests additional information, the FAA would not approve the transaction, and any slots involved could not be operated by the transferee until the DOT notifies the parties and the FAA of its approval or non-objection. If the Secretary did not notify the parties and the FAA within 14 days of the DOT's receipt of the request for approval, the FAA could approve the transaction.

The DOT would review the additional information as expeditiously as possible. The DOT's review process would be facilitated by the parties' timely information responses provided in a readable and workable format. For standalone slot transactions reviewed due to competition concerns, because the competitive factors would take antitrust law standards and policies into consideration, the DOT intends to coordinate and cooperate with DOJ to avoid unnecessary duplication of effort and burden by agencies and the parties concerned. If, after reviewing the additional information, the DOT determines the slot transaction raises no concerns, the Secretary would notify the parties and the FAA that the transaction may proceed. If the transaction raises concerns, the DOT would notify the parties of its concerns, propose remedies or other actions, and set appropriate procedures and timelines for review.

For standalone slot transactions that raise competitive issues, the DOT would coordinate and consult with DOJ throughout the review process, to minimize the burden on the affected parties and to utilize Government resources efficiently. With respect to standalone slot transactions, the DOT would conduct a separate review under 49 U.S.C. 40101, and may consider using its Section 41712 enforcement authority, as appropriate. The DOT requests comments and suggestions as to how best to minimize the burden on parties that may be subject to these reviews. The process that the DOT would use to conduct these reviews is proposed in § 93.47 and further explained below.

The DOT proposes to review competitive issues arising from standalone slot transactions having the potential for significant anti-competitive effects, such as those that would significantly change the market structure at one of the slot-controlled airports, allow unreasonable industry concentration, permit one or two airlines to excessively dominate a market, or create an environment that would facilitate monopoly powers or practices that would tend to cause a carrier to unreasonably raise fares, reduce services, or exclude competition. Such transactions raise concerns because they may impede the pro-competitive goals of the Airline Deregulation Act.

Among the issues that the DOT may consider in determining whether a particular standalone slot transaction merits further competitive review are those analyzed in connection with the Delta-US Airways slots swap, including whether:

- The transaction would increase the airline's already dominant position in a significant manner, or place the airline in a significantly dominant position;
- the transaction would significantly enhance an airline's ability to unreasonably increase its airfares in a manner unconstrained by competitors; or
- the transaction would enable slot interests to be used in an anti-competitive manner, such as by targeting smaller competitors.

The DOT requests comments on the use of these and other criteria to address competitive concerns.

The DOT believes that the transparency of the transfer mechanisms proposed in some of the secondary market alternatives discussed earlier would allow a better understanding of the dynamics behind slot transactions. That additional transparency may protect against the kind of behavior

departures, finding that Delta's share of slot interests at LGA would increase substantially, while US Airways' share of slot interests at DCA would also increase substantially. The DOT noted that low-cost airlines have a limited presence at both airports, and the DOT determined that the transaction would further inhibit new entry because the airlines would have a greater interest in maintaining price premiums by forestalling new entry. *See* 75 FR at 7309–7310 (Feb. 18, 2010); 75 FR at 26329–26330 (May 11, 2010).

[75] *See* 15 U.S.C. 18a.

[76] *See* 75 FR at 26327.

[77] *See* 49 U.S.C. 40101(a).

complained of by some. If the proposed transparent system to implement slot transfers reveals standalone slot transactions that have the potential to substantially reduce competition or create unreasonable industry concentration, the DOT has authority to investigate further and disapprove or approve with remedies that address the potential harm. The DOT also may monitor bulletin board postings, if that option is adopted in a final rule, to determine whether it suspects anti-competitive behavior. These procedures for reviewing slot transfer transactions do not limit the Secretary's authority under 49 U.S.C. 41712 to investigate and prohibit unfair or deceptive practices or unfair methods of competition.

To prevent harm to the public interest pertaining to factors other than competition, the DOT is proposing to review standalone slot transactions for purposes of analyzing effects that may be inconsistent with the public interest objectives. The DOT's public interest review could consider adverse effects on the traveling public, service to small communities, service through secondary or satellite airports, or other areas covered by the public interest. The DOT requests comments on the use of these and other criteria to address public interest concerns.

4. Exceptions to Reviews of Standalone Slot Transactions

The DOT expects very few proposed standalone transactions would raise significant competitive or public interest concerns. Accordingly, the DOT proposes to exempt from its review the more routine types of transactions involving small numbers of slots (such as those consisting of fewer than eight slots in total), involving limited terms (such as those extending over two or fewer scheduling seasons), involving one-for-one trades among incumbents at any of the three airports, or involving a sale or lease entirely to a new entrant or incumbent that holds or operates a relatively small proportion of the slots at an airport. However, the DOT would consider multiple transactions within a period of a few years, including slot transfers to multiple carriers under the marketing or operational control of a single entity, as constituting a single aggregate transaction that could be subject to review. As with HSR filing guidance published by DOJ and the Federal Trade Commission, the DOT would seek to ensure that carriers not enter into multiple small transactions with the purpose of evading the review process; multiple transactions within a three-year period could be reviewed if they constituted a pattern and raised competitive or public interest issues.

The DOT does not intend to review transactions that would be excepted from the bulletin board process. Nevertheless, it may conduct such reviews if it believes carriers have engaged in multiple transactions or have structured transactions to circumvent the competitive or public interest review process.

The DOT requests comments on whether the exceptions described above create a sufficient safe harbor so that transactions enhancing competition and providing public benefits are encouraged, while still providing the DOT with an opportunity to review transactions that could impede competition, promote monopoly markets, unreasonably raise fares, reduce service, cause undue harm to small communities or service to secondary or satellite airports, or otherwise adversely impact the public interest. Are there alternative ways to describe the sorts of slot transfers that may be excluded from the review (that is, measured by the percentage gain in market share by an acquiring carrier)? Do the proposed timeframes for additional review permit carriers to plan slot transfers without discouraging those transactions?

5. Process

With respect to the proposals outlined above regarding reviews of standalone transactions for competitive or public interest factors, if upon first examination, the DOT determines that review is necessary, the DOT anticipates using expedited procedures to conduct that review. The procedures may include an opportunity for public comment as in the Delta/US Airways slot swap proceeding, or, for example, as in a potential proceeding involving a tentative DOT decision that seeks public comment. The DOT intends to harmonize such proceedings with DOJ. The DOT requests comments on appropriate procedures to synchronize the process with DOJ and to avoid undue burden and duplication on the parties.

With respect to information submitted by the parties to a transaction, the DOT proposes that parties could request that any information submitted to the DOT for review and designated as confidential not be disclosed to the public. The DOT, subject to the procedures at 49 CFR part 7, would keep such designated information confidential and not include it in any public proceeding. The DOT would treat a request to examine or copy this information as any other request under the Freedom of Information Act, 5 U.S.C. 552, and process the request under the DOT's procedures at 49 CFR part 7. The DOT would use the procedures described in proposed § 93.47(e) for receiving, handling, and disclosing such confidential information. The procedures at 14 CFR 302.12 (commonly known as Rule 12) would not apply. The DOT requests comments on these proposed procedures, including the handling of confidential documents or alternative procedures, to ensure that decisions are made in a timely, effective, and transparent manner.

F. Retiming, Suspension, and Withdrawal of Slots for Operational Reasons

The FAA proposes to reserve the authority to retime or temporarily suspend a slot if a reduction in operations during a particular time period is required. Events such as a runway or taxiway closure, a change in separation standards, or fleet mix change that could impact throughput [78] at the airport may reduce the airport's capacity on a short-term basis. As it has done in the past, the FAA would first seek voluntary cooperation to retime or reduce operations at the airport through waivers of the usage requirements and temporary schedule reductions. If these voluntary measures were insufficient, the FAA would temporarily suspend slots until reaching the desired operational level. The FAA would conduct a lottery of slot holdings in the particular time period to determine which slot to suspend, and credit would be given for any voluntarily suspended slot. The FAA also would not suspend a slot held by a carrier that holds fewer than 20 slots on any day of the week at the airport. The FAA would provide notice 45 days in advance of its intention to temporarily suspend a slot, unless the operational circumstances necessitate a shorter notice period. Once the situation requiring a reduction in operations ceases, any temporarily suspended slots would be returned to the carrier that held them provided that carrier still is operating at the airport.

The FAA also reserves the authority to permanently withdraw slots at an airport. The FAA first would make a determination of decreased airport capacity that it does not expect to increase for an indefinite period of time.

[78] A fleet mix change could affect throughput in several ways. Introduction of larger aircraft with greater separation standards could reduce the number of aircraft that could use a runway. A fleet mix change also could change the runways available for use, which could affect the throughput.

The FAA expects to use a permanent withdrawal only in the most unusual circumstances when voluntary cooperation and a temporary suspension of slots is determined insufficient to address capacity constraints. The FAA would conduct a lottery of slot holdings in the particular time period to determine which slots to withdraw. The FAA would not withdraw a slot held by a carrier that holds fewer than 20 slots on any day of the week at the airport. The FAA would provide notice 45 days in advance of its intention to permanently withdraw a slot, unless the operational circumstances necessitate a shorter notice period. Following withdrawal, the slot would cease to exist.

The FAA believes that a carrier that ceases all operations at an airport should not continue to hold a slot and earn rental income from it, just as it believes that non-carriers should not be permitted to hold slots. The FAA believes slots held in these ways undermine the FAA's promotion of efficient use of a scarce resource controlled by the U.S. Government. The FAA proposes to allow a carrier that ceases all operations to hold the slot at that airport for no longer than 2 years after the end of the season in which it ceased operations. The carrier could lease the slot during this period so that it does not permanently lose it. This 2-year period provides adequate time for the carrier to determine its long-term plans for operating at the airport and either resume operations at the airport, return the slot to the FAA, or sell the slot to another carrier. After the 2 years elapse, the slot would revert to the FAA, and any carrier operating the slot would have to cease that operation. Similarly, if a carrier's DOT economic authority or FAA operating certificate is suspended, surrendered, or revoked, any slots held by that carrier would revert to the FAA. The FAA has determined only operating carriers may hold slots. If that carrier had an existing agreement under which another carrier were operating the slots, the FAA could allocate the slots on a temporary, non-historical basis for the remainder of the scheduling season or up to the duration of the agreement to avoid disrupting operations or expectations of the operating carrier.

G. Unscheduled Operations

The FAA proposes to limit unscheduled operations into and out of JFK, EWR, and LGA during the slot-controlled hours. Unscheduled operations already are limited at LGA by Order, and the FAA previously had proposed limits on unscheduled operations at JFK and EWR. Although unscheduled operations (including general aviation, passenger and cargo charter, ferry, and other ad hoc operations) are typically a small percentage of overall traffic, the FAA has determined these limits are necessary because any airport operation affects congestion and delays. Even a few additional operations during peak hours could result in significant additional delay, thus eroding the effectiveness of the slot limits. Accordingly, limitations on unscheduled operations should be part of any comprehensive plan to manage congestion and delays and ensure the effectiveness of limits on scheduled operations. A comprehensive plan should seek to balance airport access to all potential operators without permitting unreasonably increased congestion and delays in the absence of FAA oversight.

The FAA believes most unscheduled operations can be accommodated under this proposed rule if operators are flexible in their arrival and departure times. Moreover, the FAA believes that general aviation demand and a segment of flights conducted as business and private charters can be accommodated within regional capacity, including operating at Westchester County Airport, Islip MacArthur Airport, Republic Airport, Stewart International Airport, Morristown Municipal Airport, and Teterboro Airport. Based on data from the FAA's Enhanced Traffic Management System (ETMS) for the year ended May 31, 2008,[79] most unscheduled flights can be accommodated in the actual requested hour or through capacity in an adjacent hour (1 hour on either side of the actual hour of operation in the data), or through additional reservations available in visual meteorological conditions. If an operator cannot obtain a reservation for its preferred time, its planned flight times may need to be revised because of the limited available reservations.

Unscheduled operations at JFK would be limited to two per hour, at EWR to one per hour, and at LGA to three per hour. The proposed LGA limits are consistent with the limit that has been in place since 2009. Although the limits for JFK and EWR are lower than that for LGA, these limits generally correlate to actual hourly unscheduled operations at the airports in summer 2008. To the extent possible, ATC would permit additional operations (for example, in favorable weather conditions or if unallocated slots exist in a particular time period). Also, a secondary market alternative for unscheduled operations, in addition to the existing reservation system, could allow slot holders to exchange slots that they are not able to use on a particular day. The FAA requests comments on whether allowing slots to be exchanged in the secondary market to unscheduled operators would lead to a more efficient use of limited operational capacity.

Reservations obtained through the FAA's Airport Reservation Office (ARO) would be required prior to conducting the operation (except in the case of emergency operations) and could be obtained up to 72 hours in advance. These reservations would allow an unscheduled operation (either arrival or departure) during a 60-minute period. The reservations would be allocated on a first-come, first-served basis, determined by the time the request is received by the ARO. When the ARO allocates a reservation, it would assign a unique reservation number. Operators would primarily obtain reservations through the ARO's interactive computer system accessed via the Internet or touch-tone telephone system. This system is known as the e-CVRS. Operators would provide the date and time of the proposed operation along with other identifying information concerning the aircraft and the intended flight. Additional reservations would be available in the e-CVRS system, but these reservations may not appear until close to the reservation time.

All operations at the airport other than declared emergencies, whether under instrument flight rules (IFR) or visual flight rules (VFR), would require a reservation. However, non-emergency national security, law enforcement, military, public aircraft, or other similar mission-critical operations may be accommodated above the limits with prior FAA approval. In the case of diplomatic or other flights in direct support of foreign governments, the FAA would permit additional reservations, if necessary, to accommodate these flights but may approve an operation at a time other than the one initially requested.

The filing of a request for reservation would not constitute the filing of an IFR flight plan as required under other rules. However, an IFR flight plan could not be filed until the reservation is obtained. The operator would include the reservation number in the ''Remarks'' section of the flight plan to indicate that it has a reservation for the operation.

The FAA recognizes the needs of public charter operators to confirm

[79] The FAA also reviewed unscheduled operations in summer 2009, 2010 and 2012 and found slightly fewer unscheduled operations in those years. Therefore, the higher 2008 traffic is used for this analysis.

airport access for commercial planning and 14 CFR part 380 compliance purposes. Accordingly, the FAA proposes to allow public charter operators to obtain a reservation up to 6 months in advance for a planned individual operation or a series of operations occurring fewer than three times per month. Public charter operators planning to conduct a series of operations more than three times per month would need a slot for those operations.

Public charter operations that seek a reservation more than 72 hours and up to 6 months in advance of the planned operation, would submit their request to the FAA's Slot Administration Office. A public charter operator would be required to provide the Slot Administration Office with a certification that any required prospectus has been submitted to the DOT in accordance with 14 CFR part 380; the call sign/flight number to be used for ATC communication by the direct air carrier conducting the operation; the date and time of the proposed arrival or departure; and the origin airport immediately prior to JFK, EWR, or LGA, or the destination airport immediately following JFK, EWR, or LGA; and aircraft type. A public charter operator also would be required to notify the Slot Administration Office of any changes to the above information after the reservation has been allocated.

The number of reservations available in advance for public charter operations would be limited to one per hour at LGA and two per day at JFK and EWR. If a public charter operator were unable to obtain an advance reservation, it could attempt to obtain a reservation within the 3-day window that is open to all unscheduled operations. A public charter operator also could attempt to obtain a slot from another carrier in the secondary market under proposed § 93.45.

H. Miscellaneous Amendments

Because the HDR no longer is in effect for JFK, EWR, LGA, and ORD, the FAA proposes to remove references to these airports in part 93, subparts K and S. These out-of-date references have caused confusion for the public, and these amendments would reduce that confusion. Accordingly, the FAA proposes to remove references to these airports in §§ 93.123 (including the table in § 93.123(a)), 93.211, 93.223, 93.226. The FAA also proposes to remove §§ 93.133, 93.215, 93.217, 93.218, and 93.221(e) because they do not apply to DCA, which is the only airport for which the HDR applies. None of these amendments would substantively change how the HDR applies to DCA.

IV. Regulatory Notices and Analyses

A. Regulatory Evaluation

Changes to Federal regulations must undergo several economic analyses. First, Executive Orders 12866 and 13563 direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (Pub. L. 96–354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96–39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of $100 million or more annually (adjusted for inflation with base year of 1995). This portion of the preamble summarizes the FAA's analysis of the economic impacts of this proposed rule. We suggest readers seeking greater detail read the full regulatory evaluation, a copy of which we have placed in the docket for this rulemaking.

In conducting these analyses, the FAA has determined this proposed rule has benefits that justify its costs, and is a ''significant regulatory action'' as defined in section 3(f) of Executive Order 12866 because it raises novel policy issues contemplated under that executive order. The rule is also ''significant'' as defined in the DOT's Regulatory Policies and Procedures. The proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities, would not create unnecessary obstacles to international trade and would not impose an unfunded mandate on state, local, or tribal governments, or on the private sector.

Total Benefits and Costs of This Rule

The FAA developed this analysis using 2009 data to model the behaviors of carriers based on meeting the minimum requirement of the proposed rule. Under this assumption, carriers would incrementally increase actual operations in year one to meet the new use-or-lose requirement and this new operating level would grow by the FAA's Terminal Area Forecast (TAF) until it reached the daily limits. In the first year carrier utilization of slots will be at least 80%. After this year, any increase in operations and slot utilization is due to an increase in forecasted demand. Total benefits and costs for the regulatory case are estimated at $74,696,596 ($65,242,900 Present Value at 7%) for benefits and $53,056,768 ($46,341,836 Present Value at 7%) for costs, assuming the highest cost secondary market alternative (either alternative four or five) is adopted. Moreover, the FAA believes that this rule would improve utilization of existing slots, possibly increase a carrier's penalty for retaining slots of limited value and thus result in the return of some slots, and would result in net benefits over one year.

TOTAL COST AND BENEFITS OF ALTERNATIVES FOUR OR FIVE OF THE PROPOSED RULE

Year 2012	Benefits	Present value (7%)	Costs	Present value (7%)	Net benefits
Regulatory Case	$74,696,596	$65,242,900	$53,056,768	$46,341,836	$18,901,064

Who is potentially affected by this rule?

- Operators of scheduled and non-scheduled, domestic and international flights, and new entrants who do not yet operate at JFK, LGA, and EWR.
- All communities with air service to JFK, LGA, and EWR.
- Passengers of scheduled flights to JFK, LGA, and EWR.
- The Port Authority of New York and New Jersey, which operates the airports.
- FAA Air Traffic Control.

Assumptions

- All costs and benefits are in 2010 dollars.
- Costs and benefits estimated for the first year.
- Additional flights added to meet new usage requirement excludes weekends (Saturday and Sunday).
- Assume some flights rescheduled to meet new usage requirement.
- Present value discount rate of 7 percent is applied.
- Some unscheduled flights would be redirected.
- Carriers that would need to add a large number of flights in less desirable hours (hours 0600 and 2100) would return or sell those slots.

The majority of the costs and benefits from this proposed rule are from changes to the usage requirement. The secondary market and new administrative and reporting requirements result in minor benefits and costs. Benefits include consumer benefits (measured as consumer surplus) from additional flights at JFK, EWR, and LGA. Costs are attributed to the additional operating costs carriers incur for these added flights to meet the proposed usage requirement, the additional minutes of delay and any administrative and reporting costs.

B. Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (Pub. L. 96–354) (RFA) establishes ''as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of 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.'' The RFA covers a wide-range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA.

The initial regulatory flexibility analysis addresses:

- Description of reasons the agency is considering the action;

The purpose of this rulemaking is to replace the current temporary Orders limiting operations at LGA, JFK, and EWR with a permanent rule. Under the existing Orders the hourly scheduled operations are limited to 81 at JFK, 81 at EWR, and 71 at LGA, and unscheduled operations are limited to 3 at LGA. This proposal, if adopted, would replace those Orders and continue the existing limits on scheduled operations in addition to limiting unscheduled operations to 2 per hour at JFK and 1 at EWR and establishing daily scheduled operations limits. The FAA also intends to increase the use of slots through a revised usage requirement and secondary market.

- Statement of the legal basis and objectives of the proposed rule;

This rulemaking is promulgated under the authority described in Title 49 U.S.C. Subtitle VII, Part A, Subpart I, Sections 40101, 40103, 40105, and 41712 and in Title 15 U.S.C. Section 21. The FAA has broad authority under 49 U.S.C. 40103 to regulate the use of the navigable airspace of the United States. This section authorizes the FAA to develop plans and policy for the use of navigable airspace and to assign the use the FAA deems necessary for safe and efficient utilization.

- Identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule;

This rule would replace existing FAA Orders and does not duplicate, overlap, or conflict with other federal rules.

- Description of the recordkeeping and other compliance requirements.

The FAA proposes a secondary market and offers five alternatives. The secondary market would permit a carrier to buy, sell, or lease a slot to another carrier or to trade a slot with another carrier. For all five alternatives, each carrier party to the negotiated transaction would be required to submit a request for approval to the FAA along with the final terms of the transaction including the names of all parties to the transaction, the consideration offered by each party, the effective date of the transfer, and, if appropriate, the length of the lease. For four of the alternatives, carriers would also submit information that would be submitted to the bulletin board through either the carrier or the FAA.

