FEDERAL REGISTER

Vol. 86 Tuesday

No. 151 August 10, 2021

Pages 43583–43902

OFFICE OF THE FEDERAL REGISTER

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A cumulative list of the parts affected this month can be found in the Reader Aids section at the end of this issue.

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Presidential Documents

Title 3—

The President

Executive Order 14037 of August 5, 2021

Strengthening American Leadership in Clean Cars and Trucks

By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to promote the interests of American workers, businesses, consumers, and communities, it is hereby ordered as follows:

Section 1. *Policy.* America must lead the world on clean and efficient cars and trucks. That means bolstering our domestic market by setting a goal that 50 percent of all new passenger cars and light trucks sold in 2030 be zero-emission vehicles, including battery electric, plug-in hybrid electric, or fuel cell electric vehicles. My Administration will prioritize setting clear standards, expanding key infrastructure, spurring critical innovation, and investing in the American autoworker. This will allow us to boost jobs—with good pay and benefits—across the United States along the full supply chain for the automotive sector, from parts and equipment manufacturing to final assembly.

It is the policy of my Administration to advance these objectives in order to improve our economy and public health, boost energy security, secure consumer savings, advance environmental justice, and address the climate crisis.

Sec. 2. *Light-, Medium-, and Certain Heavy-Duty Vehicles Multi-Pollutant and Fuel Economy Standards for 2027 and Later.*

(a) The Administrator of the Environmental Protection Agency (EPA) shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Clean Air Act (42 U.S.C. 7401–7671q) to establish new multi-pollutant emissions standards, including for greenhouse gas emissions, for light- and medium-duty vehicles beginning with model year 2027 and extending through and including at least model year 2030.

(b) The Secretary of Transportation shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Energy Independence and Security Act of 2007 (Public Law 110–140, 121 Stat. 1492) (EISA) to establish new fuel economy standards for passenger cars and light-duty trucks beginning with model year 2027 and extending through and including at least model year 2030.

(c) The Secretary of Transportation shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under EISA to establish new fuel efficiency standards for heavy-duty pickup trucks and vans beginning with model year 2028 and extending through and including at least model year 2030.

Sec. 3. *Heavy-Duty Engines and Vehicles Multi-Pollutant Standards for 2027 and Later.* (a) The Administrator of the EPA shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Clean Air Act to establish new oxides of nitrogen standards for heavy-duty engines and vehicles beginning with model year 2027 and extending through and including at least model year 2030.

(b) The Administrator of the EPA shall, as appropriate and consistent with applicable law, and in consideration of the role that zero-emission heavy-duty vehicles might have in reducing emissions from certain market segments, consider updating the existing greenhouse gas emissions standards

for heavy-duty engines and vehicles beginning with model year 2027 and extending through and including at least model year 2029.

Sec. 4. *Medium- and Heavy-Duty Engines and Vehicles Greenhouse Gas and Fuel Efficiency Standards as Soon as 2030 and Later.* (a) The Administrator of the EPA shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Clean Air Act to establish new greenhouse gas emissions standards for heavy-duty engines and vehicles to begin as soon as model year 2030.

(b) The Secretary of Transportation shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under EISA to establish new fuel efficiency standards for medium- and heavy-duty engines and vehicles to begin as soon as model year 2030.

Sec. 5. *Rulemaking Targets*. (a) With respect to the rulemaking described in section 3(a) of this order, the Administrator of the EPA shall, as appropriate and consistent with applicable law, consider issuing a notice of proposed rulemaking by January 2022 and any final rulemaking by December 2022.

(b) With respect to the other rulemakings described in section 2 and section 4 of this order, the Secretary of Transportation and the Administrator of the EPA shall, as appropriate and consistent with applicable law, consider issuing any final rulemakings no later than July 2024.

Sec. 6. *Coordination and Engagement.* (a) The Secretary of Transportation and the Administrator of the EPA shall coordinate, as appropriate and consistent with applicable law, during the consideration of any rulemakings pursuant to this order.

(b) The Secretary of Transportation and the Administrator of the EPA shall consult with the Secretaries of Commerce, Labor, and Energy on ways to achieve the goals laid out in section 1 of this order, to accelerate innovation and manufacturing in the automotive sector, to strengthen the domestic supply chain for that sector, and to grow jobs that provide good pay and benefits.

(c) Given the significant expertise and historical leadership demonstrated by the State of California with respect to establishing emissions standards for light-, medium-, and heavy-duty vehicles, the Administrator of the EPA shall coordinate the agency's activities pursuant to sections 2 through 4 of this order, as appropriate and consistent with applicable law, with the State of California as well as other States that are leading the way in reducing vehicle emissions, including by adopting California's standards.

(d) In carrying out any of the actions described in this order, the Secretary of Transportation and the Administrator of the EPA shall seek input from a diverse range of stakeholders, including representatives from labor unions, States, industry, environmental justice organizations, and public health experts.

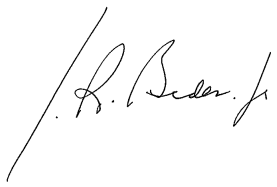
Sec. 7. *General Provisions.* (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.



THE WHITE HOUSE,
August 5, 2021.

[FR Doc. 2021–17121
Filed 8–9–21; 8:45 am]
Billing code 3295–F1–P

Presidential Documents

Memorandum of August 5, 2021

Deferred Enforced Departure for Certain Hong Kong Residents

Memorandum for the Secretary of State [and] the Secretary of Homeland Security

The United States supports the human rights and fundamental freedoms of the residents of Hong Kong. Recognizing the significant erosion of those rights and freedoms in Hong Kong by the People's Republic of China (PRC), I am directing the deferral of removal of certain Hong Kong residents who are present in the United States.

By unilaterally imposing on Hong Kong the Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region (NSL), the PRC has undermined the enjoyment of rights and freedoms in Hong Kong, including those protected under the Basic Law and the Sino-British Joint Declaration. Since the imposition of the NSL in June 2020, Hong Kong police have continued a campaign of politically motivated arrests, taking into custody at least 100 opposition politicians, activists, and protesters on NSL-related charges including secession, subversion, terrorist activities, and collusion with a foreign country or external elements. Over 10,000 individuals have been arrested for other charges in connection with anti-government protests. Over the last year, the PRC has continued its assault on Hong Kong's autonomy, undermining its remaining democratic processes and institutions, imposing limits on academic freedom, and cracking down on freedom of the press.

There are compelling foreign policy reasons to defer enforced departure for Hong Kong residents presently in the United States. The United States is committed to a foreign policy that unites our democratic values with our foreign policy goals, which is centered on the defense of democracy and the promotion of human rights around the world. Offering safe haven for Hong Kong residents who have been deprived of their guaranteed freedoms in Hong Kong furthers United States interests in the region. The United States will not waver in our support of people in Hong Kong.

Pursuant to my constitutional authority to conduct the foreign relations of the United States, I have determined that it is in the foreign policy interest of the United States to defer for 18 months the removal of any Hong Kong resident subject to the conditions and exceptions provided below.

Accordingly, I hereby direct the Secretary of Homeland Security to take appropriate measures to defer for 18 months the removal of any Hong Kong resident who is present in the United States on the date of this memorandum, except for those:

(1) who have voluntarily returned to Hong Kong or the PRC after the date of this memorandum;

(2) who have not continuously resided in the United States since the date of this memorandum;

(3) who are inadmissible under section 212(a)(3) of the Immigration and Nationality Act (INA) (8 U.S.C. 1182(a)(3)) or deportable under section 237(a)(4) of the INA (8 U.S.C. 1227(a)(4));

(4) who have been convicted of any felony or two or more misdemeanors committed in the United States, or who meet any of the criteria set forth in section 208(b)(2)(A) of the INA (8 U.S.C. 1158(b)(2)(A));

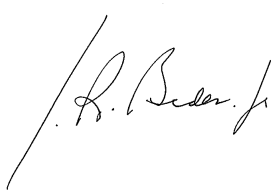
(5) who are subject to extradition;

(6) whose presence in the United States the Secretary of Homeland Security has determined is not in the interest of the United States or presents a danger to public safety; or

(7) whose presence in the United States the Secretary of State has reasonable grounds to believe would have potentially serious adverse foreign policy consequences for the United States.

I further direct the Secretary of Homeland Security to take appropriate measures to authorize employment for noncitizens whose removal has been deferred, as provided by this memorandum, for the duration of such deferral, and to consider suspending regulatory requirements with respect to F–1 nonimmigrant students who are Hong Kong residents as the Secretary of Homeland Security determines to be appropriate.

The Secretary of Homeland Security is authorized and directed to publish this memorandum in the *Federal Register*.



THE WHITE HOUSE,
Washington, August 5, 2021

[FR Doc. 2021–17122
Filed 8–9–21; 8:45 am]
Billing code 4410–10–P

Rules and Regulations

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This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2021–0226; Airspace Docket No. 20–AAL–2]

RIN 2120–AA66

Modification of Class D and Class E Airspace, and Removal of Class E Airspace; Kodiak, AK

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action modifies the Class D airspace at Kodiak Airport, Kodiak, AK. This action also removes the Class E airspace designated as an extension to a Class D or Class E surface area, east of the airport. Further, this action increases the size of the Class E airspace extending upward from 700 feet above the surface. Finally, this action updates the geographic coordinates in the third line of the Class D text header and updates the term ''Airport/Facility Directory'' to ''Chart Supplement'' in the last sentence of the Class D airspace description.

DATES: Effective 0901 UTC, December 2, 2021. The Director of the Federal Register approves this incorporation by reference action under 1 CFR part 51, subject to the annual revision of FAA Order 7400.11 and publication of conforming amendments.

ADDRESSES: FAA Order 7400.11E, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at *https://www.faa.gov//air_traffic/publications/.* For further information, you can contact the Airspace Policy Group, Federal Aviation Administration, 800 Independence Avenue SW, Washington, DC 20591; telephone: (202) 267–8783. The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of FAA Order 7400.11E at NARA, email *fr.inspection@nara.gov* or go to *https://www.archives.gov/federal-register/cfr/ibr-locations.html.*

FOR FURTHER INFORMATION CONTACT: Matthew Van Der Wal, Federal Aviation Administration, Western Service Center, Operations Support Group, 2200 S 216th Street, Des Moines, WA 98198; telephone (206) 231–3695.

SUPPLEMENTARY INFORMATION:

Authority for This Rulemaking

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. 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. This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with prescribing regulations to assign the use of airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it modifies the Class D and Class E airspace, and removes Class E airspace at Kodiak Airport, Kodiak, AK, to ensure the safety and management of instrument flight rules (IFR) operations at the airport.

History

The FAA published a notice of proposed rulemaking in the **Federal Register** (86 FR 29967; June 4, 2021) for Docket No. FAA–2021–0226 to modify the Class D and Class E airspace, and remove Class E airspace at Kodiak Airport, Kodiak, AK. Interested parties were invited to participate in this rulemaking effort by submitting written comments on the proposal to the FAA. No comments were received.

Class D, E4, and E5 airspace designations are published in paragraphs 5000, 6004, and 6005, respectively, of FAA Order 7400.11E, dated July 21, 2020, and effective September 15, 2020, which is incorporated by reference in 14 CFR 71.1. The Class D and E airspace designation listed in this document will be published subsequently in the Order.

Availability and Summary of Documents for Incorporation by Reference

This document amends FAA Order 7400.11E, Airspace Designations and Reporting Points, dated July 21, 2020, and effective September 15, 2020. FAA Order 7400.11E is publicly available as listed in the **ADDRESSES** section of this document. FAA Order 7400.11E lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

The Rule

This amendment to 14 CFR part 71 modifies the Class D airspace at Kodiak Airport, Kodiak, AK. The Class D radius is increased from 3.1 miles to 4.4 miles, excluding the mountainous terrain west and northwest of the airport and the airspace around Trident Basin Airport.

Additionally, this action removes the Class E airspace, designated as an extension to a Class D or Class E surface area, east of the airport. The airspace is no longer required to contain arriving IFR aircraft.

Further, this action modifies the Class E airspace extending upward from 700 feet above the surface, by increasing the size of the area east of the airport to properly contain IFR aircraft performing the procedure turn maneuver for the VOR RWY 26 approach. Lastly, this action updates the geographic coordinates in the third line of the Class D text header to ''lat. 57°44′59″ N, long. 152°29′38″ W'' and updates the term ''Airport/Facility Directory'' to ''Chart Supplement'' in the last sentence of the Class D airspace description.

FAA Order 7400.11, Airspace Designations and Reporting Points, is published yearly and effective on September 15.

Regulatory Notices and Analyses

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current, is non-controversial, and unlikely to result in adverse or negative comments. It, therefore: (1) Is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a

regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this rule, when promulgated, would not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Environmental Review

The FAA has determined that this action qualifies for categorical exclusion under the National Environmental Policy Act in accordance with FAA Order 1050.1F, ''Environmental Impacts: Policies and Procedures,'' paragraph 5–6.5a. This airspace action is not expected to cause any potentially significant environmental impacts, and no extraordinary circumstances exist that warrant the preparation of an environmental assessment.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

■ 1. The authority citation for 14 CFR part 71 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

§ 71.1 [Amended]

■ 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.11E, Airspace Designations and Reporting Points, dated July 21, 2020, and effective September 15, 2020, is amended as follows:

Paragraph 5000 Class D Airspace.

* * * * *

AAL AK D Kodiak, AK [Amended]

Kodiak Airport, AK
(Lat. 57°44′59″ N, long. 152°29′38″ W)
Trident Basin Airport, AK
(Lat. 57°46′51″ N, long. 152°23′29″ W)

That airspace extending upward from the surface to and including 2,600 feet MSL within a 4.4-mile radius of the airport, and within 1 mile each side of the 091° bearing from the airport, extending from the 4.4-mile radius to 6.1 miles east of Kodiak Airport, excluding that airspace west and northwest of a line beginning at the 228° bearing from Kodiak Airport, to the 308° bearing at 2.9 miles from Kodiak Airport, to the 012° bearing from Kodiak Airport, and excluding that airspace from the 024° bearing from the Kodiak Airport to the 325° bearing at 1.0 mile from Trident Basin Airport, and excluding that airspace within a 1.0-mile radius of Trident Basin Airport from the 325° bearing from Trident Basin Airport counterclockwise to the 250° bearing from Trident Basin airport, and within a 0.3-mile radius of Trident Basin Airport from the 250° bearing from Trident Basin Airport counterclockwise to the 119° bearing from the Trident Basin Airport, and from the 119° bearing at 0.3 miles from Trident Basin Airport to the 072° bearing at 4.4 miles from Kodiak Airport. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Chart Supplement.

Paragraph 6004 Class E Airspace Areas Designated as an Extension to a Class D or Class E Surface Area.

* * * * *

AAL AK E4 Kodiak, AK [Removed]

Kodiak Airport, AK
(Lat. 57°45′00″ N, long. 152°29′38″ W)

Paragraph 6005 Class E Airspace Areas Extending Upward From 700 feet or More Above the Surface of the Earth.

* * * * *

AAL AK E5 Kodiak, AK [Amended]

Kodiak Airport, AK
(Lat. 57°44′59″ N, long. 152°29′38″ W)

That airspace extending upward from 700 feet above the surface within a 6.9-mile radius of the airport, and within 8 miles north and 4.1 miles south of the 071° bearing from the airport, extending from the 6.9-mile radius and extending from 5.2 miles east of the airport to 21.2 miles east of the airport, excluding that airspace extending beyond 12 miles of the shoreline; and that airspace extending upward from 1,200 feet above the surface within a 73-mile radius of the Kodiak Airport, AK, excluding that airspace extending beyond 12 miles of the shoreline.

Issued in Des Moines, Washington, on August 2, 2021.

B.G. Chew,

Acting Group Manager, Operations Support Group, Western Service Center.

[FR Doc. 2021–16827 Filed 8–9–21; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

18 CFR Part 284

[Docket No. RM96–1–042; Order No. 587–Z]

Standards for Business Practices of Interstate Natural Gas Pipelines

AGENCY: Federal Energy Regulatory Commission, Department of Energy.

ACTION: Final rule.

SUMMARY: The Federal Energy Regulatory Commission is amending its regulations to incorporate by reference, with certain enumerated exceptions, the latest version (Version 3.2) of business practice standards adopted by the Wholesale Gas Quadrant of the North American Energy Standards Board (NAESB) applicable to natural gas pipelines in place of the currently incorporated version (Version 3.1) of those business practice standards. The revisions made by NAESB in this version of the standards are designed to enhance the natural gas industries' system and software security measures and to clarify the processing of certain business transactions.

DATES:

Effective date: This rule is effective October 12, 2021.

Compliance date: Compliance filings required by this rule are due on November 12, 2021 and compliance with the standards incorporated in this rule is required on and after June 1, 2022.

Incorporation by reference: The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of October 12, 2021.

FOR FURTHER INFORMATION CONTACT:

Stanley Wolf (technical issues), Office of Energy Policy and Innovation, Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426, (202) 502–6841, *stanley.wolf@ferc.gov*.

Oscar F. Santillana (technical issues), Office of Energy Market Regulation, Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426, (202) 502–6392, *oscar.santillana@ferc.gov*.

Robert McLean (legal issues), Office of the General Counsel, Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426, (202) 502–8156, *robert.mclean@ferc.gov*.

SUPPLEMENTARY INFORMATION:

Order No. 587–Z

Final Rule

(Issued July 13, 2021)

Table of Contents

1. In this Final Rule, the Federal Energy Regulatory Commission (Commission) amends its regulations at 18 CFR 284.12 to incorporate by reference, with certain enumerated exceptions,[1] the latest version (Version 3.2) of business practice standards adopted by NAESB's WGQ applicable to natural gas pipelines that NAESB reported to the Commission on August 17, 2020 in place of the currently incorporated version (Version 3.1) of those business practice standards. This Final Rule requires interstate natural gas pipelines to file compliance filings with the Commission by November 12, 2021 and to comply with the standards incorporated by reference in this rule on and after June 1, 2022.

2. The implementation of these standards and regulations will promote the additional efficiency and reliability of the natural gas industries' operations thereby helping the Commission to carry out its responsibilities under the Natural Gas Act (NGA). Further, the implementation of these standards will enhance the natural gas industries' computer security requirements.[2] In addition, the implementation of these data requirements will provide additional transparency to Informational Postings websites and will improve communication standards.

3. The NAESB WGQ Version 3.2 package of standards contains revisions to the NAESB WGQ Version 3.1 package of standards. As explained further below, in response to the recommendations in the Sandia National Laboratory (Sandia)[3] report, NAESB updated the Quadrant Electronic Delivery Mechanism (EDM) Related Standards and internet Electronic Transport (IET) Related Standards to specifically: (1) Require the implementation of fixes or patches for known vulnerabilities as soon as reasonably practicable in coordination with other trading partners; (2) specify notification timelines to provide notice to trading partners of any systems or software that have not been updated and the potential impact of using the vulnerable system; (3) include both specific and broad adoptions of system security measures and specific notification and coordination during outages with affected trading partners; (4) maintain a minimum encryption strength of 128 bits, (5) specify that OpenPGP[4] should be used to create public and private keys for privacy and digital signature applications; (6) specify Hyper-Text Transport Protocol Secure (HTTPS)[5] whenever secure communication is required to protect information in transit and support overall privacy needs; (7) use the largest feasible key length consistent with implementation of current business processes; (8) state that secure websites should employ individual user credentials; and (9) encourage security assessments and coordination between customers, vendors, and trading partners.

4. Further, in response to industry requests or through the normal course of WGQ activities, NAESB: (1) Updated the Nominations Related Standards to allow a Service Requester to determine which rights of the contract its segmentation nomination is using; (2) updated the Quadrant EDM Related Standards to (i) define a NAESB standard time frame for information to be retained on a pipeline's Informational Postings website, (ii) allow for processing functions at the line item level on Customer Activities websites and allow for the use of icons and/or graphical control elements for navigation and/or processing functions, and (iii) make minor revisions designed to add clarity, update the minimum technical characteristics to account for changes in technology since the previous version (Version 3.1) of the WGQ standards, and update the minimum and suggested operating systems and web browsers that entities should support; (3) updated multiple sets of standards to remove references to the term ''gigacalories'' and add the term ''gigajoules'' as the standard quantity for nominations, confirmations, and scheduling in Mexico; and (4) revised the NAESB WGQ data sets or other technical implementation documentation while not resulting in modifications to the underlying business practice standards.

I. Background

5. Since 1996, the Commission has adopted regulations to standardize the business practices and communication methodologies of interstate natural gas pipelines to create a more integrated and efficient pipeline system. These regulations have been promulgated in

[1] As explained below, we are not incorporating by reference in this Final Rule the optional model contracts and the eTariff-related standards included in the North American Energy Standards Board (NAESB) Wholesale Gas Quadrant (WGQ) Version 3.2 package of business practice standards.

[2] As explained below, NAESB has developed and adopted, in conjunction with Sandia National Laboratories, a series of business practice standards to protect the natural gas industries' internet security.

[3] Sandia is a multidisciplinary national laboratory and federally funded research and development center for the U.S. Department of Energy's (DOE) National Nuclear Security Administration that supports numerous federal, state, and local government agencies, companies, and organizations.

[4] OpenPGP is an encryption standard defined by the internet Engineering Task Force enabling design and implementation free of licensing fees. At present, the encryption method is generally considered the most secure.

[5] HTTPS authentication encrypts username and password combinations as part of a Uniform Resource Locator address. To obtain an HTTPS connection, a web browser must contact a trusted, commercial Certificate Authority, such as a NAESB Authorized Certificate Authority, to obtain the web server's public key, and follow other applicable HTTPS procedures.

the Order No. 587 series of orders,[6] wherein the Commission has incorporated by reference standards for interstate natural gas pipeline business practices and electronic communications that were developed and adopted by NAESB's WGQ. Upon incorporation by reference, this version of the standards will replace the currently incorporated version (Version 3.1) of those business practice standards.

6. On August 17, 2020, NAESB filed a report informing the Commission that it had adopted and ratified WGQ Version 3.2 of its business practice standards applicable to interstate natural gas pipelines. Version 3.2 of the WGQ includes business practice standards developed and modified in response to industry requests and directives from the NAESB Board of Directors. This version also includes the standards developed in response to the recommendations of Sandia, which in 2019 issued a cybersecurity surety assessment of the NAESB standards sponsored by DOE (Sandia Surety Assessment),[7] and the standards developed to enable the use of distributed ledger technologies when transacting the NAESB Base Contract for Sale and Purchase of Natural Gas.

7. The NAESB report identifies all the changes made to the WGQ Version 3.1 Standards and summarizes the deliberations that led to the changes being made. It also identifies changes to the existing standards that were considered but not adopted due to a lack of consensus or other reasons.

8. On February 18, 2021, the Commission issued a Notice of Proposed Rulemaking proposing to amend its regulations to incorporate by reference, with certain enumerated exceptions, the NAESB WGQ Version 3.2 business practice standards (referenced above) applicable to natural gas pipelines.[8]

9. In response to the Version 3.2 NOPR, NAESB and the Interstate Natural Gas Association of America (INGAA) filed comments. NAESB clarifies that Standards 4.3.60 and 10.3.16 do not require multi-factor (*e.g.,* two-factor) authentication on an individual basis. NAESB clarifies that Standard 4.3.60 states that a Customer Activities website should be protected by [Hyper-Text Transport Protocol] (HTTP) [9] Basic Authentication using transport layer security and require a single logon/password pair for each user session. NAESB further clarifies that Standard 10.3.16 states that trading partners should implement HTTP Basic Authentication using transport layer security.[10] INGAA supports NAESB's clarifying comments.[11]

10. INGAA expresses support for the Commission's proposal to incorporate by reference NAESB's WGQ Version 3.2 business practice standards. INGAA also supports the Commission's proposal in the Version 3.2 NOPR, but urges the Commission to ensure that implementation of a Final Rule in this proceeding occurs for the first gas day of the month, but not prior to April 1, 2022, after the winter heating season. INGAA states that implementation of a Final Rule in this proceeding will require substantial time and effort from both pipelines and their customers to alter business systems, scheduling, and coordination processes and, thus, it would be best to schedule implementation to not occur during the winter heating season.[12]

11. Further, INGAA states that requiring implementation to occur for the first gas day of the month is important for both pipelines and shippers. INGAA explains that while pipelines update their software to accommodate the new NAESB version ahead of the implementation date, both pipelines and shippers need to ensure that contract, nomination, allocation, invoice, and other changes will be fully in place and working properly with the start of the gas month. INGAA states that this is consistent with the industry's monthly billing cycle and shall avoid the complications of a mid-month transition.[13]

II. Discussion

A. The NAESB WGQ Version 3.2 Business Practice Standards

1. Modifications to Previous Version of Standards

a. Modifications in Response to the Sandia Surety Assessment

12. NAESB revised previously incorporated standards and developed new standards in response to the recommendations in the Sandia Surety Assessment. Specifically, NAESB adopted revisions to the WGQ EDM Related Business Practice Standards, which establish the framework for the electronic dissemination and communication of information between parties in the North American wholesale gas marketplace, and to the WGQ IET Related Business Practice Standards, which define the implementation of various technologies necessary to communicate transactions and other electronic data using standard protocols for electronic commerce over the internet between trading partners. First, NAESB adopted two new standards, 4.3.109 and 10.3.28, to provide that trading partners should evaluate software fixes or patches for known vulnerabilities within 30 days and implement the fix or patch as soon as reasonably practicable based on the severity of the risk. Second, NAESB adopted two new standards, 4.3.110 and 10.3.29, to provide that trading partners should mutually agree to the version of the EDM and IET to be used. Third, the new standards specify notification and coordination timelines with trading partners, where applicable, to address vulnerable systems or software as soon as possible. Fourth, the Sandia Surety Assessment recommended that NAESB consider guidelines for configuration and logging, network traffic monitoring, alerting systems, and manual continuity of operations in the event of abnormal behavior or failure conditions within the system. In response, NAESB added language to new Standards 4.3.110 and 10.3.28 to include both specific and broad adoptions of such system security measures.

13. Further, NAESB added language to existing Standards 4.3.60, 4.3.61, 10.2.33, and 10.3.25 to clarify the Transport Layer Security protocol,[14]

[6] This series of orders began with the Commission's issuance of *Standards for Bus. Pracs. of Interstate Nat. Gas Pipelines.*, Ord. No. 587, 61 FR 39053 (July 26, 1996), FERC Stats. & Regs. ¶ 31,038 (1996) (cross-referenced at 76 FERC ¶ 61,042).

[7] In April 2017, NAESB announced that Sandia, through funding provided by DOE, would be performing a surety assessment of the NAESB standards. As determined by Sandia and DOE, the purpose of the surety assessment was to analyze cybersecurity elements within the standards, focusing on four areas: (1) The NAESB Certification Program for Accredited Certification Authorities, including the Wholesale Electric Quadrant (WEQ)–012 Public Key Infrastructure Business Practice Standards, the NAESB Accreditation Requirements for Authorized Certificate Authorities, and the Authorized Certification Authority Process; (2) the WEQ Open Access Same-Time Information Systems suite of standards; (3) the WGQ and Retail Markets Quadrant IET and Quadrant EDM Related Standards Manual; and (4) a high-level dependency analysis between the gas and electric markets to evaluate the different security paradigms the markets employ.

[8] *Standards for Bus. Pracs. of Interstate Nat. Gas Pipelines,* Notice of Proposed Rulemaking, 86 FR 12879 (Mar. 5, 2021), 174 FERC ¶ 61,103 (2021) (Version 3.2 NOPR).

[9] HTTP is the original communications protocol of the internet which enables a web browser to depict text, pictures, shapes, live data, and click targets on a web browser. However, username and password combinations are not encrypted in HTTP Basic Authentication.

[10] NAESB Cmts. at 1.

[11] INGAA Cmts. at 3.

[12] *Id.* at 2.

[13] *Id.*

[14] The National Institute of Standards and Technology Special Pub. 800–52 requires government Transport Layer Security servers and clients to support Transport Layer Security Version

which encrypts data to hide information from electronic observers on the internet. NAESB also deleted all references to the Secure Sockets Layer protocol in the standards.

14. Concerning identification key lengths, the Sandia Surety Assessment recommended that Rivest-Shamir-Adelman keys [15] must be no shorter than 2048 bits, Elliptic Curve Digital Signature Algorithm keys [16] must be no shorter than 224 bits, Hash [17] algorithms should be from the Secure Hash Algorithm (SHA)–2 [18] or SHA–3 families, and acceptable Advanced Encryption Standard key lengths range from 128, to 192, to 256. The Sandia Surety Assessment recommended that, in general, implementors use the largest feasible key length consistent with implementation of current business processes. In response, NAESB deleted Standard 4.3.83 to remove legacy support references and maintain a minimum encryption strength of 128 bits. Further, NAESB revised existing Standards 10.2.34 and 10.3.15 to delete a proprietary Pretty Good Privacy (PGP) [19]-related hyperlink and to accommodate license-free OpenPGP, respectively. NAESB also adopted a new Standard 10.2.39 to specify that OpenPGP should be used to create public and private keys for privacy and digital signature applications.

15. Further, NAESB revised existing Standards 4.3.60, 4.3.84, 10.3.4, and 10.3.16 to specify HTTPS, which is an encrypted version of HTTP, whenever a secure communication is required to protect information in transit and support overall privacy needs.

b. Modifications in Response to Industry Requests

16. The following section describes standards development efforts undertaken by NAESB in response to industry requests or through the normal course of WGQ activities that resulted in modifications to the Nomination Related Standards, Quadrant EDM Related Standards, and an effort that impacted multiple sets of standards. NAESB made corresponding revisions, where appropriate, to the related data sets and technical implementation as part of the standards development effort.

i. Nomination Related Standards

17. NAESB revised existing Standards 1.3.27, 1.4.1, and 1.4.2 to add a new data element ''Capacity Block ID'' to allow a Service Requester to determine which primary point rights of the contract their segmented nomination [20] is using and eliminate an existing manual business process from the TSP to automate the business process.

ii. Quadrant Electronic Delivery Mechanism Related Standards

18. NAESB developed two new standards, Standard 4.3.107 to establish a standard data retention period for retrieval of Operationally Available data from the Informational Postings website, and Standard 4.3.108, to establish a standard data retention period for retrieval of Notices for the subcategories of Critical, Non-Critical, and Planned Service Outage from the Informational Postings website.

iii. Revisions Impacting Multiple Standards

19. NAESB revised multiple standards [21] and data sets [22] to remove references to the term ''gigacalories'' and add the term ''gigajoules,'' as the standard quantity for nominations, confirmations, and scheduling in Mexico.

iv. Other Material in NAESB's Report

20. NAESB revised multiple data sets which impacted technical implementation documentation only.

21. Further, NAESB revised its optional model contracts and corresponding Mexican and Canadian Addendums to reflect a standard digital representation of natural gas trade events. NAESB states that these revisions are intended to capitalize on smart contracts and distributed ledger technologies.

B. NAESB's Process

22. NAESB used its consensus procedures to develop and approve the WGQ Version 3.2 Standards. As the Commission found in Order No. 587, the adoption of consensus standards is appropriate, because the consensus process helps ensure the reasonableness of the standards by requiring that the standards draw support from a broad spectrum of industry participants representing all segments of the industry. Moreover, since the industry itself must conduct business under these standards, the Commission's regulations should reflect those standards that have the widest possible support. In section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTT&AA),[23] Congress affirmatively requires federal agencies to use technical standards developed by voluntary consensus standards organizations, like NAESB, as means to carry out policy objectives or activities determined by the agencies unless an agency determines that the use of such standards would be inconsistent with applicable law or otherwise impractical.

C. Adoption of Version 3.2 of the Standards

23. In the Version 3.2 NOPR, the Commission proposed to incorporate by reference, in its regulations, Version 3.2 of the NAESB WGQ consensus business practice standards, with the exception of NAESB's standards specifying the terms of optional model contracts and the eTariff-related standards.[24] None of the commenters opposed the Commission's proposal to incorporate by reference the NAESB WGQ Version 3.2 business practice standards as proposed in the Version 3.2 NOPR.[25]

24. After a review of the comments filed in response to the Version 3.2 NOPR, and because the revisions made by NAESB in this version of the standards are designed to enhance the natural gas industries' system and software security measures and to clarify the processing of certain business transactions, we amend Part 284 of the Commission's regulations to incorporate by reference the NAESB WGQ Version 3.2 business practice standards, with the exceptions (as explained in the Version 3.2 NOPR) of the optional model contracts and the eTariff-related standards.

1.2 and recommends support for Transport Layer Security Version 1.3 by the year 2024.

[15] Rivest-Shamir-Adelman is a public key infrastructure algorithm composed of a public component and a private component that is typically installed on a recognized Certificate Authority.

[16] Elliptic Curve Digital Signature Algorithm public keys generate an encrypted signature to validate data.

[17] A Hash is a cryptology technique used for digital signatures in which a series of numbers that may represent, for example, a password, an image, a document, or an executable file is used to generate a cryptographic hash (*i.e.,* a large number).

[18] SHA–2 is a set of cryptographic hash functions.

[19] PGP is a proprietary (*i.e.,* an organization must pay to use it) encryption program developed to enhance the confidentiality and integrity of data.

[20] In order for a Service Requester to have control over its segmented nomination(s), the Transportation Service Provider (TSP) will require a ''Capacity Block ID'' to be submitted with each nomination line item specifying a Transaction Type of ''Segmented.''

[21] NAESB WGQ Version 3.2 Standards 1.3.14, 1.3.15, 1.3.82, and 3.3.3.

[22] NAESB WGQ Version 3.2 Standards 0.4.1 through 0.4.3, 1.4.1, 1.4.3 through 1.4.6, 2.4.1, 2.4.6, 2.4.17, 3.4.1, 3.4.2, and 5.4.24 through 5.4.26.

[23] Public Law 104–113, 12(d), 110 Stat. 775 (1996).

[24] Version 3.2 NOPR, 174 FERC ¶ 61,103 at n.1 & P 19.

[25] NAESB's clarifying comments regarding revised existing Standards 4.3.60 and 10.3.16 are discussed separately in section II above.

D. Required Compliance Filings

25. As suggested by INGAA, we have selected an implementation schedule for compliance with this Final Rule that delays implementation until after the 2021–2022 winter heating period. To implement the standards that we are incorporating by reference in this Final Rule, we will require each interstate natural gas pipeline to file a separate tariff record reflecting the changed standards by November 12, 2021, to take effect on June 1, 2022 [26] We are adopting this implementation schedule to give the interstate natural gas pipelines subject to these standards adequate time to implement these changes.

E. Implementation Schedule

26. To implement these standards, we require interstate natural gas pipelines to file tariff records to reflect the changed standards by November 12, 2021. None of the comments took issue with the Commission's explanation of its policies on tariff filings and on waiver requests to comply with these standards.[27] Therefore, we are not modifying these policies in this Final Rule and affirm the explanation of those policies the Commission made in the Version 3.2 NOPR.

27. In addition, consistent with the requirements in Order No. 587–W,[28] we are including the following filing requirements for the November 12, 2021 compliance filing to increase the transparency of the pipelines' incorporation by reference of the NAESB WGQ Standards so that shippers and the Commission will know which tariff provision(s) implements each standard as well as the status of each standard.

(1) The pipelines must designate a single tariff record under which every NAESB standard currently incorporated by reference by the Commission is listed.[29] This section should be a separate tariff record under the Commission's electronic tariff filing requirement and should be filed electronically using the eTariff portal using the Type of Filing Code 580. We will post on the Commission's eLibrary website (under Docket No. RM96–1–042) a sample tariff record, to provide filers an illustrative example to aid them in preparing their compliance filings; [30]

(2) For each standard, each pipeline must specify in the tariff record a list of all the NAESB standards currently incorporated by reference by the Commission:

(a) whether the standard is incorporated by reference;

(b) for those standards not incorporated by reference, the tariff provision that complies with the standard; [31] and

(c) a statement identifying any standards for which the pipeline has been granted a waiver, extension of time, or other variance with respect to compliance with the standard.[32]

(3) If the pipeline is requesting a continuation of a previously granted waiver or extension of time to comply with certain NAESB WGQ standards, it must include a table in its transmittal letter that states the standard for which a waiver or extension of time was granted, and the docket number or order citation to the proceeding in which the waiver or extension of time was granted.

III. Notice of Use of Voluntary Consensus Standards

28. Office of Management and Budget (OMB) Circular A–119 (section 11) (Feb. 10, 1998) provides that when a federal agency issues or revises a regulation containing a standard, the agency should publish a statement in the Final Rule stating whether the adopted standard is a voluntary consensus standard or a government-unique standard. In this Final Rule, we are incorporating by reference voluntary consensus standards developed by NAESB's WGQ. In section 12(d) of NTT&AA, Congress affirmatively requires federal agencies to use technical standards developed by voluntary consensus standards organizations to carry out policy objectives or activities determined by the agencies unless use of such standards would be inconsistent with applicable law or otherwise impractical.[33]

IV. Incorporation by Reference

29. The Office of the Federal Register requires agencies incorporating material by reference in final rules to discuss the ways that the materials it incorporates by reference are reasonably available to interested parties and how interested parties can obtain the materials.[34] The regulations also require agencies to summarize, in the preamble of the final rule, the material it incorporates by reference. The standards that we are incorporating by reference in this Final Rule consist of seven suites of NAESB WGQ Business Practice Standards that address a variety of topics and are designed to streamline the transactional processes for the wholesale natural gas industry by promoting a more competitive and efficient market. These include the: Additional Business Practice Standards; Nominations Related Business Practice Standards; Flowing Gas Related Business Practice Standards; Invoicing Related Business Practice Standards; Quadrant Electronic Delivery Mechanism Related Business Practice Standards; Capacity Release Related Business Practice Standards; and internet Electronic Transport Related Business Practice Standards. We summarize these standards below.

30. The Additional Business Practice Standards address six areas: Creditworthiness; Storage Information; Gas/Electric Operational Communications; Operational Capacity; Unsubscribed Capacity; and Location Data Download.

- The Creditworthiness related standards describe requirements for the exchange of information, notification, and communication between parties during the creditworthiness evaluation process.
- The Storage Information related standards define the information to be provided to natural gas service requesters related to storage activities and/or balances.
- The Gas/Electric Operational Communications related standards define communication protocols intended to improve coordination between the gas and electric industries in daily operational communications between transportation service providers and gas-fired power plants. The standards include requirements for communicating anticipated power generation fuel for the upcoming day as

[26] To aid in compliance, promptly after issuance of this Final Rule, we will post a sample tariff record on the Commission's website that may be accessed at *https://www.ferc.gov/ferc-online/elibrary.* All interstate natural gas pipelines are to file their tariff records in conformance with this sample tariff record.

[27] Version 3.2 NOPR, 174 FERC ¶ 61,103 at PP 20–24.

[28] *Standards for Bus. Pracs. of Interstate Nat. Gas Pipelines,* Ord. No. 587–W, 80 FR 67302 (Nov. 2, 2015), 153 FERC ¶ 61,061, at P 42 (2015) (Ord. No. 587–W).

[29] *See* supra n.21.

[30] *Id.*

[31] For example, pipelines are required to include the full text of the NAESB nomination and capacity release timeline standards (WGQ Standards 1.3.2(i-vi) and 5.3.2, respectively) in their tariffs. *See, e.g., Standards for Bus. Pracs. of Interstate Nat. Gas Pipelines,* Ord. No. 587–U, 75 FR 16337 (Apr. 1, 2010), 130 FERC ¶ 61,212, at P 39 & n.42 (2010). Each pipeline's submittal is to identify which tariff provision complies with each of these standards.

[32] Shippers can use the Commission's electronic tariff system to locate the tariff record containing the NAESB WGQ standards, which will indicate the docket number in which any waiver or extension of time was granted.

[33] Public Law 104–113, 12(d), 110 Stat. 775 (1996), 15 U.S.C. 272 note (1997).

[34] 1 CFR 51.5 (2020). *See* Incorporation by Reference, 79 FR 66267 (Nov. 7, 2014).

well as any operating problems that might hinder gas-fired power plants from receiving contractual gas quantities.

- The Operational Capacity related standards define requirements of the transportation service provider related to the reporting and requesting of a transportation service provider's operational capacity, total scheduled quantity, and operationally available capacity.
- The Unsubscribed Capacity related standards define requirements of the transportation service provider related to the reporting and requesting of a transportation service provider's available unsubscribed capacity.
- The Location Data Download related standards define requirements for the use of codes assigned by the transportation service provider for locations and common codes for parties communicating electronically.

31. The Nominations Related Business Practice Standards define the process by which a natural gas service requester with a natural gas transportation contract nominates (or requests) service from a pipeline or a transportation service provider for the delivery of natural gas.

32. *The Flowing Gas Related Business Practice Standards* define the business processes related to the communication of entitlement rights of flowing gas at a location, of the entitlement rights on a contractual basis, of the management of imbalances, and of the measurement and gas quality information of the actual flow of gas.

33. *The Invoicing Related Business Practice Standards* define the process for the communication of charges for services rendered (Invoice), communication of details about funds rendered in payment for services rendered (Payment Remittance), and communication of the financial status of a customer's account (Statement of Account).

34. *The Quadrant Electronic Delivery Mechanism Related Business Practice Standards* define the framework for the electronic dissemination and communication of information between parties in the North American wholesale gas marketplace for Electronic Data Interchange/EDM transfers, batch flat file/EDM transfers, informational postings websites, Electronic Bulletin Boards/EDM, and interactive flat file/EDM.

35. *The Capacity Release Related Business Practice Standards* define the business processes for communication of information related to the selling of all or any portion of a transmission service requester's contract rights.

36. *The internet Electronic Transport Related Business Practice Standards* define the implementation of various technologies necessary to communicate transactions and other electronic data using standard protocols for electronic commerce over the internet between trading partners.

37. The Commission's regulations provide that copies of the standards incorporated by reference may be obtained from NAESB at *https://www.naesb.org//* or (713) 356–0060. Once the Novel Coronavirus Disease (COVID–19) restrictions are lifted, copies of the standards may be inspected at the Federal Energy Regulatory Commission, Public Reference Room, 888 First Street NE, Washington, DC 20426, Phone: (202) 502–8371, *https://www.ferc.gov/.* At this time, the Commission has suspended access to the Commission's Public Reference Room due to the President's March 13, 2020 proclamation declaring a National Emergency concerning COVID–19.

38. NAESB is a private consensus standards developer that develops voluntary wholesale and retail standards related to the energy industry. The procedures used by NAESB make its standards reasonably available to those affected by Commission regulations, which generally is comprised of entities that have the means to acquire the information they need to effectively participate in Commission proceedings. Participants can join NAESB, for an annual membership cost of $8,000, which entitles them to full participation in NAESB and enables them to obtain these standards at no additional cost. Non-members may obtain the Individual Standards Manual or Booklets for each of the seven Manuals by email for $250 per manual, which in the case of these standards would total $1,750. Non-members also may obtain the complete set of Standards Manuals, Booklets, and Contracts on USB flash drive for $2,000. NAESB also provides a free electronic read-only version of the standards for a three-business day period or, in the case of a regulatory comment period, through the end of the comment period. In addition, NAESB considers requests for waivers of the charges on a case-by-case basis depending on need.

V. Information Collection Statement

39. OMB regulations require that OMB approve certain reporting, record keeping, and public disclosure requirements (information collection) imposed by an agency.[35] Therefore, we are submitting this proposed information collection to OMB for review in accordance with section 3507(d) of the Paperwork Reduction Act of 1995. Upon approval of a collection of information, OMB will assign an OMB control number and an expiration date. Respondents subject to the filing requirements of a rule will not be penalized for failing to respond to these collections of information unless the collection of information displays a valid OMB control number.

40. The Commission solicited comments on the need for this information, whether the information will have practical utility, the accuracy of the provided burden estimates, ways to enhance the quality, utility, and clarity of the information to be collected, and any suggested methods for minimizing respondents' burden, including the use of automated information techniques. No comments were filed raising any objections to the burden estimate presented in the Version 3.2 NOPR. Accordingly, we will use that same burden estimate in this Final Rule.

41. *Public Reporting Burden:* The burden estimates for this Final Rule are for one-time implementation of the information collection requirements of this Final Rule (including tariff filing, documentation of the process and procedures, and information technology work).

42. The collections of information related to this Final Rule fall under FERC–545 (Gas Pipeline Rates: Rate Change (Non-Formal)) [36] and FERC–549C (Standards for Business Practices of Interstate Natural Gas Pipelines).[37] The following estimates of reporting burden are related only to this Final Rule and include the costs to pipelines for compliance with the Commission's directives in this Final Rule. The burden estimates are primarily related to implementing these standards and regulations and will not result in ongoing costs.

[35] 5 CFR 1320.11 (2020).

[36] FERC–545 covers rate change filings made by natural gas pipelines, including tariff changes.

[37] FERC–549C covers Standards for Business Practices of Interstate Natural Gas Pipelines.

RM96–1–042 FINAL RULE (STANDARDS FOR BUSINESS PRACTICES OF INTERSTATE NATURAL GAS PIPELINES)

	Number of respondents[38] (1)	Annual number of responses per respondent (2)	Total number of responses (1)*(2) = (3)	Average burden hr. per response (4)	Total annual burden hours & total annual cost[39] (3)*(4) = (5)	Annual costs per respondent (5)/(1) = (6)
FERC–545 (one-time)	178	1	178	10 hrs.; $1,010	1,780 hrs.; $179,780.	$1,010
FERC–549C (one-time)	178	1	178	100 hrs.; $10,100.	17,800 hrs.; $1,797,800.	$10,100
Total			356		19,580 hrs.; $1,977,580.	

The one-time burden (for both the FERC–545 and FERC–549C) will take place in Year 1 and will be averaged over three years:

FERC–545: 1,780 hours ÷ 3 = 593 hours/year over three years

FERC–549C: 17,800 hours ÷ 3 = 5,933 hours/year over three years

The number of responses is also averaged over three years (for both the FERC–545 and FERC–549C):

FERC–545: 178 responses ÷ 3 = 59 responses/year

FERC–549C: 178 responses ÷ 3 = 59 responses/year

The responses and burden for Years 1–3 will total respectively as follows:

Year 1: 59 responses; 593 hours (FERC–545); 5,933 hours (FERC–549C)

Year 2: 59 responses; 593 hours (FERC–545); 5,933 hours (FERC–549C)

Year 3: 59 responses; 593 hours (FERC–545); 5,933 hours (FERC–549C)

Title: FERC–545, Gas Pipeline Rates: Rates Change (Non-Formal); FERC–549C, Standards for Business Practices of Interstate Natural Gas Pipelines.

Action: Proposed information collections.

OMB Control Nos.: 1902–0154 (FERC–545), 1902–0174 (FERC–549C).

Respondents: Business or other for profit (*e.g.,* Natural Gas Pipelines, applicable to only a few small businesses).

Frequency of Responses: One-time implementation (related to business procedures, capital/start-up).

Necessity of Information: In response to the recommendations in the Sandia report, the revisions in this Final Rule to the Commission's regulations will upgrade current business practices and communication standards by updating the Quadrant EDM Related Standards and IET Related Standards to specifically: (1) Require the implementation of fixes or patches for known vulnerabilities as soon as reasonably practicable in coordination with other trading partners; (2) specify notification timelines to provide notice to trading partners of any systems or software that have not been updated and the potential impact of using the vulnerable system; (3) include both specific and broad adoptions of system security measures and specific notification and coordination during outages with affected trading partners; (4) maintain a minimum encryption strength of 128 bits; (5) specify that OpenPGP should be used to create public and private keys for privacy and digital signature applications; (6) specify HTTPS whenever secure communication is required to protect information in transit and support overall privacy needs; (7) use the largest feasible key length consistent with implementation of current business processes; (8) state that secure websites should employ individual user credentials; and (9) encourage security assessments and coordination between customers, vendors, and trading partners.

43. Further, in response to industry requests or through the normal course of WGQ activities, the revisions in this Final Rule to the Commission's regulations will upgrade current business practices and communication standards by specifically: (1) Updating the Nominations Related Standards to allow a Service Requester to determine which rights of the contract its segmentation nomination is using; (2) updating the Quadrant EDM Related Standards to (i) define a NAESB standard time frame for information to be retained on a pipeline's Informational Postings website, (ii) allow for processing functions at the line item level on Customer Activities websites and allow for the use of icons and/or graphical control elements for navigation and/or processing functions, and (iii) make minor revisions designed to add clarity, update the minimum technical characteristics to account for changes in technology since the previous version (Version 3.1) of the WGQ standards, and update the minimum and suggested operating systems and web browsers that entities should support; (3) updating multiple sets of standards to remove references to the term ''gigacalories'' and add the term ''gigajoules'' as the standard quantity for nominations, confirmations, and scheduling in Mexico; and (4) revising the NAESB WGQ data sets or other technical implementation documentation while not resulting in modifications to the underlying business practice standards. The package of standards also includes minor corrections. The implementation of these data requirements will provide additional transparency to Informational Postings websites and will improve communication standards. The implementation of these standards and regulations will promote the additional efficiency and reliability of the natural gas industries' operations thereby helping the Commission to carry out its responsibilities under the NGA. In addition, the Commission's Office of

[38] The number of respondents is the number of entities in which a change in burden from the current standards to the proposed exists, not the total number of entities from the current or proposed standards that are applicable.

[39] The estimated hourly cost (salary plus benefits) provided in this section is based on the salary figures for May 2019 posted by the Bureau of Labor Statistics for the Utilities sector (available at *https://www.bls.gov/oes/current/naics3_221000.htm*) and scaled to reflect benefits using the relative importance of employer costs for employee compensation from June 2020 (available at *https://www.bls.gov/news.release/ecec.nr0.htm*). The hourly estimates for salary plus benefits are:

Computer and Information Systems Manager (Occupation Code: 11–3021), $101.58

Computer and Information Analysts (Occupation Code: 15–1210), $87.42

Electrical Engineer (Occupation Code: 17–2071), $70.19

Legal (Occupation Code: 23–0000), $142.65

The average hourly cost (salary plus benefits), weighting all of these skill sets evenly, is $100.50. We round it to $101/hour.

Enforcement will use the data for general industry oversight.

Internal Review: We have reviewed the requirements pertaining to business practices of interstate natural gas pipelines and have determined that the revisions are necessary to establish a more efficient and integrated pipeline grid. These requirements conform to the Commission's plan for efficient information collection, communication, and management within the natural gas pipeline industries. We determined, through our internal review, that there is specific, objective support for the burden estimates associated with the information requirements.

44. Interested persons may obtain information on the reporting requirements by contacting the following: Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426 [Attention: Ellen Brown, Office of the Executive Director], email: *DataClearance@ferc.gov*, telephone: (202) 502–8663, fax: (202) 273–0873.

45. Comments concerning the collection of information(s) and the associated burden estimate(s), should be sent to the contact listed above and to the Office of Management and Budget, Office of Information and Regulatory Affairs, Washington, DC 20503 [Attention: Desk Officer for the Federal Energy Regulatory Commission], telephone: (202) 395–0710; fax: (202) 395–4718.

VI. Environmental Analysis

46. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect on the human environment.[40] The actions that we take here fall within categorical exclusions in the Commission's regulations for rules that are clarifying, corrective, or procedural, for information gathering, analysis, and dissemination, and for rules regarding sales, exchange, and transportation of natural gas that require no construction of facilities.[41] Therefore, an environmental review is unnecessary and has not been prepared as part of this Final Rule.

VII. Regulatory Flexibility Act

47. The Regulatory Flexibility Act of 1980 (RFA)[42] generally requires a description and analysis of final rules that will have significant economic impact on a substantial number of small entities. The Commission is not required to make such analysis if proposed regulations would not have such an effect.

48. As we stated in the WGQ Version 3.2 NOPR, approximately 178 interstate natural gas pipelines, both large and small, are potential respondents subject to the requirements adopted by this rule. Most of the natural gas pipelines regulated by the Commission do not fall within the RFA's definition of a small entity,[43] which is currently defined for natural gas pipelines as a company that, in combination with its affiliates, has total annual receipts of $30 million or less.[44] For the year 2019, only 11 companies not affiliated with larger companies had annual revenues in combination with its affiliates of $30 million or less and therefore could be considered a small entity under the RFA. This represents about six percent of the total universe of potential respondents that may have a significant burden imposed on them. We estimate that the one-time implementation cost of the proposals in this Final Rule is $1,977,580 (or $11,110 per entity, regardless of entity size).[45] We do not consider the estimated $11,110 impact per entity to be significant. Moreover, these requirements are designed to benefit all customers, including small businesses that must comply with them. Further, as noted above, adoption of consensus standards helps ensure the reasonableness of the standards by requiring that the standards draw support from a broad spectrum of industry participants representing all segments of the industry. Because of that representation and the fact that industry conducts business under these standards, the Commission's regulations should reflect those standards that have the widest possible support.

49. Accordingly, pursuant to section 605(b) of the RFA,[46] the regulations being promulgated herein should not have a significant economic impact on a substantial number of small entities.

VIII. Document Availability

50. In addition to publishing the full text of this document in the **Federal Register**, we provide all interested persons an opportunity to view and/or print the contents of this document via the internet through the Commission's Home Page (*https://www.ferc.gov/*). At this time, we have suspended access to the Commission's Public Reference Room due to the President's March 13, 2020 proclamation declaring a National Emergency concerning COVID–19.

51. From the Commission's Home Page on the internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

52. User assistance is available for eLibrary and the Commission's website during normal business hours from the Commission's Online Support at (202) 502–6652 (toll free at 1–866–208–3676) or email at *ferconlinesupport@ferc.gov,* or the Public Reference Room at (202) 502–8371, TTY (202) 502–8659. Email the Public Reference Room at *public.referenceroom@ferc.gov.*

IX. Effective Date and Congressional Notification

53. These regulations are effective October 12, 2021. We have determined (with the concurrence of the Administrator of the Office of Information and Regulatory Affairs of OMB) that this rule is not a ''major rule'' as defined in section 351 of the Small Business Regulatory Enforcement Fairness Act of 1996. This Final Rule is being submitted to the Senate, House, and Government Accountability Office.

List of Subjects in 18 CFR Part 284

Incorporation by reference, Natural gas, Reporting and recordkeeping requirements.

By direction of the Commission.

Issued: July 15, 2021.

Debbie-Anne A. Reese,

Deputy Secretary.

In consideration of the foregoing, we amend part 284, chapter I, title 18, Code of Federal Regulations, as follows:

PART 284—CERTAIN SALES AND TRANSPORTATION OF NATURAL GAS UNDER THE NATURAL GAS POLICY ACT OF 1978 AND RELATED AUTHORITIES

■ 1. The authority citation for part 284 continues to read as follows:

[40] *Reguls. Implementing the Nat'l Envt'l Pol'y Act,* Ord. No. 486, 52 FR 47897 (Dec. 17, 1987), FERC Stats. & Regs. Preambles 1986–1990 ¶ 30,783 (1987) (cross-referenced at 41 FERC ¶ 61,284).

[41] *See* 18 CFR 380.4(a)(2)(ii), 380.4(a)(5), and 380.4(a)(27) (2020).

[42] 5 U.S.C. 601–612.

[43] *See* 5 U.S.C. 601(3) citing section 3 of the Small Business Act (SBA), 15 U.S.C. 623. Section 3 of the SBA defines a ''small business concern'' as a business which is independently owned and operated, and which is not dominant in its field of operation (2019).

[44] 13 CFR 121.201 (Subsector 486—Pipeline Transportation; North American Industry Classification System code 486210; Pipeline Transportation of Natural Gas) (2020). ''Annual Receipts'' are total income plus cost of goods sold.

[45] This number is derived by dividing the total cost figure by the number of respondents. $1,977,580/178 = $11,110.

[46] 5 U.S.C. 605(b).

Authority: 15 U.S.C. 717–717z, 3301–3432; 42 U.S.C. 7101–7352; 43 U.S.C. 1331–1356.

■ 2. Amend § 284.12 by revising paragraphs (a)(1) and (2) to read as follows:

§ 284.12 Standards for pipeline business operations and communications.

(a) * * *

(1) An interstate pipeline that transports gas under subparts B or G of this part must comply with the business practices and electronic communications standards as promulgated by the North American Energy Standards Board, as incorporated herein by reference in paragraphs (a)(1)(i) through (vii) of this section.