The scheduled carrier would incur reporting costs for buying, selling, leasing or trading a slot. While these costs for an operator are minimal, largely voluntary, and can provide revenue opportunities for small operators, a full discussion of these costs now follows. For all five alternatives, each carrier party to the negotiated transaction would be required to submit a request for approval to the FAA along with the final terms of the transaction including the names of all parties to the transaction, the consideration offered by each party, the effective date of the transfer, and, if appropriate, the length of the lease. Each respondent would require 30 minutes, that includes 30 minutes for the transferring carrier and 30 minutes for the receiving carrier. Given the legal nature of the agreement a lawyer would be retained with an hourly burden labor rate [80] of $89.89.

For alternatives that require the bulletin board the FAA estimates that carriers would need at least one hour to report the buying, selling, or trading of a slot. As mentioned above the FAA estimates that carriers would post up to 25 trades. To estimate the annual reporting costs to carriers for buying, selling, or trading on the bulletin board, the FAA multiplied the estimated number of annual reports by the number of hours needed per report and the wage. The hourly burden labor rate was for a computer support specialist [81] at $30.74. Total yearly cost to carriers, at all three airports, is estimated to be between $461 and $2,305. For alternative 4, there is also the added cost to carriers of submitting bids on the bulletin board. The bidding period would last 14 days, and the FAA estimates that bidders would spend approximately 2 hours dealing with the bid over the course of 14 days. Given the public nature of the bid, carriers would seek legal review before postings bids for an hourly burden labor rate for a lawyer [82] of $89.89. The rate multiplied by 2 hours per bid sums to $179.78. Again, the FAA estimated that there would be roughly 25 notices per airport a year with approximately 5 bids per notice for a total of bids a year.

- A description and estimated number of small entities to which the rule would apply.

Any scheduled carrier, employing less than 1,500 employees, with existing slots or wanting a slot today would be affected by this rule. There are two

[80] *http://www.bls.gov/oes/current/oes532011.htm*; Bureau of Labor Statistics Occupational Employment and Wages Statistics; Lawyer (May 2009); In May 2009, the Employee Benefit Research Institute, using a Bureau of Labor Statistics Survey of employee benefits estimated the total 2009 benefit as a percentage of payroll at 30.2 percent.

[81] *http://www.bls.gov/oes/current/oes151041.htm,* Occupational Employment and Wages, May 2009; (15–1041 Computer Support Specialists).

[82] *http://www.bls.gov/oes/current/oes532011.htm*; Bureau of Labor Statistics Occupational Employment and Wages Statistics; Lawyer (May 2009); In May 2009, the Employee Benefit Research Institute, using a Bureau of Labor Statistics Survey of employee benefits estimated the total 2009 benefit as a percentage of payroll at 30.2 percent.

carriers operating scheduled service with less than 1,500 employees and one carrier with scheduled service that has slightly more than 1,500 employees. Also, unscheduled operators that employ less than 1,500 employees would be considered small entities.

The delay costs for the small entities at the New York City area airports would not result in a significant economic impact. The annual delay cost equals the average of delay per flight, multiplied by the total number of flights, then by 50 percent attributed to ground delay, and then multiplied by the average airplane operating cost. When this total delay cost is divided by annual revenue the result is less than 2 percent for the small entity scheduled operators. The FAA believes that compliance cost less than two percent of annual revenue is not a significant economic impact.

A small number of unscheduled passenger flights planning to operate at EWR or JFK may have to operate at another New York City area airport, such as Teterboro, if they are unable to obtain a reservation. This change in plans may result in an additional ground transportation cost to or from the alternative airport. However, when considering the cost of travel by private jet compared to commercial passenger service, any additional ground transportation cost is not significant.

The FAA believes the nonscheduled cargo carriers would not have a significant economic impact, as their flights would continue and most of their flights occur at night and would not incur delay costs.

The FAA considered two alternatives to the proposed rule. The first alternative was to simply extend the existing Orders. This alternative was rejected because the FAA wanted to increase competition by making slots available to more operators. The FAA believes these operators are likely to be small entities. The second alternative was to remove the existing Orders. This alternative would result in unacceptable delay costs from the increase in operations.

Thus, the FAA certifies that this proposed rule would not have a significant economic impact on a substantial number of small entities.

C. International Trade Impact Assessment

The Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, so long as the standard has a legitimate domestic objective, such the protection of safety, and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. The FAA has assessed the potential effect of this proposed rule and determined that it would impose the same costs on domestic and international entities and thus has a neutral trade impact.

D. Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of $100 million or more (in 1995 dollars) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a ''significant regulatory action.'' The FAA currently uses an inflation-adjusted value of $143.1 million in lieu of $100 million. This proposed rule does not contain such a mandate; therefore, the requirements of Title II of the Act do not apply.

E. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. According to the 1995 amendments to the Paperwork Reduction Act (5 CFR 1320.8(b)(2)(vi)), an agency may not collect or sponsor the collection of information, nor may it impose an information collection requirement unless it displays a currently valid OMB control number.

This action contains the following proposed information collection requirements. As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), the FAA has submitted these proposed information collection amendments to OMB for its review.

Title: Slot Management and Transparency for LaGuardia Airport, John F. Kennedy International Airport, and Newark Liberty International Airport.

Summary: The FAA proposes to replace the current temporary Orders limiting operations with a permanent rule to address the issues of slot management at JFK, EWR, and LGA airports. The rule would limit scheduled and unscheduled operations. The FAA also proposes to adjust the usage requirements at the New York City area airports, establish a cap on unscheduled operations at JFK and EWR, and develop a secondary market for the exchange of slots. More information on the proposed requirements is detailed elsewhere in today's notice.

Use of: The information is reported to the FAA by carriers holding slots at JFK, EWR, or LGA. This information is used to allocate, track usage, withdraw, and confirm transfers of slots among the operators and facilitates the transfer of slots in the secondary market. The FAA uses this information in order to maintain an accurate accounting of operations to ensure compliance with the operations permitted under the rule and those actually conducted at the airports.

The FAA also uses this information to help provide access to unscheduled operators seeking access to these airports.

The slot exchange information posted on the FAA's electronic bulletin board is designed to enhance competition by making the availability of slots known to new entrant and incumbent carriers seeking to serve these markets.

Respondents: Respondents would be carriers with existing service at JFK, EWR, and LGA and new carriers initiating service at those airports in the future (by acquiring slots through slot allocation or the secondary market). Various carriers included in these totals have service at all three airports. There are 26 operating carriers at LGA, 46 at EWR, and 75 at JFK.

Respondents also would be unscheduled operators seeking to operate at LGA, JFK, or EWR. For the period from May through August 2010, there were approximately 50 unscheduled operators at LGA, 25 at JFK, and 30 at EWR that used the respective airports for more than five operations.

Frequency: The information collection requirements of the rule involve carriers notifying the FAA of their use of slots. Each carrier must notify the FAA of its: (1) Slot requests for the upcoming season; (2) slot usage (operations); (3) requests for approval of one-for-one slot trades; (4) requests for approval of slots transferred between carriers under the same marketing control; and (5) submissions of bulletin board notices of intent to transfer slots and requests for approval of secondary market transactions. The information collection

requirements also include reservation requests from unscheduled operators seeking access to the three airports during the slot-controlled hours.

Slot requests for the upcoming scheduling season would take place twice per year, before the winter and summer IATA scheduling seasons. Slot usage reporting would occur four times per year, with interim and final usage reports for each scheduling season. Requests for approval of one-for-one trades, request for approvals for slots transferred between carriers under the same marketing control, and submission of bulletin board notices regarding the intent to transfer slots would all be event-driven and would occur as frequently as secondary market transactions warrant. The FAA estimates there would be approximately 2,700 secondary market transactions per year for all three airports. Similarly, reservation requests by unscheduled operators would also be event-driven and could occur as frequently as the hourly limit at the respective airport,

Annual Burden Estimate: The annual reporting burden for each subsection of the rule is presented below. These burden estimates consist of costs that would result from the imposition of this proposed rule. These include: A reservation system for unscheduled operations at JFK, EWR, and LGA, schedule requests for the upcoming season, reporting and monitoring of the usage requirement, and the documentation required for the secondary market bulletin board at all three airports.

Reservation system: 51 unscheduled operations per day (34 at JFK, 17 at EWR). From prior experience with the reservation system at LGA the reporting time per reservation is two minutes. LGA would continue to have up to 48 unscheduled operations per day.

JFK:

- (34 reservations per day) * (2 minutes per reservation) * (365 days per year) = Total Annual Hourly Burden = 414 hours

EWR:

- (17 reservations per day) * (2 minutes per reservation) * (365 days per year)—Total Annual Hourly Burden = 207 hours

LGA:

- *Monday–Fridays:* (48 reservations per day) * (2 minutes per reservation) * (5 days per week) * (52 weeks per year) = Total Annual Hourly Burden = 416 hours
- *Sundays:* (30 reservations per day) * (2 minutes per reservation) * (1 day per week) * (52 weeks per year) = Total Annual Hourly Burden = 52 hours
- Total burden (Mon–Fri, Sunday): = Total Annual Hourly Burden = 468 hours

Schedule Requests for Upcoming Season: The FAA estimates it would take each carrier approximately two hours per scheduling season to submit the required schedule request reports. These reports would be submitted to the FAA on a semiannual basis, corresponding with the winter and summer IATA scheduling seasons. There are 26 operating carriers at LGA, 46 at EWR and 75 at JFK for a total of 147 operating carriers at the three NY airports.

(147 carriers) * (2 hours per report) * (2 scheduling seasons) = Total Annual Hourly Burden = 588 hours [83]

Usage requirement: To confirm adherence to the usage requirement, the FAA proposes to require carriers to submit an interim and final usage report to the FAA, for each scheduling season. The interim report would be due by September 1 for the summer scheduling season and February 1 for the winter scheduling season. The final report would be due no later than 30 days after the end of the respective scheduling season. The interim and final reports should detail slot usage for each day of the respective scheduling season and report the following information for each slot held: the slot number, airport code, time, and arrival or departure designation; the operating carrier; the date and scheduled time of the actual operation, the flight number, origin and destination, and aircraft type identifier; and whether the flight was actually conducted.

(147 carriers) * (1.5 hours per submittal) * (4 occurrences per year) = Total Annual Hourly Burden = 882 Hours

Secondary market transactions: Reporting costs for the secondary market would vary according to which of the five alternatives the FAA chooses. Alternative 1 is the least costly. This alternative is very similar to current practices for lease agreements. This alternative does not include the costs for a bulletin board, rather carriers would privately-negotiate buy, sell, lease, and trade transactions. Alternatives 2, 3, 4, and 5 alternatively propose a bulletin board to post information on buy, sell, trade, and lease transactions. Costs include the reporting by carriers to the FAA.

From prior experience, the FAA estimates that there would be approximately 2,700 slot transfer transactions yearly for all three airports. This amounts to roughly 575 transactions for EWR, 1480 for LGA, and 645 for JFK. Many transactions include trades among carriers with unified marketing control, and those carriers could use the simplified process under proposed § 93.46 to reduce the reporting burden. The proposed oversight of secondary market competition may require submission of additional information, but the DOT expects few transactions would be reviewed.

Secondary Market Trades (not via Bulletin Board):

- 2,700 (total transactions) − 75 (bulletin board transactions) = 2,625 secondary market trades

2,625 (secondary market trades) * 1 hour per transaction (or 30 minutes per party) = 2,625 hours

The FAA estimates that there would be roughly 25 notices per airport per year that would be posted to a bulletin board under alternatives 2, 3, and 4. The FAA estimates carriers would spend 2 hours preparing and submitting those notices. For alternative 4, the FAA estimates approximately 5 bids per notice for a total of 375 bids at the three airports per year. The FAA estimates that bidders would spend approximately 2 hours dealing with each bid.

Secondary Market Bulletin Board Transactions:

(125 bids per airport) * (2 hours to respond to bids) * (3 airports) = Total Annual Hourly Burden = 750 hours

Summary

The agency requests comments to—

(1) Evaluate whether the proposed information requirements are necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the agency's estimate of the burden;

(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.

Individuals and organizations may submit comments on the information collection requirement by March 9, 2015, and should direct them to the address listed in the **ADDRESSES** section of this document. Comments also should be submitted to the Office of

[83] This analysis does not assume that a carrier operating at more than one of the affected airports would recognize an economy of scale, thus reducing the estimated amount of time required to comply with the proposed requirements.

Information and Regulatory Affairs, OMB, via facsimile at (202) 395–6974, Attention: Desk Officer for FAA.

According to the 1995 amendments to the Paperwork Reduction Act (5 CFR 1320.8(b)(2)(vi)), an agency may not collect or sponsor the collection of information, nor may it impose an information collection requirement unless it displays a currently valid OMB control number. The OMB control number for this information collection will be published in the **Federal Register**, after the Office of Management and Budget approves it.

F. International Compatibility and Cooperation

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform to International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. The FAA has determined that there are no ICAO Standards and Recommended Practices that correspond to these proposed regulations.

Executive Order 13609, Promoting International Regulatory Cooperation, promotes international regulatory cooperation to meet shared challenges involving health, safety, labor, security, environmental, and other issues and to reduce, eliminate, or prevent unnecessary differences in regulatory requirements. The FAA has analyzed this action under the policies and agency responsibilities of Executive Order 13609, and has determined that this action would have no effect on international regulatory cooperation.

G. Environmental Analysis

FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*, identifies FAA actions that are categorically excluded from preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act in the absence of extraordinary circumstances. The FAA has determined this rulemaking action qualifies for the categorical exclusion identified in paragraph 312d ''Issuance of regulatory documents (*e.g.,* Notices of Proposed Rulemaking and issuance of Final Rules) covering administration or procedural requirements (Does not include Air Traffic procedures; specific Air Traffic procedures that are categorically excluded are identified under paragraph 311 of this Order.)''. It has been determined that no extraordinary circumstances exist that may cause a significant impact and therefore no further environmental review is required. A documented categorical exclusion has been filed in the docket.

V. Executive Order Determinations

A. Executive Orders 12866 and 13563

See the ''Regulatory Evaluation'' discussion in the ''Regulatory Notices and Analyses'' section elsewhere in this preamble.

B. Executive Order 13132, Federalism

The FAA has analyzed this proposed rule under the principles and criteria of Executive Order 13132, Federalism. The agency has determined that this action would not have a substantial direct effect on the States, or the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government, and, therefore, would not have Federalism implications.

C. Executive Order 13211, Regulations That Significantly Affect Energy Supply, Distribution, or Use

The FAA analyzed this proposed rule under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (May 18, 2001). The agency has determined that it would not be a ''significant energy action'' under the executive order and would not be likely to have a significant adverse effect on the supply, distribution, or use of energy.

VI. Additional Information

A. Comments Invited

The FAA invites interested persons to participate in this rulemaking by submitting written comments, data, or views. The agency also invites comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

The FAA will file in the docket all comments it receives, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, the FAA will consider all comments it receives on or before the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The agency may change this proposal in light of the comments it receives.

Proprietary or Confidential Business Information: Commenters should not file proprietary or confidential business information in the docket. Such information must be sent or delivered directly to the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this document, and marked as proprietary or confidential. If submitting information on a disk or CD–ROM, mark the outside of the disk or CD–ROM, and identify electronically within the disk or CD–ROM the specific information that is proprietary or confidential.

Under 14 CFR 11.35(b), if the FAA is aware of proprietary information filed with a comment, the agency does not place it in the docket. It is held in a separate file to which the public does not have access, and the FAA places a note in the docket that it has received it. If the FAA receives a request to examine or copy this information, it treats it as any other request under the Freedom of Information Act (5 U.S.C. 552). The FAA processes such a request under Department of Transportation procedures found in 49 CFR part 7.

B. Availability of Rulemaking Documents

An electronic copy of rulemaking documents may be obtained from the Internet by—

1. Searching the Federal eRulemaking Portal (*http://www.regulations.gov*);
2. Visiting the FAA's Regulations and Policies Web page at *http://www.faa.gov/regulations_policies* or
3. Accessing the Government Printing Office's Web page at *http://www.gpoaccess.gov/fr/index.html*.

Copies may also be obtained by sending a request to the Federal Aviation Administration, Office of Rulemaking, ARM–1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267–9680. Commenters must identify the docket or notice number of this rulemaking.

All documents the FAA considered in developing this proposed rule, including economic analyses and technical reports, may be accessed from the Internet through the Federal eRulemaking Portal referenced in item (1) above.

VII. The Proposed Amendment

List of Subjects in 14 CFR Part 93

Air traffic control, Airports, Navigation (air).

In consideration of the foregoing, the Federal Aviation Administration proposes to amend chapter I of title 14, Code of Federal Regulations as follows:

PART 93—SPECIAL AIR TRAFFIC RULES

■ 1. Revise the authority citation for part 93 to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40101, 40103, 40105, 40106, 40109, 40113, 41712, 44502, 44514, 44701, 44715, 44719, 46301; 15 U.S.C. 21.

■ 2. Amend part 93 by adding subpart C to read as follows:

Subpart C—LaGuardia Airport, John F. Kennedy International Airport, and Newark Liberty International Airport Slot Management Rules

Sec.

93.35 Applicability.
93.36 Definitions.
93.37 Slots for scheduled arrivals and departures.
93.39 Determination of historic precedence.
93.41 Allocation of slots.
93.43 Reversion, suspension, and withdrawal of slots.
93.44 Reporting requirements.
93.45 Transfer of slots.
93.46 Operation of slots by carriers under common marketing control.
93.47 Oversight of competitive issues.
93.49 Unscheduled operations.

Subpart C—John F. Kennedy International Airport, Newark Liberty International Airport, LaGuardia Airport Slot Management Rules

§ 93.35 Applicability.

(a) This subpart prescribes the air traffic rules for the arrival and departure of aircraft used for scheduled and unscheduled service, other than helicopters, at John F. Kennedy International Airport (JFK), Newark Liberty International Airport (EWR), and LaGuardia Airport (LGA).

(b) This subpart prescribes procedures for the assignment, transfer, lease, and withdrawal of slots issued by the FAA for scheduled operations at JFK, EWR, and LGA.

(c) This subpart applies to operations at:

(1) JFK, daily from 0600 through 2259, Eastern time;

(2) EWR, daily from 0600 through 2259, Eastern time; and

(3) LGA, Monday through Friday from 0600 through 2159, Eastern time, and Sunday from 1200 through 2159, Eastern time.

(d) A U.S. or, to the extent provided for by international agreements, foreign air carrier conducting operations solely under another carrier's marketing control with unified inventory control is not considered a separate carrier under this subpart.

§ 93.36 Definitions.

For purposes of this subpart:

Airport Reservation Office (ARO) is an operational unit of the FAA's David J. Hurley Air Traffic Control System Command Center. Its responsibilities include the administration of reservations for unscheduled operations at JFK, EWR, and LGA (excluding reservations for public charter operations allocated under § 93.49(d)).

Carrier is a U.S. or foreign air carrier with authority to conduct scheduled service or regularly conducted commercial service under parts 121, 129, or 135 of this chapter and the appropriate economic authority under 14 CFR chapter II and 49 U.S.C. chapter 401, 411, and 413.

Enhanced Computer Voice Reservation System (e-CVRS) is the FAA system used to make an arrival or departure reservation at JFK, EWR, or LGA. Reservations are made through a touch-tone telephone interface, an Internet Web interface, or directly through the ARO.

New entrant is a U.S. or foreign air carrier that holds or operates fewer than 20 slots on any day of the week, in any combination during the slot-controlled hours, at the respective airport, with that number including any slots that have been returned to the FAA after the slot return deadline or had slots revoked by the FAA for insufficient use, during the two corresponding scheduling seasons immediately preceding the scheduling season for which a slot allocation is conducted.

Public charter is defined in 14 CFR 380.2 as a one-way or roundtrip charter flight to be performed by one or more direct carriers that is arranged and sponsored by a charter operator.

Public charter operator is defined in 14 CFR 380.2 as a U.S. or foreign public charter operator.

Reservation is an authorization received from the FAA to operate an unscheduled arrival to or departure from JFK, EWR, or LGA for a specific 60-minute period during the slot-controlled hours.

Scheduled operation is the arrival or departure segment of any operation regularly conducted by a carrier between JFK, EWR, or LGA and another airport regularly served by the carrier.

Scheduled series of flights is at least 5 operations on the same day-of-week that represent substantially the same scheduled service. These operations generally would be at the same time within a specific 30-minute period, have the same flight number, serve the same market, and be distributed regularly throughout the season.

Slot is the operational authority assigned by the FAA to a carrier to conduct one scheduled operation or a series of scheduled operations, or a series of public charter operations that are operated more than three times per month, at JFK, EWR, or LGA on a particular day(s) of the week during a specific 30-minute period.

Slot-controlled hours are:

(1) For JFK, daily from 0600 through 2259, Eastern time;

(2) For EWR, daily from 0600 through 2259, Eastern time;

(3) For LGA, Monday through Friday from 0600 through 2159, Eastern time, and Sunday from 1200 through 2159, Eastern time.

Slot return deadline is the date by which a carrier must return a slot that it does not intend to operate. For the summer season, the deadline is January 15. For the winter season, the deadline is August 15.

Standalone slot transaction is a slot transfer by one carrier to another carrier (whether by sale, purchase, lease, or trade), akin to monetizing a slot. A standalone slot transaction would occur independently of any slot transfers that would result from a carrier merger or acquisition, defined as a transaction that combines the ownership/operation/control of two (or possibly more) carriers into a single entity. Specifically, slot divestitures undertaken in response to a DOJ investigation of an airline merger or acquisition under the Hart Scott Rodino Antitrust Improvements Act of 1976, 15 U.S.C. 18a, would not be considered standalone slot transactions.

Summer scheduling season begins on the last Sunday of March.

Unscheduled operation is an arrival or departure segment of any operation that is not regularly conducted by an air carrier, foreign air carrier, or other operator of an aircraft, excluding helicopters, between JFK, EWR, or LGA and another service point. Certain types of air carrier and foreign air carrier operations are considered unscheduled operations under this subpart including: on demand, public and other charter flights; hired aircraft services; extra sections of scheduled flights; ferry flights; and other non-passenger flights.

Winter scheduling season begins on the last Sunday of October.

§ 93.37 Slots for scheduled arrivals and departures.

(a) No person may operate certain public charters or any scheduled arrival into or departure out of JFK, EWR, or LGA during the slot-controlled hours

without first obtaining a slot under this subpart.

(b) Except as otherwise approved by the Administrator, the number of slots are limited to no more than 81 per hour at JFK, 81 per hour at EWR, and 71 per hour at LGA.

(1) At JFK, the number of slots may not exceed 44 in any 30-minute period, 81 in any 60-minute period, or a total of 1,205 between the slot-controlled hours of 0600 and 2159.

(2) At EWR, the number of slots may not exceed 44 in any 30-minute period, 81 in any 60-minute period, or a total of 1,205 between the slot-controlled hours of 0600 and 2159.

(3) At LGA, the number of slots may not exceed 38 in any 30-minute period, 71 in any 60-minute period, or a total of 1,136 during the slot-controlled hours.

(4) The FAA may adjust the number of arrival and departure slots in any period as necessary based on the actual or potential delays created by such number or other considerations relating to congestion, airfield capacity, and the air traffic control system.

§ 93.39 Determination of historic precedence.

(a) Any carrier holding operating authorizations (except for temporary, one-season-only, or other contingent operating authorizations) allocated under the Order limiting operations at JFK, the Order limiting operations at EWR, or the Order limiting operations at LGA, as evidenced by the FAA's records, will be assigned corresponding slots in 30-minute periods consistent with the limits under § 93.37(b) and the carrier's summer and winter season schedules as approved by the FAA. The carrier will have historic precedence, subject to the requirements of this section, for these slots for the subsequent corresponding season.

(b) To be eligible for historic precedence, an allocated slot must be used at least 80% of the time for which it is allocated during the scheduling period, subject to the following:

(1) Absent approval by the FAA, the same flight or series of flights must be reported as used for an allocated slot throughout the summer or winter season.

(2) For a series of flights operated on more than one day-of-week, each day-of-week is considered a separate series of flights.

(3) The FAA will treat as used a slot held by a carrier that ceases operations using that slot due to a strike.

(4) The FAA may waive these usage requirements in the event of a highly unusual and unpredictable condition which is beyond the carrier's control and which affects carrier operations for a period of five or more consecutive days.

(5) The FAA may waive these usage requirements for a period of up to 180 days if a slot is allocated to or otherwise acquired by a new entrant carrier.

(c) A slot allocated by the FAA under § 93.41(i) does not have historic precedence for the subsequent corresponding season.

§ 93.41 Allocation of slots.

(a) Requests for slots must be submitted to the FAA Slot Administration Office at the address and by the deadline published by the FAA in a **Federal Register** notice for each summer and winter scheduling season. The request must include the following minimum information:

(1) The requesting carrier must submit its entire schedule at JFK, EWR, and LGA, as appropriate, for the particular season, noting which requests, if any, are in addition to, or changes from, the previous corresponding season at the respective airport.

(2) Each slot request must indicate the effective dates of the request, proposed days of operation, proposed time of operation (indicated as either UTC or local time), whether the operation is for an arrival or departure, flight number, and aircraft type.

(b) The FAA first will accommodate requests for slots for which the carrier has historic precedence and are for the same time period as the previous corresponding season.

(c) After accommodating historic precedence slots, the remaining slots available for allocation will be divided into two pools:

(1) Not less than 50% of the available slots will be for new entrants that have not returned slots to the FAA after the slot return deadline, or had slots revoked by the FAA for insufficient use, during the two corresponding scheduling seasons immediately preceding the scheduling season for which a slot allocation is being conducted; and

(2) The remainder will be for any carrier.

(d) Within each pool, the FAA first will accommodate carrier requests to retime slots for operational reasons.

(e) Within each pool, the FAA next will accommodate carrier requests to extend an allocated seasonal slot to year-round service.

(f) Within each pool, the FAA then will accommodate any remaining carrier requests. If all requests cannot be accommodated, the FAA will consider the following factors:

(1) The effective period of operation;

(2) The extent and regularity of intended slot use with priority given to year-round service;

(3) Schedule constraints of carriers requesting slots; and

(4) The operational impacts of scheduled demand, including the distribution of flights and the mix of arrivals and departures.

(g) If an available slot cannot be allocated according to the factors in paragraph (f) of this section, the FAA may consider the following factors:

(1) Airport facilities constraints including gates, terminals, parking, customs and immigration, and curfews; and

(2) Competition and impacts to markets served.

(h) A carrier allocated a slot under paragraph (f) of this section must operate that slot and may not transfer it for two corresponding seasons, except that carrier may engage in a one-for-one trade for operational reasons.

(i) Notwithstanding paragraphs (a) through (g) of this section, the FAA may assign an available slot to a carrier on a non-permanent, first-come, first-served basis subject to permanent assignment under this subpart. Any remaining unassigned slots may be made available to unscheduled operations on a non-permanent basis according to the procedures in § 93.49.

(j) The FAA will assign each slot a designation that consists of the airport code, slot number, 30-minute time period, frequency, summer or winter season, and arrival or departure designation.

(k) If directed by the Office of the Secretary of Transportation, the FAA will not apply the provisions of this section to any foreign air carrier or commuter operator of a country that provides slots to U.S. air carriers and commuter operators on a basis more restrictive than provided under this subpart.

§ 93.43 Reversion, suspension, and withdrawal of slots.

(a) Absent prior approval by the FAA and except as otherwise provided in this subpart, a carrier that ceases all operations at an airport may transfer, sell, or lease any slots to another carrier as provided in § 93.45, but the carrier may not hold any slots for a period exceeding 2 years after the season in which it ceases all operations at the respective airport.

(b) If a carrier's DOT economic authority or FAA operating certificate is suspended, surrendered, or revoked, any slots held by that carrier revert to the FAA. If another carrier is operating

the slots under an agreement with the holding carrier, the FAA may allocate those slots on a temporary basis not exceeding the duration of the agreement.

(c) The FAA may retime or temporarily suspend slots at any time to fulfill operational needs. The FAA will provide a 45-day notice, unless shorter notice is required for operational needs, to an affected carrier prior to temporarily suspending a slot that specifies the date by which operations using that slot must cease. The FAA will determine the suspended slots by lottery of slot holdings in the particular time period during which slots are being suspended. The FAA will reassign a suspended slot, if at all, only to the carrier from which it was suspended, provided the carrier continues to conduct scheduled operations at the respective airport.

(d) If the FAA determines to reduce the number of allocated slots following a determination of decreased airport capacity, it may permanently withdraw slots to reach the accepted limit. The FAA will determine the withdrawn slots by lottery of slot holdings in the particular time period during which slots are being withdrawn. Following withdrawal, those slots would cease to exist.

(e) The FAA will not retime, suspend, or withdraw slots, under this section, of a carrier that holds fewer than 20 slots on any day of the week at the respective airport.

§ 93.44 Reporting requirements.

(a)(1) No later than September 1 for the summer scheduling season and February 1 for the winter scheduling season, each carrier holding a slot must submit an interim report of slot usage for each day of the applicable scheduling season.

(2) No later than 30 days after the last day of the applicable scheduling season, each carrier must submit a final report of the completed operations for each day of the entire scheduling season.

(b) The report required under paragraph (a) this section must contain, in a format acceptable to the FAA, the following information for each slot:

(1) The slot number, airport code, time, and arrival or departure designation;

(2) The operating carrier;

(3) The date and scheduled time of each of the operations conducted with the slot, including the flight number, origin and destination, and aircraft type identifier; and

(4) Whether the flight was actually conducted.

(c) The FAA may withdraw the slots of any carrier that does not meet the reporting requirements of paragraph (a) of this section.

§ 93.45 Transfer of slots. [ALTERNATIVE ONE]

(a) Except as otherwise provided in this subpart, a carrier may buy, sell, or lease a slot to another carrier for any consideration and for any time period, and a carrier may trade a slot with another carrier for a slot at any U.S. or foreign slot-controlled airport.

(b) Requests for FAA approval of transfers under this section must be submitted in writing by all parties to the transaction to the FAA Slot Administration Office in a manner acceptable to the Administrator. Requests must provide the names of the transferor and recipient; business address and telephone number of the person representing the transferor and recipient; whether the slot is to be used for an arrival or departure; and the slot designation of the slot as described in § 93.41(j).

(c) The request for FAA approval also must include the final terms of the transaction including:

(1) The names of all parties to the transaction;

(2) The consideration offered by each party;

(3) The effective date of the transfer; and

(4) The length of the lease, if applicable.

(d) Prior to approving the transfer, the FAA will confirm the transferred slots come from the transferor's FAA-approved slot holdings and that no transfer limitations apply.

(e) The Secretary may review the final terms of the transaction for any anti-competitive effects or adverse public interest effects under § 93.47. The FAA may not approve the transfer until the Secretary notifies the FAA of the Secretary's approval or non-objection or the 14-day notice period under § 93.47(b) elapses.

(f) The slot may not be used by the transferee until the conditions of this section have been met, and the FAA provides notice of its approval of the transfer.

§ 93.45 Transfer of slots. [ALTERNATIVE TWO]

(a) Except as otherwise provided in this subpart, a carrier may buy, sell, or lease a slot to another carrier for any consideration and for any time period, and a carrier may trade a slot with another carrier for a slot at any U.S. or foreign slot-controlled airport.

(b) Except as permitted under paragraphs (c), (d), (e), (f), and (g) of this section, a carrier must provide notice to the FAA four months before its intended transaction date of its intent to transfer a slot prior to negotiating with another carrier. The notice of intent to transfer must include the slot number and time, effective date of the transfer, and, if applicable, the duration of the lease. The FAA will post a notice of the offer to transfer the slot and relevant details on the FAA Web site at *http://www.faa.gov*. The notice will state the opening and closing dates for bids and the contact information of the transferring carrier for bid submission. The offering carrier may accept any bid and negotiate the final terms of the transfer, but it may consider only bids submitted during the bidding period.

(c) A carrier may trade a slot with another carrier on a one-for-one basis without providing notice to the FAA under paragraph (b) of this section provided the request for FAA approval also includes a certification by both carriers that no consideration or promise of consideration was provided by either party to the trade.

(d) A carrier may lease a slot to another carrier without notice to the FAA under paragraph (b) of this section provided the lease is effective for no longer than two scheduling seasons.

(e) Carriers with agreements where one carrier operates solely under the other's marketing control may transfer a slot with another party subject to that agreement without notice to the FAA under paragraph (b) of this section provided the request for FAA approval also includes a certification of that agreement by both carriers.

(f) Prior to [90 DAYS AFTER EFFECTIVE DATE], a carrier may buy, sell, or trade with another carrier a slot that was subject to a lease or short-term trade under the Order limiting operations at JFK, Order limiting operations at EWR, or Order limiting operations at LGA without notice to the FAA under paragraph (b) of this section.

(g) Requests for FAA approval for transfers under this section must be submitted in writing by all parties to the transaction to the FAA Slot Administration Office in a manner acceptable to the Administrator. Requests must provide the names of the transferor and recipient; business address and telephone number of the person representing the transferor and recipient; whether the slot is to be used for an arrival or departure; and the slot designation of the slot as described in § 93.41(j).

(h) The request for FAA approval also must include the final terms of the transaction including, as applicable:

(1) The names of all parties to the transaction;

(2) A description of the transaction;

(3) The consideration offered by each party;

(4) The names of all bidders and consideration offered by each bidder;

(5) The effective date of the transfer; and

(6) The length of the lease.

(i) Prior to approving the transfer, the FAA will confirm the relevant slots are part of the carrier's FAA-approved slot holdings and that no transfer limitations apply.

(j) The Secretary may review the final terms of the transaction for any anti-competitive effects or adverse public interest effects under § 93.47. The FAA may not approve the transfer until the Secretary notifies the FAA of the Secretary's approval or non-objection or the 14-day notice period under § 93.47(b) elapses.

(k) The slot may not be used by the transferee until the conditions of this section have been met, and the FAA provides notice of its approval of the transfer.

§ 93.45 Transfer of slots. [ALTERNATIVE THREE]

(a) Except as otherwise provided in this subpart, a carrier may buy, sell, or lease a slot to another carrier for any consideration and for any time period, and a carrier may trade a slot with another carrier for a slot at any U.S. or foreign slot-controlled airport.

(b) Except as permitted under paragraphs (c), (d), (e), and (f) of this section, a carrier may negotiate tentative terms of a transfer without providing advance notice to the FAA. A carrier must provide notice to the FAA four months before its intended transaction date of these tentative transfer terms that includes the slot number and time, effective date of the transfer, consideration offered, and, if applicable, the duration of the lease. The FAA will post a notice of the relevant details of the transfer on the FAA Web site at *http://www.faa.gov*. The notice will state the opening and closing dates for bids and the contact information of the transferring carrier(s) for bid submission. The offering carrier may accept the tentative transaction or any counterbid and then negotiate the final terms of the transfer, but it may consider only bids submitted during the bidding period.

(c) A carrier may trade a slot with another carrier on a one-for-one basis without providing notice to the FAA under paragraph (b) of this section provided the request for FAA approval also includes a certification by both carriers that no consideration or promise of consideration was provided by either party to the trade.

(d) A carrier may lease a slot to another carrier without notice to the FAA under paragraph (b) of this section provided the lease is effective for no longer than two scheduling seasons.

(e) Carriers with agreements where one carrier operates solely under the other's marketing control may transfer a slot with another party subject to that agreement without notice to the FAA under paragraph (b) of this section provided the request for FAA approval also includes a certification of that agreement by both carriers.

(f) Prior to [90 DAYS AFTER EFFECTIVE DATE], a carrier may buy, sell, or trade with another carrier a slot that was subject to a lease or short-term trade under the Order limiting operations at JFK, Order limiting operations at EWR, or Order limiting operations at LGA without notice to the FAA under paragraph (b) of this section.

(g) Requests for FAA approval for transfers under this section must be submitted in writing by all parties to the transaction to the FAA Slot Administration Office in a manner acceptable to the Administrator. Requests must provide the names of the transferor and recipient; business address and telephone number of the person representing the transferor and recipient; whether the slot is to be used for an arrival or departure; and the slot designation of the slot as described in § 93.41(j).

(h) The request for FAA approval also must include the final terms of the transaction including:

(1) The names of all parties to the transaction;

(2) The consideration offered by each party;

(3) The names of all bidders and consideration offered by each bidder, if applicable;

(4) The effective date of the transfer; and

(5) The length of the lease, if applicable.

(i) Prior to approving the transfer, the FAA will confirm the transferred slots come from the transferor's FAA-approved slot holdings and that no transfer limitations apply.

(j) The Secretary may review the final terms of the transaction for any anti-competitive effects or adverse public interest effects under § 93.47. The FAA may not approve the transfer until the Secretary notifies the FAA of the Secretary's approval or non-objection or the 14-day notice period under § 93.47(b) elapses.

(k) The slot may not be used by the transferee until the conditions of this section have been met, and the FAA provides notice of its approval of the transfer.

§ 93.45 Transfer of slots. [ALTERNATIVE FOUR]

(a) Except as otherwise provided in this subpart, a carrier may buy, sell, or lease a slot to another carrier for any consideration and for any time period, and a carrier may trade a slot with another carrier for a slot at any U.S. or foreign slot-controlled airport.

(b) Except as permitted under paragraphs (c), (d), (e), and (f) of this section, a carrier must provide notice to the FAA four months before its intended transaction date of its intent to transfer a slot prior to negotiating with another carrier. The notice of intent to transfer must include the slot number and time, effective date of the transfer, and, if applicable, the duration of the lease. The FAA will post a notice of the offer to transfer the slot and relevant details on the FAA Web site at *http://www.faa.gov*. The notice will state the opening and closing dates for bids and the contact information of the transferring carrier. Bids must be submitted through the bulletin board for public posting. The offering carrier may accept any bid and negotiate the final terms of the transfer, but it may consider only bids submitted during the bidding period.

(c) A carrier may trade a slot with another carrier on a one-for-one basis without providing notice to the FAA under paragraph (b) of this section provided the request for FAA approval also includes a certification by both carriers that no consideration or promise of consideration was provided by either party to the trade.

(d) A carrier may lease a slot to another carrier without notice to the FAA under paragraph (b) of this section provided the lease is effective for no longer than two scheduling seasons.

(e) Carriers with agreements where one carrier operates solely under the other's marketing control may transfer a slot with another party subject to that agreement without notice to the FAA under paragraph (b) of this section provided the request for FAA approval also includes a certification of that agreement by both carriers.

(f) Prior to [90 DAYS AFTER EFFECTIVE DATE], a carrier may buy, sell, or trade with another carrier a slot that was subject to a lease or short-term trade under the Order limiting operations at JFK, Order limiting operations at EWR, or Order limiting

operations at LGA without notice to the FAA under paragraph (b) of this section.

(g) Requests for FAA approval for transfers under this section must be submitted in writing by all parties to the transaction to the FAA Slot Administration Office in a manner acceptable to the Administrator. Requests must provide the names of the transferor and recipient; business address and telephone number of the person representing the transferor and recipient; whether the slot is to be used for an arrival or departure; and the slot designation of the slot as described in § 93.41(j).

(h) The request for FAA approval also must include the final terms of the transaction including:

(1) The names of all parties to the transaction;

(2) The consideration offered by each party;

(3) The names of all bidders and consideration offered by each bidder, if applicable;

(4) The effective date of the transfer; and

(5) The length of the lease, if applicable.

(i) Prior to approving the transfer, the FAA will confirm the transferred slots come from the transferor's FAA-approved slot holdings and that no transfer limitations apply.

(j) The Secretary may review the final terms of the transaction for any anti-competitive effects or adverse public interest effects under § 93.47. The FAA may not approve the transfer until the Secretary notifies the FAA of the Secretary's approval or non-objection or the 14-day notice period under § 93.47(b) elapses.

(k) The slot may not be used by the transferee until the conditions of this section have been met, and the FAA provides notice of its approval of the transfer.

§ 93.45 Transfer of slots. [ALTERNATIVE FIVE]

(a) Except as otherwise provided in this subpart, a carrier may buy, sell, or lease a slot to another carrier for currency only and for any time period, and a carrier may trade a slot with another carrier for a slot at any U.S. or foreign slot-controlled airport.

(b) Except as permitted under paragraphs (c), (d), (e), and (f) of this section, a carrier must provide notice to the FAA four months before its intended transaction date of its intent to transfer a slot. The notice of intent to transfer must include the slot number and time, effective date of the transfer, and, if applicable, the duration of the lease. The FAA will post a notice of the offer to transfer the slot and relevant details on the FAA Web site at *http://www.faa.gov*. The notice will state the opening and closing dates for bids but not the identity of the transferring carrier. Bids must be submitted through the bulletin board for public posting. The identity of the bidders may not be disclosed during the bidding period. The offering carrier must accept the highest bid submitted during the bidding period.

(c) A carrier may trade a slot with another carrier on a one-for-one basis without providing notice to the FAA under paragraph (b) of this section provided the request for FAA approval also includes a certification by both carriers that no consideration or promise of consideration was provided by either party to the trade.

(d) A carrier may lease a slot to another carrier without notice to the FAA under paragraph (b) of this section provided the lease is effective for no longer than two scheduling seasons.

(e) Carriers with agreements where one carrier operates solely under the other's marketing control may transfer a slot with another party subject to that agreement without notice to the FAA under paragraph (b) of this section provided the request for FAA approval also includes a certification of that agreement by both carriers.

(f) Prior to [90 DAYS AFTER EFFECTIVE DATE], a carrier may buy, sell, or trade with another carrier a slot that was subject to a lease or short-term trade under the Order limiting operations at JFK, Order limiting operations at EWR, or Order limiting operations at LGA without notice to the FAA under paragraph (b) of this section.

(g) Requests for FAA approval for transfers under this section must be submitted in writing by all parties to the transaction to the FAA Slot Administration Office in a manner acceptable to the Administrator. Requests must provide the names of the transferor and recipient; business address and telephone number of the person representing the transferor and recipient; whether the slot is to be used for an arrival or departure; and the slot designation of the slot as described in § 93.41(j).

(h) The request for FAA approval also must include the final terms of the transaction including:

(1) The names of all parties to the transaction;

(2) The price offered by each bidder;

(3) The effective date of the transfer; and

(4) The length of the lease, if applicable.

(i) Prior to approving the transfer, the FAA will confirm the transferred slots come from the transferor's FAA-approved slot holdings and that no transfer limitations apply.

(j) The Secretary may review the final terms of the transaction for any anti-competitive effects or public interest effects under § 93.47. The FAA may not approve the transfer until the Secretary notifies the FAA of the Secretary's approval or non-objection or the 14-day notice period under § 93.47(b) elapses.

(k) The slot may not be used by the transferee until the conditions of this section have been met, and the FAA provides notice of its approval of the transfer.

§ 93.46 Operation of slots by carriers under common marketing control.