(i) Additional Standards (Version 3.2, August 15, 2020);

(ii) Nominations Related Standards (Version 3.2, August 15, 2020);

(iii) Flowing Gas Related Standards (Version 3.2, August 15, 2020);

(iv) Invoicing Related Standards (Version 3.2, August 15, 2020);

(v) Quadrant Electronic Delivery Mechanism Related Standards (Version 3.2, August 15, 2020);

(vi) Capacity Release Related Standards (Version 3.2, August 15, 2020); and

(vii) internet Electronic Transport Related Standards (Version 3.2, August 15, 2020).

(2) This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of these standards may be obtained from the North American Energy Standards Board, 801 Travis Street, Suite 1675, Houston, TX 77002, *Phone:* (713) 356–0060. NAESB's website is at *https://www.naesb.org/.* Copies may be inspected at the Federal Energy Regulatory Commission, Public Reference Room, 888 First Street NE, Washington, DC 20426, *Phone:* (202) 502–8371, *https://www.ferc.gov/,* or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email *fr.inspection@nara.gov,* or go to: *www.archives.gov/federal-register/cfr/ibr-locations.html.*

* * * * *

[FR Doc. 2021–16915 Filed 8–9–21; 8:45 am]

BILLING CODE 6717–01–P

Proposed Rules

Federal Register
Vol. 86, No. 151
Tuesday, August 10, 2021

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.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 73

[Docket No. PRM–73–18; NRC–2014–0165]

Protection of Digital Computer and Communication Systems and Networks

AGENCY: Nuclear Regulatory Commission.

ACTION: Petition for rulemaking; denial.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking (PRM), dated June 12, 2014, submitted by Anthony Pietrangelo on behalf of the Nuclear Energy Institute. The petitioner requested that the NRC amend its power reactor cyber security regulations to make them consistent with the original intent of the rule and clarify that the scope of those regulations only require the protection of those digital assets that can directly cause core damage and spent fuel sabotage, or whose failure would cause a reactor scram. The petition was docketed by the NRC on September 22, 2014, and assigned Docket No. PRM–73–18. The NRC staff has determined that the information presented in PRM–73–18 does not support rulemaking. The NRC has also determined that existing and ongoing revisions to guidance can effectively address the issues raised by the petitioner in this PRM. Therefore, for the reasons discussed in the **SUPPLEMENTARY INFORMATION** of this document, the NRC is denying PRM–73–18.

DATES: The docket for the petition for rulemaking, PRM–73–18, is closed on August 10, 2021.

ADDRESSES: Please refer to Docket ID NRC–2014–0165 when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

- *Federal Rulemaking website:* Go to *https://www.regulations.gov* and search for Docket ID NRC–2014–0165. Address questions about NRC dockets to Dawn Forder; telephone: 301–415–3407; email: *Dawn.Forder@nrc.gov.* For technical questions, contact the individuals listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *https://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''Begin Web-based ADAMS Search.'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* For the convenience of the reader, the ADAMS accession numbers and instructions about obtaining materials referenced in this document are provided in the ''Availability of Documents'' section of this document. The incoming petition is available in ADAMS under Accession No. ML14184B120.
- *Attention:* The PDR, where you may examine and order copies of public documents, is currently closed. You may submit your request to the PDR via email at *pdr.resource@NRC.gov* or call 1–800–397–4209 between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Juan Lopez, Office of Nuclear Material Safety and Safeguards; telephone: 301–415–2338; email: *Juan.Lopez@nrc.gov;* or Ilka Berrios, Office of Nuclear Material Safety and Safeguards; telephone: 301–415–2404; email: *Ilka.Berrios@nrc.gov.* Both are staff of the U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. The Petition

Section 2.802 of title 10 of the *Code of Federal Regulations* (10 CFR), ''Petition for rulemaking—requirements for filing,'' provides an opportunity for any person to petition the Commission to issue, amend, or rescind any regulation. On June 12, 2014, the NRC received a PRM from Anthony Pietrangelo on behalf of the Nuclear Energy Institute (NEI or the petitioner). The petitioner requested that the NRC amend its regulations in § 73.54, ''Protection of digital computer and communication systems and networks,'' to clarify the scope of § 73.54(a) to only protect those systems and networks associated with structures, systems, or components (SSCs) that are either necessary to prevent core damage and spent fuel sabotage, or whose failure would cause a reactor scram.

The NRC identified two principal issues in the petition. First, the petitioner asserts that a rulemaking is needed to clarify the language in § 73.54(a) to make it consistent with the original intent of this provision to protect against radiological sabotage by only protecting those digital assets that if compromised could directly cause significant core damage or spent fuel sabotage, or whose failure would cause a reactor scram. Second, the petitioner asserts that what it sees as the broad scoping language in § 73.54(a)(1) goes considerably beyond the scope of systems and networks necessary to prevent radiological sabotage, unnecessarily diverting licensee attention from the protection of those digital assets having a direct relationship to radiological sabotage. According to the petitioner, the time, resources, and costs of protecting from a cyber attack those digital assets not directly related to preventing radiological sabotage are inconsistent with the intent of the cyber security rule and are not justified. As discussed in the ''Reasons for Denial'' section of this document, the petitioner presented several assertions to support its petition that the NRC considered in the evaluation the PRM. On September 22, 2014, the NRC published a notice of docketing of PRM–73–18 in the **Federal Register** along with a request for public comment.

II. Background

Following the terrorist attacks of September 11, 2001, the NRC conducted a review of its security requirements to ensure that nuclear power reactors and other licensed facilities could effectively protect against the changing threat environment. Based on this review, the

NRC issued a series of security orders imposing new security requirements on nuclear power reactors and other facilities. In NRC Order EA–02–026, ''Interim Safeguards and Security Compensatory Measures for Nuclear Power Plants,'' dated February 25, 2002, the NRC required licensees to address certain cyber security threats at their facilities to protect against a cyber attack. A subsequent order, NRC Order EA–03–086, ''Issuance of Order Requiring Compliance with Revised Design Basis Threat for Operating Power Reactors,'' dated April 29, 2003, required licensees to address additional cyber attack characteristics.

In 2006, the NRC published in the **Federal Register** a proposed rulemaking, ''Power Reactor Security Requirements'' (71 FR 62664; October 26, 2006), to amend its existing security requirements and add new security requirements applicable to nuclear power reactors. This proposed rule contained a new § 73.55(m), ''Digital computer and communication networks.'' Section 73.55(m)(1) would have required nuclear power reactor licensees to protect computer systems that, if compromised, would adversely impact safety, security and emergency preparedness (SSEP). Section 73.55(m)(2) would have required licensees to systematically assess and manage cyber risks at their facilities. The NRC received comments on the proposed rule, including comments on § 73.55(m).

After considering all comments, the NRC issued a final rule, ''Power Reactor Security Requirements,'' (74 FR 13926; March 27, 2009). This final rule relocated the cyber security requirements in the proposed rule's § 73.55(m) to a new stand-alone § 73.54 in the final rule. As noted by the Commission in the 2009 final rule Statement of Considerations (SOC), relocating the cyber security requirements into their own stand-alone section was appropriate because the implementation of a cyber security program requires a uniquely independent technical expertise and knowledge that would not necessarily be implemented by security personnel. As further noted, placing the cyber security requirements in a stand-alone section would enable these requirements to be made applicable to other types of facilities in the future, if warranted.

In 2013, the NRC began performing inspections of NRC licensees' 10 CFR 73.54 cyber security programs. By 2016, the NRC had completed initial inspections of all NRC licensees' cyber security programs. During this period of time, both industry and the NRC gained valuable insights and lessons learned from implementation of the NRC's cyber security requirements.

In January 2019, the Office of Nuclear Security and Incident Response's (NSIR) Cyber Security Branch initiated an assessment of the NRC's cyber security regulations and Power Reactor Cyber Security Program. Its purpose was to identify key areas of improvement that would strengthen the NRC's Power Reactor Cyber Security Program. The cyber assessment team engaged with external stakeholders to gain additional insights. The Cyber Security Branch in NSIR completed its assessment of the NRC's Power Reactor Cyber Security Program in July 2019. The assessment identified several enhancements to the Power Reactor Cyber Security Program, and the NRC staff developed an action plan to facilitate and prioritize implementation of these enhancements. The enhancements are intended to further risk-inform the NRC's Power Reactor Cyber Security Program. Based on the assessment results, the NRC determined that there was a need to further revise guidance documents beyond updates already implemented by industry stakeholders to, among other things, address issues associated with the scoping of critical digital assets (CDAs).

III. Reasons for Denial

The NRC is denying the petition because the petitioner did not present sufficient new information to warrant the requested changes to the NRC's regulations in § 73.54. Specifically, the petitioner did not show that the regulatory language in § 73.54(a) is inconsistent with the original intent of this provision or the cyber security rule and did not show that the regulatory language in § 73.54(a)(1) is overly broad. Furthermore, an assessment of the NRC's cyber security regulations and Power Reactor Cyber Security Program performed by NRC staff as a separate effort from the review of this petition determined that existing and ongoing revisions to guidance can effectively address the issues raised by the petitioner in this PRM without the need for rulemaking.

Assertions in the Petition

The assertions made by the petitioner in Section III of PRM–73–18, ''Bases for the Action Requested by Petitioner,'' are summarized in the following paragraphs along with the NRC's responses to those assertions.

Assertion A in Section III of the PRM:

In support of its PRM, the petitioner asserts, in part, that the scoping language in § 73.54(a) was not included in the 2006 proposed rule and was added to the 2009 final rule without the opportunity for public notice and comment. The petitioner further asserts that the effects of this scoping language were likely not clear when the final rule was issued.

NRC Response to Assertion A:

The NRC disagrees with the petitioner's Assertion A. The 2006 proposed rule contained a new § 73.55(m) titled ''Digital computer and communication networks.'' Section 73.55(m)(1) would have required licensees to have a cyber security program that would protect computer systems that, if compromised, would adversely impact SSEP. The NRC received several comments on the cyber security requirements in the 2006 proposed rule. This included a comment that the term ''protected computer system'' used in § 73.55(m)(1)(iii) lacked clarity and should be better defined in the final rule. As the Commission stated in the SOC to the 2009 final rule, in response to a public comment, the NRC revised the language in § 73.55(m)(1), renumbered as § 73.54(a) in the 2009 final rule, to provide a more detailed list of the types of computer systems and networks requiring protection from a cyber attack consistent with the language in the proposed rule.

The language in § 73.55(m)(1) of the 2006 proposed rule put licensees on notice that they were required to protect computer systems that, if compromised, could adversely affect SSEP. The language in § 73.54(a) of the 2009 final rule, while modifying the 2006 language from ''SSEP'' to ''SSEP functions'' to better identify the computer systems and networks requiring protection, did not significantly change any cyber security requirements from the proposed rule to the final rule. The 2009 language is consistent with, and a logical outgrowth of, the language in the 2006 proposed rule. Accordingly, the NRC was not required to submit this clarifying language for public notice and comment.

Assertion B in Section III of the PRM:

The petitioner asserts that one result of the § 73.54(a)(1) language in the 2009 final rule was to enlarge the scope of digital assets to be protected from cyber attack beyond what the Commission originally intended in the 2006 proposed rule. The petitioner further asserts that the § 73.54(a)(1) language requires licensees to implement cyber security controls on hundreds to thousands of digital assets, most of which do not, even if compromised, have a direct relationship to radiological

sabotage. According to the petitioner, this creates an inconsistency between the NRC's cyber security requirements and the § 73.55 physical protection program. The petitioner, citing § 73.55(b)(3) and referencing the existing process used to identify target sets, asserts that the performance objectives of the § 73.55 physical protection program must protect against significant core damage and spent fuel sabotage. However, according to the petitioner, because the current language in § 73.54(a)(1) requires the protection of digital assets that cannot, even if compromised, result in significant core damage or spent fuel sabotage, it is inconsistent with the performance objectives of the § 73.55 physical protection program.

NRC Response to Assertion B:

The NRC disagrees with the petitioner's Assertion B. The petitioner asserts that the language in § 73.54(a)(1) is inconsistent with the cyber security rule's original intent of protecting against the Design Basis Threat (DBT) of radiological sabotage. The petitioner's assertion is predicated on the assumption that protecting against the DBT of radiological sabotage is limited to only protecting that equipment and those digital assets that can directly cause significant core damage or spent fuel sabotage.

The NRC agrees that, consistent with the regulatory language in § 73.54(b)(3) and § 73.55(b)(3), a licensee's cyber security program must protect against significant core damage and spent fuel sabotage. However, the NRC does not agree that protecting against the radiological sabotage DBT only involves protecting those digital assets that can directly cause significant core damage and spent fuel sabotage. Rather, protecting against radiological sabotage also involves protecting those digital assets that could either directly or indirectly cause significant core damage or spent fuel sabotage. Additionally, the NRC included EP systems in the cyber security rule because such systems are essential to mitigate the consequences of radiological sabotage. Accordingly, for the reasons described in this section, the NRC does not agree that the language in § 73.54(a)(1) is inconsistent with either the cyber security rule's original intent of protecting against the DBT of radiological sabotage or inconsistent with the performance objectives of § 73.55.

There is nothing in the language of either the 2006 proposed rule or the 2009 final rule that supports the petitioner's assertion. Section 73.54(a) of the 2009 final rule states the general performance objective that licensees must protect against the DBT as described in § 73.1. There is no language indicating that protecting against the DBT is limited to protecting only those digital assets that can directly cause significant core damage or spent fuel sabotage. Similarly, Regulatory Guide (RG) 5.71, ''Cyber Security Program for Nuclear Facilities,'' and the other documents cited by the petitioner reiterate the general performance objective that licensees must protect against the DBT and prevent significant core damage or spent fuel damage.

The petitioner references the existing process used to identify target sets to support the assertion that the performance objectives of the § 73.55 physical protection program only require protection against significant core damage and spent fuel sabotage. As noted previously, the NRC agrees that a licensee's cyber security program must protect against significant core damage and spent fuel sabotage. The NRC further agrees that the process for developing and identifying target sets defines the set of equipment that must be protected from a physical attack to prevent significant core damage and spent fuel sabotage. The NRC notes that § 73.55(f)(2) requires that licensees consider cyber attacks in the development and identification of target sets. However, the purpose of the cyber security language in § 73.55(f)(2) is to identify a specific type of threat that target sets must be protected from. This language is not intended and should not be used to define the scope of the NRC's cyber security requirements.

As previously noted in the NRC's response to petitioner's Assertion A, § 73.55(m)(1) of the 2006 proposed rule would have required licensees to have a cyber security program that would protect computer systems that, if compromised, would adversely impact SSEP. In the SOC to the 2006 proposed rule, the NRC explained that the cyber security requirements were designed to minimize potential attack pathways and the consequences of a successful cyber attack. These requirements are part of a defense-in-depth strategy to protect SSEP digital assets that, if compromised, could directly or indirectly result in radiological sabotage at an NRC-licensed nuclear power plant. Additionally, the NRC included EP systems in the cyber security rule because such systems are essential to mitigate the consequences of radiological sabotage.

The NRC made a conscious and deliberate decision to include computer and network systems that could affect SSEP functions in the cyber security rule, even though not all of the equipment and digital assets requiring protection that are associated with those systems can directly cause significant core damage or spent fuel sabotage. The NRC further explained that as computer technology is increasingly integrated into nuclear power plants, many plant safety and security systems rely on this technology to carry out their functions. The NRC intended that digital assets associated with such systems be protected to minimize potential attack pathways that could indirectly or directly result in radiological sabotage. Accordingly, the NRC does not agree with the petitioner's assertion that the original intent of the cyber security requirements in the 2006 proposed rule was limited to protecting only those digital assets that could directly cause significant core damage or spent fuel sabotage. For these reasons, the NRC has determined that the language in § 73.54(a)(1) is consistent with the original intent of the 2006 proposed rule and is consistent with the performance objectives in § 73.55.

Assertion C in Section III of the PRM:

The petitioner asserts that the language in § 73.54(a)(1) unnecessarily requires licensees to focus on protecting hundreds to thousands of digital assets at their sites that are, in some way, associated with the SSEP functions identified in § 73.54(a)(1). The petitioner asserts that many of these digital assets have no nexus to radiological sabotage. As a result, the considerable time, resources and costs needed to protect these assets is not justified. The petitioner further asserts that granting the petition will lead to a more efficient use of licensee resources without compromising plant safety or security.

NRC Response to Assertion C:

The NRC disagrees with the petitioner's assertion that the NRC's cyber security requirements in § 73.54(a)(1) require the protection of hundreds, and in some cases thousands, of digital assets that have no nexus to radiological sabotage. Section 73.54(a)(1) requires that licensees protect digital computer and communication systems and networks associated with SSEP functions from a cyber attack. The NRC recognizes that these systems may contain hundreds and possibly thousands of digital assets. It is not the NRC's expectation that all digital assets associated with such functions will necessarily require protection in accordance with the NRC's cyber security requirements. Consistent with the requirements in § 73.54(a)(2), only those digital assets that could adversely impact SSEP functions are within the scope of the NRC's cyber

security requirements and must be protected against a cyber attack.

Section 73.54(b)(1) requires licensees to conduct an analysis of digital computer and communication systems and networks and identify those digital assets that must be protected against a cyber attack. This requirement reflects the NRC's recognition that licensees are well situated to determine the safety and security significance of digital systems and assets at their facilities. The NRC issued RG 5.71 to provide guidance to licensees in implementing the NRC's cyber security requirements. Section 3.1.3 of RG 5.71 recognizes that not all digital assets associated with SSEP functions may need to be protected. It sets forth a process for identifying those assets, referred to as CDAs in the regulatory guide, that must be protected against a cyber attack. CDAs are those digital assets that meet the criteria in § 73.54(a)(2) and, if compromised, could adversely impact SSEP functions.

The petitioner identifies examples of digital assets—specifically fax machines, hand-held calibration devices, radios and pagers, and certain calculators used by licensee staff—that it claims have no nexus to radiological sabotage. The NRC agrees that some digital assets associated with SSEP functions may not need to be protected from cyber attack. Consistent with § 73.54(b)(1), determining whether a specific digital asset, such as a fax machine, calibration device, radio, or the like, has a nexus to radiological sabotage requires a site-specific analysis to determine the safety and security significance of the specific asset. The purpose of the analysis is to determine if a specific digital asset must be protected consistent with the criteria in § 73.54(a)(2). That is why neither the NRC's cyber security rule nor RG 5.71 prescribe a list of specific digital assets that must be protected against a cyber attack.

As elaborated in the NRC Response to Assertion B, the NRC does not agree with the petitioner's assertion that only those digital assets that, if compromised, can directly result in radiological sabotage are subject to the NRC's cyber security requirements. Digital assets, the compromise of which may not directly cause significant core damage or spent fuel sabotage, but that could serve as attack pathways that potentially increase the risk of a successful cyber attack if not protected, are within the scope of the NRC's cyber security requirements.

The NRC has been conducting cyber security inspections since 2013 and recently completed a major assessment of the NRC's cyber security requirements. One of the major lessons learned from these inspections and the assessment is that many licensees adopted a conservative approach to identifying digital assets at their facilities that could potentially impact SSEP functions. This resulted in a large number of digital assets being included within the scope of licensees' cyber security programs. As a result of the lessons learned from these inspections and the assessment, the NRC has been and is continuing to engage with stakeholders to revise existing guidance and refine the methodology for identifying CDAs that fall within the scope of the NRC's cyber security requirements. Based on these interactions, NEI revised NEI 13–10 to include a consequence-based, graded approach for identifying CDAs. The NEI 13–10 guidance enables industry to focus resources on the more significant digital assets. The NRC is continuing to work with stakeholders to identify additional revisions to the guidance for identifying those digital assets that must be protected from a cyber attack. For the reasons discussed in this section, the NRC does not agree with the petitioner's assertion that the language in § 73.54(a)(1) requires the protection of digital assets that do not have a nexus to radiological sabotage.

The NRC disagrees with the assertion that the cyber security rule requires the unnecessary expenditure of licensee resources to protect digital assets that have no nexus to radiological sabotage. The NRC issued RG 5.71 in January 2010 to provide guidance to licensees in implementing the NRC's cyber security requirements. It establishes a process for identifying those digital assets, called CDAs, that must be protected against a cyber attack. Some stakeholders have taken a conservative approach to identifying CDAs. The NRC has determined that this is an implementation issue, not an issue with the cyber security rule language. Accordingly, the NRC has been and is continuing to work with industry stakeholders to revise existing guidance and establish new guidance to refine the methodology for identifying CDAs. For these reasons, the NRC does not agree with the petitioner's assertion that the language in § 73.54(a)(1) requires the protection of digital assets that do not have a nexus to radiological sabotage and results in an unjustified burden and costs for licensees.

Assertion D in Section III of the PRM

The petitioner notes that on October 21, 2010, the Commission made a policy determination to apply the NRC's cyber security rule to SSCs in the balance of plant (BOP) at NRC-licensed nuclear power plants. The petitioner further notes that as a result of this policy determination, SSCs in the BOP were no longer subject to the Federal Energy Regulatory Commission's (FERC) Critical Infrastructure Protection reliability standards. The petitioner states that this policy determination expanded the scope of the cyber security program to include digital assets not strictly necessary to prevent radiological sabotage.

NRC Response to Assertion D:

The NRC agrees with the petitioner that on October 21, 2010, the Commission made a policy determination to apply the NRC's cyber security regulations to SSCs in a nuclear power plant's BOP that have a nexus to radiological health and safety. The petitioner asserts that this policy determination expanded the scope of § 73.54(a) to include digital assets not strictly necessary to be protected to prevent radiological sabotage.

As the petitioner notes, the Commission's October 2010 policy determination applied the NRC's cyber security regulations to BOP digital assets that by themselves, even if compromised, could not directly cause significant core damage or spent fuel sabotage. For the same reasons set forth in the NRC's response to the petitioner's Assertions B and C, the NRC does not agree with the petitioner's statement that this policy determination resulted in an expansion of the scope of either the 2006 proposed rule or the 2009 final rule.

From its inception, the 2006 proposed cyber security rule would have required licensees to protect those digital assets associated with SSEP that, if compromised, could either directly or indirectly cause radiological sabotage resulting in significant core damage or spent fuel sabotage. As the Commission stated in SRM–COMWCO–10–0001, it ''has determined as a matter of policy that the NRC's cyber security rule at 10 CFR 73.54 should be interpreted to include SSCs in the BOP that have a nexus to radiological health and safety at NRC-licensed nuclear power plants.'' In SECY–10–0153, ''Cyber Security—Implementation of the Commission's Determination of Systems and Equipment within the Scope of Title 10 of the *Code of Federal Regulations,* Section 73.54,'' dated November 19, 2010, the staff informed the Commission that it considered SSCs in the BOP that have a nexus to radiological health and safety to be those that could, if compromised, directly or indirectly affect reactivity of a nuclear power plant, and are therefore within the scope

of important-to-safety functions described in § 73.54(a)(1).

To the extent that Assertion D raises issues concerning FERC's jurisdiction at nuclear power plants, the NRC does not have the authority to limit the jurisdiction granted to other agencies by statute.

Assertion E in Section III of the PRM:

The petitioner states that, as of March 1, 2014, NRC inspections had identified violations of low safety significance associated with the failure of reactor licensees to identify digital assets needing protection against cyber attacks under § 73.54(a)(1). The petitioner views the violations as an illustration of the problems created by the § 73.54(a)(1) scoping language. The petitioner concludes that although these violations ''have little to no safety significance,'' they have resulted in unnecessary expense and a diversion of licensee resources, as well as conveying to the public ''an incorrect impression that the state of cyber security preparedness at those sites is less than adequate.''

NRC Response to Assertion E:

The NRC agrees that several violations have been identified during its inspections of licensee cyber security programs at reactor sites. The implementation plan for licensees' cyber security programs, which has eight distinct milestones, was developed to allow a phased approach to full implementation of the cyber security requirements in § 73.54. One of the goals of this phased approach was to allow lessons learned to be applied by licensees prior to full program implementation. The use of this phased approach was intended to identify issues in an iterative way, particularly in regard to digital asset identification. In cases where violations were identified during cyber security inspections of milestones 1 through 7, the NRC performed an evaluation and did not cite the violations if the licensee had made a ''good faith'' effort to comply with the requirements. Licensees addressed these issues and made corrections to their cyber security programs prior to full program implementation. The identification and resolution of these cyber security issues help ensure that licensees successfully implement an effective cyber security program.

The NRC disagrees with the petitioner's assertion that the violations illustrate problems with the scoping language in § 73.54(a)(1). This scoping language correctly identifies the digital computer and communication systems and networks that the Commission intends licensees to protect against a cyber attack. The language in § 73.54(a)(1) does not identify specific digital assets that must be protected by licensee cyber security programs. It is the responsibility of the licensee to conduct the analysis required by § 73.54(b)(1) and correctly identify those digital assets that, if compromised, could adversely impact SSEP functions. Failure to correctly identify digital assets may result in violations of the NRC's cyber security requirements.

The NRC also disagrees that the violations have conveyed to the public an incorrect impression that the state of cyber security preparedness at reactor sites is less than adequate. The petitioner provides no evidence that the public has formed such an impression as a result of these violations.

IV. Public Comments on the Petition

The comment period closed on December 8, 2014, and the NRC received 19 comment submissions on the PRM. All of the comment submissions received on this petition are available on *https://www.regulations.gov* under Docket ID NRC–2014–0165.

Of the 19 comment submissions received, 15 comment submissions supported the petition, two opposed the petition, and two provided other observations on the cyber security rule language. Overall, the comments received do not present additional information to support the petitioner's proposal that the NRC amend its cyber security regulations. The NRC organized the 19 comment submissions into 18 comment categories that are summarized and evaluated in the following paragraphs.

Comment Category 1: Scope of the rule language is too broad.

In support of the PRM, several comment submissions assert that the scope of the existing cyber security requirements in § 73.54 is too broad. They contend that this broad scope has resulted in unnecessary burden on reactor licensees having to maintain hundreds to thousands of digital assets within their cyber security programs. The comment submissions state that most of these digital assets have no nexus to protecting the health and safety of the public. One commenter stated that the high level of protection required by § 73.54 should be focused on the equipment whose compromise could endanger the health and safety of the public. Another commenter stated that the regulations in § 73.54 now allow the NRC to require that licensees classify an excessive number of components as ''critical'' even though their functions have little or no bearing on nuclear safety.

NRC Response to Category 1 Comments: The comments included in Category 1 reiterate assertions made in the petition that the scope of the cyber security rule is too broad. For the reasons set forth in the ''Reasons for Denial'' section of this document, the NRC does not agree with these comments.

The NRC also disagrees with the commenters' assertion that actions required by § 73.54 are overly burdensome and have no nexus to protecting the health and safety of the public. As the Commission stated in SRM–COMWCO–10–0001, it ''has determined as a matter of policy that the NRC's cyber security rule at 10 CFR 73.54 should be interpreted to include SSCs in the BOP that have a nexus to radiological health and safety at NRC-licensed nuclear power plants.'' In SECY–10–0153, ''Cyber Security—Implementation of the Commission's Determination of Systems and Equipment within the Scope of Title 10 of the *Code of Federal Regulations,* Section 73.54,'' dated November 19, 2010, the Commission was informed that SSCs in the BOP that have a nexus to radiological health and safety are those that could, if compromised, directly or indirectly affect reactivity of a nuclear power plant, and are therefore within the scope of important-to-safety functions described in § 73.54(a)(1).

Consistent with the NRC's cyber security rule, it is the licensee's responsibility to analyze its digital computer and communication systems and networks and identify those digital assets that could adversely impact SSEP functions if compromised by a cyber attack. The NRC agrees with the commenters that some licensees may have conservatively identified certain digital assets that could not adversely impact SSEP functions even if compromised as being within the scope of the NRC's cyber security rule.