A carrier that operates solely under the marketing control of another carrier may operate the other carrier's slots without transferring the slots provided that:

(a) The marketing carrier is responsible for ensuring that there are slots assigned for the planned operations of the carrier under its marketing control. The marketing carrier must submit information in advance to the FAA Slot Administration Office, at least on a seasonal basis, detailing the airport, carrier, marketed and operational flight number ranges, and effective dates.

(b) The marketing carrier must submit changes throughout the reporting period.

(c) The marketing carrier is responsible for submitting the usage reports required under § 93.44.

§ 93.47 Oversight of public interest and competitive issues.

(a) The Secretary may review a standalone slot transfer transaction conducted under § 93.45, to determine adverse public interest and/or anti-competitive effects, as described in 49 U.S.C. 40101(a). Small transactions of fewer than 8 slots in total or transfers extending for 2 or fewer seasons) would not be subject to review under this section. However, the Secretary may consider multiple transactions within a three-year period as constituting a single aggregate transaction, including transactions that involve the transfer of slots to carriers under the marketing or operational control of a single entity.

(b) The following procedures are used when conducting a review for public interest or competitive factors under paragraph (a) of this section.

(1) Within 14 days of receiving from the FAA the final terms of a transaction under § 93.45, the Secretary will notify

the parties of the Secretary's determination of whether to request and evaluate additional information. If the Secretary decides to request and evaluate additional information, the DOT will request the additional information.

(2) After receiving notice of a slot transfer under § 93.45, the FAA may not approve the transaction without further notice from the Secretary.

(3) If the Secretary does not notify the parties and the FAA within 14 days of the intent to request and evaluate additional information, the FAA may approve the transaction.

(c) The procedures for objections to public disclosure of information at 14 CFR 302.12 do not apply to information submitted to the DOT under paragraphs (a) or (b) of this section. Any person seeking confidential treatment for information submitted to the DOT under paragraphs (a) or (b) of this section must clearly designate the information for which confidential treatment is sought by including appropriate markings on each page of the submission. The DOT will not disclose such designated information to the public, except as required under the Freedom of Information Act, 5 U.S.C. 552, and pursuant to the procedures in 49 CFR part 7.

(d) Nothing in this section limits the authority of the Secretary to investigate and prohibit any unfair or deceptive practice or an unfair method of competition, as provided by 49 U.S.C. 41712.

§ 93.49 Unscheduled operations.

(a) During the slot-controlled hours, no person may operate an aircraft other than a helicopter to or from JFK, EWR, or LGA unless he or she has received, for that unscheduled operation, a reservation that is assigned by the ARO or, in the case of certain public charters, in accordance with the procedures in paragraph (d) of this section. The FAA will accept requests for reservations through the e-CVRS beginning 72 hours prior to the proposed time of arrival to or departure from the respective airport. Additional information on procedures for obtaining a reservation is available on the Internet at *http://www.fly.faa.gov/ecvrs*.

(b) Reservations, including those assigned to certain public charter operations under paragraph (d) of this section, will be available to be assigned by the ARO on a 60-minute basis as follows:

(1) At JFK, two reservations per hour during the slot-controlled hours.

(2) At EWR, one reservation per hour during the slot-controlled hours.

(3) At LGA, three reservations per hour during the slot-controlled hours.

(c) The ARO will receive and process all reservation requests for unscheduled arrivals and departures and assign reservations on a first-come, first-served basis determined by the time the request is received by the ARO.

(d) One reservation per hour at LGA and two reservations per day at JFK and EWR will be available for assignment to certain public charter operations prior to the 72-hour reservation window in paragraph (a) of this section.

(1) A public charter operator may request a reservation up to six months in advance of the date of the flight operation for a planned individual operation or a series of operations occurring fewer than 3 times per month. Reservation requests must be submitted to the Federal Aviation Administration, Slot Administration Office, AGC–200, 800 Independence Avenue SW., Washington, DC 20591. Requests may be made via facsimile at (202) 267–7277 or by email at *7-awa-slotadmin@faa.gov*.

(2) The public charter operator must certify that its prospectus has been accepted by the Department of Transportation in accordance with 14 CFR part 380.

(3) The public charter operator must identify the call sign/flight number or aircraft registration number of the direct air carrier; the date and time of the proposed operation; the airport served immediately prior to or after JFK, EWR, or LGA; aircraft type; and the nature of the operation (*e.g.,* ferry or passenger). Any changes to an approved reservation must be approved in advance by the Slot Administration Office.

(4) A series of operations occurring more than 3 times per month is required to have a slot allocated by the FAA as provided in § 93.37.

(5) If all reservations available under paragraph (d)(1) of this section have been assigned, the public charter operator may request a reservation under paragraph (a) of this section.

(e) The filing of a request for a reservation does not constitute the filing of an IFR flight plan as required by regulation. The IFR flight plan may be filed only after the reservation is obtained, must include the reservation number in the ''Remarks'' section, and must be filed in accordance with FAA regulations and procedures.

(f) Air Traffic Control will accommodate declared emergencies without regard to reservations. Non-emergency national security, law enforcement, military, public aircraft, or other similar mission-critical operations may be accommodated above the reservation limits with the prior approval of the Vice President, System Operations Services, Air Traffic Organization. Procedures for obtaining the appropriate waiver will be available on the Internet at *http://www.fly.faa.gov/ecvrs*.

(g) Notwithstanding the limits in paragraph (b) of this section, if conditions are favorable, and significant delay is unlikely, the FAA may determine that additional reservations may be accommodated for a specific time period. Unused slots also may be made available temporarily for unscheduled operations. Reservations for additional operations must be obtained through the ARO.

(h) No reservations may be bought, sold, or leased.

(i) A Reservation must be canceled if it will not be used as assigned.

■ 3. Amend § 93.123 to revise paragraphs (a), (b)(4) to read as follows:

§ 93.123 High density traffic airports.

(a) Each of the following airports is designated as a high density traffic airport and, except as provided in § 93.129 and paragraph (b) of this section, or unless otherwise authorized by ATC, is limited to the hourly number of allocated IFR operations (takeoffs and landings) that may be reserved for the specified classes of users for that airport:

IFR Operations per Hour

Class of user	Ronald Reagan Washington National Airport
Air carriers	37
Commuters	11
Other	12

(b) * * *

(4) The allocation of IFR reservations for air carriers except commuters at Ronald Reagan Washington National Airport does not include extra sections of scheduled flights. The allocation of IFR reservations for scheduled commuters at Ronald Reagan Washington National Airport does not include extra sections of scheduled flights. These flights may be conducted without regard to the limitation upon the hourly IFR reservations at those airports.

* * * * *

§ 93.133 [Removed and Reserved]

■ 4. Remove and reserve § 93.133.

■ 5. Amend § 93.211 to revise paragraph (a) to read as follows:

§ 93.211 Applicability.

(a) This subpart prescribes rules applicable to the allocation and withdrawal of IFR operational authority (takeoffs and landings) to individual air carriers and commuter operators at the High Density Traffic Airports identified in subpart K of this part.

* * * * *

§ 93.215, 93.217 and 93.218 [Removed and Reserved]

■ 6. Remove and reserve §§ 93.215, 93.217, and 93.218.

■ 7. Amend § 93.221 to remove paragraph (e).

■ 8. Amend § 93.223 to revise paragraph (b) to read as follows:

§ 93.223 Slot withdrawal.

(b) Separate slot pools shall be established for air carriers and commuter operators at each airport. The FAA shall assign, by random lottery, withdrawal priority numbers for the recall priority of slots at each airport. Each additional permanent slot, if any, will be assigned the next higher number for air carrier or commuter slots, as appropriate, at each airport. Each slot shall be assigned a designation consisting of the applicable withdrawal priority number; the airport code; a code indicating whether the slot is an air carrier or commuter operator slot; and the time period of the slot. The designation shall also indicate, as appropriate, if the slot is daily or for certain days of the week only; is limited to arrivals or departures; and is allocated for international operations or for EAS purposes.

* * * * *

■ 9. Amend § 93.226 to revise paragraph (a)(3) introductory text to read as follows:

§ 93.226 Allocation of slots in low-demand periods.

(a) * * *

(3) For Ronald Reagan Washington National Airport:

* * * * *

Issued in Washington, DC, on December 19, 2014.

Susan L. Kurland,

Assistant Secretary for Aviation and International Affairs.

Richard M. Swayze,

Assistant Administrator for Policy, International Affairs, and Environment.

[FR Doc. 2014–30378 Filed 1–6–15; 11:15 am]

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Part VI

Department of Transportation

Federal Aviation Administration

14 CFR Parts 5 and 119

Safety Management Systems for Domestic, Flag, and Supplemental Operations Certificate Holders; Final Rule

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 5 and 119

[Docket No. FAA–2009–0671; Amendment Nos. 5–1 and 119–17]

RIN 2120–AJ86

Safety Management Systems for Domestic, Flag, and Supplemental Operations Certificate Holders

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: This final rule requires each air carrier operating under 14 CFR part 121 to develop and implement a safety management system (SMS) to improve the safety of its aviation-related activities. SMS is a comprehensive, process-oriented approach to managing safety throughout an organization. SMS includes an organization-wide safety policy; formal methods for identifying hazards, controlling, and continually assessing risk and safety performance; and promotion of a safety culture. SMS stresses not only compliance with technical standards but also increased emphasis on the overall safety performance of the organization.

DATES: This final rule becomes effective March 9, 2015.

FOR FURTHER INFORMATION CONTACT: Scott Van Buren, Chief System Engineer for Aviation Safety, Office of Accident Investigation and Prevention (AVP), Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 494–8417; facsimile: (202) 267–3992; email: *scott.vanburen@faa.gov.* For legal questions, contact Alex Zektser, Regulations Division, Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267–3073; facsimile: (202) 267–7971; email: *alex.zektser@faa.gov.*

SUPPLEMENTARY INFORMATION:

I. Authority for This Rulemaking

The Federal Aviation Administration's (FAA) authority to issue rules on aviation safety is found in Title 49 of the United States Code. This rulemaking is promulgated under the authority described in 49 U.S.C. 106(f), which establishes the authority of the Administrator to promulgate regulations and rules and 49 U.S.C. 44701(a)(5), which requires the Administrator to promulgate regulations and minimum standards for other practices, methods, and procedures necessary for safety in air commerce and national security.

In addition, the Airline Safety and Federal Aviation Administration Extension Act of 2010 (the Act), Public Law 111–216, sec. 215 (August 1, 2010), required the FAA to conduct rulemaking to ''require all 14 CFR part 121 air carriers to implement a safety management system.'' The Act required the FAA to issue this final rule within 24 months of the passing of the Act (July 30, 2012).

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I. Overview of the Final Rule

This final rule requires air carriers authorized to conduct operations under 14 Code of Federal Regulations (CFR) part 121 (part 121) to develop and implement a safety management system (SMS) to improve the safety of their aviation-related activities. SMS includes an organization-wide safety policy; formal methods for identifying hazards, controlling, and continually assessing risk; and promotion of a safety culture. When systematically applied, SMS provides a set of decision-making tools that air carriers can use to improve safety. SMS improves safety by addressing underlying organizational issues that may result in accidents or incidents.

This final rule is part of the FAA's efforts to continuously improve safety in air transportation by filling gaps through improved management practices. SMS's proactive emphasis on hazard identification and mitigation, and on communication of safety issues, will provide air carriers with robust tools to improve safety. Congress, in the Airline Safety and Federal Aviation Administration Extension Act of 2010 (Pub. L. 111–216, August 1, 2010), directed the FAA to issue a notice of proposed rulemaking within 90 days of enactment, and a final SMS rule by July 30, 2012. In addition, the National Transportation Safety Board (NTSB) has recommended the FAA pursue rulemaking to require all part 121 operators to implement an SMS. Further, the International Civil Aviation Organization (ICAO), in its March 2006 amendments to Annex 6 part I, which addresses operation of airplanes in international commercial air transport, established a standard for member states to mandate that each air carrier establish an SMS. This regulation will comply with the statutory requirement, fully address the NTSB recommendation, and harmonize U.S. requirements with ICAO standards for air carriers operating under part 121.

While the commercial air carrier accident rate in the United States has decreased substantially over the past 10 years, the FAA has identified a recent trend involving hazards that were revealed during accident investigations. The FAA's Office of Accident Investigation and Prevention identified 123 accidents involving part 121 air carriers from fiscal year (FY) 2001 through FY 2010 for which identified causal factors could have been mitigated if air carriers had implemented an SMS to identify hazards in their operations and developed methods to control the risk.[1] This type of approach allows air carriers to anticipate and mitigate the likely causes of potential accidents. This is a significant improvement over current ''reactive'' safety action emphasis, which focuses on discovering and mitigating the cause of an accident only after that accident has occurred. In order to bring about this change in accident mitigation, as well as the other reasons discussed throughout this document, the FAA is requiring part 121

[1] Initially, the analysis identified 172 accidents, but this number was based on comments to the notice of proposed rulemaking. The accident analysis is discussed further in the Final Regulatory Evaluation.

air carriers to develop and implement an SMS.

The requirements in this rule function as follows. Air carriers authorized to conduct operations under part 121 must develop and implement an SMS within 3 years of the effective date of the final rule. To demonstrate that the air carrier's SMS will be fully implemented by the end of this three-year period, the air carrier will be required to submit an implementation plan within 6 months of the effective date of the final rule. The implementation plan should include any existing programs, policies or procedures the air carrier intends to include in its SMS, such as continuing analysis and surveillance systems, aspects of quality management systems, and employee reporting systems. This implementation plan must be approved by the FAA within 12 months of the effective date of the final rule.

The air carrier's SMS must contain the following four major components: Safety policy, safety risk management, safety assurance, and safety promotion. To satisfy the safety policy component, the air carrier must establish a policy which, among other things, defines the air carrier's safety objectives and commitment toward achieving those objectives. The air carrier will also be required to designate an accountable executive who is ultimately responsible for the safety performance of its operations, as well as sufficient management personnel who will be responsible for the coordination, implementation, and maintenance of the SMS, as well as integration of SMS processes across the air carrier.

Under safety risk management, air carriers must develop processes to analyze existing and potential systems and use the resulting system analyses to identify hazards that may impact the air carrier's aviation operations.[2] Air carriers will then analyze the risk of a consequence arising from the hazard occurring and determine if the associated safety risk is acceptable. If it is not acceptable, the air carrier must develop risk controls for implementation.

Through safety assurance, the air carrier will develop and implement processes to monitor the safety performance of its aviation operations. The processes must include means to monitor and audit operational processes, investigate incidents and accidents, and allow for confidential employee reporting of hazards as well as proposing solutions for safety improvement. The air carrier will also conduct evaluations regarding its safety performance to review the effectiveness of risk controls that are implemented as well as to identify any changes in the operational environment that may introduce new hazards.

Under safety promotion, air carriers will be required to train their employees (including managers) and develop the tools to communicate necessary safety information. Involvement of the air carriers' employees is essential to the success of its SMS. The employees must be properly informed of their responsibilities and trained regarding their duties relevant to the safety performance of the air carrier. In addition, they must be made aware of necessary safety information resulting from the various SMS analyses.

II. Summary of the Costs and Benefits of the Final Rule

This rule requires part 121 air carriers (domestic, flag, and supplemental operations) to establish an SMS. SMS is a tool designed to help air carriers effectively integrate formal risk control procedures into normal operational practices to improve safety for all part 121 air carriers. It is expected that the requirements of the rule will help airlines to identify safety problems, and if airlines take steps to mitigate these problems it is estimated that the benefits from that mitigation could be between $205.0 and $472.3 million over 10 years ($104.9 to $241.9 million present value at 7 percent discount rate). Costs of the rule's provisions (excluding any mitigation costs, which have not been estimated) are estimated to be $224.3 million ($135.1 million present value at 7 percent discount rate) over 10 years.

ESTIMATED COSTS AND BENEFITS FOR ALL PART 121 CARRIERS—2014–2023

[Millions of 2010 dollars * (discounted at 7% discount rate)]

Costs	Rule Implementation Costs: $135.1.
	Mitigation Costs: Not quantified, estimates not included.
Benefits from Provisions of the Rule and any Consequent Safety Mitigation Actions **	$104.9–$241.9.

* Table values have been rounded. Totals may not add due to rounding.

** Given the range of mitigation actions possible, it is difficult to quantify potential benefits. This range reflects the potential benefits resulting from examples of possible mitigation actions.

III. Background

A. Summary of NPRM

On November 5, 2010, the FAA published a notice of proposed rulemaking (NPRM) on SMS for part 121 certificate holders (75 FR 68224). In the NPRM, the FAA proposed to require these certificate holders to develop and implement an SMS to improve the safety of their aviation related activities. In response to several commenters' requests, the comment period was extended and ultimately closed on March 7, 2011.

B. Summary of Comments

The FAA received 69 comment documents in response to the NPRM from a variety of commenters, including air carriers, aircraft designers and manufacturers, trade associations, emergency medical transport services, a non-profit safety organization, a university, and private citizens. Commenters included Aerospace Industries Association (AIA)/General Aviation Manufacturers Association (GAMA), Air Charter Safety Foundation (ACSF), Aircraft Electronics Association (AEA), Aircraft Owners and Pilots Association (AOPA), Air Line Pilots Association, International (ALPA), Air Medical Operators Association (AMOA), Air Transport Association of America, Inc.[3] (ATA), American Association for Justice (AAJ), Association of Air Medical Services (AAMS), Association of Flight Attendants (AFA), Communications Workers of America, AFL–CIO, Aviation Safety Council of Alaska (ASCA), Aviation Suppliers Association (ASA), The Boeing Company (Boeing), Bombardier Inc.

[2] Hazards may also be identified through safety assurance functions, as well as by analyzing a proposed change to the air carrier's system.

[3] As of December 1, 2011, the ATA changed its name to Airlines for America (A4A).

(Bombardier), Cargo Airline Association (CAA), Cessna Aircraft Company (Cessna), Clark County (Nevada) Department of Aviation (CCDOA), Delta Air Lines, Inc. (Delta), DTI Training Consortium (DTI Training), Experimental Aircraft Association (EAA), FedEx Express (FedEx), Futron Corporation (Futron), GE Aviation (GE), Gener Ibita Topacio, Hawker Beechcraft Corporation (Hawker Beechcraft), Helicopter Association International (HAI), JetBlue Airways (JetBlue), Modification and Replacement Parts Association (MARPA), National Air Carriers Association (NACA), National Air Transportation Association (NATA), National Transportation Safety Board (NTSB), Omni Air International (Omni Air), Pinnacle Airlines Corp. (Pinnacle), Regional Airline Association (RAA), Rockwell Collins Inc. (Rockwell Collins), Southwest Airlines (SWA), StandardAero, True-lock, United Parcel Service Co. (UPS), United Technologies Corporation (UTC), University of Southern California (U.S.C.), School of Engineering, the U.S. Small Business Administration's (SBA) Office of Advocacy, and 24 individuals.

IV. Discussion of Final Rule and Comments

The FAA is adopting the final rule, as proposed, with minor modifications based on the comments discussed below. The rule requires part 121 certificate holders to submit a plan for implementation of SMS and fully implement an SMS within 3 years of the effective date of the final rule.

A. Scalability

The SBA raised concerns about the scalability of this rule and its impact on small business entities. The SBA, along with True-lock, AEA, MARPA, and ASA, indicated that this rule would be too costly for small businesses to implement. The SBA suggested limiting the final rule to incident management, strategic decision-making, and notification of incidents to the FAA.

The FAA has decided not to limit this rule as suggested by the SBA because adopting the SBA's proposal would only partially enact the safety assurance component and none of the other requirements that the FAA considers to be necessary for an effective SMS. The four parts of an SMS (safety policy, safety risk management, safety assurance, and safety promotion) work together to stress management accountability and decision-making based on forward looking hazard identification and mitigation of risks, rather than a retrospective review of conditions that have already caused accidents and incidents. The four components working together provide the tools necessary to allow strategic decision-making.

However, the FAA recognizes the perceived impact that this rule may have on small businesses. As of January 6, 2012, there were 90 part 121 certificate holders. The size, scope, and complexity of the operations of each of these certificate holders vary greatly. For example, a third of the part 121 certificate holders have 10 or fewer airplanes, while 10% have more than 270 airplanes.

Given the variance in these types of operations, the FAA designed these requirements to be applicable to air carriers of various sizes, scopes, and complexities, as well as adaptable to fit the different types of organizations in the air transportation system and operations within an individual air carrier. The FAA does not anticipate, nor expect, that small air carriers would require an SMS as complex as one for large air carriers. To further clarify this issue, the FAA has revised 14 CFR 5.3 in the final rule to state that the SMS must be appropriate to the size, scope, and complexity of the certificate holder's operations. As such, it is scalable to the size of a small entity.

The FAA has also revised the guidance material that was published for comment with the NPRM. The revised guidance material provides a variety of examples of how to implement the SMS processes and procedures that an air carrier may develop based on the size, scope, and complexity of its operation. The examples outlined in the guidance material are not intended to limit an air carrier to only these methods of compliance. The following outlines different approaches, based on processes and procedures developed by air carriers participating in the Flight Standards Service (AFS) Voluntary SMS Pilot Project (''Pilot Project''), which may be adapted to fit the operational needs of an air carrier based on the size of its operation.[4]

Larger air carriers participating in the Pilot Project typically use their existing divisional structures as a foundation for SMS management. The flight safety organization or equivalent provides a source of standardization, oversight, and reporting directly to a corporate accountable executive. Each division typically establishes a management review process with a committee chaired by the most senior manager (generally a senior vice president) in the division. This senior manager may be one of the management personnel that is already required of an air carrier conducting operations under part 121 under 14 CFR 119.65. These committees are most often supported by a staff-level working group that attends to day-to-day safety management functions, and advises the senior management committee. These working groups are usually made up of existing safety and quality assurance personnel, along with representatives from the functional areas within the division. They are, in turn, supported by the members of the flight safety organization which may also manage corporate level data management and analysis functions. To provide coordination and integration across the air carrier, most large air carriers have a corporate level committee made up of the division managers and including the most senior managers in the air carrier (*e.g.*, Chief Executive Office, President, Chief Operating Officer).