RG 5.71 contains NRC guidance for complying with the regulations in § 73.54. Licensees may use methods other than those described in RG 5.71 to meet the regulations in § 73.54. The NRC has also engaged with stakeholders regarding revisions to industry guidance to assist licensees in better identifying digital assets that fall within the scope of the NRC's cyber security rule. For example, as a result of insights gained from these interactions, NEI revised NEI 08–09, ''Cyber Security Plan for Nuclear Power Reactors,'' and NEI 13–10, ''Cyber Security Control Assessment,'' to address the application of cyber security controls for CDAs at nuclear power plants. Similarly, NEI revised NEI 13–10, Revision 6, to address

scoping issues using a consequence-based approach for screening CDAs. The consequence-based approach in NEI 13–10 enables industry to focus resources on the more consequential digital assets that require protection. The NRC continues to engage with stakeholders to review and revise, as appropriate, relevant cyber security guidance, including guidance on the scoping of CDAs.

Comment Category 2: Implementation costs are significantly higher than those presented in the regulatory analysis for the 2009 rule.

Two comment submissions that support the PRM assert that the costs associated with implementation of the cyber security requirements in § 73.54 are substantially higher than those presented in the NRC's 2009 regulatory analysis of these requirements.

NRC Response to Category 2 Comments: The NRC acknowledges that the costs regarding the implementation of § 73.54 were underestimated in the 2009 regulatory analysis that supported the final rule. Specifically, the quantity of digital assets identified as CDAs far exceeded the NRC's estimates developed at the time the cyber security rule was finalized. As noted previously, given that many licensees adopted a conservative approach to identifying digital assets at their facilities, the NRC has and is continuing to engage with stakeholders to revise guidance for identifying CDAs. The NRC anticipates that this will reduce the number of identified CDAs and result in a reduction of costs to licensees in implementing the NRC's cyber security requirements. As a separate effort, the NRC is reviewing its process for developing cost estimates associated with rulemakings.

Comment Category 3: Unnecessary diversion of licensee resources and attention.

The commenters assert that in determining required cyber security controls, no graded approach is acceptable for use by NRC licensees in complying with the requirements in § 73.54. These commenters assert that the cost of implementing and maintaining these controls contribute no added value, are costly to maintain, and reduce the effectiveness of the digital assets.

One commenter asserts that the current rule language significantly increases costs by: (1) Creating a need for vendor processes outside of a well-vetted procurement process; (2) imposing requirements for monitoring and assessment outside of current practices; and (3) failing to accept current maintenance rule analysis of a component's risk significance for exemption from additional treatment. Two commenters assert that the cost of implementing and maintaining the requirements of the rule directly competes with the cost of facility modifications that could improve plant safety, equipment reliability, and reduce the likelihood of an initiating event. Another commenter states that the scope of the existing requirements in § 73.54 introduce significant and unwarranted costs in terms of complying with the requirements in § 73.56, and that these issues would be resolved by granting the PRM.

Two commenters suggest specific alternatives for refocusing the rule language in § 73.54. One commenter suggests, as an alternative to the petitioner's suggested changes: (1) Modifying § 73.54(a)(1)(i) to directly state that only ''Target Set and credited security system equipment'' need special consideration for preventing the previously established § 73.1 DBT intent of radiological sabotage; and (2) modifying § 73.54(a)(1)(ii) to focus on trips and transients created by cyber attacks initiated by outsiders external to the Protected Area (PA). Another commenter similarly suggested that the NRC refocus the rule language on: (1) High assurance protection for preventing radiological sabotage; (2) preventing plant trips and transients caused by cyber attacks initiated from outside the PA; and (3) preventing accidental initiation of a cyber attack caused by insider action.

NRC Response to Category 3 Comments: The NRC disagrees that a graded approach is not acceptable for use by licensees in complying with the requirements in § 73.54. A consequence-based, graded assessment process for identifying CDAs and determining the appropriate security controls to be applied to those CDAs may contribute to reducing unnecessary costs to licensees. Using this graded approach may result in the application of certain minimum cyber security controls to specifically identified CDAs as well as provide a method to assess alternate means of protecting CDAs, for example EP CDAs, from cyber attacks. However, this graded approach will still require that licensees adequately protect CDAs from a cyber attack. For these reasons and the reasons stated in the ''Reasons for Denial'' section of this document, the NRC disagrees with the assertion that the development of a consequence-based, graded approach for implementing the requirements in § 73.54 contributes no added value, and therefore, results in the unnecessary expenditure of licensee resources.

The NRC also disagrees with the assertion that the application of cyber security controls reduces the effectiveness of digital assets. The commenters did not provide any evidence to support this assertion. The NRC is not aware of any operational experience or data that demonstrates a reduction in effectiveness of digital assets due to the application of cyber security controls to those assets.

The NRC does not agree that the rule language in § 73.54 imposes requirements for monitoring and assessment that are ''outside of current practices.'' The cyber security rule does not require any change to existing licensee monitoring and assessment practices that have already been implemented and does not impose any requirement that licensees develop and implement new monitoring and assessment practices.

The NRC disagrees with the comments regarding limiting the scope of § 73.54 to only target sets and credited security system equipment, and trips and transients created by cyber attacks initiated by outsiders external to the PA. Cyber attacks can adversely affect the performance of SSEP functions of a nuclear facility, which are broader than the functions performed by target sets and security system equipment. As described in RG 5.71, the scope of the cyber security rule goes beyond consideration of cyber attacks initiated by outsiders external to the PA because a defense-in-depth approach requires the licensee to evaluate threats from all possible vectors, including internal and external threats. The NRC further notes that the commenters did not provide a technical basis to support their recommendations.

Certain Category 3 comments are outside the scope of the petition for rulemaking. First, the comment that the requirements in § 73.54 create a need for vendor processes outside of a well-vetted procurement process is outside the scope of the petition. The petition does not discuss the alleged need for additional vendor processes identified in the comment submission. Additionally, the commenter did not provide any evidence that the NRC's cyber security rule impacts licensee procurement processes. Licensees may procure any computer systems, networks or digital assets that enable them to comply with NRC requirements and are not prohibited by federal law. The cyber security rule requires licensees to ensure that CDAs associated with whatever digital systems the licensee procures are adequately protected from a cyber attack by the application of appropriate security

controls. Second, the assertion that the requirements in § 73.54 fail to address the maintenance rule's analysis of a component's risk significance is also outside the scope of the petition. The petition does not discuss the application of the maintenance rule and its discussion of a component's risk significance. Finally, the commenters assertion that the requirements in § 73.54 introduce significant and unwarranted costs in terms of compliance with the access authorization requirements in § 73.56 are also outside the scope of the petition. The petition does not discuss the impact of the cyber security rule on access authorization requirements. Furthermore, the rule does not limit licensees' ability to purchase any digital system that helps it meet the NRC's access authorization requirements. The NRC is not aware of any operational experience or data showing that licensees have had significant and unwarranted costs that are unique to compliance with access authorization requirements as a result of the cyber security rule.

Comment Category 4: Issues with process for identification of CDAs.

In support of the PRM, several comment submissions assert that a significant amount of resources are expended on protecting CDAs that have no capability to cause core damage or spent fuel sabotage even if compromised, and that these efforts result in no measurable increase in reactor and spent fuel security. One commenter specifies in this regard that each CDA requires documentation of an assessment as configured against the cyber security technical controls in NEI 08–09, Revision 6, Appendix D, ''even if the CDA has no capability to cause core damage or spent fuel sabotage.'' Several comment submissions identify CDAs associated with EP communication systems and other equipment as examples of CDAs that should not be included in the scope of the cyber security program. One commenter similarly states that the application of cyber security controls to CDAs is not consistent with other elements of the physical protection program, since cyber security controls are required for systems and equipment that go beyond the systems and equipment necessary to prevent radiological sabotage. One commenter asserts that the resources expended on protecting these CDAs may delay other facility enhancements that would protect more important equipment.

One commenter further states that additional burden is added to protect CDAs when the postulated attack is specific to an active insider with physical CDA access. Two comment submissions cited the Plant Process Computer (PPC) as an example of a system that should not be subject to cyber security requirements.

NRC Response to Category 4 Comments: These comments reiterate issues raised in the petition; the NRC does not agree with these comments for the reasons stated in the ''Reasons for Denial'' section of this document.

Regarding the comment that the application of cyber security controls to CDAs for demonstrating compliance with the cyber security requirements in § 73.54 is not consistent with other elements of the physical protection program, the commenter did not provide an example that supports this assertion. Furthermore, the cyber security requirements in § 73.54 are not inconsistent with the physical protection program performance objectives set forth in § 73.55. Specifically, there is no inconsistency as protecting against radiological sabotage is not limited to protecting only those digital assets the compromise of which can directly cause significant core damage and spent fuel sabotage. Rather, protecting against radiological sabotage involves protecting those digital assets that, if compromised by a cyber attack, could either directly or indirectly cause significant core damage or spent fuel sabotage. As noted previously, the Commission included EP functions within the scope of the cyber security rule because they are essential to mitigate the consequences of radiological sabotage.

Regarding the comment on the need to assess CDAs that have no capability to cause core damage or spent fuel sabotage even if compromised, this essentially repeats assertions made in the petition. The NRC does not agree that protecting against radiological sabotage is limited to protecting only those digital assets that can directly cause significant core damage or spent fuel sabotage if impacted by a cyber attack.

The comments identify the PPC as an example of a system that should not be subject to cyber security requirements. Consistent with § 73.54(b)(1), a licensee must conduct a site-specific analysis to identify those digital assets that meet the criteria of § 73.54(a)(1) and must be protected from a cyber attack. Determining whether or not the PPC should or should not be subject to the NRC's cyber security requirements is dependent upon the outcome of the site-specific analysis.

Comment Category 5: Benefits of granting the petition.

The comment submissions supporting the PRM generally assert that granting the petition would: (1) Have an immediate positive impact on overall safety and security while reducing unnecessary burden on reactor licensees; (2) continue to provide defense-in-depth protection for those digital assets having a nexus to radiological safety and security, thereby eliminating the unnecessary diversion of attention and resources expended on protecting digital assets that do not have a nexus to radiological safety and security; and (3) be consistent with the NRC's original intent to prevent radiological sabotage, in accordance with long-standing physical protection program requirements. Several comment submissions added that if the petition is granted, they would still be able to meet the requirements in § 73.54 to provide high assurance of adequate protection from cyber attacks. Two comment submissions assert that granting the petition would support grid reliability through protection of digital assets capable of causing a reactor trip, and they continue to support having the NRC as the single regulatory authority for cyber security in order to enhance regulatory clarity and implementation efficiency.

NRC Response to Category 5 Comments: For the reasons set forth in response to petitioner's Assertion B, the NRC disagrees with the commenters' assertion that the current version of the cyber security rule is not consistent with the original intent of the rule.

Additionally, the NRC disagrees with the comments asserting that the petitioner's proposed changes would have an immediate positive impact on overall safety and security while reducing unnecessary burden on reactor licensees. Instead, granting the petition would have the opposite effect as it would increase the risk of SSEP functions being compromised by a cyber attack.

The NRC also disagrees with the commenters' assertions that the petitioner's proposed changes would continue to provide defense-in-depth protection of digital assets (*i.e.,* digital computer and communication systems and networks). The NRC explained in the 2009 SOC that as computer technology is increasingly integrated into nuclear power plants, many plant safety and security systems rely on this technology to carry out their functions. The digital assets associated with these integrated systems must be protected to minimize potential attack pathways and the consequences of a successful cyber attack. Granting the petition would have the opposite effect as it would remove

cyber security protection for such digital assets and decrease defense-in-depth, inconsistent with the rule. For example, the term ''defense-in-depth'' used in § 73.54(c)(2) requires that a cyber security program be designed to apply and maintain ''defense-in-depth protective strategies to ensure the capability to detect, respond to, and recover from cyber attacks.'' In responding to a comment on what became § 73.54(c)(2), the Commission in Section III.D of the 2009 SOC stated that defense-in-depth for digital assets ''includes technical and administrative controls that are integrated and used to mitigate threats from identified risks'' (74 FR 13934; March 27, 2009).

To the extent that the comment submissions are asserting that the NRC should be the single regulatory authority establishing cyber security requirements for nuclear power plants, the NRC does not have the authority to limit the jurisdiction granted to other agencies by statute. However, the NRC has worked closely with FERC on matters of mutual interest related to the nation's electric power grid reliability and nuclear power plant safety and security, including but not limited to, coordination of activities related to cyber security at nuclear power plants. By the memorandum of agreement dated September 22, 2015, the NRC and FERC have reached a mutual agreement on how each agency will implement its jurisdiction over cyber security assets at nuclear power plants.

Comment Category 6: Interpretation of ''Critical Digital Assets'' under the cyber security rule.

One commenter asserts that NRC inspectors have interpreted ''critical digital assets'' to include backup valve position indicators to which an operator may refer during an abnormal plant condition. The commenter states that if such indicators were affected by a cyber security event, the required response action could be potentially delayed but would not affect plant safety. The commenter concludes that designating valve position indicators as CDAs ''adds hundreds of components to the critical digital asset program'' without contributing to plant safety and goes well beyond any reasonable definition of what constitutes a ''critical'' digital asset.

NRC Response to Category 6 Comments: The subject of whether any digital asset is a ''critical digital asset'' is based on a site-specific analysis of digital assets performed by the licensee. RG 5.71, ''Cyber Security Program for Nuclear Facilities,'' NEI 08–09, ''Cyber Security Plan for Nuclear Power Reactors,'' and NEI 13–10, ''Cyber Security Control Assessment,'' provide guidance to licensees on the development of licensee cyber security plans that meet NRC requirements, including the process of identifying and implementing appropriate cyber security controls for CDAs.

The NRC is continuing to engage with stakeholders to develop guidance revisions to streamline the process for addressing the application of cyber security controls to CDAs. For example, the NRC has reviewed NEI proposals for risk-informing the identification of CDAs for EP, BOP, important-to-safety and safety-related digital assets (ADAMS Accession Nos. ML20129J981, ML20209A442, and ML20223A256). NEI has stated its intent to incorporate these revisions into its guidance documents and to submit them to the NRC for endorsement.

Comment Category 7: Critical Infrastructure Protection standards.

Two comment submissions assert that the evidence required by the NRC and the North American Electric Reliability Corporation Critical Infrastructure Protection standards regarding compliance with cybersecurity requirements should be brought into closer alignment through rulemaking to reduce the current burden on those utilities that run both nuclear and non-nuclear facilities. The comment submissions further assert that § 73.54 requires utilities to comply with the requirements of multiple regulatory agencies and having to provide different types of evidence to different agencies places unnecessary burdens on the limited number of utility cybersecurity professionals. One of these comment submissions also asserts that a rulemaking should establish clear boundaries of jurisdiction between the NRC and other regulatory agencies.

NRC Response to Category 7 Comments: These comments pertain to issues that were not raised by the petitioner and, therefore, are outside the scope of this PRM. The NRC's cyber security rule is applicable only to NRC power reactor licensees and is not applicable to non-nuclear electric utilities.

Further, to the extent that the comment submissions are asserting that the NRC should establish clear boundaries to limit the jurisdiction of other Federal regulatory agencies, the NRC has no authority to limit the jurisdiction granted to other agencies by statute. However, the NRC has worked closely with FERC on matters of mutual interest related to the nation's electric power grid reliability and nuclear power plant safety and security, including but not limited to coordination of activities related to cyber security, to avoid dual regulation of nuclear power plants. By the memorandum of agreement dated September 22, 2015, the NRC and FERC have reached a mutual agreement of how each agency will implement its jurisdiction over cyber security assets at nuclear power plants.

Comment Category 8: The petition should be denied.

Two comment submissions assert that the petition should be denied. The commenters assert that granting the petition would roll back cybersecurity regulations essential for nuclear safety. The comment submissions endorse maintaining a high level of cybersecurity protection for both nuclear facilities and communication networks.

NRC Response to Category 8 Comments: The NRC agrees that the petition should be denied. As discussed in the ''Reasons for Denial'' section of this document, the existing cyber security regulations in § 73.54 are necessary to ensure adequate protection of digital computer and communication systems and networks associated with SSEP functions and their related support systems.

Comment Category 9: Include PRM-proposed changes in the cyber security event notification rulemaking.

Eleven comment submissions assert that the cyber security event notification rulemaking could provide a ready vehicle for the changes proposed in the petition.

NRC Response to Category 9 Comments: The Cyber Security Event Notification final rule was published in the **Federal Register** on November 2, 2015 (80 FR 67264). It was a separate action that did not address the issues raised by the petitioner in PRM–73–18. These comments are outside the scope of this PRM.

Comment Category 10: Specific examples of equipment that should not be covered by the cyber security rule.

Nine comment submissions provide examples of equipment that should not be required to be protected by the cyber security rule. Some of the examples the commenters provide are digital process instruments within BOP systems, wireless control systems associated with plant cranes, non-safety related digital indicators, business computer systems, and cameras, transmitters, and media converters.

NRC Response to Category 10 Comments: The issue of whether a specific digital asset must be protected from cyber attacks under the regulations in § 73.54 is based on a site-specific analysis made by the licensee. The NRC notes that, to address issues associated

with determining if certain equipment should be protected by the cyber security rule, the NRC has found the guidance in NEI 13–10 and NEI 10–04 to be acceptable for use in identifying systems and assets subject to the cyber security rule. NEI 10–04 provides industry with a risk-informed methodology for determining which digital assets should be considered CDAs. NEI 13–10 provides guidance for developing a consequence-based, graded approach to comply with the regulations in § 73.54. This approach provides for the application of certain minimum cyber security controls to specifically identified CDAs, and a method to assess alternate means for protecting certain classes of equipment from cyber attack. Furthermore, the NRC has reviewed NEI proposals for risk-informing the identification of CDAs for EP, BOP, important-to-safety and safety-related digital assets. NEI has stated its intent to incorporate these revisions into its guidance documents and to submit them to the NRC for endorsement.

Comment Category 11: Suggested alternatives to granting the petition.

Several comment submissions suggest the NRC should reassess the adequacy of the cyber security rule and should work with external stakeholders to consider other approaches such as a risk-informed, graded approach, or international ISA99 industrial standards. Several comment submissions provide specific examples of alternate approaches to the cyber security rule. One commenter also asserts that concepts such as redundancy, diversity, and common-cause failures should be reexamined in the context of cyber security.

NRC Response to Category 11 Comments: In 2019, the NRC performed an assessment of the Power Reactor Cyber Security Program. The program assessment identified opportunities to further risk-inform the cyber security guidance in lieu of pursuing changes to the cyber security rule. For example, the NRC has reviewed NEI proposals for risk-informing the identification of CDAs for EP, BOP, important-to-safety and safety-related digital assets. NEI has stated its intent to incorporate these revisions into its guidance documents and to submit them to the NRC for endorsement.

Comment Category 12: NRC should impose additional requirements for cyber security.

One commenter asserts that unintentional or non-malicious cyber incidents are not adequately addressed in NRC guidance documents, and that the NRC should have a requirement to include unintentional cyber incidents. Also, the commenter asserts that engineers and technicians that are experts in instrumentation and control (I&C), electrical engineering, and plant maintenance should be part of the cyber security team, and that the NRC should consider the use of digital I&C and electrical systems for nuclear plant safety applications. The commenter asserts that the training for engineers to be able to identify potential cyber incidents is minimal, and that the current NRC requirements for cyber security are not conservative when compared to safety requirements.

NRC Response to Category 12 Comments: The NRC notes that the NRC's cyber security requirements do not distinguish between intentional and unintentional cyber attacks. Licensees are required to protect against any cyber attack that could adversely impact critical digital assets associated SSEP functions. The NRC's existing cyber security regulations in § 73.54 provide high assurance that digital computer and communication systems and networks associated with SSEP functions are protected against a cyber attack. The NRC's cyber security framework also requires that the licensee's cyber security staff have the appropriate training.

Comment Category 13: Examples of cyber security incidents that illustrate need for more requirements.

One commenter who opposes the PRM asserts that the current NRC cyber security requirements need to be strengthened, and that granting the PRM would lessen protection against cyber attacks. The commenter provides examples of cyber security incidents supporting his concern, and further asserts that: (1) The NRC cyber security review of the Oconee I&C upgrade was not adequate, and the NRC should accordingly reassess the adequacy of the cyber security rule because control systems are not adequately protected by the current scope of § 73.54; (2) a comprehensive review is needed to understand the potential system interactions of the different devices in a reactor facility's safety and non-safety systems, and these system vulnerabilities should be covered by § 73.54; (3) air-gapped security measures are not necessarily adequate since it is possible that a well-meaning insider could unintentionally connect infected portable media to a plant system or component, and the commenter provides examples of how a reactor facility could be compromised using an unintentional insider as a vector for a cyber attack; (4) integrity checking does not offer protection against malicious manipulations until complemented with authenticity checking; and (5) malware has been shown to affect certain cyber vulnerable systems such as human machine interfaces that are used in reactor facilities.

NRC Response to Category 13 Comments: The NRC agrees that granting the PRM could lessen protection against cyber attacks. For the reasons set forth in the ''Reasons for Denial'' section of this document, the NRC has decided to deny the PRM. The commenter is requesting that the NRC take action to strengthen its cyber security requirements to increase protection of digital computer and communication systems and networks at nuclear power plants. The NRC has determined that the current cyber security requirements are robust and provide reasonable assurance that critical digital assets are adequately protected to prevent a cyber attack.

Comment Category 14: Specific Disagreement with petitioner's changes.

Two comment submissions that oppose the PRM assert that the petitioner's proposed changes do not adequately protect safety and security of nuclear power plants, and that the petitioner's proposed changes are not conservative. The comment submissions assert that cyber threats to safety-related and important-to-safety functions can cause, or contribute to, core melt scenarios. The comment submissions also assert that a reduction in cyber security requirements for EP systems is unacceptable because it would not then be possible to meet existing regulations concerning notification of emergency responders if these systems were compromised.

One commenter further asserts that limiting the § 73.54 cybersecurity requirements to the prevention of significant core damage and spent fuel sabotage would not provide effective protection for other safety-critical systems. This commenter also asserts that only the strongest, layered defenses are likely to discourage reconnaissance and attack vector development, and that granting the PRM would (1) eviscerate the NRC's strong cybersecurity regulations and technical guidance; and, (2) exacerbate dependence of nuclear facilities on offsite AC power, therefore producing greater exposure to long-term loss of offsite power risks.

NRC Response to Category 14 Comments: The NRC generally agrees with these comments. Cyber attacks on safety-related and important-to-safety functions may cause, or contribute to, radiological sabotage (*e.g.,* core melt scenarios). If the provisions in § 73.54(a)(1)(iii) (requiring the protection of digital computer and

communication systems and networks associated with EP functions, including offsite communications) were removed as the PRM requests, this would likely hamper a reactor licensee's ability to notify emergency responders in the event that offsite communication systems were compromised in a cyber attack.

The NRC assumes that the commenter's reference to ''layered defenses'' refers to the concept of defense-in-depth. As discussed in the response to the Category 5 Comments, the existing regulations in § 73.54 reflect a defense-in-depth approach, and the NRC agrees that granting the PRM would not be consistent with maintaining defense-in-depth.

Comment Category 15: RG 5.71 and NEI 08–09 should be reassessed.

Two comment submissions opposing the petition assert that the current regulatory guidance is insufficient. The commenters assert that neither RG 5.71 nor NEI 08–09 addresses cyber threats and vulnerabilities that have been demonstrated to be exploitable, and that the scope of RG 5.71 should be reassessed. One commenter also states that the scope of RG 5.71 should be reassessed to better address control system-specific cyber security issues. The commenters also provide various examples of concerns regarding the current regulatory guidance and specific suggestions for improving this guidance. The commenters assert that the current interpretation of the cyber security rule is increasing plant risk by reducing operational stability. The commenters further assert that configuration changes prescribed by NEI 08–09 and RG 5.71 contribute to uncertainty in the reliability of CDAs. The commenters assert that RG 5.71 should be updated to include consideration of plant risk. One commenter asserts that the existing guidance is too focused on information technology and ignores the merits of current protective approaches that are based on traditional I&C Engineering and other license requirements.

NRC Response to Category 15 Comments: These comments are beyond the scope of the PRM. The petition does not raise the guidance issues identified in the comment submissions. The NRC performs periodic reviews of its guidance documents to determine if they need revision. The results of the most recent periodic review of RG 5.71 can be found under ADAMS Accession No. ML15099A158. The NRC disagrees that the current interpretation of the cyber security rule is increasing plant risk by reducing operational stability. The comment submissions did not provide support for this assertion, and the NRC is not aware of any such reduction in operational stability.

Comment Category 16: Existing plant processes are sufficient to protect most digital equipment.

Two comment submissions that support the PRM assert that while there are thousands of digital assets that are important to the efficient operation of reactor facilities, such assets would be adequately protected by the existing plant controls such as physical protection, network isolation, configuration management, maintenance and testing. One of the comment submissions adds that EP functionality assets, such as communication systems, are typically protected using redundancy and diversity.

NRC Response to Category 16 Comments: The NRC recognizes that there may be large numbers of digital assets that are important to the efficient operation at a nuclear power plant. These assets may well be protected by existing plant controls. The NRC cyber security requirements do not require the protection of such assets if they cannot adversely impact SSEP functions even if they are compromised. The NRC has determined that CDAs that can adversely impact SSEP functions must be protected from a cyber attack. If a licensee's site-specific analysis can demonstrate that existing plant controls at a given nuclear power plant can protect these CDAs from a cyber attack, then the licensee does not need to apply additional security controls to meet the requirements of the NRC's cyber security rule. If existing plant controls cannot provide such protection, then additional cyber security controls for CDAs would be required.

Comment Category 17: Cyber Security Language was not offered for public comment.

One commenter reiterates the petitioner's assertion that the 2006 proposed rule's scoping language (71 FR 62664; October 26, 2006) was removed and replaced with new text in the 2009 final rule (74 FR 13926; March 27, 2009), asserting that the practical effect of the new scoping language was likely not clear when the final rule was issued.

NRC Response to Category 17 Comments: For the reasons stated in the ''Reasons for Denial'' section of this document, the NRC does not agree with this comment. The clarifying changes made to the scoping language in the 2009 final rule are consistent with and a logical outgrowth of the proposed rule, and the reasons for making these changes were adequately explained in the 2009 SOC.

Comment Category 18: NRC cyber security requirements should be expanded.

One commenter suggested that in order to cover ''all digital assets involved in the management of power-block industrial energy,'' the scope of § 73.54 should be expanded.

NRC Response to Category 18 Comments: The NRC assumes that in referencing ''all digital assets involved in the management of power-block industrial energy'' the commenter is referring to digital assets or digital components used to support a reactor facility's on-site power systems. Safety-related digital assets or safety-related digital components interfacing with the facility's on-site power systems are addressed in the safety requirements of 10 CFR part 50 (specifically in appendix A to 10 CFR part 50, general design criterion 17). The commenter does not provide a basis for expanding the scope of § 73.54 to include matters relating to general design criterion 17.

V. Availability of Documents

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

Document	Date	Adams Accession No. or **Federal Register** citation or website
PRM–73–18—Petition to Amend 10 CFR 73.54, ''Protection of Digital Computer and Communication Systems and Networks'' submitted by Nuclear Energy Institute (NEI).	June 12, 2014	ML14184B120
Protection of Digital Computer and Communication Systems and Networks; Notice of Docketing and Request for Comment.	September 22, 2014	79 FR 56525

Document	Date	Adams Accession No. or **Federal Register** citation or website
PRM–73–18—Public Comments RE: Protection of Digital Computer and Communication Systems and Networks.	August 10, 2020	ML20223A027
SRM–CMWCO–10–0001—''Regulation of Cyber Security at Nuclear Power Plants''	October 21, 2010	ML102940009
Regulatory Guide 5.71, ''Cyber Security Program for Nuclear Facilities''	January 2010	ML090340159
NEI 08–09, ''Cyber Security Plan for Nuclear Power Reactors,'' Revision 6	April 2010	ML101180437
NEI 13–10, ''Cyber Security Control Assessment,'' Revision 6,	August 2017	ML17234A615
Regulatory Analysis and Backfit Analysis; Final Rulemaking: Power Reactor Security Requirements.	March 17, 2009	ML083390372
GAO–15–98, NRC Needs to Improve Its Cost Estimates by Incorporating More Best Practices.	December 12, 2014	*https://www.gao.gov/products/GAO-15-98*
SECY–14–0002, ''Plan for Updating the U.S. Nuclear Regulatory Commission's Cost-Benefit Guidance''.	January 17, 2014	ML13274A495
NUREG/BR–0058, ''Regulatory Analysis Guidelines of the U.S. Nuclear Regulatory Commission, Draft Report for Comment,'' Revision 5.	April 2017	ML17100A480
MD 8.2, ''Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests''.	September 20, 2019	ML18093B087
SECY–20–0008: Draft Final NUREG/BR–0058, Regulatory Analysis Guidelines of the U.S. Nuclear.	February 13, 2020	ML19261A277
Memorandum of Agreement between the U.S. Nuclear Regulatory Commission (NRC) and the Federal Energy Regulatory Commission (FERC).	September 22, 2015	ML15033A181
SECY–14–0129: Rulemaking: Final Rule: Cyber Security Event Notification (CSEN)	November 20, 2014	ML14136A212
Power Reactor Security Requirements; Final Rule	March 27, 2009	74 FR 13926
Power Reactor Cyber Security Program Assessment	July 12, 2019	ML19175A211
Periodic Review of RG 5.71	April 9, 2015	ML15099A158
Draft Regulatory Guide (DG)-5061, ''Cyber Security Program for Nuclear Power Reactor''	August 2018	ML18016A129
Power Reactor Security Requirements; Proposed Rule	October 26, 2006	71 FR 62664
Cyber Security Event Notifications; Final Rule	November 2, 2015	80 FR 67265
Memorandum of Understanding Between the U.S. Nuclear Regulatory Commission and the North American Electric Reliability Corporation.	December 17, 2019	ML093510905
EA–02–026, Issuance of Order for Interim Safeguards and Security Compensatory Measures for Nuclear Power Plants.	February 25, 2002	ML020510635
EA–03–086, ''Issuance of Order Requiring Compliance with Revised Design Basis Threat for Operating Power Reactors''.	April 29, 2003	ML030740002
SECY–10–0153, ''Cyber Security—Implementation of the Commission's Determination of Systems and Equipment within the Scope of Title 10 of the *Code of Federal Regulations,* Section 73.54''.	November 19, 2010	ML103490344
NEI 10–04, ''Identifying Systems and Assets Subject to the Cyber Security Rule, Rev. 2''	July 2012	ML12180A081

VI. Conclusion

For the reasons discussed in this document, the NRC finds that the petitioner did not present sufficient new information to warrant the requested changes in PRM–73–18. The NRC's current cyber security requirements are consistent with the NRC's original intent for the cyber security rule, and these requirements continue to provide reasonable assurance of adequate protection of public health and safety, and the common defense and security. Further, the NRC has determined that the language in § 73.54(a) is not overly broad. Finally, the NRC has determined that existing and ongoing revisions to guidance can effectively address the other issues raised by the petitioner in this PRM without the need for rulemaking. Accordingly, the NRC is denying the PRM–73–18.

Dated: August 3, 2021.

For the Nuclear Regulatory Commission.

Annette L. Vietti-Cook,

Secretary of the Commission.

[FR Doc. 2021–16889 Filed 8–9–21; 8:45 am]

BILLING CODE 7590–01–P

DEPARTMENT OF EDUCATION

34 CFR Chapter VI

[Docket ID ED–2021–OPE–0077]

Negotiated Rulemaking Committee; Negotiator Nominations and Schedule of Committee Meetings

AGENCY: Office of Postsecondary Education, Department of Education.

ACTION: Intent to establish rulemaking committee.

SUMMARY: We announce our intention to establish one negotiated rulemaking committee to prepare proposed regulations for the Federal Student Aid programs authorized under title IV of the Higher Education Act of 1965, as amended (HEA). The committee will include representatives of organizations or groups with interests that are significantly affected by the subject matter of the proposed regulations. We request nominations for individual negotiators who represent key stakeholder constituencies for the issues to be negotiated to serve on the committee. We also announce the creation of a subcommittee, and request nominations for individuals with pertinent expertise to participate on the subcommittee. The Department has set a schedule for committee meetings.

DATES: We must receive your nominations for negotiators to serve on the committee on or before August 31, 2021. The dates and times of the committee and subcommittee meetings are set out in the *Schedule for Negotiations* section in the

SUPPLEMENTARY INFORMATION section. All meetings will be virtual.

ADDRESSES: Please email your nominations for negotiators to *negregnominations@ed.gov.* If you are unable to email your nomination, send it to Vanessa Gomez, U.S. Department of Education, 400 Maryland Ave. SW, Room 2C179, Washington, DC 20202.

FOR FURTHER INFORMATION CONTACT: For information about negotiated rulemaking, see ''The Negotiated Rulemaking Process for Title IV Regulations Frequently Asked Questions'' at *https://www2.ed.gov/policy/highered/reg/hearulemaking/hea08/neg-reg-faq.html.* For information about the content of this document, including additional information about the negotiated rulemaking process or the nomination submission process, contact: Vanessa Gomez, U.S. Department of Education, 400 Maryland Ave. SW, Room 2C179, Washington, DC 20202. Telephone: (202) 453–6708. Email: *vanessa.gomez@ed.gov.*

If you use a telecommunications device for the deaf (TDD) or text phone (TTY), call the Federal Relay Service (FRS), toll free, at 1–800–877–8339.

SUPPLEMENTARY INFORMATION:

Background

On May 26, 2021, we published an announcement of our intent to establish negotiated rulemaking committees under section 492 of the HEA to develop proposed regulations related to a number of higher education practices and issues in the **Federal Register** (86 FR 28299) (Negotiated Rulemaking Committee Notice). The Department suggested the following topics for the negotiated rulemaking process:

(1) Change of ownership and change in control of institutions of higher education under 34 CFR 600.31;

(2) Certification procedures for participation in title IV, HEA programs under 34 CFR 668.13;

(3) Standards of administrative capability under 34 CFR 668.16;

(4) Ability to benefit under 34 CFR 668.156;

(5) Borrower defense to repayment under 34 CFR 682.410, 682.411, 685.206, and 685.222;

(6) Discharges for borrowers with a total and permanent disability under 34 CFR 674.61, 682.402(c), and 685.213;

(7) Closed school discharges under 34 CFR 685.214 and 682.402(d);

(8) Discharges for false certification of student eligibility under 34 CFR 685.215 and 682.402(e);

(9) Loan repayment plans under 34 CFR 682.209, 682.215, 685.208, and 685.209;

(10) The Public Service Loan Forgiveness program under 34 CFR 685.219;

(11) Mandatory pre-dispute arbitration and prohibition of class action lawsuits provisions in institutions' enrollment agreements (formerly under 34 CFR 685.300) and associated counseling about such arrangements under 34 CFR 685.304;

(12) Financial responsibility for participating institutions of higher education under 34 CFR subpart L, such as events that indicate heightened financial risk;

(13) Gainful employment (formerly located in 34 CFR subpart Q); and

(14) Pell Grant eligibility for prison education programs under 34 CFR part 690.

We also announced three public hearings at which interested parties could comment on the topics suggested by the Department and suggest additional topics for consideration for action by the negotiated rulemaking committees. Those hearings took place virtually on June 21, June 23, and June 24, 2021. We invited parties to comment and submit topics for consideration in writing as well. Recordings and transcripts from the public hearings are available at: *https://www2.ed.gov/policy/highered/reg/hearulemaking/2021/index.html.*

Written comments submitted in response to the Negotiated Rulemaking Committee Notice may be viewed through the Federal eRulemaking Portal at *www.regulations.gov.* Instructions for finding comments are available on the site under ''FAQ''. Individuals can enter docket ID ED–2021–OPE–0077 in the search box to locate the appropriate docket.

Committee Topics

After considering the information received at the public hearings and the written comments, we have decided to establish the Affordability and Student Loans Committee to address the following topics:

(1) Borrower defense to repayment under 34 CFR 682.410, 682.411, 685.206, and 685.222;

(2) Closed school discharges under 34 CFR 685.214 and 682.402(d);

(3) Discharges for borrowers with a total and permanent disability under 34 CFR 674.61, 682.402(c), and 685.213;

(4) Discharges for false certification of student eligibility under 34 CFR 685.215 and 682.402(e);

(5) Loan repayment plans under 34 CFR 682.209, 682.215, 685.208, and 685.209;

(6) Interest capitalization on Federal student loans under 34 CFR 682.202, 685.202, 685.209, and 685.220;

(7) Mandatory pre-dispute arbitration and prohibition of class action lawsuits provisions in institutions' enrollment agreements (formerly under 34 CFR 685.300) and associated counseling about such arrangements under 34 CFR 685.304;

(8) Pell Grant eligibility for prison education programs under 34 CFR part 690; and

(9) The Public Service Loan Forgiveness program under 34 CFR 685.219.

As a part of the negotiated rulemaking process, we are forming a Prison Education Program Subcommittee to expand the range of expertise and constituencies represented on this topic. The committee will consider the subcommittee's recommendations in its consideration of proposed regulations to implement Pell Grant eligibility for incarcerated individuals, authorized by the Consolidated Appropriations Act of 2021. Currently, students incarcerated in a State or Federal penal institution are prohibited from receiving Pell Grants. Sections 702 and 703 of the Consolidated Appropriations Act of 2021 amended sections 401 and 484 of the HEA to remove this prohibition; however, the amendments require that an incarcerated student enroll in a qualifying prison education program to qualify for a Pell Grant. The Department intends to develop regulations to implement those changes.

This subcommittee will address these issues and make recommendations to the committee. The subcommittee is not authorized to make decisions for the Affordability and Student Loans Committee. The subcommittee may be comprised of some members of the committee (negotiators), as well as individuals who are not committee members but who have expertise that will be helpful in developing proposed regulations. Therefore, in addition to asking for nominations for individual negotiators who represent key stakeholder constituencies for issues to be negotiated to serve on the committee (see *Constituencies for Negotiator Nominations*), we seek nominations for individuals with specific types of experience to serve on the subcommittee. Before conclusion of the negotiations, the subcommittee will present its recommendations for regulatory changes to the committee for its consideration.

Seven of the 14 topics listed in the Negotiated Rulemaking Committee Notice are not on the list of topics to be considered by the Affordability and

Student Loans Committee. These remaining topics and other topics suggested in the public hearings and written comments provided to the Department may be considered by a separate rulemaking committee(s) formed at a later date, which we would announce in a separate **Federal Register** notice.

We intend to select negotiators for the Affordability and Student Loans Committee who represent the interests of those significantly affected by the topics proposed for negotiation. In so doing, we will comply with the requirement in section 492(b)(1) of the HEA that the individuals selected must have demonstrated expertise or experience in the relevant topics proposed for negotiations. We will also select individual negotiators who reflect the diversity among program participants, in accordance with section 492(b)(1) of the HEA. Our goal is to establish a committee and subcommittee that will allow significantly affected parties to be represented while keeping the committee size manageable.

We generally select a primary and alternate negotiator for each constituency represented on a committee. The primary negotiator participates for the purpose of determining consensus. The alternate participates for the purpose of determining consensus in the absence of the primary negotiator. The Department will provide more detailed information to both primary and alternate negotiators selected to participate on the committee about the logistics and protocols of the meetings. The subcommittee will only have a primary member. We will not select alternates for the subcommittee.

Individuals who are not members of the committee will be able to observe the committee meetings, will have access to individuals representing their constituencies, and may be able to participate in informal working groups on various issues between the meetings.

Constituencies for Negotiator Nominations

We have identified the following constituencies as having interests that are significantly affected by the topics proposed for negotiation. We plan to include as negotiators individuals from organizations or groups representing these constituencies and/or individuals who are a part of the constituency. We particularly encourage organizations representing the interests of historically underserved and/or low-income communities to submit their nominations. Nominations must include evidence of the nominee's specific knowledge in these areas, citing specific topics outlined in the *Committee Topics* section. Constituencies for the Affordability and Student Loans Committee are:

(1) Dependent students—these are undergraduate students who are typically traditionally-aged college students. A student is a dependent student if they were required to enter both their and their parents' information on their most recent FAFSA submission.

(2) Independent students—these are often older or nontraditional students, such as students over the age of 24. Students who are married, have children or other dependents, or who were unaccompanied and homeless or at risk of being homeless are independent students. Independent students can be pursuing undergraduate or graduate studies. A student is an independent student if they were not required to enter their parents' information on their most recent FAFSA submission.

Note: Students who were formerly incarcerated and participated in postsecondary education while in prison are included in the independent and dependent student categories regardless of whether they received Federal student aid, and we encourage nominations for individuals with those experiences. For both student spots, we also encourage individuals or organizations representing low-income students to apply.

(3) Student loan borrowers. This includes but is not limited to: Student loan borrowers who are currently repaying their student loans, student loan borrowers who defaulted or are currently in default, student loan borrowers who were in forbearance or are currently in the administrative (automatic) forbearance due to COVID–19, and student loan borrowers who prior to the administrative forbearance were delinquent (late) on their student loans payments.

(4) Legal assistance organizations that represent students and/or borrowers.

(5) U.S. military service members, veterans, or groups representing them.

(6) State attorneys general.

(7) State higher education executive officers, State authorizing agencies, and/or State regulators of institutions of higher education and/or loan servicers.

(8) Individuals with disabilities or groups representing them.

(9) Financial aid administrators at postsecondary institutions.

(10) Two-year public institutions of higher education.

(11) Four-year public institutions of higher education.

(12) Private nonprofit institutions of higher education.

(13) Proprietary institutions.

(14) Minority-serving institutions—institutions of higher education eligible to receive Federal assistance under title III, parts A, B, and F, and title V of the HEA, which include Historically Black Colleges and Universities, Hispanic-Serving Institutions, American Indian Tribally Controlled Colleges and Universities, Alaska Native and Native Hawaiian-Serving Institutions, Predominantly Black Institutions, Native American-Serving Nontribal Institutions, and Asian American and Native American Pacific Islander-Serving Institutions.

(15) Federal Family Education Loan (FFEL) lenders and/or guaranty agencies.

(16) Accrediting agencies.

The goal of the committee is to develop proposed regulations that reflect a final consensus of the committee. Consensus means that there is no dissent by any member of a negotiating committee, including the committee member representing the Department.

An individual selected as a negotiator is expected to represent the interests of their organization or group and to participate in the negotiations in a manner consistent with the goal of developing proposed regulations on which the committee will reach consensus. If consensus is reached, all members of the organization or group represented by a negotiator are bound by the consensus and are prohibited from commenting negatively on the resulting proposed regulations. The Department will not consider any such negative comments on the proposed regulations that are submitted by a member of such an organization.

We are interested in nominations for members of the Prison Education Program Subcommittee from individuals who represent the following groups:

(1) Consumer advocacy organizations.

(2) Financial aid administrators.

(3) Formerly incarcerated students.

(4) Groups that represent incarcerated students.

(5) Postsecondary institutions that are prison education program providers.

(6) State correctional education directors.

(7) State higher education executive officers.

We encourage representatives from postsecondary institutions that are currently participating in the Department's Second Chance Pell Experiment to submit nominations. For more information on the Second Chance

Pell experiment please visit: *https://experimentalsites.ed.gov/exp/approved.html.*

Advisors

The Department also invites nominations for two advisors. These advisors will not be members of the committee and will not impact the consensus vote; however, we will consult with the advisors, who will serve as a resource. We seek an advisor representing qualifying employers on the topic of Public Service Loan Forgiveness. The term ''public service job'' for purposes of the Public Service Loan Forgiveness program is defined in section 455(m)(3)(B) of the HEA as including jobs in: Emergency management, government (excluding time served as a member of Congress), military service, public safety, law enforcement, public health (including nurses, nurse practitioners, nurses in a clinical setting, and full-time professionals engaged in health care practitioner occupations and health care support occupations, as such terms are defined by the Bureau of Labor Statistics), public education, social work in a public child or family service agency, public interest law services (including prosecution or public defense or legal advocacy on behalf of low-income communities at a nonprofit organization), early childhood education (including licensed or regulated childcare, Head Start, and State funded prekindergarten), public service for individuals with disabilities, public service for the elderly, public library sciences, school-based library sciences and other school-based services, or at an organization that is described in section 501(c)(3) of the Internal Revenue Code of 1986 and exempt from taxation under section 501(a) of such Code, or teaching as a full-time faculty member at a Tribal College or University as defined in section 316(b) of the HEA and other faculty teaching in high-needs subject areas or areas of shortage (including nurse faculty, foreign language faculty, and part-time faculty at community colleges), as determined by the Secretary.

Additionally, we seek an advisor with expertise in economic and/or higher education policy analysis and higher education data to support the committee in evaluating and understanding its options.

The advisors will be expected to be available throughout the duration of the Affordability and Student Loans Committee (excluding the Prison Education Program subcommittee) meetings, in the event that issues related to Public Service Loan Forgiveness arise. The Department will work with the committee and the advisors to determine more specific dates and times that the advisors must be present for the committee meetings. The advisors may be asked to provide information on their experience as an employer in a public service job and as an economist and/or higher education researcher, respectively. For example, the employer advisor should be prepared to relay how they assist employees with the Employment Certification Form or how the full-time employment requirement for the Public Service Loan Forgiveness Program impacts part-time employees. The economic and/or higher education research advisor should be prepared to examine data related to student loan repayment, including income-driven repayment plans. The advisors may also offer recommendations to the committee on regulatory language.

Nominations

We strongly suggest that nominations for both the committee and subcommittee include the information described in this section. The Department anticipates increased interest due to the number of topics, and nominations lacking that information may be more difficult for the Department to evaluate. We also suggest that nominees exclude any supplementary information that is not requested in this section.

(1) The exact name of the constituency or constituencies the nominee is being nominated for (see *Constituencies for Negotiator Nominations*);

(2) The name of the nominee;

(3) The nominee's place of employment or institution at which they are or were enrolled and, if different, the organization the nominee represents;

(4) A resume or evidence of the nominee's expertise and experience in the topics proposed for negotiations; and

(5) The nominee's contact information, including the nominee's email address, telephone number, and physical mailing address or post office box.

Please see the **ADDRESSES** section for submission information. If the nomination is submitted by the recommended email method to *negregnominations@ed.gov,* the submitter will receive an email confirmation of receipt. The Department will provide additional information to those we select to serve as negotiators. Once complete, a list of negotiators will be posted here: *www2.ed.gov/policy/highered/reg/hearulemaking/2021/index.html.* If a constituency does not have a qualifying nominee, the Department will also provide information at that site about how any vacancies can be filled at the beginning of the October 4, 2021 committee meeting.

Schedule for Negotiations

The Affordability and Student Loans Committee will meet for three sessions on the following dates:

Session 1: October 4–8, 2021
Session 2: November 1–5, 2021
Session 3: December 6–10, 2021

Times for the committee meetings will be published here: *https://www2.ed.gov/policy/highered/reg/hearulemaking/2021/index.html.*

The Prison Education Program Subcommittee will meet for two sessions in October and November. The sessions will be three days each. We will announce the dates and times of the subcommittee meetings as soon as possible here: *https://www2.ed.gov/policy/highered/reg/hearulemaking/2021/index.html.*

All negotiated rulemaking committee meetings will be conducted virtually and available for the public to view. Individuals who wish to observe the committee meetings will be required to register for each day they would like to observe. We will post registration links closer to the start of negotiations on our website at: *www2.ed.gov/policy/highered/reg/hearulemaking/2021/index.html.* The Department will also post recordings and transcripts of the meetings on that site.

At the end of each day, the Department will reserve 30 minutes for public comment. We will provide information on how to request time to speak on our website at *www2.ed.gov/policy/highered/reg/hearulemaking/2021/index.html.*

Accessible Format: On request to the program contact person listed under **FOR FURTHER INFORMATION CONTACT**, individuals with disabilities can obtain this document and a copy of the application package in an accessible format. The Department will provide the requestor with an accessible format that may include Rich Text Format (RTF) or text format (txt), a thumb drive, an MP3 file, braille, large print, audiotape, or compact disc, or other accessible format.

Electronic Access to this Document: The official version of this document is the document published in the **Federal Register**. You may access the official edition of the **Federal Register** and the Code of Federal Regulations at *www.govinfo.gov.* At this site you can view this document, as well as all other

documents of this Department published in the **Federal Register**, in text or Portable Document Format (PDF). To use PDF you must have Adobe Acrobat Reader, which is available free at the site. You may also access the documents of the Department published in the **Federal Register** by using the article search feature at: *www.federalregister.gov.* Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department.

Program authority: 20 U.S.C. 1098a.

Michelle Asha Cooper,

Acting Assistant Secretary for Postsecondary Education.

[FR Doc. 2021–16953 Filed 8–9–21; 8:45 am]

BILLING CODE 4000–01–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R07–OAR–2021–0476; FRL–8757–01–R7]

Air Plan Approval; Missouri; Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing approval of a State Implementation Plan (SIP) revision submitted by Missouri on January 19, 2021. Missouri requests that the EPA approve into Missouri's SIP revisions to its rule related to the restriction of particulate matter emissions from fuel burning equipment used for indirect heating. These revisions add incorporation by reference information, remove unnecessary words, and make other editorial changes for clarity. The EPA believes that the revisions are administrative in nature, do not impact the stringency of the SIP and do not adversely impact air quality. The EPA's proposed approval of this rule revision is being done in accordance with the requirements of the Clean Air Act (CAA).

DATES: Comments must be received on or before September 9, 2021.

ADDRESSES: You may send comments, identified by Docket ID No. EPA–R07–OAR–2021–0476 to *https://www.regulations.gov.* Follow the online instructions for submitting comments.

Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received will be posted without change to *https://www.regulations.gov/,* including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the ''Written Comments'' heading of the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Robert F. Webber, Environmental Protection Agency, Region 7 Office, Air Permitting and Standards Branch, 11201 Renner Boulevard, Lenexa, Kansas 66219; telephone number: (913) 551–7251; email address: *webber.robert@epa.gov*.

SUPPLEMENTARY INFORMATION: Throughout this document ''we,'' ''us,'' and ''our'' refer to the EPA.

Table of Contents

I. Written Comments

Submit your comments, identified by Docket ID No. EPA–R07–OAR–2021–4076, at *https://www.regulations.gov.* Once submitted, comments cannot be edited or removed from *Regulations.gov*. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.* on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets.*

II. What is being addressed in this document?

The EPA is proposing to approve revisions to the Missouri SIP received on January 19, 2021. The revisions are to Title 10, Division 10 of the Code of State Regulations (CSR), 10 CSR 10–6.405 ''Restriction of Particulate Matter Emissions from Fuel Burning Equipment Used for Indirect Heating'' which restricts the emission of particulate matter from fuel burning equipment used for indirect heating except where 10 CSR 10–6.070 would be applied. This rule applies throughout the state with additional conditions applicable to the metropolitan areas of Kansas City, Springfield, and St. Louis.

These revisions add incorporation by reference information, remove unnecessary words, and make other editorial changes for clarity. These revisions are described in detail in the technical support document (TSD) included in the docket for this action.

Missouri received two comments from the EPA during the comment period. Missouri addressed the comments from the EPA. The EPA is proposing to approve the revisions to this rule because it will not have a negative impact on air quality.

III. Have the requirements for approval of a SIP revision been met?

The State submission has met the public notice requirements for SIP submissions in accordance with 40 CFR 51.102. The submission also satisfied the completeness criteria of 40 CFR part 51, appendix V. The State provided public notice on this SIP revision from January 2, 2020 to April 2, 2020. The State received and addressed two comments from the EPA. As explained in more detail in the TSD which is part of this docket, the SIP revision submission meets the substantive SIP requirements of the CAA, including section 110 and implementing regulations.

IV. What action is the EPA proposing to take?

The EPA is proposing to approve Missouri's request to revise 10 CSR 10–6.405. The EPA is soliciting comment on the substantive and administrative revisions detailed in this proposal and the TSD. The EPA is not soliciting comment on existing rule text that has been previously approved by the EPA into the SIP. Final rulemaking will occur after consideration of any comments.

V. Incorporation by Reference

In this document, the EPA is proposing to include regulatory text in an EPA final rule that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference the Missouri Regulation described in the proposed amendments to 40 CFR part 52 set forth

below. The EPA has made, and will continue to make, these materials generally available through *www.regulations.gov* and at the EPA Region 7 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

VI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of the National Technology Transfer and Advancement Act (NTTA) because this rulemaking does not involve technical standards; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

The SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Particulate matter.

Dated: July 30, 2021.

Edward H. Chu,

Acting Regional Administrator, Region 7.

For the reasons stated in the preamble, EPA proposes to amend 40 CFR part 52 as set forth below:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

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

Subpart AA—Missouri

■ 2. In § 52.1320, the table in paragraph (c) is amended by revising the entry ''10–6.405'' to read as follows:

§ 52.1320 Identification of plan.

* * * * *

(c) * * *

EPA—APPROVED MISSOURI REGULATIONS

Missouri citation	Title	State effective date	EPA approval date	Explanation
Missouri Department of Natural Resources				
*	*	*	*	*
Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods, and Air Pollution Control Regulations for the State of Missouri				
*	*	*	*	*
10–6.405	Restriction of Particulate Matter Emissions from Fuel Burning Equipment Used for Indirect Heating.	9/30/2020	[Date of publication of the final rule in the **Federal Register**], [**Federal Register** citation of the final rule].	.....
*	*	*	*	*

* * * * *

[FR Doc. 2021–16847 Filed 8–9–21; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R09–OAR–2021–0371; FRL–8746–01–R9]

Air Plan Approval; California; San Diego Air Pollution Control District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve revisions to the San Diego Air Pollution Control District (SDAPCD) portion of the California State Implementation Plan (SIP). These revisions concern emissions of volatile organic compounds (VOCs) from cold solvent cleaning and stripping operations and from vapor degreasing operations. We are proposing to approve changes to SIP-approved local rules to regulate these emission sources under the Clean Air Act (CAA or the Act). We are taking comments on this proposal and plan to follow with a final action.

DATES: Comments must be received on or before September 9, 2021.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R09–OAR–2021–0371 at *https://www.regulations.gov.* For comments submitted at *Regulations.gov*, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.* on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets.* If you need assistance in a language other than English or if you are a person with disabilities who needs a reasonable accommodation at no cost to you, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: Robert Schwartz, EPA Region IX, 75 Hawthorne St., San Francisco, CA 94105. By phone: (415) 972–3286 or by email at *schwartz.robert@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document, ''we,'' ''us'' and ''our'' refer to the EPA.

Table of Contents

I. The State's Submittal

A. What rules did the State submit?

Table 1 lists the rules addressed by this proposal with the dates that they were adopted by the local air agency and submitted by the California Air Resources Board (CARB).

TABLE 1—SUBMITTED RULES

Local agency	Rule #	Rule title	Revised and adopted	Submitted
SDAPCD	67.6.1	Cold Solvent Cleaning and Stripping Operations	02/10/2021	04/20/2021
SDAPCD	67.6.2	Vapor Degreasing Operations	02/10/2021	04/20/2021

On June 7, 2021, the EPA determined that the submittal for SDAPCD Rule 67.6.1 and Rule 67.6.2 met the completeness criteria in 40 CFR part 51 Appendix V, which must be met before formal EPA review.

B. Are there other versions of these rules?

We approved earlier versions of Rule 67.6.1 and Rule 67.6.2 into the SIP on October 13, 2009.[1] The SDAPCD adopted revisions to the SIP-approved versions on February 10, 2021 and CARB submitted them to us on April 20, 2021. If we take final action to approve the February 10, 2021 versions of Rule 67.6.1 and Rule 67.6.2, these versions will replace the previously approved versions of these rules in the SIP.

C. What is the purpose of the submitted rule revisions?

Emissions of VOCs contribute to the production of ground-level ozone and smog, which harm human health and the environment. Section 110(a) of the CAA requires states to submit regulations that control VOC emissions. The District revised Rule 67.6.1 to include more stringent solvent cleaning VOC limits, increase the stringency of a qualifying VOC limit for an exemption to the rule, and remove an inappropriate exemption for sources covered by a National Emission Standards for Hazardous Air Pollutants (NESHAP) standard. Rule 67.6.2 was revised to increase the stringency of a qualifying VOC limit for an exemption to the rule and to add several housekeeping updates.

Additionally, on December 3, 2020 (85 FR 77996), the EPA partially approved and partially disapproved SDAPCD's reasonably available control technology (RACT) demonstrations for the 2008 8-hr ozone national ambient air quality standards (NAAQS) (also referred to as the ''2016 RACT SIP''). These deficiencies were identified in our August 10, 2020 proposed partial approval and partial disapproval.[2] For Rule 67.6.1, the deficiency identified was an inappropriate exemption for sources covered by the NESHAP standard. Revisions to Rule 67.6.1 were submitted on April 20, 2021, in part to correct this deficiency. The EPA's technical support document (TSD) has more information about these rules.