Using this framework, a large air carrier has established a team of sufficient management personnel responsible for the daily oversight of SMS and communication to the accountable executive, to ensure that informed decisions regarding the safety performance of the air carrier's operations are being made. This existing framework can be used to satisfy the management structure requirements in this final rule.

At medium size air carriers, the decision making and information process flows are similar to those of larger air carriers, but the supporting functions are often integrated under the Director of Safety. These structures are similar to what are traditionally used to accomplish the requirements of an independent evaluation program (IEP), which most part 121 air carriers already have in place.[5]

At small air carriers, there will likely not be the multiple tiers of decision making and structures that exist in larger air carriers. For small air carriers, convening ad hoc committees might be an appropriate SMS mechanism. In these cases, the Director of Safety may be the sole support staff available. Using the Director of Safety in this capacity

[4] The Pilot Project was established for operators to develop implementation SMS strategies and oversight interfaces necessary for SMS, as well as gain experience for FAA and operators regarding SMS implementation.

[5] IEP is a comprehensive program for evaluating an air carrier's operational systems as well as its assurance programs. It builds on the auditing programs of the internal audit function and provides management with an additional level of assurance that is independent of the operational sub-organizations' audits and reviews. IEPs provide many of the auditing and evaluation safety assurance processes required in the rule.

would be an acceptable means of compliance with the management structure requirements of this final rule for a small air carrier.

Another example of scalability stems from management's need for continued access to information about the air carrier's operational processes. Larger air carriers may, as part of safety assurance, have full time safety and quality auditors who conduct internal audits, or, particularly in smaller divisions, these audits may be performed by personnel from inside the divisions as collateral duties. In addition, automated data entry, record keeping, retrieval, and analysis are nearly universal at larger air carriers. Software may be developed by or for the air carrier, or may be selected from a variety of specialty safety and quality system software providers. Larger air carriers typically also have specialized information technology (IT) staffs that may be used to monitor and complete the recordkeeping requirements of the final rule.

Managers of medium to small air carriers certainly need the same type of information to make decisions. Typically, though, the volume of information is smaller because the operation is smaller and not as complex. The frequency of the air carrier's operations may also affect the rate at which information must be updated and audits must be conducted. Medium and small air carriers often purchase uniform software packages sold by third parties rather than invest in custom-built packages that require hiring in-house staffers to implement, design, and maintain the software. Very small air carriers may use basic desktop software (*e.g.*, spreadsheet and basic database products) to track information. Smaller air carriers often use line personnel to perform audits as a collateral duty. Analysis of individual audits typically is performed as part of the auditing activity with trend analysis being done by the Director of Safety and, if available, safety and quality staff. Using these existing tools are acceptable means of compliance with the requirements of this final rule.

Another example of the scalability of SMS can be seen in the employee reporting system required by this rule. The FAA anticipates that smaller air carriers will have to deal with significantly fewer reports from the employee reporting system than larger air carriers. Also, larger air carriers are more likely to satisfy this requirement through one or more aviation safety action programs' (ASAP) employee group applications. These systems for large employee groups might be more costly than the minimum requirements imposed by this rule. ASAP is an employee reporting system that air carriers may use to gather information from employees on safety compliance and performance issues. Approximately two-thirds of air carriers conducting operations under part 121 have implemented some type of ASAP program. While ASAP originally was limited to pilots and flight engineers, some air carriers have expanded the program to include their flight attendants, dispatchers, and mechanics; and one air carrier has an ASAP for ground service personnel.

To further ensure that the SMS is scaled to fit the needs of the air carrier's operations, the FAA recommends each air carrier evaluate its existing management systems and regulatory compliance programs and then incorporate those systems and programs that exemplify the key components of SMS as appropriate. The FAA designed the final rule to allow for this flexibility. The FAA acknowledges that many air carriers already have quality management systems (QMS) and other processes currently in place to monitor performance of their operations. In addition, some current regulatory and voluntary programs, like the continuing analysis and surveillance system (CASS) and ASAPs, can be incorporated into the SMS and used to meet the safety assurance requirements of the final rule. Incorporating those existing systems that already meet the performance objectives of this rule will only serve to expedite an air carrier's implementation of SMS, and allow for a smoother transition for employees expected to participate in the air carrier's SMS because of their familiarity with their employers' existing systems.

In addition to the flexibility incorporated in the final rule and the ability to leverage existing processes to meet SMS requirements, the FAA has offered a tool to air carriers that will facilitate SMS implementation and data management. It is important to note that this rule does not specifically require automated information technology systems. However, several SMS processes will require management of varying amounts of data, depending on the size and complexity of the air carrier's organization. Currently, air carriers have free access to the FAA's web-based application tool (WBAT) to assist in satisfying the data collection and management aspects of the final rule. WBAT is a federally developed and funded software system that may be used to assist the air carriers with data management.

WBAT began as an ASAP and incident reporting tool. Its use was expanded to contain functions that more broadly support SMS. Specifically, WBAT currently has modules that support the data management needs of safety risk management and safety assurance functions (*e.g.*, employee reporting, audits, investigations, and evaluations). WBAT also contains an SMS implementation plan manager module, which supports the air carrier's implementation of SMS by providing a tool to guide air carriers though a gap analysis and implementation planning process. The results of the gap analysis and implementation planning are also documented and stored in WBAT. While WBAT data are treated as proprietary to the air carrier, permission can be given to the FAA to access it and review draft plans online and provide feedback, greatly expediting the review and approval process. WBAT is currently used by approximately 64 air carriers authorized to conduct operations under part 121. Of those 64 carriers, 55 use WBAT to support their SMS implementation as part of their participation in the Pilot Project.

While the FAA is not requiring air carriers to use WBAT, it is one option that is available and it reduces the costs of developing and implementing a separate platform. The FAA has made a commitment to continue to support WBAT for basic services as a result of the comments submitted to the NPRM.

B. Scope and Definition of Hazard

ATA, AIA/GAMA, and Delta asserted that the rule was too broad and could be applied to areas beyond the FAA's oversight authority. To address this issue, the commenters suggested revising the final rule to limit the SMS to those areas of a certificate holder's business that have a direct operational impact on aviation activities.

To address the commenters' concerns regarding the FAA's oversight of SMS, the FAA has incorporated the suggestions of the commenters to limit that oversight to the air carrier's aviation activities conducted under part 121. While some air carriers may narrowly tailor their SMS to address only these activities, the FAA acknowledges that some air carriers may opt to extend their SMS to other aviation related activities for which they hold certificates, such as 14 CFR part 145 (part 145) repair station activities, or 14 CFR part 142 training center activities. Some air carriers might also extend their SMS to their non-aviation related activities, such as security and occupational safety and health issues. If an air carrier elects to do so, the FAA would only conduct

oversight of the SMS activities related to its aviation operations that the air carrier conducts in accordance with the provisions of part 121. In the final rule, the FAA has revised the regulatory text to limit the application of SMS only to the aviation-related activities conducted under the air carrier's 14 CFR part 119 (part 119) certificate.

The FAA also limited the scope of SMS, in part, by defining hazard more narrowly. There were thirteen comments related to the definition of ''hazard.'' U.S.C. stated that the definition of hazard should be expansive enough to include non-operational elements (*e.g.*, human resources, finance, information technology) of an organization. Twelve commenters (including SBA, ATA, AIA/GAMA, GE, and MARPA) suggested limiting the term ''hazard'' to the aviation operational environment. Specifically, these commenters were concerned about the scope and depth of expectations regarding hazard identification. They stated that the SMS should focus solely on conditions affecting the safety of aviation operations and not occupational safety or environmental protection, as could be inferred in the definition proposed in the NPRM. Other commenters asked whether certificate holders would be expected to track every conceivable hazard, even those instances in which exposure to the hazard is remote or the likelihood and/or severity of potential outcomes would be negligible.

Upon review of the comments, the FAA recognizes that the scope of the hazard and risk analysis and control processes required of the SMS must be consistent with the FAA's statutory authority and the intended scope of the SMS. Therefore, the FAA has amended the definition of ''hazard'' to limit it to a ''condition that could foreseeably cause or contribute to an aircraft accident as defined in 49 CFR 830.2.'' This definition more clearly limits the potential events to be considered to those directly related to aircraft operations and the potential severity of those events to aircraft accidents, which is consistent with the FAA's statutory authority in 49 U.S.C. 44702. The FAA definition, though it is tailored specifically to aviation, is consistent in intent and application with long standing industry system safety definition and practice. The revised definition also incorporates the NTSB's definition of ''aircraft accident,'' as provided under 49 CFR 830.2. According to 49 CFR 830.2, an ''aircraft accident'' means an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

C. Protection of Information/Data From Disclosure Under Freedom of Information Act (FOIA)

AMOA, AOPA, ASA, ATA, Boeing, Bombardier, CAA, EAA, FedEx, GE, HAI, JetBlue, MARPA, NACA, UTC, and RAA all raised concerns that if SMS data is not protected from disclosure under FOIA, the FAA's oversight over SMS could be compromised due to a lack of data being submitted to the FAA. ATA and GE, while supporting the FAA's approach in the NPRM to not require the physical submission of any data, asserted that this is not adequate protection. These commenters indicated that protection of this data is vital to ensuring this information is shared with the FAA.

Exposing submitted safety data to public scrutiny may have a chilling effect on reporting practice. ATA acknowledged that this information should be shared only with the FAA. JetBlue suggested the FAA develop a 14 CFR part 193 (part 193) protection order, extending the same protections to SMS data that currently exist for ASAP, the Flight Operational Quality Assurance Program (FOQA), the Line Operations Safety Audit (LOSA), etc. AAJ opposed the protection of information beyond existing FOIA protections because of the impact the protection may have on the ability to gather information during discovery processes.

The FAA recognizes that protection of certain safety information is vital to ensuring that employees and air carriers provide sufficient data to the FAA to ensure effective oversight over SMS. Section 44735 of title 49 of the United States Code, as amended by the FAA Modernization and Reform Act of 2012, Public Law 112–95 (Feb. 14, 2012), specifically contemplates the protection of voluntarily submitted reports, data, or other information produced or collected for purposes of developing and implementing a safety management system acceptable to the Administrator. It is important to note, however, such protection could not be afforded to information that is required to be kept to satisfy compliance with other regulatory requirements, such as crewmember training records or maintenance service records.

To further clarify the extent of protection that may be afforded under the statute, the FAA notes that any record or other documentation that is required to show compliance with other regulatory requirements would not be protected. Protection also would not extend to records that must be made available under the provisions of 14 CFR 119.59. Furthermore, any information protected under the statute is only protected from release by the FAA. If the information is submitted or released by the air carrier to another government entity, the protections of the statute are not binding on these other entities. Nor are these documents necessarily protected from discovery in civil litigation, although the carrier would be free to ask the court for whatever protections would be appropriate under the rules of the relevant jurisdiction.

D. Enforcement

ACSF, AEA, and DTI Training raised concerns about the manner in which the FAA plans to enforce the requirements of the new rule and address issues of noncompliance identified through SMS policies and procedures. ACSF recommended that the FAA publish its plan for compliance and enforcement, and provide industry the opportunity to comment.

In regard to enforcement of the provisions of 14 CFR part 5 (part 5), the FAA acknowledges that each SMS will be uniquely designed to meet the needs of that air carrier's operations. Determining compliance with the requirements of part 5 will be dependent on the specific facts of each case. As such, the FAA will exercise its discretion in deciding to pursue enforcement of the requirements of part 5.

The FAA also recognizes that a fundamental concept of SMS is for air carriers to identify and correct their own instances of noncompliance and invest resources and efforts to preclude their recurrence. This concept is not new to FAA enforcement policy. Many air carriers are currently addressing these issues under the voluntary disclosure reporting program (VDRP). When an apparent violation is detected through SMS processes and procedures, the FAA encourages air carriers to use VDRP as appropriate to disclose the violation.

E. Scope of SMS and Compliance With Administrative Procedure Act

AOPA, ASA, MARPA, NATA, SBA, and True-Lock raised concerns that the FAA could use SMS to extend regulatory requirements without going through notice and comment rulemaking as required under the Administrative Procedure Act (APA), 5 U.S.C. 552. Specifically, concerns were

raised with regard to the requirement under the rule that the certificate holder develop risk controls for those hazards that require mitigation as identified under the certificate holder's safety risk management analysis.

This issue is not unique to SMS. Many regulations impose performance requirements that may be met in different ways. For example, certificate holders are required under 14 CFR 121.135 to develop and document certain procedures, methods, and instructions to personnel. This provision sets forth areas that must be addressed by these procedures, but does not prescribe the exact procedures that must be incorporated into the certificate holders' manuals. This discretion is evident in the requirement of 14 CFR 121.135(b)(15), which requires the manual to include ''procedures for operating in periods of . . . potentially hazardous meteorological conditions.'' As the regulation does not establish a prescriptive, exclusive list of hazardous meteorological conditions for which procedures must be developed, the certificate holder must identify those conditions that are likely to impact its operation and address them appropriately in its manual. If these procedures are incorporated in the certificate holder's required manual, the certificate holder must ensure compliance with the procedures it develops and documents in its manuals.

A practical outcome of the safety risk management and safety assurance components of SMS is that procedures developed and documented under 14 CFR 121.135 may need to be revised, or new procedures added, to mitigate risk from identified hazards. It is not the intent of this rulemaking to alter the existing regulatory standards or the approval and acceptance processes that already apply to each certificate holder.

In some instances, the FAA may determine that a particular mitigation is necessary for all certificate holders based on the identification of a system-wide hazard. If the FAA identifies the need for such mitigation, the FAA would conduct rulemaking in accordance with the APA in order to apply the standard to all certificate holders.

F. Duplicative Rulemaking

ACSF, EAA, and NATA raised concerns about the different set of SMS requirements for airports and suggested combining these two rulemaking actions into one to ensure consistency. ASA and MARPA asserted that the FAA should not create a general part 5, but rather should incorporate the proposed requirements into a new subpart for part 121. This would allow for SMS requirements to be tailored to each specific part to address technical issues that are unique to the regulated entities.

As stated in the NPRM, the FAA developed the framework of the rule as a means of harmonizing with ICAO standards, while establishing a uniform standard that could be extended to apply to 14 CFR part 135 (part 135) certificate holders, part 145 repair stations, and design and manufacturing entities. The uniform standard is necessary because some of these regulated entities may hold more than one FAA certificate and may need or want to create one SMS to encompass all of their aviation-related activities. The general standards set forth in part 5 would permit such integration with only minor modifications. Any extension of the applicability of part 5 required by the FAA will be made through the APA notice and comment rulemaking process.

In regard to the separate standards for airports, the FAA notes that both SMS rules are structured in accordance with the ICAO SMS framework, which is identical in Annex 6 (air operators) and Annex 14 (airports). However, the FAA recognizes that there are inherent differences in the operation of an airport and an air carrier. Based on a review of these differences, the FAA determined that the rulemakings should proceed as separate projects.

Although there may be two separate regulations addressing SMS, the FAA encourages air carriers and airports to communicate with one another when hazards are identified through their respective SMS procedures and processes. In that way, they can determine which SMS may best address the hazard. For example, if an air carrier's employee identifies a hazard on the movement area of the airport, the air carrier's employee would likely report the hazard through the air carrier's employee reporting system. Once reported, the FAA recommends that the air carrier notify the airport of the identified hazard so the airport is aware of the issue and can analyze the risk accordingly. In addition, the air carrier may also analyze the risk of the hazard and determine if it warrants any sort of mitigation through the revision or further development of the air carrier's procedures. This type of communication will serve to ensure that hazards, whether unique to the certificate holder or more systemic to the airport, are being addressed effectively by all parties.

G. Credit for Pilot Project Participants and Adoption of Third Party/Accredited SMS

ATA, Delta, NACA, and StandardAero suggested grandfathering in the participants in the Pilot Project, or otherwise providing credit for their progress in developing and implementing an SMS based on the framework set forth in AC 120–92A. Delta requested additional guidance for those certificate holders transitioning from the levels of validation in the Pilot Project to satisfying the requirements of part 5. In addition, ASA and StandardAero requested that they receive credit for third party systems that are similar to SMS that they have implemented, such as QMS, IEP, or International Standard for Business Aircraft Operations (IS–BAO).

The FAA developed the requirements in the NPRM based on the ICAO SMS framework in Annex 6 and the guidelines for developing a voluntary SMS described in AC 120–92A, Appendix I. Despite the attempt to harmonize the proposed regulatory standards with the ICAO framework and guidance material, there may be some differences between what the air carriers have done in the Pilot Project and what would be required under part 5 once the rule becomes effective. Rather than exempt the Pilot Project participants from the requirements of part 5, the FAA believes that these air carriers would benefit from reviewing their existing implementation plans, and comparing the plans with the final rule. If gaps are found, the carriers would update the implementation plans to fill the gaps identified and submit their plans to the FAA for approval to satisfy the requirements of 14 CFR 5.1(b).

Some air carriers completed SMS implementation through the Pilot Project under the framework of AC 120–92A and their SMS has been validated by the FAA. To comply with the implementation plan requirements of 14 CFR 5.1(b), these air carriers will need to conduct a gap analysis of the systems currently in place under their SMS and the requirements of the final rule, and identify any gaps that will need to be addressed to bring their existing SMS into compliance with the requirements of the final rule. However, they may not have to repeat the entire gap analysis and planning process in areas where there are no differences between the final rule and Pilot Project guidance.

In regard to the request for credit for implementation of third party systems, like International Air Transportation Association (IATA) Operational Safety Audit (IOSA), International Standards

Organization (ISO)–9000/AS–9100, these systems have not been subject to review and acceptance by the FAA. It would be inappropriate to provide credit or waive compliance requirements to these air carriers who have implemented these third party systems. These systems may include some elements of an SMS, but may not contain all the necessary elements.

These third-party systems may be incorporated into an air carrier's SMS if the systems satisfy the requirements set forth in the final rule. If an air carrier plans to incorporate these other systems into its SMS, the air carrier should outline the incorporation of these systems in its implementation plan. Given these avenues for incorporating existing processes and procedures, the FAA has not revised the final rule to allow credit for Pilot Project participants, nor other air carriers who have implemented third-party SMS systems or other management tools.

H. Applicability, Subpart A—Implementation Plans

ACSF, ATA, Bombardier, NACA, and RAA requested the timeframe for submission of the implementation plans be extended from 6 months to anywhere from 9 to 18 months. ASCA, ATA, Bombardier, FedEx, Omni Air, and RAA expressed concern with the FAA's ability to manage the 90 submissions it will receive, as well as the FAA's ability to establish a consistent process for review and acceptance of the plans. Bombardier, EAA, and RAA asserted that an extension of this time is needed because the FAA would not be held to a timetable for accepting the implementation plans. FedEx suggested the FAA consider a timetable of three months to approve the implementation plan, or, in the alternative, to simply accept the plan. ASCA, Bombardier, and FedEx requested that the time to submit and wait for the FAA to approve an implementation plan should not be included in the 3-year implementation timeframe.

In addition, ATA, AOPA, ASCA, and Bombardier indicated that three years was not adequate for carriers to develop and implement an SMS. In contrast, AFA, ALPA, NTSB, Omni Air, and SWA acknowledged that the proposed timeframes for implementation plan approval and SMS acceptance were reasonable.

The FAA notes that 24 of the part 121 certificate holders participating in the SMS Pilot Project have submitted an SMS implementation plan as part of the pilot project. The typical implementation plans received in the pilot projects indicated that full implementation of SMS could be achieved within three years. None of the participants indicated the need for more time during development of their plans. Because this timeframe is consistent with the comments received from AFA, ALPA, NTSB, Omni Air, and SWA, as well as the lessons learned from other Civil Aviation Authorities (CAAs), the FAA has determined that three years is an adequate timeframe for implementation of SMS.

However, upon review of the comments, the FAA has revised 14 CFR 5.3 to require submission of the implementation plan for review within 6 months of the final rule's effective date, and for approval of the plan no later than 12 months after the effective date of the final rule. As of January 11, 2012, 72 of the approximately 90 part 121 certificate holders are participating in the Pilot Project. Of these, 17 have completed implementation plans, which have been validated by the FAA. The average time for completing and receiving approval of these plans is approximately one year. Based on this average, the FAA expects that certificate holders will be able to meet this requirement. Certificate holders that already have a validated implementation plan through the Pilot Project will not be required to resubmit their original implementation plan for approval, but rather may submit an abridged analysis that identifies the areas in their existing implementation plans that need to be revised to comply with the new regulatory requirements. Many Certificate Management Teams (CMTs), which are the FAA field offices responsible for managing individual part 121 certificates, have been exposed to these implementation plans due to their work with the Pilot Project and, therefore, there should be no extended delays in reviewing and ultimately approving these plans. Accordingly, the FAA believes this timeframe is sufficient and will not cause undue burden on either the affected certificate holders or the FAA.