II. The EPA's Evaluation and Action

A. How is the EPA evaluating the rules?

Rules in the SIP must be enforceable (see CAA section 110(a)(2)), must not interfere with applicable requirements

[1] 74 FR 52427.

[2] 85 FR 48127.

concerning attainment and reasonable further progress or other CAA requirements (see CAA section 110(l)), and must not modify certain SIP control requirements in nonattainment areas without ensuring equivalent or greater emissions reductions (see CAA section 193).

Generally, SIP rules must require RACT for each category of sources covered by a Control Techniques Guidelines (CTG) document as well as each major source of VOCs in ozone nonattainment areas classified as Moderate or above (see CAA section 182(b)(2)). The SDAPCD regulates an ozone nonattainment area classified as a Severe nonattainment area for the 2008 and 2015 8-hour ozone NAAQS (40 CFR 81.305).[3] Therefore, these rules must implement RACT. In addition, we evaluated the rule to ensure it cured the deficiencies we identified in the partial disapproval of the SDAPCD's 2016 RACT SIP [4] with respect to the requirement to establish RACT-level controls for sources covered by the ''Control Techniques Guidelines for Industrial Cleaning Solvents.''

Guidance and policy documents that we used to evaluate enforceability, revision/relaxation and rule stringency requirements for the applicable criteria pollutants include the following:

1. ''State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990,'' 57 FR 13498 (April 16, 1992); 57 FR 18070 (April 28, 1992).
2. ''Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations,'' EPA, May 25, 1988 (the Bluebook, revised January 11, 1990).
3. ''Guidance Document for Correcting Common VOC & Other Rule Deficiencies,'' EPA Region 9, August 21, 2001 (the Little Bluebook).
4. ''Control of Volatile Organic Emissions from Solvent Metal Cleaning,'' EPA–450/2–77–022, November 1977.
5. ''Control Techniques Guidelines for Industrial Cleaning Solvents,'' EPA–453/R–06–001, September 2006.

B. Do the rules meet the evaluation criteria?

These rules meet CAA requirements and are consistent with relevant guidance regarding enforceability, RACT, and SIP revisions. The revisions to Rule 67.6.1 cure the deficiency identified in our partial disapproval of SDAPCD's 2016 RACT SIP with respect to the requirement to establish RACT-level controls for sources covered by the Industrial Cleaning Solvents CTG. Additionally, the District revised Rule 67.6.1 to include more stringent solvent cleaning VOC limits and to increase the stringency of a qualifying VOC limit for an exemption to the rule. The District revised Rule 67.6.2 to increase the stringency of a qualifying VOC limit for an exemption to the rule. The TSD has more information on our evaluation.

C. The EPA Recommendations to Further Improve the Rules

We recommend that the District add a reference to SDAPCD Rule 67.17 that contains provisions for this source category supplementary to Rule 67.6.1 and Rule 67.6.2. The TSD includes additional recommendations for the next time the local agency modifies the rules.

D. Public Comment and Proposed Action

As authorized in section 110(k)(3) of the Act, the EPA proposes to fully approve the submitted rules because they fulfill all relevant requirements. We will accept comments from the public on this proposal until September 9, 2021. If we take final action to approve the submitted rules, our final action will incorporate these rules into the federally enforceable SIP. In addition, if we finalize our approval of Rule 67.6.1, it will address our obligation to promulgate a Federal Implementation Plan for the Industrial Cleaning Solvent CTG source category associated with our partial disapproval of the District's 2008 RACT SIP, and satisfy the District's requirement to establish RACT-level controls for this source category.[5]

III. Incorporation by Reference

In this rule, the EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference the SDAPCD rules described in Table 1 of this preamble. The EPA has made, and will continue to make, these materials available through *https://www.regulations.gov* and at the EPA Region IX Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

IV. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this proposed action merely proposes to approve state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a ''significant regulatory action'' subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- Does not provide the EPA with the discretionary authority to address disproportionate human health or environmental effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

[3] 86 FR 29522 (June 2, 2021).

[4] 85 FR 77996 (December 3, 2020) and 85 FR 48127 (August 10, 2020).

[5] Sanctions and FIP clocks still apply as they relate to deficiencies in other CTG source categories identified elsewhere in our partial disapproval of the District's 2008 RACT SIP (85 FR 77996).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

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

Dated: July 19, 2021.

Deborah Jordan,

Acting Regional Administrator, Region IX.

[FR Doc. 2021–16665 Filed 8–9–21; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R07–OAR–2021–0475; FRL–8754–01–R7]

Air Plan Approval; Missouri; Restriction of Emissions From Batch-Type Charcoal Kilns

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing approval of a State Implementation Plan (SIP) revision submitted by Missouri on January 19, 2021. Missouri requests that the EPA approve into Missouri's SIP revisions to its rule related to control of emissions from Batch-Type Charcoal Kilns. These revisions correct an erroneous reference, update, correct and clarify references to test methods, remove unnecessary words, and make other grammatical and typographical corrections. These revisions are administrative in nature and do not impact the stringency of the SIP or have an adverse impact to air quality. The EPA's proposed approval of this rule revision is being done in accordance with the requirements of the Clean Air Act (CAA).

DATES: Comments must be received on or before September 9, 2021.

ADDRESSES: You may send comments, identified by Docket ID No. EPA–R07–OAR–2021–0475 to *https://www.regulations.gov.* Follow the online instructions for submitting comments.

Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received will be posted without change to *https://www.regulations.gov/,* including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the ''Written Comments'' heading of the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Robert F. Webber, Environmental Protection Agency, Region 7 Office, Air Permitting and Standards Branch, 11201 Renner Boulevard, Lenexa, Kansas 66219; telephone number: (913) 551–7251; email address: *webber.robert@epa.gov*.

SUPPLEMENTARY INFORMATION: Throughout this document ''we,'' ''us,'' and ''our'' refer to the EPA.

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I. Written Comments

Submit your comments, identified by Docket ID No. EPA–R07–OAR–2021–0475, at *https://www.regulations.gov.* Once submitted, comments cannot be edited or removed from *Regulations.gov*. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.* on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets.*

II. What is being addressed in this document?

The EPA is proposing to approve revisions to the Missouri SIP received on January 19, 2021. The revisions are to Title 10, Division 10 of the Code of State Regulations (CSR), 10 CSR 10–6.330 ''Restriction of Emissions From Batch-Type Charcoal Kilns'' which establishes emission limits for batch-type charcoal kilns based on operational parameters that reflect the Best Available Control Technology (BACT) for this industry as of August 20, 1997. These revisions correct an erroneous reference to 10 CSR 10–6.030(21), update, correct and clarify references to test methods, remove unnecessary words, and make other grammatical and typographical corrections. These revisions are described in detail in the technical support document (TSD) included in the docket for this action.

Missouri received no comments during the state public comment period. The EPA is proposing to approve the revisions to this rule because it will not have a negative impact on air quality.

III. Have the requirements for approval of a SIP revision been met?

The State submission has met the public notice requirements for SIP submissions in accordance with 40 CFR 51.102. The submission also satisfied the completeness criteria of 40 CFR part 51, appendix V. The State provided public notice on this SIP revision from September 16, 2019 to December 10, 2019 and received no comments on this rulemaking. As explained above, the revision meets the substantive SIP requirements of the CAA, including section 110 and implementing regulations.

IV. What action is the EPA proposing to take?

The EPA is proposing to approve Missouri's request to revise 10 CSR 10–6.330. The EPA is soliciting comment on the substantive and administrative revisions detailed in this proposal and the TSD. The EPA is not soliciting comment on existing rule text that has been previously approved by the EPA into the SIP. Final rulemaking will occur after consideration of any comments.

V. Incorporation by Reference

In this document, the EPA is proposing to include regulatory text in an EPA final rule that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference the Missouri Regulation described in the proposed amendments to 40 CFR part 52 set forth below. The EPA has made, and will continue to make, these materials generally available through *www.regulations.gov* and at the EPA Region 7 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

VI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission

that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of the National Technology Transfer and Advancement Act (NTTA) because this rulemaking does not involve technical standards; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

The SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Particulate matter, Volatile organic compounds.

Dated: July 30, 2021.

Edward H. Chu,

Acting Regional Administrator, Region 7.

For the reasons stated in the preamble, EPA proposes to amend 40 CFR part 52 as set forth below:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

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

Subpart AA—Missouri

■ 2. In § 52.1320, the table in paragraph (c) is amended by revising the entry ''10–6.330'' to read as follows:

§ 52.1320 Identification of plan.

* * * * *

(c) * * *

EPA-APPROVED MISSOURI REGULATIONS

Missouri citation	Title	State effective date	EPA approval date	Explanation
Missouri Department of Natural Resources				
*	*	*	*	*
Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods, and Air Pollution Control Regulations for the State of Missouri				
*	*	*	*	*
10–6.330	Restriction of Emissions From Batch-Type Charcoal Kilns.	7/30/2020	[Date of publication of the final rule in the **Federal Register**], [**Federal Register** citation of the final rule].	
*	*	*	*	*

* * * * *

[FR Doc. 2021–16846 Filed 8–9–21; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

42 CFR Part 513

[CMS–5528–P]

RIN 0938–AT91

Most Favored Nation (MFN) Model

AGENCY: Centers for Medicare & Medicaid Services (CMS), HHS.

ACTION: Proposed rule.

SUMMARY: This proposed rule proposes to rescind the Most Favored Nation Model interim final rule with comment period that appeared in the November 27, 2020, **Federal Register**.

DATES: To be assured consideration, comments must be received at one of the addresses provided below, by October 12, 2021.

ADDRESSES: In commenting, please refer to file code CMS–5528–P.

Comments, including mass comment submissions, must be submitted in one

of the following three ways (please choose only one of the ways listed):

1. *Electronically.* You may submit electronic comments on this regulation to *http://www.regulations.gov.* Follow the ''Submit a comment'' instructions.

2. *By regular mail.* You may mail written comments to the following address ONLY: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–5528–P, P.O. Box 8013, Baltimore, MD 21244–8013.

Please allow sufficient time for mailed comments to be received before the close of the comment period.

3. *By express or overnight mail.* You may send written comments to the following address ONLY: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–5528–P, Mail Stop C4–26–05, 7500 Security Boulevard, Baltimore, MD 21244–1850.

For information on viewing public comments, see the beginning of the **SUPPLEMENTARY INFORMATION** section.

FOR FURTHER INFORMATION CONTACT: Lara Strawbridge, (410) 786–7400 or *MFN@cms.hhs.gov.*

SUPPLEMENTARY INFORMATION: *Inspection of Public Comments:* All comments received before the close of the comment period are available for viewing by the public, including any personally identifiable or confidential business information that is included in a comment. We post all comments received before the close of the comment period on the following website as soon as possible after they have been received: *http://www.regulations.gov.* Follow the search instructions on that website to view public comments. CMS will not post on *Regulations.gov* public comments that make threats to individuals or institutions or suggest that the individual will take actions to harm any individual. CMS continues to encourage individuals not to submit duplicative comments. We will post acceptable comments from multiple unique commenters even if the content is identical or nearly identical to other comments.

I. Background

Increases in Part B prescription drug spending significantly outpace the growth in spending on other Medicare Part B services,[1] and prices in the United States (U.S.) for most Medicare Part B drugs with the highest Medicare spending far exceed prices in other countries.[2] [3] Specifically, drugs have consistently been a major contributor to the overall Medicare Part B spending trend. Medicare Part B fee-for-service (FFS) spending for separately payable physician-administered drugs and drugs furnished in a hospital outpatient department represented about 11 percent of Medicare Part B FFS benefit spending in 2015, but accounted for about 37 percent of the change in Medicare Part B FFS benefit spending from 2015 to 2020.[4] In addition to the continued growth in spending, Medicare pays substantially more than other countries for many of the highest-cost Medicare Part B drugs that beneficiaries receive in an outpatient setting for which Medicare Part B allows separate payment.[5] In many instances, Medicare pays more than twice as much for certain drugs as other countries do.[6]

This imbalance in payment arises because Medicare generally establishes the payment for separately payable Medicare Part B drugs using the methodology in section 1847A of the Social Security Act (the Act). In most cases, this means payment is based on the average sales price (ASP) plus a statutorily mandated 6 percent add-on. Under this methodology, the Medicare program does not get the benefit of the substantial discounts provided in other countries, because ASP is calculated using only the prices that manufacturers charge to certain U.S.-based purchasers. ASP-based payments may also encourage the use of more expensive drugs because the dollar amount of the 6 percent add-on portion is larger for drugs with higher ASPs.[7]

The Most Favored Nation (MFN) Model interim final rule with comment period (85 FR 76180) [8] (hereafter, referred to as ''the November 2020 interim final rule'') was published in the **Federal Register** on November 27, 2020, and was effective the same day, with a 60-day comment period. The 60-day comment period on the November 2020 interim final rule closed on January 26, 2021. The November 2020 interim final rule established a 7-year nationwide, mandatory MFN Model, under section 1115A of the Act, with the model performance period beginning on January 1, 2021. The MFN Model would test an alternative way for Medicare to pay for certain Medicare Part B single source drugs and biologicals (including biosimilar biologicals). For additional information on the MFN Model, see the November 2020 interim final rule and the MFN Model website.[9]

In the November 2020 interim final rule, Waiver of Proposed Rulemaking and Delay in Effective Date, we stated that we found that there was good cause to waive the notice and comment requirements under sections 553(b)(B) of the Administrative Procedure Act and section 1871(b)(2)(C) of the Act because of the particularly acute need for affordable Medicare Part B drugs in the midst of the COVID–19 pandemic (85 FR 76249).

In December 2020, while the comment period was open, four lawsuits were filed related to CMS's waivers of proposed rulemaking and delay in effective date as well as other aspects of the MFN Model and the

[1] Nguyen X. Nguyen and Steve Sheingold. Medicare Part B Drugs: Trends in Spending and Utilization, 2006–2017. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. November 20, 2020 (*https://aspe.hhs.gov/pdf-report/medicare-part-b-drugs-spending-and-utilization*).

[2] ''Comparison of U.S. and International Prices for Top Medicare Part B Drugs by Total Expenditures'' accessed via *https://aspe.hhs.gov/pdf-report/comparison-us-and-international-prices-top-medicare-part-b-drugs-total-expenditures;* El-Kilani Z, Finegold K, Mulcahy A, and Bosworth A. Medicare FFS Part B and International Drug Prices: A Comparison of the Top 50 Drugs. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. November 20, 2020 (*https://aspe.hhs.gov/pdf-report/medicare-ffs-part-b-and-international-drug-prices*).

[3] Individual countries differ in the regulatory processes and standards governing approval of drugs and biologicals. Use of international drug prices in the MFN Model should not be interpreted to connote FDA approval or to otherwise describe any scientific or regulatory relationship between U.S.-approved and non-U.S.-approved products.

[4] 2020 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. Accessed via: *https://www.cms.gov/files/document/2020-medicare-trustees-report.pdf.*

[5] ''Comparison of U.S. and International Prices for Top Medicare Part B Drugs by Total Expenditures'' accessed via *https://aspe.hhs.gov/pdf-report/comparison-us-and-international-prices-top-medicare-part-b-drugs-total-expenditures;* El-Kilani Z, Finegold K, Mulcahy A, and Bosworth A. Medicare FFS Part B and International Drug Prices: A Comparison of the Top 50 Drugs. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. November 20, 2020 (*https://aspe.hhs.gov/pdf-report/medicare-ffs-part-b-and-international-drug-prices*).

[6] ''Comparison of U.S. and International Prices for Top Medicare Part B Drugs by Total Expenditures'' accessed via *https://aspe.hhs.gov/pdf-report/comparison-us-and-international-prices-top-medicare-part-b-drugs-total-expenditures;* El-Kilani Z, Finegold K, Mulcahy A, Bosworth A. Medicare FFS Part B and International Drug Prices: A Comparison of the Top 50 Drugs. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. November 20, 2020 (*https://aspe.hhs.gov/pdf-report/medicare-ffs-part-b-and-international-drug-prices*).

[7] MedPAC, June 2017, ''Medicare Part B Drug Payment Policy Issues,'' accessed via *http://medpac.gov/docs/default-source/reports/jun17_ch2.pdf*

[8] Available at *https://www.govinfo.gov/content/pkg/FR-2020-11-27/pdf/2020-26037.pdf.*

[9] Available at *https://innovation.cms.gov/innovation-models/most-favored-nation-model.*

November 2020 interim final rule: *Association of Community Cancer Centers* v. *Azar,* No. 8:20–cv–03531 (D. Md.); *California Life Sciences Ass'n* v. *CMS,* No. 3:20–cv–08603 (N.D. Ca); *Regeneron Pharmaceuticals* v. *HHS,* No. 7:20–cv–10488 (S.D.N.Y.); and *Community Oncology Alliance, Inc.* v. *HHS,* No.1:20–cv–03604 (D.D.C.). On December 28, 2020, the U.S. District Court for the Northern District of California issued a nationwide preliminary injunction in *California Life Sciences,* which preliminarily enjoined HHS from implementing the MFN Model and the November 2020 interim final rule. The lawsuits in the U.S. District Court for the District of Maryland and the U.S. District Court for the District of Columbia were stayed based on the nationwide preliminary injunction. On December 30, 2020, the U.S. District Court for the Southern District of New York issued a preliminary injunction in *Regeneron Pharmaceuticals* v. *HHS,* which preliminarily enjoined HHS from applying the November 2020 interim final rule to Regeneron's drug EYLEA® (aflibercept).

On January 8, 2021, the Solicitor General determined not to appeal the preliminary injunction issued in *California Life Sciences.* On January 19, 2021, at the parties' request, the U.S. Northern District of California stayed the case until at least April 23, 2021. Subsequently, on April 26, 2021, another stay was granted until July 26, 2021. On July 29, 2021, another stay was granted until September 27, 2021.

In *Regeneron Pharmaceuticals,* on February 2, 2021, the plaintiff filed a letter seeking leave to file a motion for summary judgment, and HHS filed a letter seeking leave to file a motion for a stay. On February 10, 2021, the U.S. District Court for the Southern District of New York granted HHS's request and stayed the case for 90 days (that is, through May 11, 2021). On May 10, 2021, the stay in this case was extended for an additional 90 days, until August 9, 2021, to give HHS time to consider how to proceed with the rule in light of the ''unanimous'' court decisions to date. In its order, the court noted that HHS should ''not assume that another stay will be granted,'' as the stays gave HHS ''a half-year to reach a conclusion regarding how to proceed[.]''

As a result of the nationwide preliminary injunction, the MFN Model was not implemented on January 1, 2021, as contemplated in the November 2020 interim final rule. While the nationwide preliminary injunction has been in place, CMS considered how to proceed given stakeholders' concerns about potential impacts of the MFN Model.

II. Provisions of the Proposed Regulations

We received approximately 1,166 timely pieces of correspondence in response to the November 2020 interim final rule. We appreciate the comments that we received. We note that many commenters agreed with HHS about the urgency of addressing high prescription drug prices, but nearly all of the commenters expressed concern about beginning the model on January 1, 2021, including starting the model during the COVID–19 pandemic. Given that the nationwide preliminary injunction precluded implementation of the MFN Model on January 1, 2021, as contemplated, that multiple courts found procedural issues with the November 2020 interim final rule, and that stakeholders expressed concern about the model start date,[10] we are proposing to rescind regulations added by the November 2020 interim final rule and remove the associated regulatory text at 42 CFR part 513. We believe this proposed rule communicates how we wish to proceed with the November 2020 interim final rule to the courts and the public. Since the preliminary injunctions prevented the November 2020 interim final rule from taking effect, we do not believe there would be any disruption to reliance interests or Medicare program administration if this proposed rule were to take effect. If finalized, our proposal would allow us to take time to further consider the issues identified by commenters and would address the November 2020 interim final rule's procedural deficiencies by rescinding it. We note that this proposed rule (that is, our proposal to effectively withdraw an interim final rule with comment period) is limited to the codification of the November 2020 interim final rule, and does not reflect any judgment by HHS regarding future policy.

On July 9, 2021, President Biden signed an Executive Order on Promoting Competition in the American Economy that, in part, directs the Secretary of HHS to take steps to lower the prices of and improve access to prescription drugs and biologicals. HHS is exploring opportunities to promote value-based care for our beneficiaries; to address the high cost of Medicare Part B drugs, manufacturers' pricing, and the resulting growth in Medicare Part B drug spending; and to modernize the Medicare program to improve the quality and cost of care for beneficiaries. We will continue to carefully consider the comments we received on the November 2020 interim final rule as we explore all options to incorporate value into payments for Medicare Part B drugs and improve beneficiaries' access to evidence-based care.

We invite comments on our proposal to rescind and remove the regulations at 42 CFR part 513, which also would withdraw the MFN Model.

III. Collection of Information Requirements

As stated in section 1115A(d)(3) of the Act, Chapter 35 of title 44, United States Code, shall not apply to the testing and evaluation of CMS Innovation Center Models. However, costs incurred through information collections were described in sections III.H., III.I.b., and VI.C.5. of the November 2020 interim final rule (85 FR 76221, 76222, and 76244, respectively) . If this proposed rule is finalized, requirements related to the information collection described in the November 2020 interim final rule would not continue. As such, resulting savings are included in the estimate of the impact of our proposal to withdraw the MFN Model in section V.C. of this proposed rule. Further, this proposed rule does not impose information collection requirements, that is, reporting, recordkeeping or third-party disclosure requirements. Consequently, there is no need for review by the Office of Management and Budget under the authority of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

IV. Response to Comments

Because of the large number of public comments we normally receive on **Federal Register** documents, we are not able to acknowledge or respond to them individually. We will consider all comments we receive by the date and time specified in the **DATES** section of this preamble, and, when we proceed with a subsequent document, we will respond to the comments in the preamble to that document.

V. Regulatory Impact Analysis

A. Statement of Need

The purpose of this proposed rule is to propose the rescission of the Most Favored Nation Model, codified by an interim final rule with comment period

[10] For example, commenters stated that the MFN Model should not start during the COVID–19 pandemic, and in addition that the model should not begin on January 1, 2021, while the public comment period for the November 2020 interim final rule was ongoing (until January 26, 2021). Further, commenters stated that CMS failed to allow MFN participants sufficient time to prepare for model start and to develop and deploy new systems with distributors and customers to exclude model sales from ASP reporting.

that appeared in the November 27, 2020 **Federal Register**, and remove the associated regulatory text at 42 CFR part 513, which also would withdraw the MFN Model.

B. Overall Impact

We have examined the impact of this rule as required by Executive Order 12866 on Regulatory Planning and Review (September 30, 1993), Executive Order 13563 on Improving Regulation and Regulatory Review (January 18, 2011), the Regulatory Flexibility Act (RFA) (September 19, 1980, Pub. L. 96–354), section 1102(b) of the Act, section 202 of the Unfunded Mandates Reform Act of 1995 (March 22, 1995; Pub. L. 104–4), Executive Order 13132 on Federalism (August 4, 1999), and the Congressional Review Act (5 U.S.C. 804(2)).

Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Section 3(f) of Executive Order 12866 defines a ''significant regulatory action'' as an action that is likely to result in a rule: (1) Having an annual effect on the economy of $100 million or more in any one year, or adversely and materially affecting a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local or tribal governments or communities (also referred to as ''economically significant''); (2) creating a serious inconsistency or otherwise interfering with an action taken or planned by another agency; (3) materially altering the budgetary impacts of entitlement grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raising novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

A regulatory impact analysis (RIA) must be prepared for major rules with significant regulatory actions or with economically significant effects ($100 million or more in any 1 year). Based on our estimates, OMB's Office of Information and Regulatory Affairs has determined this rulemaking is ''economically significant'' as measured by the $100 million threshold. Accordingly, we have prepared an RIA that to the best of our ability presents the costs and benefits of the rulemaking.

C. Detailed Economic Analysis

Removing the regulatory text at 42 CFR part 513, which also would withdraw the MFN Model, would mean that the annualized/monetarized estimates of costs and transfers presented in the November 2020 interim final rule (85 FR 76235 through 76248) would not be realized. The regulatory impact analysis of the November 2020 interim final rule estimated that the MFN Model would result in substantial overall savings for the Medicare program, the Medicaid program, and beneficiaries, and that model participants would experience costs associated with complying with the regulations, survey completion, and potential requests for financial hardship exemption.

In the November 2020 interim final rule, we presented estimates from the CMS Office of the Actuary (OACT) (85 FR 76236) and the HHS Office of the Assistant Secretary for Planning and Evaluation (ASPE) (85 FR 76240). We noted that there is much uncertainty around the assumptions for both the OACT and ASPE estimates, and refer readers to section VI.C. of the November 2020 interim final rule for a more complete discussion of the estimated impacts of the MFN Model. These potential impacts were estimated to occur beginning January 2021 through December 2028, in alignment with a January 1, 2021 model start. However, because the MFN Model was not implemented on January 1, 2021, as contemplated in the November 2020 interim final rule, such effects have not occurred.

Nevertheless and notwithstanding the nationwide preliminary injunction, this analysis uses a baseline in which the November 2020 interim final rule was implemented on January 1, 2021, to calculate the monetized estimates of the effects of this proposed rule. We maintain the analytical approach described in the regulatory impact analysis of the November 2020 interim final rule, and for the purpose of quantifying the effects of this proposed rule, assume that the regulations added by the November 2020 interim final rule will be in full effect if this proposed rule is not finalized. As a result of the rescission of the regulations added by the November 2020 interim final rule, this proposed rule would, if finalized, prevent the occurrence of the estimated costs and transfers presented in the November 2020 interim final rule. We summarize this result in Tables 1 and 2, which illustrate, inversely, the monetized estimates contained in Table 17 (85 FR 76247) and Table 18 (85 FR 76248) of the November 2020 interim final rule. The period covered shown in Tables 1 and 2 begins January 2021 in alignment with the accounting statements and tables presented in the November 2020 interim final rule. This approach illustrates that this proposed rule, if finalized, would prevent the realization of the annualized/monetarized estimates of costs and transfers that were presented in the November 2020 interim final rule. Because the MFN Model was not implemented, readers should understand that this proposed rule does not affect conditions in the past.

TABLE 1—ACCOUNTING STATEMENT: ESTIMATED IMPACTS FROM CY 2021 TO CY 2028 AS A RESULT OF PROVISIONS OF THIS PROPOSED RULE BASED ON THE OACT ESTIMATE

Category	Estimates	Units		
		Year dollar	Discount rate (%)	Period covered
Costs:				
Annualized Monetized ($million/year)	−29.4	2018	7	January 2021—December 2028.
	−27.1	2018	3	January 2021—December 2028.
To Whom	Hospital/physicians.			
Annualized Monetized ($million/year)	−0.4	2018	7	January 2021—December 2027.
	−0.4	2018	3	January 2021—December 2027.
Transfers:				

TABLE 1—ACCOUNTING STATEMENT: ESTIMATED IMPACTS FROM CY 2021 TO CY 2028 AS A RESULT OF PROVISIONS OF THIS PROPOSED RULE BASED ON THE OACT ESTIMATE—Continued

Category	Estimates	Units		
		Year dollar	Discount rate (%)	Period covered
Annualized Monetized ($million/year)	11,502.5 11,906.3	2018 2018	7 3	January 2021—December 2027. January 2021—December 2027.
From Whom to Whom	Federal Government to hospitals/physicians and MA plans.			
Annualized Monetized ($million/year)	4,087.2 4,228.3	2018 2018	7 3	January 2021—December 2027. January 2021—December 2027.
From Whom to Whom	Beneficiaries to hospitals/physicians and MA plans.			
Annualized Monetized ($million/year)	577.5 596.5	2018 2018	7 3	January 2021—December 2027. January 2021—December 2027.
From Whom to Whom	States to hospitals/physicians and MA plans.			