Pinnacle disagreed with the proposal to require implementation plans be approved. Due to the dynamic nature of the airline industry, Pinnacle asserts that these plans must be routinely modified to accommodate changes to an airline's organization or environment. If a plan requires approval, an airline would not be able to proceed with a change to a plan until the FAA reviewed and approved each change. Bombardier, while not objecting to the requirement to have the plans approved, recommended some minimum requirements for the content and level of detail for the implementation plan.

The FAA recognizes the dynamic nature of an air carrier's operations, and, thus, maintains that the SMS should be accepted rather than approved to allow the air carrier to make the necessary changes to address issues in its operations. However, to ensure that the SMS is properly developed within the required timeframe, some measure of additional oversight control is necessary. One of the foremost acknowledged sources of hazards is change in an air carrier's operation, and it is one of the principal reasons for special or expanded oversight by the FAA. The FAA, therefore, has not revised the requirement that the implementation plan must ultimately be approved. Any changes to the implementation plan and SMS will be documented and submitted to the FAA by the air carrier. If a modification is required, the FAA will provide additional guidance to the air carrier to ensure that the SMS remains in compliance with part 5 and is implemented within 3 years of the effective date of the final rule.

ATA suggested extending the effective date of the final rule because the proposed 60-day period is not sufficient time to review the rule and understand what is required to be in the implementation plan before the time for submission of the implementation plan begins to run. In contrast, AFA, NTSB, Omni Air, and SWA stated that the 60-day effective date was reasonable.

The FAA has determined that the 60-day effective date is appropriate. The changes to the final regulatory text are not significant and, again, more than 50% of the part 121 certificate holders already are engaged in developing and implementing an SMS. Therefore, the 60-day effective date is a reasonable timeframe for certificate holders to conduct their review of the final rule and initiate compliance.

I. Subpart B, Safety Policy—Designation of a Single Accountable Executive and Sufficient Safety Management Personnel

a. Single Accountable Executive

Bombardier raised concerns that proposed 14 CFR 5.25 does not permit any flexibility for the certificate holder to delegate tasks to more than one executive or other management representatives as appropriate, based on the size and complexity of the organization. ATA recommended further clarifying the role of the accountable executive, and removing the requirement that the accountable executive be responsible for implementation of the SMS. ATA, NACA, and RAA asserted that this

responsibility is better suited for the safety management representative. ALPA supported the designation of a single, accountable executive. Cessna and Futron recommended that the authority to make operational decisions and the authority to allocate resources should be better defined for the accountable executive, or otherwise removed from this paragraph. Futron asserted that the accountable executive should be outside of the normal safety chain and directly involved in the operational chain.

As proposed, 14 CFR 5.25 defines both the accountable executive and the management personnel. The accountable executive must be a single, identifiable person having final authority and responsibility for the safety performance of the air carrier. This ensures that executive management is integrally involved in the oversight of the air carrier's safety performance. The FAA has not revised this requirement in the final rule.

To address the commenters' concerns about the accountable executive's responsibilities, the FAA has clarified the criteria and responsibilities set forth in 14 CFR 5.25. As prescribed, the accountable executive needs to be able to organize, direct, and control the air carrier's activities, as well as allocate resources to make safety controls effective. The accountable executive must also develop the documented safety policy proposed under 14 CFR 5.21, communicate the policy throughout the air carrier, and regularly review the safety policy and safety performance of the air carrier. The accountable executive must review safety information to assess the overall performance of the air carrier and make necessary changes.

b. Management Representative

Delta suggested that the involvement of a part 119 management position in the efficient working of an SMS must suffice as a required resource for the implementation of the SMS. Other commenters questioned the need to require only one management representative and suggested revising the rule to allow for the certificate holder to determine how to structure a management team responsible for monitoring the daily operation of the SMS.

Part 119 identifies various management personnel needed for an air carrier to function and maintain a certificate. The FAA does not believe it is necessary to restrict part 121 air carriers from using only the Director of Safety or another part 119 management personnel position to perform the duties specified in 14 CFR 5.25(c). The requirement to have a designated management representative was intended to ensure coordinated and consistent implementation of a fully integrated SMS throughout the air carrier's aviation related activities, as well as to provide adequate support for continued operation and maintenance of the SMS.

Upon review of the comments, it appears that either one person, or a combination of personnel, could perform the function of the management representative as proposed in the NPRM. The FAA does not expect that the accountable executive will always perform every day-to-day activity that the function of the management representative requires. As air carrier operations are diverse, one method of managing implementation and continued operation of an SMS cannot be exclusively defined. To do so may stifle innovation and creativity. Although a single management representative, designated by and reporting directly to the accountable executive, is conceptually the most direct means of establishing a point of responsibility for an integrated system, this does not represent the only means. Depending upon the size and complexity of the air carrier, the functions of the management representative or personnel may range between being a collateral duty of the accountable executive, to a team of representatives working under the guidance and coordination of a team leader who is responsible for the effectiveness of the team. Accordingly, the FAA has revised 14 CFR 5.25(c) to allow the air carrier to designate sufficient management personnel responsible for the coordination and implementation of the SMS.

Whatever structure is implemented by the air carrier, 14 CFR 5.25(c)(4) requires that these personnel regularly report to the accountable executive. Personnel designated to perform this function must be in positions in the organization of sufficient independence to have direct access to the accountable executive to report on the safety performance of the operation and recommend any necessary improvements.

c. Role of Line Employees

AFA raised concerns that the line employees are not defined as having a key role in the decision-making process and that they are merely a reporting mechanism for the SMS. AFA asserted that these employees should also have input into the decision- making process.

For an SMS to be effective, input and active participation is essential from all levels of employees in an air carrier. Many air carriers have different decision-making processes, some of which include line employees. Roles that employees play within that air carrier's SMS must be identified and documented in the safety policy as described in 14 CFR 5.21. If line employees are identified to participate in safety boards, working groups or audit review teams, they must be trained to actively support the safety policy of the accountable executive as well as comply with all established organizational safety initiatives. Another aspect of SMS that requires line employee participation is the employee reporting system. The participation of line employees is critical in developing improvements in functions that directly impact their job tasks.

J. Subpart C, Safety Risk Management (SRM)

AIG, ASA, ATA, Boeing, GAMA, MARPA, Pinnacle, and RAA recognized the importance of SRM, but requested clarification regarding when the SRM processes and procedures are triggered and what constitutes a ''system.'' The commenters also suggested reorganizing 14 CFR 5.51, 5.53, and 5.55, to emphasize hazard identification and to eliminate system analysis.

The FAA has revised the regulatory text to clarify how safety analyses must be used under safety risk management. With regards to this rule, the term ''system'' is used to describe the operational components used to deliver aviation-related services. Systems may include hardware, software, people, procedures, resources, or functions directly related to the delivery of air transportation services. For example, a system would include, among others: The aircraft, the crewmembers, crew training, crewmember duty time tracking programs, dispatch functions, maintenance of the aircraft, fueling, servicing, and flight operations. The term ''system'' does not include those people, procedures, resources, hardware, and software that are not directly related to the delivery of air transportation services (*e.g.,* advertising, building maintenance, payroll). The FAA's use of the term ''system,'' in this rulemaking, is consistent with long-standing use of the term within the industry.

As part of the SRM process, air carriers need to consider the operational environment directly related to the delivery of air transportation services. The operational environment that should be considered includes not only

the physical environment (*e.g.,* terrain, weather, geographic location) but also any constraints on the air carrier's actions due to business needs and other laws or regulations that may affect the air carrier's air transportation services.

Regarding when SRM would be triggered, 14 CFR 5.51 (Applicability.) requires that the SRM process be applied under the following conditions: Planning for and implementation of new systems; revision of existing systems; development of operational procedures; or identification of hazards or ineffective risk controls through the safety assurance processes in subpart D of part 5. Some examples of these triggers are outlined below.

Changes to an air carrier's operation could include addition of new routes, opening or closing of line stations, adding or changing contractual arrangements for services, additions of new fleets or major modifications of existing fleets, addition of different types of operations such as extended-range operational performance standards operations, or a change in the software for operational systems such as flight planning and dispatch. Any of these additions or changes would trigger the use of the SRM process.

A further trigger for SRM would be cases when the safety assurance processes reveal hazards that have not been addressed or instances when the procedures that have been specified fail to control risk. For example, an air carrier might discover through employee reporting or internal auditing that procedures for loading data into the airplane flight management computer are confusing. This would result in action such as the air carrier modifying the procedures themselves or the training and checking process in use. In another example, an analysis of internal audits could reveal that a maintenance tracking and control program failed to identify required inspections, resulting in some of them being missed or overdue. In this case, the air carrier may decide that the program itself is defective and must be reengineered, again, requiring the application of SRM. These are just some examples of systems and triggers for the SRM processes of subpart C of the final rule.

RAA suggested that 14 CFR 5.53(c) include the requirement to track hazards. This practice would prevent hazards from being identified and recorded without further action. The FAA has reviewed this suggestion and determined that the purpose of the suggested revision is already met under the final rule. Subpart C, SRM, and Subpart D, Safety Assurance, work together such that identified hazards must be tracked in addition to being identified. Thus, the FAA has not adopted this suggested revision in the final rule.

K. Subpart D, Safety Assurance

AIG, ASA, ATA, Boeing, Cessna, GAMA, MARPA, Rockwell Collins, and U.S.C. agreed on the importance of safety assurance practices, but recommended the FAA clarify the applicability of safety assurance and the definition of ''system'' to mirror the definition of ''system'' for SRM. Boeing also suggested revising 14 CFR 5.71 and 5.73 to limit the scope of the SMS to the aviation-related activities of the company. In addition, Boeing, GAMA, MARPA, and Rockwell Collins recommended replacing the term ''operation'' with ''system'' because operation implies the activities of an air carrier, and would require modification if these provisions were extended to other types of operators in future rulemakings.

AIA/GAMA, Boeing, Cessna, and Rockwell Collins all questioned using the terms ''continuous'' and ''periodic'' in 14 CFR 5.71. The commenters asserted that the terms are ambiguous and do not establish a frequency for adequate monitoring. For example, one commenter stated that the continuous monitoring requirement could imply monitoring the system 24 hours a day, which could be burdensome.

Because different systems will require different monitoring processes, the FAA has removed the terms continuous and periodic from 14 CFR 5.71. Additional clarification of the monitoring requirements is also provided in the advisory material associated with this final rule. In regards to the suggestion to define the term system for safety assurance, the FAA has determined that such a definition would not be necessary in the regulatory text because the list in 14 CFR 5.71(a) provides the scope of safety assurance activities. Further, as stated in section J, the term ''system'' is used to describe the operational components used to deliver aviation-related services. Systems may include hardware, software, people, procedures, resources, and functions directly related to the delivery of air transportation services. The systems addressed by this rule do not include those elements that are not directly related to the delivery of air transportation services.

L. Subpart F, Recordkeeping and Documentation Requirements

AIA/GAMA, Boeing, Bombardier, Omni Air, and Rockwell Collins asserted that the record keeping and documentation requirements for SMS are too prescriptive and onerous. ATA and Delta advocated the retention requirement be scalable and flexible according to the certificate holder's policy and that outputs of the SMS should be retained for as long as deemed necessary by the air carrier. EAA questioned the operational reason for mandating the retention of SMS records beyond existing industry standards and requirements. NATA requested clarification on the types of documents that must be maintained under the proposed standards.

Bombardier and Boeing suggested revising recordkeeping provisions in 14 CFR 5.97 to require certificate holders to maintain these records for 5 years. AIA/GAMA also supported a 5-year retention requirement for outputs of SRM processes. NACA acknowledged that the recordkeeping requirements were acceptable as proposed.

Neither the proposed rule text nor the preamble implies that an air carrier would have to undergo a complicated and expensive revamping of its organization to accommodate document and record retention requirements. The required records can be kept electronically or in paper format. For SRM outputs, the timeline associated with the retention of the documents must be scalable to the air carrier's operation. The outputs of SRM processes should be kept for as long as they remain relevant to the air carrier's operation to allow the air carrier to evaluate whether the controls put in place under SRM are effective and needed. Once the action that triggers the development of the control is no longer present in the air carrier's operation, the air carrier may determine that the records no longer need to be kept. Thus, it is important that the air carrier exercise discretion to determine how long SRM output records are kept.

Similarly, this rule requires a certificate holder to retain records of SMS-required training that is administered to the accountable executive, members of the certificate holder's management, and other employees for as long as the individual who received the training is employed by the certificate holder. Once the individual who received the training is no longer employed by the certificate holder, there is no longer a need for the certificate holder to retain these records.

The recordkeeping requirements associated with the safety assurance's processes and procedures serve a different purpose. The goal of safety assurance is to collect historical data on an operating system for analysis. The air carrier needs to have sufficient

historical data to review. The 5-year period proposed in the NPRM is reasonable and will provide the air carrier with adequate records to conduct analysis. The FAA has determined that the proposed recordkeeping retention requirements are appropriate and has retained the requirements in the final rule.

M. Flow-Down of Requirements

ALPA asserted that an air carrier must exercise some oversight of those entities providing services to them and that the proposed rule would naturally have some flow down effect. ALPA asserted there should be a requirement to develop and document an avenue for the reporting of hazards from subcontractor field employees to the air carrier. This may include establishing a liaison that would communicate necessary safety information to the subcontractor and take corrective action as necessary.

RAA stated that, even though the FAA will not expand these existing requirements to entities other than certificate holders authorized to conduct operations under part 121, it can be expected that air carrier SMS programs will produce positive trickledown benefits to the operational safety of contractors. Under this scenario, air carriers will provide safety-enhancing guidance and oversight (at some level) to relevant elements of their contract service providers operations, and contractors will share information with the air carriers on the risks or safety trends that the contractors may from time to time identify.

Bombardier stated that it is expected that SMS regulated entities will determine what aspects of the SMS need to be passed on to non-regulated suppliers and pass those requirements along through business requirements. Inevitably, this will then result in additional burden on the regulated entities to provide support and increased oversight to ensure compliance of these suppliers, contractors and sub-contractors with these SMS related requirements. The SMS rule should be carefully constructed to allow those part 121 or 135 carriers to accept their part 145 certificated suppliers' SMS without deviation. Otherwise, inconsistent requirements will be passed on from different operators.

ASA and MARPA stated it is normal in the industry for air carriers and other certificate holders to flow-down their requirements to their suppliers, even without a regulatory requirement. For example, many certificate holders may decide to use their suppliers as data sources for their SMS (*e.g.,* reports of identified hazards). There is nothing in the regulation that prevents the FAA from stating that once the flow-down is in the manual, the supplier becomes part of the SMS system and thus becomes subject to SMS oversight. They recommended that the rule specify that a company may rely on its business partners as data sources for its SMS, but even if it does so, this act alone would not impose SMS regulations (or FAA SMS oversight) on the business partner.

NACA agreed, asserting that it is not necessary to require contractors or subcontractors to develop an SMS at this time. They should be permitted to let data flow into a part 121 carrier's program when handling their aircraft. This would add valuable information to SMS and produce a more comprehensive program.

AOPA strongly disagreed with the FAA's assessment and believed the FAA has greatly underestimated the trickle down implications for contractors and subcontractors of regulated certificate holders. The more functions a certificate holder contracts out, such as fueling, deicing, and pilot training, the more critical it is that the certificate holder include its contractors in its SMS process. Although the FAA is not seeking regulation of these contracted entities, AOPA asserted that FAA should not discount the potential effects of this proposed regulation on these entities. AOPA is concerned that this ripple effect would become even more apparent when the FAA expands the requirements of 14 CFR part 5 to encompass part 135 certificate holders.

Delta Air Lines did not see a significant impact or flow down effect of the development of SMS and its implications on vendors and contractors providing services to the operator. The comprehensive implementation in all levels of the organization has allowed the vendors and contractors to be assessed under the safety assurance component of its SMS and findings and observations are mitigated under a risk-based system documented and tracked according to the SMS requirements and SRM techniques.

Boeing said that the product/service provider should be allowed to determine the level of integration based on business needs and operational efficiency, without incurring undue compliance burden.

The SMS requirements of the rule are intended to be applied to individual air carriers. This rule does not require the air carrier to require SMSs on the part of contractors, code-share partners, or other business affiliates. This rule permits the use of contractors as a data source, but will not mandate this requirement. Associated policy and advisory documents will not specify or imply these requirements as conditions of acceptance. An air carrier may include SMS in its negotiated business arrangements, consistent with the common practice in industry where air carriers require registration under such programs as AS 9100, IOSA, and Coordinating Agency for Supplier Evaluation (C.A.S.E.) audits. Contractual requirements for arrangements do not relieve the air carrier from its responsibilities under this rule.

N. FAA Capability To Manage Oversight

AIA/GAMA, AOPA, Hawker Beechcraft, JetBlue, Omni Air, and RAA asserted it is essential that the FAA develop and deploy appropriate training and guidance material for the inspector workforce involved in SMS assessment and oversight. Hawker Beechcraft and Omni Air questioned whether the FAA would be able to handle the significant surge in plan submissions as the deadline nears.

FedEx suggested that the FAA consider a process by which differences in interpretation, applicability, and direction between a carrier and the FAA approval authority can be elevated within the FAA for resolution.

Clear and comprehensive guidance documents have been developed and will be provided to the Aviation Safety Inspectors (ASIs) prior to this rule's effective date to ensure standardization. The SMS Program Office is also available as subject matter experts to assist the field office inspectors. Training is also currently underway for part 121 ASIs. This training includes the principles and precepts of SMS. Additional training is being designed to enhance the ASI's knowledge and ability to assess the compliance of an air carrier's SMS with part 5.

Air carriers also will be able to use the Consistency and Standardization Initiative [6] to appeal decisions related to the review of their SMS. The FAA will consider a process by which differences in interpretation, applicability, and direction between an air carrier and the FAA approval authority can be elevated to the applicable FAA office for resolution.

O. Guidance Material

ACSF, AOPA, Boeing, GE, Hawker Beechcraft, and NATA suggested rescinding draft FAA Order 8900xx and reissuing simplified guidance material

[6] For more information regarding the Consistency and Standardization Initiative please refer to: *http://www.faa.gov/about/office_org/headquarters_offices/avs/consistency_standardization/.*

because the draft order is too prescriptive. The commenters were concerned that the guidance material and orders significantly expands the regulatory requirements in proposed part 5. Commenters noted that the draft order contained material that was too academic and should be revised for clarity.

Upon review of the comments, the FAA has revised the guidance material to ensure that there is a clear delineation between regulatory requirements and other information.[7] The FAA has also revised the draft guidance for inspectors to provide instruction on various methods that may be employed to satisfy the requirements of this rule.

P. Determination of Acceptable Levels of Safety

AEA, AOPA, ASCA, and ATA asked for a definition of acceptable level of safety. They expressed concern that lacking a clear definition of this term would leave the industry and the FAA in a position where inspectors would be defining what constitutes an acceptable level of safety. This would lead to inconsistent application across the industry. The SBA also asserted that the FAA should conduct a gap analysis of its regulations and fill any holes to establish standardized acceptable levels of safety through the regulations that can be uniformly applied throughout the industry.

The term ''acceptable level of safety'' is only used in the preamble of the NPRM and is only mentioned when referencing ICAO standards/framework and an NTSB recommendation. In determining the safety performance measurement for the air carrier's operation, each air carrier should use the regulatory minimums set forth in Chapter I, Title I, of 14 CFR as the baseline.

Q. Performance Based v. Process Based Regulation

ASA and MARPA stated that the proposed part 5 was a process-based rule. In contrast, AIA/GAMA and Bombardier stated that the proposal was a performance-based rule. All of these commenters expressed a strong desire to avoid a prescriptive-based rule because of the dynamic nature of air carrier operations. They were also concerned that a performance-based rule could lead to wide variances in interpretation as to what is acceptable for an SMS.

The ARC, ATA, and GE expressed a strong desire for a rule that closely matched the ICAO framework to allow for increased acceptance of an air carrier's SMS by foreign civil aviation authorities. They stressed the need to balance prescription with the need for adequate description and flexibility to develop multiple solutions in the interest of increased innovation. They stated that the proposed requirements met all of these needs.

Changing the regulatory text to a pure performance-based rule would deviate from the ICAO SMS requirements. This increases the risk that the FAA's SMS rules would fail to meet the requirements of other sovereign nations, and thus jeopardize the ability of U.S. air carriers to operate in countries where compliance with these standards is enforced. This final rule specifies a basic set of processes to form a framework for the SMS, but does not specify particular methods for implementing these processes. This provides a balance between standardization and a robust SMS structure while allowing considerable flexibility for how an individual air carrier chooses to establish its SMS.

R. Employee Reporting Systems

Proposed 14 CFR 5.21(a)(4) states there must be an employee reporting system, and that the reporting system must be confidential as per 14 CFR 5.71(a)(7). AFA, ALPA, RAA, and SWA were concerned that unless an explicit restriction is imposed to prevent abuse, disclosures of safety improvement opportunities, concerns, or issues submitted by any employee may be used against the reporting employee in a disciplinary manner. They suggested that the employee reporting system be non-punitive.

The confidential reporting system in 14 CFR 5.71(a)(7) is a conduit for employees to raise safety issues without fear of reprisal. There is a distinction in a non-punitive reporting system and the requirement in 14 CFR 5.21(a)(5) to require the certificate holder to establish a policy that defines unacceptable employee behaviors. There are some instances where disciplinary action is warranted (*e.g.*, the behavior indicates a willful disregard to comply with company procedures or regulations) and 14 CFR part 5 recognizes this fact. Therefore, the rule requires a certificate holder to establish a confidential employee reporting system and define unacceptable behaviors. This allows the confidential gathering of safety information from employees while maintaining the certificate holder's freedom to address unacceptable behavior.

V. Regulatory Notices and Analyses

A. Regulatory Evaluation

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 and Executive Order 13563 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (Pub. L. 96–354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96–39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of $100 million or more annually (adjusted for inflation with base year of 1995). This portion of the preamble summarizes the FAA's analysis of the economic impacts of this final rule. We suggest readers seeking greater detail read the full regulatory evaluation, a copy of which we have placed in the docket for this rulemaking.

In conducting these analyses, FAA has determined that this final rule: (1) Has benefits that justify its costs, (2) is not an economically ''significant regulatory action'' as defined in section 3(f) of Executive Order 12866, (3) is ''significant'' as defined in DOT's Regulatory Policies and Procedures; (4) will not have a significant economic impact on a substantial number of small entities; (5) will not create unnecessary obstacles to the foreign commerce of the United States; and (6) will not impose an unfunded mandate on state, local, or tribal governments, or on the private sector by exceeding the threshold identified above. These analyses are summarized below.

i. Total Benefits and Costs of This Rule

This rule requires Part 121 operators (domestic, flag, and supplemental operations) to establish an SMS. It is expected that the requirements of the rule will help airlines to identify safety problems, and if airlines take steps to mitigate these problems it is estimated

[7] The FAA acknowledges that Advisory Circular 120–92 is not binding.

that the benefits from that mitigation could be between $205.0 and $472.3 million over 10 years ($104.9 to $241.9 million present value at 7 percent discount rate). Costs of the rule's provisions (excluding any mitigation costs, which have not been estimated) are estimated to be $224.3 million ($135.1 million present value at 7 percent discount rate) over 10 years.

ESTIMATED COSTS AND BENEFITS FOR ALL PART 121 CARRIERS—2014–2023

[Millions of 2010 Dollars * (Discounted at 7% Discount Rate)]

Costs	Rule Implementation Costs: $135.1.
	Mitigation Costs: Not quantified, estimates not included.
Benefits from Provisions of the Rule and any Consequent Safety Mitigation Actions **	$104.9–$241.9.

* Table values have been rounded. Totals may not add due to rounding.

** Given the range of mitigation actions possible, it is difficult to quantify potential benefits. This range reflects the potential benefits resulting from examples of possible mitigation actions.

ii. Who is potentially affected by this rule?

All Part 121 Operators

iii. Assumptions

- All costs and benefits are presented in 2010 dollars.
- All costs and benefits are estimated over a 10-year period from 2014 through 2023.
- Benefits of SMS implementation would begin to accrue in 2017.
- Costs to air carriers would begin to accrue in 2014.
- The present value discount rate is 7 percent.
- The Value of Statistical Life = $8.9 million in 2010$.

iv. Benefits of This Rule

The benefits of this final rule consist of the value of averted fatalities, casualties, aircraft damage, accident investigation costs, and reduced employee compensation claims. These benefits are a result of identifying safety issues, spotting trends, implementing necessary safety mitigations, and communicating findings before they result in a near-miss, incident, or accident. Over the 10-year period of analysis, it is estimated that the benefits from averted accidents, reduced employee compensation claims, and safety mitigations could range between $205.0 and $472.3 million ($104.9 to $241.9 million present value at 7 percent discount rate).

v. Costs of This Rule

Each air carrier will be required to develop an SMS that includes the four SMS components: Safety Policy, Safety Risk Management, Safety Assurance, and Safety Promotion. To support each component, the FAA projects that the compliance cost of this rule will come from the initial development and documentation of the carriers' SMS, implementation and continuous operating costs to include the modification or purchasing of new equipment/software, additional staff and promotional materials, and training. Costs increase with the size of the carrier and the type of operations that they provide. However, medium and large operators have existing quality management systems which will lower their estimated compliance costs. Costs of the rule's provisions (excluding any mitigation costs, which have not been estimated) are estimated to be $224.3 million ($135.1 million present value at 7 percent discount rate) over 10 years.

B. Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (Pub. L. 96–354) (RFA) establishes ''as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of 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.'' The RFA covers a wide-range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA. Section 603 of the Act requires agencies to prepare and make available for public comment an initial regulatory flexibility analysis (IRFA) describing the impact of proposed rules on small entities.

As required by Section 603(a) of the RFA, we prepared and published an initial regulatory flexibility analysis (IRFA) as part of the NPRM for this rule (75 FR 68240, November 5, 2010). As a result of that analysis we determined this rule would have a significant impact on a substantial number of small entities for the following reasons: We estimated that 64 operators were small entities. Even though the proposed rule responds to the PL 111–216 Congressional requirement, we structured the requirement such that small entities could meet the requirements with lower costs than a larger firm.

Section 604 of the RFA also requires an agency to publish a final regulatory flexibility analysis (FRFA) in the **Federal Register** when issuing a final rule. Section 604(a) requires that each FRFA contain:

- A statement of the need for, and objectives of, the rule;
- a statement of the significant issues raised by the public comments in response to the initial regulatory flexibility analysis, a statement of the assessment of the agency of such issues, and a statement of any changes made in the proposed rule as a result of such comments;
- the response of the agency to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration in response to the proposed rule, and a detailed statement of any change made to the proposed rule in the final rule as a result of the comments;
- a description of and an estimate of the number of small entities to which the rule will apply or an explanation of why no such estimate is available;
- a description of the projected reporting, recordkeeping and other compliance requirements of the 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; and,

• a description of the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.

A Statement of the Need for, and Objectives of, the Rule

The objective of Safety Management Systems (SMS) is to proactively manage safety, to identify potential hazards, to determine risk, and to implement measures that mitigate the risk. The FAA envisions operators being able to use all of the components of SMS to enhance a carrier's ability to identify safety issues and spot trends before they result in a near-miss, incident, or accident. For this reason, the FAA is requiring carriers to develop and implement an SMS.

A Statement of the Significant Issues Raised by the Public Comments in Response to the Initial Regulatory Flexibility Analysis, a Statement of the Assessment of the Agency of Such Issues, and a Statement of any Changes Made in the Proposed Rule as a Result of Such Comments

AEA commented that the FAA failed to analyze alternatives and stated that small carriers do not have enough incidents to make SMS cost-beneficial. The FAA maintains that SMS is congressionally mandated and we did look at two alternatives. For the final rule we discussed: (1) Extending the timeframe for development of SMS implementation plans; and (2) extending the timeframe for implementation of SMS. However, as stated above, the FAA ultimately determined that delaying the implementation of SMS delays the safety benefits and this delay in benefits is not offset by the small, delayed compliance cost. Upon a review of these costs, the FAA determined the compliance costs are not a significant economic impact.

The Response of the Agency to any Comments Filed by the Chief Counsel for Advocacy of the Small Business Administration in Response to the Proposed Rule, and a Detailed Statement of any Change Made to the Proposed Rule in the Final Rule as a Result of the Comments

The Small Business Administration (SBA) commented that an SMS would be burdensome for a small carrier, plus SMS may be more suitable for larger carriers because it aids in reducing silos which many not be an issue because of size for many smaller carriers. The FAA maintains the program is flexible and there are several existing programs that small carriers can leverage to make SMS less expensive. For example, many small and medium sized carriers reported that they would use the Web-Based Application Tool (WBAT), which is an FAA sponsored tool, to report and house their data. In addition, carriers that are currently pursuing an SMS reported benefits similar to their larger counterparts.

A Description of and an Estimate of the Number of Small Entities To Which the Rule Will Apply or an Explanation of why no Such Estimate is Available

Under the North American Industry Classification System (NAICS) codes 481111 and 481112, for scheduled air transportation, small entities would be all part 121 carriers with less than 1,500 employees. The FAA estimates that there are approximately 90 part 121 operators and 60 of these operators meet the definition of a small entity; therefore the FAA believes that there are a substantial number of small entities impacted by this rule.

A Description of the Projected Reporting, Recordkeeping and Other Compliance Requirements of the 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 SMS is a formalized approach to managing safety by developing an organization-wide safety policy, developing formal methods of identifying hazards, analyzing and mitigating risk, developing methods for ensuring continuous safety improvement, and creating organization-wide safety promotion strategies. Each air carrier would be required to develop an SMS that includes the four SMS components: Safety Policy, Safety Risk Management, Safety Assurance, and Safety Promotion. To support each component, the FAA projects that the compliance cost of this rule would come from the initial development and documentation of their SMS, implementation and continuous operating costs to include the modification or purchasing of new equipment/software, additional staff and promotional materials, and training. Costs increase as the size of the carrier increases. However, carriers have the ability to use existing programs such as an Aviation Safety Action Programs (ASAP) or the Web-Based Application Tool (WBAT) to meet these requirements.

The FAA estimated the average annual compliance cost during the first three years the rule is in effect for the 60 carriers identified as small entities and compared these costs to calendar year 2011 operating revenues (the most current data available).[8] The compliance cost for small entities was then averaged for three groups based on carrier fleet size (small, medium, and large). Carriers with a fleet of 9 or less aircraft are in the ''small'' group; carriers with between 10 and 47 aircraft are in the ''medium'' group; and carriers with a fleet size greater than 47 aircraft are in the ''large'' group.

Each of the 29 carriers in the ''small'' group fits the criteria of a small entity. The compliance cost for this group of carriers will average $164,500 per year. For the 26 small entities in the ''medium'' group, the compliance cost will average $206,400 per year. The compliance cost for the five carriers identified as small entities in the ''large'' group will average $408,000 per year. Each carrier's compliance cost will vary from the averages presented here due to carrier size (in terms of employee headcount), and the extent to which a carrier already has an ASAP or other safety program already in place.

Of the 60 carriers classified as small entities, 54 reported operating revenues on Form 41. For these 54 reporting carriers, annual compliance costs during the first three years the rule is in effect were less than two percent of their calendar year 2011 operating revenues. A determination for the six remaining small entities was not possible because financial data was not publicly available.

A Description of the Steps the Agency Has Taken To Minimize the Significant Economic Impact on Small Entities Consistent With the Stated Objectives of Applicable Statutes, Including a Statement of the Factual, Policy, and Legal Reasons for Selecting the Alternative Adopted in the Final Rule and Why Each One of the Other Significant Alternatives to the Rule Considered by the Agency Which Affect the Impact on Small Entities Was Rejected

To relieve the burden of this rule on small entities, the FAA considered extending the timeframe for

[8] U.S. Department of Transportation Form 41 (Schedule P1.1, and P1.2), and Form 298–C (Schedule F1). For carriers not reporting a full year of CY 2011 operating revenues, the most recent four consecutive quarters of data was used.

development of SMS implementation plans. In making this determination, the FAA considered longer and shorter terms. However, it settled on one year based on information from the SMS Pilot Project, which showed that an average of one year was sufficient to develop and approve an implementation plan.[9] As part of its analysis, the FAA noted that pilot project participants ultimately had differing levels of SMS implementation. However, because all pilot project participants had initially developed (and received FAA validation on) an implementation plan that provided for full SMS implementation, the FAA was able to use this data to estimate how long it would take a certificate holder to develop such a plan and get the plan approved by the FAA.

The FAA also considered extending the timeframe for implementation of SMS. However, the FAA ultimately concluded that three years for full implementation of SMS is appropriate. In making this determination, the FAA considered longer and shorter terms. Based on information from the SMS Pilot Project, as well as lessons learned from other Civil Aviation Authorities (CAAs), which showed that three years was an appropriate timeframe for implementation of an SMS, the FAA decided that three years was the best interval to allow carriers to prepare and begin implementation.[10] With regard to both of these alternatives, the timelines chosen for implementation plans and final implementation of SMS are mitigated for small entities to the extent that SMS plans and programs must be appropriate to the size, scope, and complexity of the certificate holder's operations, and are therefore scalable to the size of the small entity.

In conclusion, while the FAA found this rule will affect a substantial number of small entities, we found annual compliance cost was less than two percent of annual revenue for the firms with public data. As the compliance cost is less than two percent of annual revenue, the FAA concludes there will not be a significant economic impact. Therefore, as the FAA Administrator, I certify this rule will not have a significant economic impact on a substantial number of small entities.

D. International Trade Impact Assessment

The Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, so long as the standard has a legitimate domestic objective, such the protection of safety, and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. The FAA has assessed the potential effect of this final rule and determined that it uses ICAO international standards as its basis and therefore is in compliance with the Trade Agreements Act.

E. Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of $100 million or more (in 1995 dollars) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a ''significant regulatory action.'' The FAA currently uses an inflation-adjusted value of $143.1 million in lieu of $100 million. This final rule does not contain such a mandate; therefore, the requirements of Title II of the Act do not apply.

F. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. According to the 1995 amendments to the Paperwork Reduction Act (5 CFR 1320.8(b)(2)(vi)), an agency may not collect or sponsor the collection of information, nor may it impose an information collection requirement unless it displays a currently valid Office of Management and Budget (OMB) control number.

This final rule will impose new information collection requirements. The estimated burden of those requirements is discussed below. As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), the FAA has submitted these information collection requirements to OMB for its review. Notice of OMB approval for this information collection will be published in a future **Federal Register** document.

Under this final rule, each certificate holder operating under part 121 will develop an SMS, tailored to its unique operating environment, comprised of the four key components: Safety policy, safety risk management, safety assurance, and safety promotion. Collection and analysis of safety data is an essential part each carrier's SMS. The FAA has identified the following areas that will create information collection burdens under this final rule: Development and implementation of the SMS; implementation plan and documentation; recordkeeping requirements associated with the safety policy, safety risk management and safety assurance processes; training records, and communication records. In addition, based on comments received to the proposed rule, the FAA has also identified information collection burdens associated with expanding existing programs that may be used to satisfy the requirements of the final rule. For all information required to be submitted, documented, or collected under this final rule, the FAA does not specify how, or in what media, the documents and records must be maintained relative to the requirements of the final rule. Air carriers are encouraged to use existing mechanisms and systems to minimize the burden of the final rule. These burdens are outlined below. The cost estimates associated with these burdens are based on comments from the ARC, information from the SMS pilot program participants, and comments received in response to the NPRM.

i. Expansion of Existing Programs

The FAA has strongly encouraged air carriers to use existing programs, such as the Aviation Safety Action Program (ASAP), and the Internal Evaluation Program (IEP), to satisfy some of the requirements for the safety assurance component of SMS. The FAA expects that the 59 air carriers with existing ASAP programs will expand their programs to cover those employees currently not covered, to satisfy the employee reporting system requirement of the final rule. For the 31 remaining air carriers, the FAA expects that these carriers will use the employee reporting

[9] MITRE Corporation conducted a study of the pilot project participants and concluded that it took, on average, approximately one year for pilot project participants to complete implementation plans.

[10] While many pilot project participants are not small carriers, the large and mid-size carriers that make up a large portion of the pilot project participants had to build an SMS from the ground up. The typical implementation plan received from these carriers showed that they would be able to fully implement an SMS within three years. Because SMS is scalable, a small carrier's SMS will be less complex than a large or mid-size carrier's SMS. Accordingly, the FAA does not expect small carriers to need more time to implement an SMS than the large and mid-size carriers that were part of the pilot project.

tools in the Web-Based Application Tool (WBAT), which is a federally developed and funded software system that can be used, for example, to develop an implementation plan, document hazards, and create an employee reporting system. Because this is a federally funded system, the FAA estimated a minimal burden for those 31 carriers using WBAT. The information collection costs for air carriers expanding existing programs to comply with this rule are as follows.

a. Estimate Annual Cost of Expanding Existing Programs

59	Part 121 Carriers with an ASAP for one or more employee groups [11]
1	Full Time Employee (FTE) = 2000 hours per year
2	FTEs per additional ASAP @ 0.2 FTE each [12] = 800 hours per ASAP
3	Pilot ASAPs
14	Mechanic and Engineering (M&E) ASAPs
18	Dispatcher ASAPs
+ 32	Flight Attendant (FA) ASAPs
67	Total Employee Group ASAPs
$2,000	Hardware/software, administration, and meeting logistics per group [13]
× 67	Total Employee Group ASAPs
$134,000	Material Cost per Year

Employee group	Annual salary	Hourly salary
Airline pilots/copilots/flight engineers salary: [14]	$151,248	$75.6239
Maintenance staff salary: [15]	73,606	36.8031
Dispatchers salary: [16]	70,250	35.1249
Flight attendants salary: [17]	54,290	27.1452

3 Pilot ASAPs * 800 hours:	2,400 hours.
14 M&E ASAPs * 800 hours:	11,200 hours.
18 Dispatcher ASAPs * 800 hours:	14,400 hours.
+ 32 FA ASAPs * 800 hours:	25,600 hours.
Total Labor Hours per Year	53,600 hours.

	Hours * labor rate	In 000's
3 Pilot ASAPs	2,400 hr * $75.6239	$181.497
14 M&E ASAPs	11,200 hr * 36.8031	412.195
18 Dispatcher ASAPs	14,400 hr * 35.1249	505.798
+ 32 FA ASAPs	25,600 hr * 27.1452	694.917
Total Labor Cost per Year		1,794.408
+ Total Material Cost per Year		134.000
Total Cost per Year for Expanding Existing Programs		1,928.408

b. Estimated Implementation Cost of Expanding of Existing Programs

The FAA assumes that the 59 carriers expand these programs over 3 years. A third of the expansion will be completed in year one, two-thirds of the program will be completed in year two, and the program will be fully operational by the third year.

Year 1	53,600 hours * 33.3%	17,848.8
Year 2	53,600 hours * 66.6%	35,697.6
+ Year 3	53,600 hours * 100.0%	53,600.0
Total Labor Hours for 3 Years		107,146.4

		In 000's
Year 1	$1,928.408 * 33.3%	$ 642.160
Year 2	$1,928.408 * 66.6%	1,284.320

[11] *http://www.faa.gov/about/initiatives/asap* (August 23, 2011).

[12] ATA response to NPRM ''Request for Comments'' (Docket No. FAA–2009–061), Figure 3, page 35.

[13] Ibid.

[14] *http://www.bls.gov/oes/current/naics3_481000.htm*, *http://www.bls.gov/news.release/pdf/ecec.pdf*, BLS reports in Table A. Relative importance of employer costs for employee compensation, June 2011 that additional employer compensation per employee is roughly 31% of an employee's salary

[15] Ibid.

[16] Ibid.

[17] Ibid.

		In 000's
+ Year 3	$1,928.408 * 100.0%	1,928.408
Total Cost for 3 Years		3,854.888

c. Estimated Total Costs of Expanding Existing Programs

Implementation Cost: 107,146.4 labor hours and $3.9 million over 3 years.

Average Annual Cost: 35,715.5 labor hours and $1.28 million per year.

ii. Implementation Plan, SMS Documentation and Implementation

All 90 certificate holders will be required to develop and submit an implementation plan. The implementation plan will guide the certificate holder's implementation of SMS, as well as provide the basis for FAA's oversight during the development and implementation phases. The SMS implementation plan is the only document or data that the certificate holder must submit to the FAA. It is a one-time submission due six months after the effective date of the final rule.

All 90 certificate holders must also develop and maintain documentation that describes the safety policy for the certificate holder. The safety policy must address, among other things, the certificate holder's safety objectives, statements about the necessary resources for the implementation of the SMS, a safety reporting policy that defines requirements for employee reporting of safety hazards or issues, and an emergency response plan.

In addition to the safety policy, all 90 certificate holders are required under this rule to develop and maintain documentation of SMS processes and procedures, including safety risk management processes and safety assurance processes. Given that these processes and procedures will depend on the size and scope of each air carrier's operation, the amount of documentation will vary greatly amongst these certificate holders.

a. Estimated Cost of Implementation Plan and SMS Documentation

One Full Time Employee (FTE):	2,000 hours/yr
Research Analyst Salary: [18]	$92,958/yr or $46.479/hr
Material Documentation Cost (3 years): [19]	Small $24,000
	Medium 95,000
	Large 337,500

	Hours
30 Large Carriers * 4,256 hrs/yr of labor per carrier:	127,680
31 Medium Carriers * 2,732 hrs/yr of labor per carrier:	84,692
+ 29 Small Carriers * 3,045 hrs/yr of labor per carrier:	88,305
Total Labor Hours per Year for 90 Carriers	300,677
Total Labor Hours for 90 Carriers over 3 Years	902,031

Total Labor Hours per Year	300,677
× Research Analyst Hourly Wage	$46.479
Total Labor Cost/Per Year for 90 Carriers	$13,975,166
Total Initial Labor Cost for 90 Carriers over 3 Years	41,925,498

30 Large Carriers * $337,500 material cost over three years:	$10,125,000
31 Medium Carriers * $95,000 material cost over three years:	2,945,000
29 Small Carriers * $24,000 material cost over three years:	696,000
90 Carriers Initial Material Cost Over 3 Years	13,766,000

Initial Labor Cost for 90 Carriers over 3 Years	41,925,498
× Initial Material Cost for 90 Carriers over 3 Years	13,766,000
Initial Cost Burden Over Years 1–3	55,691,498

b. Estimated Annual Cost of SMS Documentation

In comments to the NPRM, ATA estimates that small carriers will spend $10,000 a year, medium sized carriers will spend $15,000, and large carriers will spend $30,000 on SMS manual revision.

30 Large Carriers * $30,000/yr per carrier	$ 900,000
31 Medium Carriers * $15,000/yr per carrier	465,000

[18] Bureau of Labor Statistics, *http://www.bls.gov/oes/current/oes152031.htm.*

[19] Initial Regulatory Evaluation Voluntary Program Participant's Survey.