TABLE 2—ACCOUNTING STATEMENT: ESTIMATED IMPACTS FROM CY 2021 TO CY 2028 AS A RESULT OF THE PROVISIONS OF THIS PROPOSED RULE BASED ON THE ASPE ESTIMATE

Category	Estimates	Units		
		Year dollar	Discount rate (%)	Period covered
Costs: Annualized Monetized ($million/year)	−29.4 −27.1	2018 2018	7 3	January 2021—December 2028. January 2021—December 2028.
To Whom	Hospital/physicians			
Annualized Monetized ($million/year)	−0.4 −0.4	2018 2018	7 3	January 2021—December 2027. January 2021—December 2027.
Transfers: Annualized Monetized ($million/year)	7,058.3 7,276.5	2018 2018	7 3	January 2021—December 2027. January 2021—December 2027.
From Whom to Whom	Federal Government to hospitals/physicians and MA plans			
Annualized Monetized ($million/year)	4,504.9 4,638.6	2018 2018	7 3	January 2021—December 2027. January 2021—December 2027.
From Whom to Whom	Beneficiaries to hospitals/physicians and MA plans			
Annualized Monetized ($million/year)	342.4 351.6	2018 2018	7 3	January 2021—December 2027. January 2021—December 2027.
From Whom to Whom	States to hospitals/physicians and MA plans			

D. Regulatory Flexibility Act (RFA)

The RFA requires agencies to analyze options for regulatory relief of small entities. For purposes of the RFA, small entities include small businesses, nonprofit organizations, and small governmental jurisdictions. Most hospitals and most other providers and suppliers are small entities, either by nonprofit status or by having revenues of less than $8 million to $41.5 million in any 1 year. Individuals and states are not included in the definition of a small entity. For details, see the Small Business Administration's ''Table of Small Business Size Standards'' at *https://www.sba.gov/document/support--table-size-standards.* The rule of thumb used by HHS for determining whether an impact is ''significant'' is an adverse effect equal to 3 percent or more of total annual revenues.

This proposed rule, if finalized, would impact the vast majority of Medicare-participating providers and suppliers that submit claims for separately payable Medicare Part B drugs by preventing the impacts described in the November 2020 interim final rule (85 FR 76246) from being realized. There are over 20,000 small entities that would be included or affected by the MFN Model if the model was implemented. We refer readers to Table 3 and Table 8 in the November 2020 interim final rule (85 FR 76195 and 76219, respectively) to see the number of entities, as well as the types of providers and suppliers, that would be most likely impacted by the MFN Model. This proposed rule proposes to withdraw the MFN Model, and therefore would likely impact these same entities. Accordingly, we have determined that a Regulatory Flexibility Analysis (RFA) is required. As its measure of significant economic impact on a substantial number of small entities, HHS uses a

change in revenue of more than 3 to 5 percent. We do believe that this threshold will be reached by the requirements in this proposed rule. Therefore, the Secretary has certified that this proposed will have a significant economic impact on a substantial number of small entities. The RFA presented in the November 2020 interim final rule (85 FR 76245) describes the potential impact of the MFN Model, if it was implemented, on small entities. If finalized, this proposed rule would prevent those impacts from being realized. Specifically, the lower drug payments and alternative add-on payments described in section III.F. of the November 2020 interim final rule would not occur. Instead, payment for submitted claims would be made under the applicable Medicare payment methodology. This RFA, together with the preamble, constitutes the required analysis.

In addition, section 1102(b) of the Act requires us to prepare an RIA if a rule may have a significant impact on the operations of a substantial number of small rural hospitals. This analysis must conform to the provisions of section 603 of the RFA. For purposes of section 1102(b) of the Act, we define a small rural hospital as a hospital that is located outside of a Metropolitan Statistical Area for Medicare payment regulations and has fewer than 100 beds. Similar to urban entities, we estimate that this proposed rule, if finalized, would have a significant impact on small rural hospitals by preventing the impacts described in the November 2020 interim final rule (85 FR 76246) from being realized. Specifically, if the MFN Model was implemented, these rural entities would experience drug payment reductions and overall payment reductions similar to urban entities. Instead, if this proposed rule is finalized, payment for submitted claims would be made under the applicable Medicare payment methodology.

We welcome comments on our estimate of significantly affected providers and suppliers and the magnitude of estimated effects for this proposed rule.

E. Unfunded Mandates Reform Act (UMRA)

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA) also requires that agencies assess anticipated costs and benefits before issuing any rule whose mandates require spending in any 1 year of $100 million in 1995 dollars, updated annually for inflation. In 2021, that threshold is approximately $158 million. As discussed in section V.C. of this proposed rule, the financial impacts for States (that is, an estimated overall reduction in State spending) presented in the November 2020 interim final rule (85 FR 76235 through 76248) would not be realized. This proposed rule does not mandate any spending by State, local, or tribal governments, or by the private sector, and hence an UMRA analysis is not required.

F. Federalism

Executive Order 13132 establishes certain requirements that an agency must meet when it promulgates a proposed rule (and subsequent final rule) that imposes substantial direct requirement costs on State and local governments, preempts State law, or otherwise has Federalism implications. As discussed in section V.C. of this proposed rule, the financial impacts for States (that is, an estimated overall reduction in State spending) presented in the November 2020 interim final rule (85 FR 76235 through 76248) would not be realized. Since this regulation does not impose any costs on State or local governments, preempt State law, or otherwise have Federalism implications, the requirements of Executive Order 13132 are not applicable.

In accordance with the provisions of Executive Order 12866, this proposed rule was reviewed by the Office of Management and Budget.

Chiquita Brooks-LaSure, Administrator of the Centers for Medicare & Medicaid Services, approved this document on July 21, 2021.

List of Subjects for 42 CFR 513

Administrative practice and procedure, Health facilities, Medicare, Reporting and recordkeeping requirements.

PART 513—[REMOVED]

■ For the reasons set forth in the preamble and under the authority at 5 U.S.C. 301, the Centers for Medicare & Medicaid Services proposes to remove 42 CFR part 513.

Dated: August 3, 2021.

Xavier Becerra,

Secretary, Department of Health and Human Services.

[FR Doc. 2021–16886 Filed 8–6–21; 4:15 pm]

BILLING CODE 4120–01–P

Notices

Federal Register
Vol. 86, No. 151
Tuesday, August 10, 2021

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Submission for OMB Review; Notice of Request for Emergency Approval

May 13, 2021.

In compliance with the requirements of the Paperwork Reduction Act of 1995 (PRA), the Department of Agriculture (USDA) has submitted a request to the Office of Management and Budget (OMB) for a six-month emergency approval of the following information collection: ICR 0596–NEW, Grant or Agreement Award Face Sheet. The requested approval would enable the collection of this information and the implementation of this program while USDA completes the normal PRA approval process for ICR 0596–0217.

Forest Service

Title: Grant or Agreement Award Face Sheet.

OMB Control Number: 0596–NEW.

Summary of Collection: The 2018 Farm Bill expanded the ability for tribes to enter into agreements with the Forest Service to manage programs implementing the Tribal Forest Protection Act (''638 agreements,'' pursuant to the Indian Self-Determination and Education Assistance Act (Pub. L. 93–638). The proposed information collection approves the use of a new form needed to execute these agreements. In conjunction with the Intertribal Timber Council, the Forest Service assessed the status of development of demonstration project agreements under this important new authority and anticipates the need to evaluate and execute numerous projects in the near future. It is critical that the agency be able to support these important economic development projects in a timely fashion.

If approved for emergency use, this form will be combined with 0596–0217 at the time of renewal (expiration date is 12/31/2021).

Levi S. Harrell,

Departmental Information Collection Clearance Officer.

[FR Doc. 2021–16988 Filed 8–9–21; 8:45 am]

BILLING CODE 3411–15–P

DEPARTMENT OF AGRICULTURE

Submission for OMB Review; Comment Request

The Department of Agriculture has submitted the following information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1995, Public Law 104–13. Comments are requested regarding; whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; the accuracy of the agency's estimate of burden including the validity of the methodology and assumptions used; ways to enhance the quality, utility and clarity of the information to be collected; and ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Comments regarding this information collection received by September 9, 2021 will be considered. Written comments and recommendations for the proposed information collection should be submitted within 30 days of the publication of this notice on the following website *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function.

An agency may not conduct or sponsor a collection of information unless the collection of information displays a currently valid OMB control number and the agency informs potential persons who are to respond to the collection of information that such persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

Animal and Plant Health Inspection Service

Title: Communicable Diseases in Horses.

OMB Control Number: 0579–0127.

Summary of Collection: The Animal Health Protection Act (AHPA) of 2002 is the primary Federal law governing the protection of animal health. The law gives the Secretary of Agriculture broad authority to detect, control, or eradicate pests or diseases of livestock or poultry. The Secretary may also prohibit or restrict import or export of any animal or related material if necessary, to prevent the spread of any livestock or poultry pest or disease. The AHPA is contained in Title X, Subtitle E, Sections 10401–18 of Public Law 107–171, May 13, 2002, the Farm Security and Rural Investment Act of 2002.

Veterinary Services (VS), a program within USDA's Animal and Plant Health Inspection Service (APHIS), is responsible for administering regulations intended to ensure that animals affected with EIA are identified through proficient and reliable testing and that appropriate reporting occurs. Further, regulations ensure animals testing positive are moved interstate in a way that does not endanger the health of the U.S. equine population. APHIS regulations at title 9, *Code of Federal Regulations* (9 CFR) 75.4 deal specifically with regulating the interstate movement of horses affected with equine infectious anemia (EIA). VS provides guidance on approval of laboratories, diagnostic facilities, and research facilities. Ensuring the safe movement of these horses requires the use of information collection activities, including an EIA laboratory test form, a certificate or permit for the interstate movement of an EIA reactor, a supplemental investigation form if a horse tests positive for EIA, agreements, request for hearing, and written notification of withdrawal of approval.

Need and Use of the Information: The information collected from forms, APHIS VS 10–11, Equine Infectious Anemia Laboratory Test; VS 10–12, Equine Infectious Anemia Supplemental Investigation; and VS 1–27, Permit for the Movement of Restricted Animals, VS–10–15, Agreement to Conduct Equine Infectious Anemia Testing, VS–10–16, Laboratory Inspection Checklist for Equine Infectious Anemia Testing, will be used to prevent the spread of

equine infectious anemia. Regulations also require the use an Agreement for Approved Livestock Facilities, Request for Hearing, Written Notification of Approval or Withdrawal, Review of Requirements and Interview, Memorandum of Recommendation and Justification, Monthly Summary Reporting, Denial or Withdrawal of Laboratory Approval. Without the information it would be impossible for APHIS to effectively regulate the interstate movement of horses infected with EIA.

Description of Respondents: Farms; Business or other for-profit; State, Local and Tribal Government.

Number of Respondents: 235,018.

Frequency of Responses: Reporting: On occasion.

Total Burden Hours: 92,610.

Animal and Plant Health Inspection Service

Title: Importation of Gypsy Moth Host Materials from Canada.

OMB Control Number: 0579–0142.

Summary of Collection: The United States Department of Agriculture (USDA) is responsible for preventing plant diseases or insect pests from entering the United States, preventing the spread of pests not widely distributed in the United States, and eradicating those imported pests when eradication is feasible. Under the Plant Protection Act (7 U.S.C. 7701– *et seq.*), the Secretary of Agriculture is authorized to regulate the importation of plants, plant products, and other articles to prevent the introduction of injurious plant pests. The regulations implementing this Act are contained in Title 7 of the Code of Federal Regulations (CFR), Part 319 (Foreign Quarantine Notices). The Plant Protection and Quarantine, a program within USDA's Animal and Plant Health Inspection Service (APHIS) is responsible for ensuring that these regulations are enforced.

Need and Use of the Information: APHIS will collect information from individuals both within and outside the United States using phytosanitary certificates, certificates of origin, a written statement, a compliance agreement and an emergency Action notice. Information collected will ensure that importing foreign logs, trees, shrubs, and other articles do not harbor plant or insect pests such as the gypsy moth. Failing to collect this information would cripple APHIS' ability to ensure that trees (including Christmas trees), shrubs, logs, and a variety of other items imported from Canada do not harbor gypsy moths.

Description of Respondents: Business or other for-profit; Individuals or households; Federal Government.

Number of Respondents: 3,201.

Frequency of Responses: Reporting: On occasion.

Total Burden Hours: 4,358.

Animal and Plant Health Inspection Service

Title: Control of Chronic Wasting Disease.

OMB Control Number: 0579–0189.

Summary of Collection: The Animal Health Protection Act (AHPA) of 2002 is the primary Federal law governing the protection of animal health. The law gives the Secretary of Agriculture broad authority to detect, control, and eradicate pests or diseases of livestock or poultry, and to pay claims arising from destruction of animals. Disease prevention is the most effective method for maintaining a healthy animal population and enhancing the Animal and Plant Health Inspection Service (APHIS) ability to complete in exporting animals and animal products. Chronic wasting disease (CWD) is a transmissible spongiform encephalopathy (TSE) of elk, deer and moose typified by chronic weight loss leading to death. The presence of CWD disease in cervids causes significant economic and market losses to U.S. producers. To accelerate the control and limit the spread of this disease in the United States, APHIS created a cooperative, voluntary Federal-State-private sector CWD Herd Certification Program. The program is designed to identify farmed or captive herds infected with CWD and provided for the management of these herds in a way that reduces the risk of spreading CWD.

Need and Use of the Information: APHIS will collect information from owners of elk, deer, and moose herds who choose to participate in the CWD Herd Certification program. They would need to follow program requirements for animal identification, testing, herd management, and movement of animals into and from herds. APHIS also established requirements for the interstate movement of cervids to prevent movement of elk, deer, and moose that pose a risk of spreading CWD. Carrying out this program will entail the use of several information collection activities and three APHIS forms. Failing to collect it would make it impossible for APHIS to maintain its CWD Herd Certification Program, thereby hindering APHIS' ability to prevent and control the spread of CWD in the United States.

Description of Respondents: Business or other for-profit and not-for-profit; State, Local or Tribal Government.

Number of Respondents: 9,053.

Frequency of Responses: Reporting and Recordkeeping: On occasion.

Total Burden Hours: 322,546.

Animal and Plant Health Inspection Service

Title: Infectious Salmon Anemia (ISA)—Payment of Indemnity.

OMB Control Number: 0579–0192.

Summary of Collection: The Animal Health Protection Act (AHPA) of 2002 is the primary Federal law governing the protection of animal health. The law gives the Secretary of Agriculture broad authority to detect, control, or eradicate pest or diseases of livestock or poultry. Infectious Salmon Anemia (ISA) is a clinical disease resulting from infection with the ISA virus and poses a substantial threat to the economic viability and sustainability of salmon aquaculture in the United States and abroad. This indemnity program entails the use of several information collection activities, including completing a program enrollment form as well as an appraisal and indemnity claim form; developing biosecurity protocols; conducting biosecurity audits; developing site-specific ISA action plans; compiling fish inventories and mortality reports (and recordkeeping); and disease surveillance to control ISA. Program participants, who may include certain aquaculture industry business owners, managers, site employees, and accredited veterinarians, and designated laboratories, must also assist APHIS with certain disease surveillance activities. Without the information it would be impossible for APHIS to contain and prevent ISA outbreaks in the United States.

Need and Use of the Information: APHIS uses a form to enroll aquaculture industry businesses, three others to reimburse them for disease losses, and other information activities to document or conduct biosecurity, protocols, and audits; develop site-specific ISA action plans; compile fish inventories and mortality reports (and keep records of the inventories and reports); and conduct disease surveillance.

Description of Respondents: Business or other for-profit.

Number of Respondents: 13.

Frequency of Responses: Recordkeeping; Reporting: On occasion.

Total Burden Hours: 549.

Dated: August 5, 2021.

Ruth Brown,

Departmental Information Collection Clearance Officer.

[FR Doc. 2021–17020 Filed 8–9–21; 8:45 am]

BILLING CODE 3410–34–P

DEPARTMENT OF AGRICULTURE

Submission for OMB Review; Comment Request

August 5, 2021.

The Department of Agriculture will submit the following information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1995, Public Law 104–13 on or after the date of publication of this notice. Comments are requested regarding: (1) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (2) the accuracy of the agency's estimate of burden including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Comments regarding these information collections are best assured of having their full effect if received by September 9, 2021. Written comments and recommendations for the proposed information collection should be submitted within 30 days of the publication of this notice on the following website *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function.

An agency may not conduct or sponsor a collection of information unless the collection of information displays a currently valid OMB control number and the agency informs potential persons who are to respond to the collection of information that such persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

National Agricultural Statistics Service (NASS)

Title: National Agroforestry Survey.

OMB Control Number: 0535–NEW.

Summary of Collection: The primary objective of the National Agricultural Statistics Service (NASS) is to collect, prepare and issue State and national estimates of crop and livestock production, prices, and disposition; as well as economic statistics, environmental statistics related to agriculture and also to conduct the Census of Agriculture.

The survey will collect data whether the operator uses any of five agroforestry practices typically used for conservation: Windbreaks, Silvopasture, Riparian Forest Buffers, Alley Cropping, as well as Forest Farming & Multi-story Cropping.

Windbreaks are linear plantings of trees and shrubs designed to provide economic, environmental and community benefits. The primary purpose of most windbreaks is to slow the wind which creates a more beneficial condition for soils, crops, livestock, wildlife and people. Silvopasture is the deliberate integration of trees and grazing livestock operations on the same land. These systems are intensively managed for both forest products and forage, providing both short- and long-term income sources.

A riparian forest buffer is an area adjacent to a stream, lake, or wetland that contains a combination of trees, shrubs, and/or other perennial plants and is managed differently from the surrounding landscape, primarily to provide conservation benefits.

Forest farming is the cultivation of high-value crops under the protection of a managed tree canopy. In some parts of the world, this is called multi-story cropping and when used on a small scale in the tropics it is sometimes called home gardening.

Alley cropping is defined as the planting of rows of trees and/or shrubs to create alleys within which agricultural or horticultural crops are produced. The trees may include valuable hardwood veneer or lumber species; fruit, nut or other specialty crop trees/shrubs; or desirable softwood species for wood fiber production.

Need and Use of the Information: NASS would plan and conduct the survey and deliver access to a dataset or responses to approved staff from USDA-Forestry Service, who will publish the results of the survey. This project is conducted as a cooperative effort with the U. S. Department of Agriculture's Forestry Service—National Agroforestry Center. Funding for this survey is being provided by the U.S. Department of Agriculture's Forestry Service—National Agroforestry Center.

Description of Respondents: Farmers and Ranchers.

Number of Respondents: 11,800.

Frequency of Responses: Once.

Total Burden Hours: 9,550.

Levi S. Harrell,

Departmental Information Collection Clearance Officer.

[FR Doc. 2021–16996 Filed 8–9–21; 8:45 am]

BILLING CODE 3410–20–P

DEPARTMENT OF COMMERCE

International Trade Administration

[C–552–805]

Polyethylene Retail Carrier Bags From the Socialist Republic of Vietnam: Final Results of Expedited Second Sunset Review of the Countervailing Duty Order

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

SUMMARY: As a result of this sunset review, the Department of Commerce (Commerce) finds that revocation of the countervailing duty (CVD) order on polyethylene retail carrier bags (PRCBs) from the Socialist Republic of Vietnam (Vietnam) would be likely to lead to continuation or recurrence of countervailable subsidies at the levels indicated in the ''Final Results of Review'' section of this notice.

DATES: Applicable August 10, 2021.

FOR FURTHER INFORMATION CONTACT: Daniel Alexander, AD/CVD Operations, Office VII, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–4313.

SUPPLEMENTARY INFORMATION:

Background

On May 4, 2010, Commerce published its CVD order on PRCBs from Vietnam in the **Federal Register**.[1] On March 31, 2021, Commerce published the notice of initiation of the second sunset review of the *Order,* pursuant to section 751(c) of the Tariff Act of 1930, as amended (the Act).[2] Commerce received a notice of intent to participate from the Polyethylene Retail Carrier Bag Committee (the Committee), an *ad hoc* association of U.S. producers of PRCBs, within the deadline specified in 19 CFR 351.218(d)(1)(i).[3] The Committee

[1] *See Polyethylene Retail Carrier Bags from the Socialist Republic of Vietnam: Countervailing Duty Order,* 75 FR 23670 (May 4, 2010) (*Order*).

[2] *See Initiation of Five-Year (Sunset) Review,* 86 FR 16701 (March 31, 2021).

[3] *See* Committee's Letter, ''Five-Year ('Sunset') Review the Countervailing Duty Order On

claimed interested party status under section 771(9)(E) of the Act, as a trade or business association a majority of whose members manufacture, produce, or wholesale a domestic like product in the United States and stated that each member of the Committee is a manufacturer of the domestic like product and thus, is a domestic interested party pursuant to section 771(9)(C) of the Act.[4]

Commerce received a substantive response from the Committee [5] within the 30-day deadline specified in 19 CFR 351.218(d)(3)(i). We received no substantive responses from the Government of Vietnam or any other domestic or interested parties in this proceeding, nor was a hearing requested.

On May 21, 2021, Commerce notified the U.S. International Trade Commission that it did not receive an adequate substantive response from respondent interested parties.[6] As a result, pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(C)(2), Commerce conducted an expedited (120-day) sunset review of the *Order.*

Scope of the Order

The scope of this *Order* covers PRCBs. Imports of merchandise included within the scope of this *Order* are currently classifiable under statistical category 3923.21.0085 of the Harmonized Tariff Schedule of the United States. For a complete description of the scope of the *Order, see* the accompanying Issues and Decision Memorandum.[7]

Analysis of Comments Received

All issues raised in this sunset review are addressed in the Issues and Decision Memorandum. A list of topics discussed in the Issues and Decision Memorandum is included as an appendix to this notice. The Issues and Decision Memorandum is a public document and is on file electronically via the Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS). ACCESS is available to registered users at *http://access.trade.gov.* In addition, a complete version of the Issues and Decision Memorandum can be accessed directly on the internet at *http://enforcement.trade.gov/frn/.*

Final Results of Sunset Review

Pursuant to sections 751(c)(1) and 752(b) of the Act, we determine that revocation of the CVD order on PRCBs from Vietnam would be likely to lead to continuation or recurrence of countervailable subsidies at the following rates:

Producer/exporter	Net countervailable subsidy (percent)
Advance Polybag Co., Ltd ...	52.56
Fotai Vietnam Enterprise Corp. and Fotai Enterprise Corporation	5.28
All Others	5.28

Administrative Protective Order (APO)

This notice also serves as the only reminder to parties subject to an APO of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of the return or 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.

Notification to Interested Parties

We are issuing and publishing these final results and this notice in accordance with sections 751(c), 752(b), and 777(i)(1) of the Act, and 19 CFR 351.218.

Dated: July 23, 2021.

Christian Marsh,

Acting Assistant Secretary for Enforcement and Compliance.

Appendix—List of Topics Discussed in the Issues and Decision Memorandum

[FR Doc. 2021–16961 Filed 8–9–21; 8:45 am]

BILLING CODE 3510–DS–P

Polyethylene Retail Carrier Bags from Vietnam: Domestic Industry Notice Of Intent To Participate In Sunset Review,'' dated April 9, 2021.

[4] *Id.* The individual members of the Committee are Hilex Poly Co., LLC and Superbag LLC.

[5] *See* Committee's Letter, ''Five-Year (Sunset) Review of the Countervailing Duty Order On Polyethylene Retail Carrier Bags from Vietnam: Domestic Industry Substantive Response,'' dated April 28, 2021.

[6] *See* Commerce's Letter, ''Sunset Reviews for April 2021,'' dated May 21, 2021.

[7] *See* Memorandum, ''Issues and Decision Memorandum for the Expedited Second Sunset Review of the Countervailing Duty Order on Polyethylene Retail Carrier Bags from the Socialist Republic of Vietnam,'' dated concurrently with, and hereby adopted by, this notice (Issues and Decision Memorandum).

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–943, C–570–944]

Oil Country Tubular Goods From the People's Republic of China: Preliminary Affirmative Determinations of Circumvention

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

SUMMARY: The Department of Commerce (Commerce) preliminarily determines that imports of welded oil country tubular goods (OCTG) completed in Brunei or the Philippines using inputs manufactured in the People's Republic of China (China) are circumventing the antidumping and countervailing duty orders on OCTG from China.

DATES: Applicable August 10, 2021.

FOR FURTHER INFORMATION CONTACT: Yang Jin Chun or John Drury, AD/CVD Operations Office VI, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–5760 and (202) 482–0195, respectively.

SUPPLEMENTARY INFORMATION:

Background

On November 3, 2020, Commerce self-initiated these anti-circumvention inquiries to determine whether certain imports of welded OCTG completed in Brunei or the Philippines using inputs manufactured in China are circumventing the antidumping and countervailing duty orders on OCTG from China.[1]

Scope of the Orders

The products covered by the orders are certain OCTG, which are hollow steel products of circular cross-section, including oil well casing and tubing, of iron (other than cast iron) or steel (both carbon and alloy), whether seamless or welded, regardless of end finish. A full description of the scope of the orders is contained in the Preliminary Decision

[1] *See Oil Country Tubular Goods from the People's Republic of China: Self-Initiation of Anti-Circumvention Inquiries on the Antidumping Duty and Countervailing Duty Orders,* 85 FR 71877 (November 12, 2020).

Memorandum.[2] The written description is dispositive.

Scope of the Anti-Circumvention Inquiries

These anti-circumvention inquiries cover welded OCTG completed in Brunei or the Philippines using inputs manufactured in China and subsequently exported from Brunei or the Philippines to the United States.

Methodology

Commerce is conducting these anti-circumvention inquiries in accordance with section 781(b) of the Tariff Act of 1930, as amended (the Act), and 19 CFR 351.225(h). Because China is a non-market economy country within the meaning of section 771(18) of the Act, Commerce relied on surrogate values to value the purchases of Chinese hot-rolled steel, as discussed in section 773(c) of the Act. For a complete description of the events that followed the initiation of these anti-circumvention inquiries, *see* the Preliminary Decision Memorandum. A list of topics included in the Preliminary Decision Memorandum is included as an Appendix to this notice. 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). ACCESS is available to registered users at *https://access.trade.gov.* In addition, a complete version of the Preliminary Decision Memorandum can be accessed directly at *http://enforcement.trade.gov/frn/.*

Preliminary Determinations

As detailed in the Preliminary Decision Memorandum, Commerce preliminarily determines that welded OCTG assembled or completed in Brunei or the Philippines using inputs manufactured in China and subsequently exported from Brunei or the Philippines to the United States are circumventing the antidumping and countervailing duty orders on OCTG from China. We therefore preliminarily determine that it is appropriate to include this merchandise within the antidumping and countervailing duty orders on OCTG from China and to instruct U.S. Customs and Border Protection (CBP) to suspend entries of merchandise produced using Chinese inputs in a third country, *i.e.,* Brunei or the Philippines, and exported to the United States.

Suspension of Liquidation

As stated above, Commerce has made preliminary affirmative findings of circumvention of the antidumping and countervailing duty orders on OCTG from China for welded OCTG completed in Brunei or the Philippines using inputs manufactured in China and subsequently exported from Brunei or the Philippines to the United States. These preliminary circumvention findings apply to welded OCTG assembled or completed in Brunei or the Philippines using inputs manufactured in China and subsequently exported from Brunei or the Philippines to the United States. In accordance with section 19 CFR 351.225(l)(2), Commerce will direct CBP to suspend liquidation and to require a cash deposit of estimated duties on unliquidated entries of welded OCTG completed in Brunei or the Philippines using inputs manufactured in China, subsequently exported from Brunei or the Philippines to the United States, and entered, or withdrawn from warehouse, for consumption on or after November 3, 2020, the date of initiation of these anti-circumvention inquiries. The suspension of liquidation will remain in effect until further notice. For entries of such merchandise produced in Brunei or the Philippines, Commerce will instruct CBP to require antidumping duty cash deposits equal to the rate established for the China-wide entity, *i.e.,* 99.14 percent,[3] and countervailing duty cash deposits equal to the current all-others rate, *i.e.,* 27.08 percent.[4]

Welded OCTG assembled or completed in Brunei or the Philippines using non-Chinese inputs is not subject to these anti-circumvention inquiries. However, because the mandatory respondents are unable to track welded OCTG to the country of origin of inputs used in the production of welded OCTG,[5] Commerce will not implement a certification process at this preliminary stage, and Commerce will require cash deposits on all entries of welded OCTG from Brunei and the Philippines.[6] However, we intend to implement a certification process in the future for any companies that may be established in Brunei or the Philippines, and we plan to issue draft certifications shortly after these preliminary determinations of circumvention. With respect to the mandatory respondents, Commerce will reconsider eligibility to participate in a certification process if a party demonstrates in a future segment of the proceeding (*i.e.,* a changed circumstances review or an administrative review) that the OCTG being entered into the United States that it produces is not produced using Chinese inputs. Interested parties are invited to comment on this issue in their case briefs.