+ 29	Small Carriers * $10,000/yr per carrier	290,000
	Document Update Costs per Year for Years 4–10	$1,655,000

iii. SMS Recordkeeping Requirements

This rule requires air carriers to record outputs from their safety risk management (SRM) processes, safety assurance (SA) processes, safety communications and SMS training. Records of outputs for SRM processes must be maintained for as long as the outputs remain relevant to the certificate holder's operation. Outputs of safety assurance processes must be maintained for 5 years. Training records must be kept for as long as the individual is employed by the certificate holder and all SMS communication records under § 5.93 must be kept for 24 months. The scope and breadth of these recordkeeping requirements will depend on the size and complexity of the certificate holder's operation. To mitigate these burdens, the FAA has not specified how, or in what media, these records must be maintained, and has also encouraged the use of existing mechanisms. For example, the FAA has estimated the burden of maintaining employee SMS training records to be minimal since 121 certificate holders are already required to maintain training records.

Based on this information, the FAA maintains that only one additional employee will be required for carriers with several existing safety programs, 2 full time employees for large and medium carriers with few pre-existing programs, and a part-time employee for small carriers. The FAA also maintains that there will be minimal additional material costs and training record costs since all part 121 certificate holders already maintain training records. Operating costs will begin after the development, documentation, and implementation of an SMS.

a. Estimated Annual Cost of SMS Recordkeeping Requirements:

90 Operators
One Full Time Employee (FTE) = 2000 hours per year
Research Analyst Salary [20] = $92,958 per year = $46.479 per hour

	Hours
59 Large/Medium Carriers * 1 FTE * 2,000 hours	118,000
9 Large/Medium Carriers * 2 FTE * 2,000 hours	36,000
+ 22 Small Carriers * 0.5 FTE * 2,000 hours	22,000
Total Recordkeeping Hours per Year for 90 carriers (Years 4–10)	176,000

Total Recordkeeping Hours per Year for 90 carriers	176,000
× Hourly Wage—Research Analyst	$46.479
Total Recordkeeping Cost per Year for 90 Carriers (Years 4–10)	$8,180,304

Promotional material per year per carrier [21]	$833
× 90 Carriers	90
Total Promotional Material Cost per Year for 90 Carriers (Years 4–10)	$74,970

Total Recordkeeping Cost per Year for 90 Carriers (Years 4–10)	$8,180,304
+ Total Promo Material Cost per Year for 90 Carriers (Years 4–10)	$74,970
Total Annual Cost (Years 4–10)	$8,255,274

b. Estimated Total Annual Cost of SMS Recordkeeping Requirements

176,000 labor hours and $8.3 million per year (Years 4–10).

iv. Estimated Costs to the Federal Government

This rule requires air carriers to implement an SMS acceptable to the Administrator within 3 years of the effective date of the final rule. The FAA offers a federally developed and funded software system, WBAT, which serves a variety of functions in addition to aiding carriers with their ASAPs and SMS. The FAA estimates at most that it costs $2.6 million per year to maintain WBAT.

v. Summary of Total Burden

a. Implementation Cost

Years 1–3	Develop, Implement, Document SMS-Initial Cost Burden	$55,691,498
+ Years 1–3	Cost to Expand Existing Programs	3,854,888
Years 1–3	Total Implementation Cost	59,546,386

b. Annual Cost

+ Years 1–10	Federal Govt Cost—WBAT	$ 2,600,000
Years 4–10	Staffing and Promotional Material	$8,255,274

[20] Bureau of Labor Statistics, *http://www.bls.gov/oes/current/oes152031.htm.*

[21] Initial Regulatory Evaluation Voluntary Program Participant's Survey.

Years 4–10	ASAPs	1,928,408
+ Years 4–10	SMS Manual Updates	1,655,000
Years 4–10	Total Cost Per Year	11,838,682
Years 1–10	$ 2,600,000 * 10 years	$26,000,000
Years 4–10	$11,838,682 * 7 years	82,870,774

G. International Compatibility

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform to International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. The FAA has reviewed the corresponding ICAO Standards and Recommended Practices and has identified the following differences with these proposed regulations. Amendment 30 to Annex 6 part I Section 3.2 Safety Management, Paragraph 3.3.6 effective 1 January, 2009 requires that a Flight Data Analysis Program be in the SMS standard. The FAA will file a difference with ICAO.

ICAO Annex 6 part I includes a provision that part 121 air carriers operating airplanes having a maximum gross takeoff weight in excess of 27,000 kg (approximately 59,400 lbs.). ''. . . shall establish and maintain a flight data analysis programme as part of its safety management system.'' Flight Data Analysis Program (FDAP) is a general term encompassing a number of means by which routine flight operations data may be acquired, recorded, analyzed, and shared. Flight Operational Quality Assurance (FOQA) is one such program. FOQA is a formal voluntary program which has been implemented by 41 air carriers conducting operations under part 121. FOQA specifications include installation of extensive flight data recording systems which facilitate rapid transfer of recorded data, de-identification of that data, and agreements between pilot organizations and the air carriers which define how this information may be used.

The part 121 fleet is diverse in terms of size, complexity, and age, as well as the size of the air carriers that operate them. Many of the older aircraft would require extensive modifications to adapt them to the technical requirements of a FOQA program. The investment and expense of implementing and maintaining such a system exceeds the financial capability of many smaller air carriers. There are a number of ways to meet the requirements of an FDAP. Therefore, the FAA will not require FOQA in this rule.

H. Environmental Analysis

FAA Order 1050.1E identifies FAA actions that are categorically excluded from preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act in the absence of extraordinary circumstances. The FAA has determined this rulemaking action qualifies for the categorical exclusion identified in Chapter 3, paragraph 312d and involves no extraordinary circumstances.

I. Regulations Affecting Intrastate Aviation in Alaska

Section 1205 of the FAA Reauthorization Act of 1996 (110 Stat. 3213) requires the FAA, when modifying its regulations in a manner affecting intrastate aviation in Alaska, to consider the extent to which Alaska is not served by transportation modes other than aviation, and to establish appropriate regulatory distinctions. In the NPRM, the FAA requested comments on whether the proposed rule should apply differently to intrastate operations in Alaska. The agency did not receive any comments, and has determined, based on the administrative record of this rulemaking, that there is no need to make any regulatory distinctions applicable to intrastate aviation in Alaska.

VI. Executive Order Determinations

A. Executive Order 13132, Federalism

The FAA has analyzed this final rule under the principles and criteria of Executive Order 13132, Federalism. The agency determined that this action will not have a substantial direct effect on the States, or the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government, and, therefore, does not have Federalism implications.

B. Executive Order 13211, Regulations That Significantly Affect Energy Supply, Distribution, or Use

The FAA analyzed this final rule under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (May 18, 2001). The agency has determined that it is not a ''significant energy action'' under the executive order and it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

VII. How To Obtain Additional Information

A. Rulemaking Documents

An electronic copy of a rulemaking document may be obtained by using the Internet—

1. Search the Federal eRulemaking Portal (*http://www.regulations.gov*);
2. Visit the FAA's Regulations and Policies Web page at *http://www.faa.gov/regulations_policies/* or
3. Access the Government Printing Office's Web page at *http://www.gpo.gov/fdsys/browse/collection.action?collectionCode=FR*.

Copies may also be obtained by sending a request (identified by notice, amendment, or docket number of this rulemaking) to the Federal Aviation Administration, Office of Rulemaking, ARM–1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267–9680.

B. Comments Submitted to the Docket

Comments received may be viewed by going to *http://www.regulations.gov* and following the online instructions to search the docket number for this action. Anyone is able to search the electronic form of all comments received into any of the FAA's 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.).

C. Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. A small entity with questions regarding this document, may contact its local FAA official, or the person listed under the **FOR FURTHER INFORMATION CONTACT** heading at the beginning of the preamble. To find out more about SBREFA on the Internet, visit *http://www.faa.gov/regulations_policies/rulemaking/sbre_act/*.

List of Subjects

14 CFR Part 5

Air carriers, Aircraft, Airmen, Aviation safety, Reporting and recordkeeping requirements, Safety, Transportation.

14 CFR Part 119

Administrative practice and procedure, Air carriers, Aircraft, Aviation safety, Charter flights, Reporting and recordkeeping requirements.

The Amendment

In consideration of the foregoing, and under the authority of 49 U.S.C. 106(f) and 44701(a)(5), the Federal Aviation amends chapter I of title 14, Code of Federal Regulations, as follows:

■ 1. The heading for subchapter A is revised to read as follows:

Subchapter A—Definitions and General Requirements

■ 2. Add part 5 to subchapter A to read as follows:

PART 5—SAFETY MANAGEMENT SYSTEMS

Subpart A—General

Sec.
5.1 Applicability.
5.3 General requirements.
5.5 Definitions.

Subpart B—Safety Policy

5.21 Safety policy.
5.23 Safety accountability and authority.
5.25 Designation and responsibilities of required safety management personnel.
5.27 Coordination of emergency response planning.

Subpart C—Safety Risk Management

5.51 Applicability.
5.53 System analysis and hazard identification.
5.55 Safety risk assessment and control.

Subpart D—Safety Assurance

5.71 Safety performance monitoring and measurement.
5.73 Safety performance assessment.
5.75 Continuous improvement.

Subpart E—Safety Promotion

5.91 Competencies and training.
5.93 Safety communication.

Subpart F—SMS Documentation and Recordkeeping

5.95 SMS documentation.
5.97 SMS records.

Authority: Pub. L. 111–216, sec. 215 (Aug. 1, 2010); 49 U.S.C. 106(f), 106(g), 40101, 40113, 40119, 41706, 44101, 44701–44702, 44705, 44709–44711, 44713, 44716–44717, 44722, 46105.

Subpart A—General

§ 5.1 Applicability.

(a) A certificate holder under part 119 of this chapter authorized to conduct operations in accordance with the requirements of part 121 of this chapter must have a Safety Management System that meets the requirements of this part and is acceptable to the Administrator by January 8, 2018.

(b) A certificate holder must submit an implementation plan to the FAA Administrator for review no later than September 9, 2015. The implementation plan must be approved no later than March 9, 2016.

(c) The implementation plan may include any of the certificate holder's existing programs, policies, or procedures that it intends to use to meet the requirements of this part, including components of an existing SMS.

§ 5.3 General requirements.

(a) Any certificate holder required to have a Safety Management System under this part must submit the Safety Management System to the Administrator for acceptance. The SMS must be appropriate to the size, scope, and complexity of the certificate holder's operation and include at least the following components:

(1) Safety policy in accordance with the requirements of subpart B of this part;

(2) Safety risk management in accordance with the requirements of subpart C of this part;

(3) Safety assurance in accordance with the requirements of subpart D of this part; and

(4) Safety promotion in accordance with the requirements of subpart E of this part.

(b) The Safety Management System must be maintained in accordance with the recordkeeping requirements in subpart F of this part.

(c) The Safety Management System must ensure compliance with the relevant regulatory standards in chapter I of Title 14 of the Code of Federal Regulations.

§ 5.5 Definitions.

Hazard means a condition that could foreseeably cause or contribute to an aircraft accident as defined in 49 CFR 830.2.

Risk means the composite of predicted severity and likelihood of the potential effect of a hazard.

Risk control means a means to reduce or eliminate the effects of hazards.

Safety assurance means processes within the SMS that function systematically to ensure the performance and effectiveness of safety risk controls and that the organization meets or exceeds its safety objectives through the collection, analysis, and assessment of information.

Safety Management System (SMS) means the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of safety risk controls. It includes systematic procedures, practices, and policies for the management of safety risk.

Safety objective means a measurable goal or desirable outcome related to safety.

Safety performance means realized or actual safety accomplishment relative to the organization's safety objectives.

Safety policy means the certificate holder's documented commitment to safety, which defines its safety objectives and the accountabilities and responsibilities of its employees in regards to safety.

Safety promotion means a combination of training and communication of safety information to support the implementation and operation of an SMS in an organization.

Safety Risk Management means a process within the SMS composed of describing the system, identifying the hazards, and analyzing, assessing and controlling risk.

Subpart B—Safety Policy

§ 5.21 Safety policy.

(a) The certificate holder must have a safety policy that includes at least the following:

(1) The safety objectives of the certificate holder.

(2) A commitment of the certificate holder to fulfill the organization's safety objectives.

(3) A clear statement about the provision of the necessary resources for the implementation of the SMS.

(4) A safety reporting policy that defines requirements for employee reporting of safety hazards or issues.

(5) A policy that defines unacceptable behavior and conditions for disciplinary action.

(6) An emergency response plan that provides for the safe transition from normal to emergency operations in accordance with the requirements of § 5.27.

(b) The safety policy must be signed by the accountable executive described in § 5.25.

(c) The safety policy must be documented and communicated throughout the certificate holder's organization.

(d) The safety policy must be regularly reviewed by the accountable executive to ensure it remains relevant and appropriate to the certificate holder.

§ 5.23 Safety accountability and authority.

(a) The certificate holder must define accountability for safety within the organization's safety policy for the following individuals:

(1) Accountable executive, as described in § 5.25.

(2) All members of management in regard to developing, implementing, and maintaining SMS processes within their area of responsibility, including, but not limited to:

(i) Hazard identification and safety risk assessment.

(ii) Assuring the effectiveness of safety risk controls.

(iii) Promoting safety as required in subpart E of this part.

(iv) Advising the accountable executive on the performance of the SMS and on any need for improvement.

(3) Employees relative to the certificate holder's safety performance.

(b) The certificate holder must identify the levels of management with the authority to make decisions regarding safety risk acceptance.

§ 5.25 Designation and responsibilities of required safety management personnel.

(a) *Designation of the accountable executive.* The certificate holder must identify an accountable executive who, irrespective of other functions, satisfies the following:

(1) Is the final authority over operations authorized to be conducted under the certificate holder's certificate(s).

(2) Controls the financial resources required for the operations to be conducted under the certificate holder's certificate(s).

(3) Controls the human resources required for the operations authorized to be conducted under the certificate holder's certificate(s).

(4) Retains ultimate responsibility for the safety performance of the operations conducted under the certificate holder's certificate.

(b) *Responsibilities of the accountable executive.* The accountable executive must accomplish the following:

(1) Ensure that the SMS is properly implemented and performing in all areas of the certificate holder's organization.

(2) Develop and sign the safety policy of the certificate holder.

(3) Communicate the safety policy throughout the certificate holder's organization.

(4) Regularly review the certificate holder's safety policy to ensure it remains relevant and appropriate to the certificate holder.

(5) Regularly review the safety performance of the certificate holder's organization and direct actions necessary to address substandard safety performance in accordance with § 5.75.

(c) *Designation of management personnel.* The accountable executive must designate sufficient management personnel who, on behalf of the accountable executive, are responsible for the following:

(1) Coordinate implementation, maintenance, and integration of the SMS throughout the certificate holder's organization.

(2) Facilitate hazard identification and safety risk analysis.

(3) Monitor the effectiveness of safety risk controls.

(4) Ensure safety promotion throughout the certificate holder's organization as required in subpart E of this part.

(5) Regularly report to the accountable executive on the performance of the SMS and on any need for improvement.

§ 5.27 Coordination of emergency response planning.

Where emergency response procedures are necessary, the certificate holder must develop and the accountable executive must approve as part of the safety policy, an emergency response plan that addresses at least the following:

(a) Delegation of emergency authority throughout the certificate holder's organization;

(b) Assignment of employee responsibilities during the emergency; and

(c) Coordination of the certificate holder's emergency response plans with the emergency response plans of other organizations it must interface with during the provision of its services.

Subpart C—Safety Risk Management

§ 5.51 Applicability.

A certificate holder must apply safety risk management to the following:

(a) Implementation of new systems.

(b) Revision of existing systems.

(c) Development of operational procedures.

(d) Identification of hazards or ineffective risk controls through the safety assurance processes in subpart D of this part.

§ 5.53 System analysis and hazard identification.

(a) When applying safety risk management, the certificate holder must analyze the systems identified in § 5.51. Those system analyses must be used to identify hazards under paragraph (c) of this section, and in developing and implementing risk controls related to the system under § 5.55(c).

(b) In conducting the system analysis, the following information must be considered:

(1) Function and purpose of the system.

(2) The system's operating environment.

(3) An outline of the system's processes and procedures.

(4) The personnel, equipment, and facilities necessary for operation of the system.

(c) The certificate holder must develop and maintain processes to identify hazards within the context of the system analysis.

§ 5.55 Safety risk assessment and control.

(a) The certificate holder must develop and maintain processes to analyze safety risk associated with the hazards identified in § 5.53(c).

(b) The certificate holder must define a process for conducting risk assessment that allows for the determination of acceptable safety risk.

(c) The certificate holder must develop and maintain processes to develop safety risk controls that are necessary as a result of the safety risk assessment process under paragraph (b) of this section.

(d) The certificate holder must evaluate whether the risk will be acceptable with the proposed safety risk control applied, before the safety risk control is implemented.

Subpart D—Safety Assurance

§ 5.71 Safety performance monitoring and measurement.

(a) The certificate holder must develop and maintain processes and systems to acquire data with respect to its operations, products, and services to monitor the safety performance of the organization. These processes and systems must include, at a minimum, the following:

(1) Monitoring of operational processes.

(2) Monitoring of the operational environment to detect changes.

(3) Auditing of operational processes and systems.

(4) Evaluations of the SMS and operational processes and systems.

(5) Investigations of incidents and accidents.

(6) Investigations of reports regarding potential non-compliance with regulatory standards or other safety risk controls established by the certificate holder through the safety risk management process established in subpart B of this part.

(7) A confidential employee reporting system in which employees can report hazards, issues, concerns, occurrences, incidents, as well as propose solutions and safety improvements.

(b) The certificate holder must develop and maintain processes that

analyze the data acquired through the processes and systems identified under paragraph (a) of this section and any other relevant data with respect to its operations, products, and services.

§ 5.73 Safety performance assessment.

(a) The certificate holder must conduct assessments of its safety performance against its safety objectives, which include reviews by the accountable executive, to:

(1) Ensure compliance with the safety risk controls established by the certificate holder.

(2) Evaluate the performance of the SMS.

(3) Evaluate the effectiveness of the safety risk controls established under § 5.55(c) and identify any ineffective controls.

(4) Identify changes in the operational environment that may introduce new hazards.

(5) Identify new hazards.

(b) Upon completion of the assessment, if ineffective controls or new hazards are identified under paragraphs (a)(2) through (5) of this section, the certificate holder must use the safety risk management process described in subpart C of this part.

§ 5.75 Continuous improvement.

The certificate holder must establish and implement processes to correct safety performance deficiencies identified in the assessments conducted under § 5.73.

Subpart E—Safety Promotion

§ 5.91 Competencies and training.

The certificate holder must provide training to each individual identified in § 5.23 to ensure the individuals attain and maintain the competencies necessary to perform their duties relevant to the operation and performance of the SMS.

§ 5.93 Safety communication.

The certificate holder must develop and maintain means for communicating safety information that, at a minimum:

(a) Ensures that employees are aware of the SMS policies, processes, and tools that are relevant to their responsibilities.

(b) Conveys hazard information relevant to the employee's responsibilities.

(c) Explains why safety actions have been taken.

(d) Explains why safety procedures are introduced or changed.

Subpart F—SMS Documentation and Recordkeeping

§ 5.95 SMS documentation.

The certificate holder must develop and maintain SMS documentation that describes the certificate holder's:

(a) Safety policy.

(b) SMS processes and procedures.

§ 5.97 SMS records.

(a) The certificate holder must maintain records of outputs of safety risk management processes as described in subpart C of this part. Such records must be retained for as long as the control remains relevant to the operation.

(b) The certificate holder must maintain records of outputs of safety assurance processes as described in subpart D of this part. Such records must be retained for a minimum of 5 years.

(c) The certificate holder must maintain a record of all training provided under § 5.91 for each individual. Such records must be retained for as long as the individual is employed by the certificate holder.

(d) The certificate holder must retain records of all communications provided under § 5.93 for a minimum of 24 consecutive calendar months.

PART 119—CERTIFICATION: AIR CARRIERS AND COMMERCIAL OPERATORS

■ 3. The authority citation for part 119 is revised to read as follows:

Authority: Pub. L. 111–216, sec. 215 (August 1, 2010); 49 U.S.C. 106(f), 106(g), 1153, 40101, 40102, 40103, 40113, 44105, 44106, 44111, 44701–44717, 44722, 44901, 44903, 44904, 44906, 44912, 44914, 44936, 44938, 46103, 46105.

■ 4. Add § 119.8 to read as follows:

§ 119.8 Safety Management Systems.

(a) Certificate holders authorized to conduct operations under part 121 of this chapter must have a safety management system that meets the requirements of part 5 of this chapter and is acceptable to the Administrator by March 9, 2018.

(b) A person applying to the Administrator for an air carrier certificate or operating certificate to conduct operations under part 121 of this chapter after March 9, 2015, must demonstrate, as part of the application process under § 119.35, that it has an SMS that meets the standards set forth in part 5 of this chapter and is acceptable to the Administrator.

Issued in Washington, DC, under the authority provided by 49 U.S.C. 106(f), 44701(a)(5) and Sec. 215 of Pub. L. 111–216, 124 Stat. 2350 (49 U.S.C. 44701 note) on January 5, 2015.

Michael P. Huerta,

Administrator.

[FR Doc. 2015–00143 Filed 1–7–15; 8:45 am]

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