Public Comment

Commerce intends to disclose the analysis used in these preliminary findings within five days of publication of this notice. Interested parties are invited to comment on the preliminary determinations of these anti-circumvention inquiries. Pursuant to 19 CFR 351.309(b)(2), interested parties may submit case briefs not later than 30 days after the date of publication of this notice. Rebuttal briefs, limited to issues raised in the case briefs, may not be filed later than seven days after the time limit for filing case briefs.[7] Pursuant to 19 CFR 351.309(c)(2) and (d)(2), parties who submit case or rebuttal briefs in these anti-circumvention inquiries are encouraged to submit with each argument: (1) A statement of the issue; (2) a brief summary of the argument; and (3) a table of authorities.

Pursuant to 19 CFR 351.310(c), interested parties who wish to request a hearing, limited to issues raised in the case and rebuttal briefs, 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. 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, Commerce intends to hold the hearing at a time and date to be determined. Parties should confirm

[2] *See* Memorandum, ''Oil Country Tubular Goods from the People's Republic of China: Decision Memorandum for Preliminary Affirmative Determinations of Circumvention,'' dated concurrently with, and hereby adopted by, this notice (Preliminary Decision Memorandum) at 3.

[3] *See Oil Country Tubular Goods from the People's Republic of China: Final Results of Antidumping Duty Administrative Review; 2017–2018,* 84 FR 32125, 32126 (July 5, 2019).

[4] *See Oil Country Tubular Goods from the People's Republic of China: Notice of Court Decision Not in Harmony With the Amended Final Determination of the Countervailing Duty Investigation,* 82 FR 25770 (June 5, 2017).

[5] *See, e.g.,* HLDS (B) Steel Sdn. Bhd.'s Letter, ''HLDSB Initial Questionnaire Response,'' dated March 16, 2021 at 25; and HLD Clark Steel Pipe Co., Inc.'s Letter, ''HLD Clark Initial Questionnaire Response,'' dated March 16, 2021 at 26.

[6] *See, e.g., Diamond Sawblades and Parts Thereof from the People's Republic of China: Final Determination of Anti-Circumvention Inquiry,* 84 FR 33920, 33921 (July 16, 2019).

[7] *See* 19 CFR 351.309; *see also* 19 CFR 351.303 (for general filing requirements); *Temporary Rule Modifying AD/CVD Service Requirements Due to COVID–19,* 85 FR 17006 (March 26, 2020); and *Temporary Rule Modifying AD/CVD Service Requirements Due to COVID–19; Extension of Effective Period,* 85 FR 41363 (July 10, 2020).

the date and time of the hearing two days before the scheduled date of the hearing.

International Trade Commission Notification

Consistent with section 781(e) of the Act, Commerce will notify the International Trade Commission (ITC) of these preliminary determinations to include the merchandise subject to these anti-circumvention inquiries within the antidumping and countervailing duty orders on OCTG from China. Pursuant to section 781(e) of the Act, the ITC may request consultations concerning Commerce's proposed inclusion of the subject merchandise. If, after consultations, the ITC believes that a significant injury issue is presented by the proposed inclusion, it will have 60 days from the date of notification by Commerce to provide written advice.

Final Determinations

According to section 781(f) of the Act, Commerce shall, to the maximum extent practicable, make its anti-circumvention determination within 300 days from the date of the initiation of the inquiry.[8] Due to the complicated nature of these anti-circumvention inquiries, we are hereby extending the deadline for the final determinations of these anti-circumvention inquiries by 50 days. Therefore, Commerce intends to issue the final determinations of these anti-circumvention inquiries to October 28, 2021.

These preliminary affirmative circumvention determinations are published in accordance with section 781(b) of the Act and 19 CFR 351.225(f).

Dated: August 4, 2021.

Christian Marsh,

Acting Assistant Secretary for Enforcement and Compliance.

Appendix

List of Topics Discussed in the Preliminary Decision Memorandum

[FR Doc. 2021–17016 Filed 8–9–21; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XB289]

Endangered and Threatened Species; Take of Anadromous Fish

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

ACTION: Notice, Issuance of 14 Enhancement of Survival Permits.

SUMMARY: Notice is hereby given that NMFS has issued 14 enhancement of survival permits (Permit Numbers 23271, 23276, 23278, 23279, 23280, 23284, 23285, 23286, 23287, 23288, 23289, 23290, 23291, 23434) for enhancement and monitoring purposes associated with the Template Safe Harbor Agreement for Conservation of Coho Salmon in the Shasta River (Agreement) and associated Site Plans Agreements developed for the enrolled properties.

ADDRESSES: The Agreement, Site Plan Agreements, permits, and supporting documents are available upon written request or by appointment: California Coastal Office, NMFS WCR, 1655 Heindon Road, Arcata, California 95521, ph: 707–825–5171, fax: 707–825–4840.

FOR FURTHER INFORMATION CONTACT: Jim Simondet, Arcata, California (ph: 707–825–5171, email: *jim.simondet@noaa.gov*).

SUPPLEMENTARY INFORMATION: The issuance of permits under the Endangered Species Act of 1973 (ESA)(16 U.S.C. 1531–1543) is based on a finding that such permits: (1) Are applied for in good faith; (2) would not operate to the disadvantage of the ESA-listed species which are the subject of the permits; and (3) are consistent with the purposes and policies set forth in section 2 of the ESA. Authority to take listed species is subject to conditions set forth in the permits. Permits are issued in accordance with and are subject to the ESA and NMFS regulations (50 CFR parts 222–226) governing listed marine and anadromous species.

Species Covered in This Notice

The following listed species is covered in this notice:

Threatened Southern Oregon/Northern California Coast (SONCC) coho salmon (*Oncorhynchus kisutch;* covered species).

Permits Issued

Twelve permittees have been issued enhancement of survival permits upon entry into the Agreement, which was developed by NMFS, California Department of Fish and Wildlife (CDFW), the Shasta Watershed Conservation Group (SWCG), and the permittees (Table 1). The 12 permittees (Table 1) each developed site plan agreements for their respective properties (*i.e.,* Enrolled Properties) that describe management activities that will be implemented, including Beneficial Management Activities (BMAs), as defined in the Agreement. The Site Plan Agreements, Agreement, and enhancement of survival permits are expected to promote the recovery of the covered species on enrolled properties within the Shasta River watershed in the Agreement area (see Figure 1 in the Agreement). The Shasta River is a tributary to the Klamath River and is in Siskiyou County, California. The duration of the Agreement and the associated enhancement of survival permits is 20 years.

TABLE 1—PERMITTEE, PERMIT NUMBER, AND ENROLLED PROPERTIES AFFILIATED WITH THE AGREEMENT

Permittee	Permit number	Enrolled property	Expiration date
Outpost North Annex	23271	Belcampo-North Annex Property, 8030 Siskiyou Blvd., Grenada, CA 96038.	February 24, 2041.
California Department of Fish and Wildlife.	23276	Big Springs Ranch Wildlife Area, 41° 35′44.76 N 122°27′ 31.52 W.	February 25, 2041.
Cardoza Ranch	23278	Cardoza Ranch, 3710 East Louie Road, Montague, CA 96064.	February 24, 2041.

[8] *See also* 19 CFR 351.225(f)(iii)(5) (explaining that Commerce will issue a final anticircumvention ruling ''normally within 300 days from the date of the initiation of the. . . inquiry'').

TABLE 1—PERMITTEE, PERMIT NUMBER, AND ENROLLED PROPERTIES AFFILIATED WITH THE AGREEMENT—Continued

Permittee	Permit number	Enrolled property	Expiration date
Edson Foulke Ditch Company	23279	Edson-Foulke Point of Diversion, 41° 43′52.6 N 122°47′46.8 W.	February 24, 2041
Grenada Irrigation District	23280	Grenada Irrigation District ..... Point of Diversion 41° 38′ 11.56′ N 122° 29′ 22.88 W	February 24, 2041.
2019 Lowell L. Novy Revocable Trust.	23284	Grenada-Novy Ranch, Gazelle—19931 Old Hwy 99 S, Gazelle, CA 96034, Grenada—2426 County Hwy A–12, Grenada, CA 96034.	February 24, 2041.
Hidden Valley Ranch	23285	Hidden Valley Ranch, 13521 Big Springs Road, Montague, CA 96064.	February 24, 2041.
Emmerson Investments, Inc	23286	Hole-in-the-Ground Ranch, 11825 Big Springs Road, Montague, CA 96064.	February 24, 2041.
Montague Water Conservation District.	23287	Montague Water Conservation District, N. 52°, 43′ E., approximately 2601 feet from SW corner of Section 25, T43N, R5W, MDB&M, being within the NE¼ of SW¼ of said Section 25.	February 24, 2041.
Outpost Mole Richardson	23288	Parks Creek Ranch, 25801 Old Hwy 99, Weed, CA 96094 ...	February 24, 2041.
Rice Livestock Company	23289	Rice Livestock Company, 1730 County Highway A12, Montague, CA.	February 24, 2041.
Emmerson Investments, Inc	23290	Seldom Seen Ranch, 41° 54′ 63.2 N 122° 38′ 35.7 W	February 24, 2041.
Emmerson Investments, Inc	23291	Shasta Springs Ranch, 21305 Slough Road, Weed, CA 96094.	February 25, 2041.
NB Ranches, Inc	23434	Nicoletti Ranch, 1824 DeSouza Lane, Montague, CA and 2238 DeSouza Lane, Montague, CA.	February 24, 2041.

The enhancement of survival permits authorize the incidental taking of the covered species associated with routine agricultural activities, implementation of BMAs, and the potential future return of the enrolled property to the baseline or elevated baseline conditions identified in the respective Site Plan Agreement. Under the enhancement of survival permits, Site Plan Agreements, and Agreement, the permittees specify the restoration and/or enhancement, and management activities to be carried out on the enrolled properties and a timetable for implementing those activities. NMFS prepared a biological opinion under section 7(a)(2) of the ESA to determine whether NMFS' actions of entering into the Agreement and the 14 associated Site Plan Agreements, and issuing the 14 section 10(a)(1)(A) enhancement of survival permits, would result in jeopardy to the covered species or destroy or adversely modify their designated critical habitat. NMFS determined that these actions would not result in jeopardy or destruction or adverse modification of designated critical habitat. NMFS also determined that the Agreement and Site Plan Agreements will result in a net conservation benefit for the covered species and meet all required standards of NMFS' Safe Harbor Policy (64 FR 32717; June 17, 1999). The Agreement and Site Plan Agreements specify baseline or elevated baseline conditions for the enrolled properties and include restoration/enhancement activities that will be completed by the permittee to achieve the specified conditions. The Agreement also contains a monitoring component and an Adaptive Management Program that requires the permittees to ensure compliance with the terms and conditions of the Agreement, and to ensure that the baseline or elevated baseline conditions of habitat for the covered species occur on the enrolled properties. Results of the monitoring efforts will be provided to NMFS by the permittees in annual reports for the duration of the 20-year permit term. In addition to reviewing annual reports submitted by SWCG, NMFS, and CDFW will conduct a five-year review to assess the effectiveness of the Agreement.

At the end of the permit term and Agreement, the enhancement of survival permits authorize the permittees to incidentally take covered species associated with a return to baseline or elevated baseline conditions if desired and in compliance with the terms and conditions of the permits.

Dated: August 3, 2021.

Angela Somma,

Chief, Endangered Species Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 2021–16986 Filed 8–9–21; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XB308]

Marine Mammals and Endangered Species

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

ACTION: Notice; issuance of permits, permit modifications.

SUMMARY: Notice is hereby given that permits and permit modifications have been issued to the following entities under the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA), as applicable.

ADDRESSES: The permits and related documents are available for review upon written request via email to *NMFS.Pr1Comments@noaa.gov.*

FOR FURTHER INFORMATION CONTACT: Amy Hapeman (Permit No. 24334) and Erin Markin (Permit Nos. 21467–02 and 22822–02); at (301) 427–8401.

SUPPLEMENTARY INFORMATION: Notices were published in the **Federal Register** on the dates listed below that requests for a permit or permit modification had been submitted by the below-named applicants. To locate the **Federal Register** notice that announced our receipt of the application and a complete description of the activities, go to *www.federalregister.gov* and search

on the permit number provided in Table 1 below.

TABLE 1—ISSUED PERMITS AND PERMIT MODIFICATIONS

Permit No.	RTID	Applicant	Previous **Federal Register** notice	Issuance date
21467–02	0648–XB053	Karen Holloway-Adkins, Ph.D., East Coast Biologists, Inc., P.O. Box 33715, Indialantic, FL 32903.	86 FR 26207; May 13, 2021	July 2, 2021.
22822–02	0648–XB053	Pamela Plotkin, Ph.D., Texas Sea Grant, Texas A&M University, 797 Lamar Street, 4115 TAMU, College Station, TX 77843.	86 FR 26207; May 13, 2021	July 2, 2021.
24334	0648–XA897	Alaska Department of Fish and Game, 1300 College Road, Fairbanks, AK 99701 (Responsible Party: Lori Quakenbush).	86 FR 11729; February 26, 2021	July 13, 2021.

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

As required by the ESA, as applicable, issuance of these permit was based on a finding that such permits: (1) Were applied for in good faith; (2) will not operate to the disadvantage of such endangered species; and (3) are consistent with the purposes and policies set forth in Section 2 of the ESA.

Authority: The requested permits have been issued under the MMPA of 1972, as amended (16 U.S.C. 1361 *et seq.*), the regulations governing the taking and importing of marine mammals (50 CFR part 216), the ESA of 1973, as amended (16 U.S.C. 1531 *et seq.*), and the regulations governing the taking, importing, and exporting of endangered and threatened species (50 CFR parts 222–226), as applicable.

Dated: August 5, 2021.

Amy Sloan,

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

[FR Doc. 2021–16992 Filed 8–9–21; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Docket ID: DoD–2021–OS–0083]

Privacy Act of 1974; System of Records

AGENCY: Defense Information Systems Agency (DISA), Department of Defense (DoD).

ACTION: Notice of a modified system of records.

SUMMARY: In accordance with the Privacy Act of 1974, the DoD is modifying and reissuing a current system of records titled Enterprise Application and Services Forest (EASF), K890.15. This system of records was originally established by the DISA to collect and maintain records on the core active directory (AD) Infrastructure (domain controllers) for Enterprise Services such as DoD Enterprise Email (DEE), Identity Synchronization Services (IdSS), and DoD Enterprise Portal Service (DEPS). It is an Enterprise-wide hierarchical directory structure designed to employ greater centralization and standardization of network management for user data, security, and distributed resources and services across the DoD Enterprise. This system of records notice (SORN) is being updated to make various compliance changes as well as add DoD's standard routine uses.

DATES: This system of records is effective upon publication; however, comments on the Routine Uses will be accepted on or before September 9, 2021. The Routine Uses are effective at the close of the comment period.

ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:

* *Federal Rulemaking Portal: https://www.regulations.gov.*

Follow the instructions for submitting comments.

* *Mail:* DoD cannot receive written comments at this time due to the COVID–19 pandemic. Comments should be sent electronically to the docket listed above.

Instructions: All submissions received must include the agency name and docket number for this **Federal Register** document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the internet at *https://www.regulations.gov* as they are received without change, including any personal identifiers or contact information.

FOR FURTHER INFORMATION CONTACT: Mrs. Jeanette M. Weathers-Jenkins, DISA Privacy Officer, 6914 Cooper Ave, Fort Meade, MD 20755–7090, or by phone at (301) 225–8158.

SUPPLEMENTARY INFORMATION:

I. Background

The DISA is modifying the K890.15 EASF system of records to allow the provision of user accounts, and to authenticate users to DoD enterprise Web applications (*e.g.,* Defense Collaboration Services, Defense Enterprise Portal, DEE) for non-dual persona personnel with DoD's Personal Identity Verification (PIV)—Authentication (Auth) certificate, rather than DoD's Email signing certificate. Subject to public comment, the DoD proposes to update this SORN to add the standard DoD routine uses (routine uses A through I) and to allow for additional disclosures outside DoD related to the purpose of this system of records. Additionally, the following sections of this SORN are being modified as follows: (1) To the Authority for Maintenance of the System section to update citation(s) and add additional authorities; (2) purpose of the system to improve clarity; (3) to the Categories of Individuals Covered by the System section to expand the individuals covered and Categories of Records to clarify how the records relate to the revised Category of Individuals; (4) Record Source Categories to account for Five Eyes partners and Coalition partners exchange in order to populate the information into the Five Eyes national directory; (5) Routine Uses to align with DoD's standard routine uses; (6) to the Administrative, Technical, and Physical Safeguards to update the individual safeguards protecting the personal information; (7) to the Record Access Procedures section to reflect the

need for individuals to identify the appropriate DoD office or component to which their request should be directed; and (8) to the Contesting Records Procedures and Notification procedures section to update the appropriate citation for contesting records. Furthermore, this notice includes non-substantive changes to simplify the formatting and text of the previously published notice.

DoD SORNs have been published in the **Federal Register** and are available from the address in **FOR FURTHER INFORMATION CONTACT** or at the Defense Privacy, Civil Liberties, and Transparency Division (DPCLTD) website at *https://dpcld.defense.gov/privacy.*

II. Privacy Act

Under the Privacy Act, a ''system of records'' is a group of records under the control of an agency from which information is retrieved by the name of an individual or by some identifying number, symbol, or other identifying particular assigned to the individual. In the Privacy Act, an individual is defined as a U.S. citizen or lawful permanent resident.

In accordance with 5 U.S.C. 552a(r) and Office of Management and Budget (OMB) Circular No. A–108, DPCLTD has provided a report of this system of records to the OMB and to Congress.

Dated: August 5, 2021.

Aaron T. Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

SYSTEM NAME AND NUMBER:

Enterprise Application and Services Forest (EASF), K890.15.

SYSTEM CLASSIFICATION:

Unclassified.

SYSTEM LOCATION:

System locations may be obtained from the system manager.

SYSTEM MANAGER(S):

Chief, Enterprise Directory Services Section, Defense Information Systems Agency (DISA), Services Directorate, Applications Division, Infrastructure Applications Branch, 6910 Cooper Ave., Fort Meade, MD 20755–7090, telephone number 301–225–9201, email: *disa.meade.se.list.idss-product-management@mail.mil.*

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

10 U.S.C. Chapter 8, Defense Agencies and Department of Defense Field Activities; DoD Directive 5105.19, Defense Information Systems Agency (DISA); DoD Instruction (DoDI) 1000.25, DoD Personnel Identity Protection (PIP) Program; DoDI 5200.46, DoD Investigative and Adjudicative Guidance for Issuing the Common Access Card (CAC); and DoDI 8520.03, Identity Authentication for Information Systems.

PURPOSE(S) OF THE SYSTEM:

This system of records provides the core active directory (AD) Infrastructure (domain controllers) for Enterprise Services such as DoD Enterprise Email (DEE), Identity Synchronization Services (IdSS), and DoD Enterprise Portal Service (DEPS). It also:

A. Supports the provision of user accounts and authenticates users to DoD enterprise Web applications (*e.g.,* Defense Collaboration Services, Defense Enterprise Portal, DEE) for non-dual personal personnel with DoD's Personal Identity Verification (PIV)—Authentication (Auth) certificate;

B. Provides an Enterprise-wide hierarchical directory structure designed to employ greater centralization and standardization of network management for user data, security, and distributed resources and services across the DoD Enterprise; and

C. Supports the use of enterprise services to establish a reliable and uniform secure data portal for the transmittal of shared information between DoD and VA.

D. To support continuous data exchange between DoD and its Coalition Partners to enable current and future information sharing capabilities that are used by the respective warfighters for conducting mission supporting operations.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

A. DoD personnel, meaning those who have been issued DoD CAC or a DoD Class 3 Public Key Infrastructure (PKI) certificate to include civilian employees, military personnel, contractors, and other individuals detailed or assigned to DoD Components.

B. Department of Veterans Affairs (VA) PIV card holders identified by the VA's Interagency Care Coordination Committee (IC3).

CATEGORIES OF RECORDS IN THE SYSTEM:

A. *For DoD personnel:* Individuals name, unique identifiers including DoD ID number, other unique identifier, Federal Agency Smart Credential Number (FASC–N), login name, legacy login name, and persona username, object class, rank, title, job title, persona type code (PTC), persona display name (PDN), address, email, phone, and other contact information for work and home locations, U.S. government agency code, service code, personnel category code, non-U.S. government agency object common name, user account control, information technology service entitlements, Unit Identification Code (UIC), and PKI certificate information, Administrative Organization Code, DoD component, DoD sub-component, Non-DoD agency, Directory publishing restrictions, Reserve Component Code, Billet Code, Pay Grade, type of investigation, date of investigation, and security clearance level.

B. *For VA personnel:* Individual's name, other unique identifier, primary and other work email addresses, administrative organization code, duty sub-organization code persona email address, email encryption certificate, driver's license number.

Note: This system does not collect or maintain the individual's Social Security Number.

RECORD SOURCE CATEGORIES:

Records and information stored in this system of records are obtained from: Defense Manpower Data Center (DMDC)'s Defense Eligibility Enrollment Reporting System (DEERS), Person Data Repository (PDR) for DoD person and person data, the DISA DoD PKI Global Directory Service (GDS) for users with PKI email certificates, Five Eyes partners, and the Coalition partners.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act of 1974, as amended, these records contained therein may specifically be disclosed outside the DoD as a routine use pursuant to 5 U.S.C. 552a(b)(3) as follows:

A. To contractors, grantees, experts, consultants, students, and others performing or working on a contract, service, grant, cooperative agreement, or other assignment for the federal government when necessary to accomplish an agency function related to this system of records.

B. To the appropriate Federal, State, local, territorial, tribal, foreign, or international law enforcement authority or other appropriate entity where a record, either alone or in conjunction with other information, indicates a violation or potential violation of law, whether criminal, civil, or regulatory in nature.

C. To any component of the Department of Justice for the purpose of representing the DoD, or its

components, officers, employees, or members in pending or potential litigation to which the record is pertinent.

D. In an appropriate proceeding before a court, grand jury, or administrative or adjudicative body or official, when the DoD or other Agency representing the DoD determines that the records are relevant and necessary to the proceeding; or in an appropriate proceeding before an administrative or adjudicative body when the adjudicator determines the records to be relevant to the proceeding.

E. To the National Archives and Records Administration for the purpose of records management inspections conducted under the authority of 44 U.S.C. 2904 and 2906.

F. To a Member of Congress or staff acting upon the Member's behalf when the Member or staff requests the information on behalf of, and at the request of, the individual who is the subject of the record.

G. To appropriate agencies, entities, and persons when (1) the DoD suspects or confirms a breach of the system of records; (2) the DoD determines as a result of the suspected or confirmed breach there is a risk of harm to individuals, the DoD (including its information systems, programs, and operations), the Federal Government, or national security; and (3) the disclosure made to such agencies, entities, and persons is reasonably necessary to assist in connection with the DoD's efforts to respond to the suspected or confirmed breach or to prevent, minimize, or remedy such harm.

H. To another Federal agency or Federal entity, when the DoD determines that information from this system of records is reasonably necessary to assist the recipient agency or entity in (1) responding to a suspected or confirmed breach or (2) preventing, minimizing, or remedying the risk of harm to individuals, the recipient agency or entity (including its information systems, programs and operations), the Federal Government, or national security, resulting from a suspected or confirmed breach.

I. To such recipients and under such circumstances and procedures as are mandated by Federal statute or treaty.

J. To the United States Coast Guard (USCG) to share DoD information to ensure it maintains a state of readiness to function as a specialized military Service in the Department of Navy in a time of war or national emergency.

K. To DoD-approved Coalition Partners for the purposes of routine mission supporting activities. In return, the Coalition partner may disclose system of records information to DoD or a DoD component.

L. To partner Five Eyes (FVEY) Nations to provide information pursuant to existing bilateral agreement(s) in order to populate the information into the FVEY national directory.

POLICIES AND PRACTICES FOR STORAGE OF RECORDS:

Records may be stored electronically in secure facilities behind a locked door. The records may be stored on magnetic disc, tape, or digital media; in agency-owned cloud environments; or in vendor Cloud Service Offerings certified under the Federal Risk and Authorization Management Program (FedRAMP).

POLICIES AND PRACTICES FOR RETRIEVAL OF RECORDS:

These records are retrieved by individual name and DoD ID Number.

POLICIES AND PRACTICES FOR RETENTION AND DISPOSAL OF RECORDS:

System's sole function is to receive and integrate data from two or more other systems and export the resultant product to yet another independent system. These records are maintained as temporary which may be destroyed upon verification of successful creation of the final document or file, or when no longer needed for business use, whichever is later.

ADMINISTRATIVE, TECHNICAL, AND PHYSICAL SAFEGUARDS:

Access to the type and amount of data is governed by privilege management software and policies developed and enforced by Federal government personnel. Data is protected by repository and interfaces, including, but not limited to multi-layered firewalls, Secure Sockets Layer/Transport Layer Security (SSL/TLS) connections, access control lists, file system permissions, intrusion detection and prevention systems and log monitoring. Complete access to all records is restricted to and controlled by certified system management personnel, who are responsible for maintaining the EASF directory integrity and the data confidentiality. Access to computerized data is restricted by CAC.

RECORD ACCESS PROCEDURES:

Individuals seeking access to their records should follow the procedures in 32 CFR part 310. Individuals should address written inquiries to the Defense Information Systems Agency (DISA), FOIA Service Center, Defense Information Systems Agency, ATTN: Headquarters FOIA Requester Service Center, P.O. Box 549, Ft Meade, MD 20755–0549. Signed, written requests should include the individual's full name, current address, telephone number, and the name and number of this system of records notice.

In addition, the requester must provide a notarized statement or an unsworn declaration made in accordance with 28 U.S.C. 1746, in the following format:

If executed outside the United States: ''I declare (or certify, verify, or state) under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on (date). (Signature).''

If executed within the United States, its territories, possessions, or commonwealths: ''I declare (or certify, verify, or state) under penalty of perjury that the foregoing is true and correct. Executed on (date). (Signature).''

CONTESTING RECORD PROCEDURES:

The DoD rules for accessing records, contesting contents, and appealing initial Component determinations are contained in 32 CFR part 310, or may be obtained from the system manager.

NOTIFICATION PROCEDURES:

Individuals seeking to determine whether information about themselves is contained in this system of records should follow the instructions for Record Access Procedures above.

EXEMPTIONS PROMULGATED FOR THE SYSTEM:

None.

HISTORY:

December 8, 2010, 75 FR 76426; June 16, 2014, 79 FR 34299

[FR Doc. 2021–17000 Filed 8–9–21; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF ENERGY

[Case Number 2021–006; EERE–2021–BT–WAV–0014]

Energy Conservation Program: Notification of Petition for Waiver of RefPlus Inc. From the Department of Energy Walk-In Coolers and Walk-In Freezers Test Procedure and Notification of Grant of Interim Waiver

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notification of petition for waiver and grant of an interim waiver; request for comments.

SUMMARY: This notification announces receipt of and publishes a petition for waiver and interim waiver from RefPlus, Inc. (''RefPlus''), which seeks a waiver

for specified carbon dioxide (''CO_2'') direct expansion unit cooler basic models from the U.S. Department of Energy (''DOE'') test procedure used for determining the efficiency of walk-in cooler and walk-in freezer refrigeration systems. DOE also gives notification of an Interim Waiver Order that requires RefPlus to test and rate the specified CO_2 direct expansion unit cooler basic models in accordance with the alternate test procedure set forth in the Interim Waiver Order. DOE solicits comments, data, and information concerning RefPlus's petition and its suggested alternate test procedure so as to inform DOE's final decision on RefPlus's waiver request.

DATES: Written comments and information are requested and will be accepted on or before September 9, 2021.

ADDRESSES: Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at *www.regulations.gov.* Alternatively, interested persons may submit comments, identified by docket number EERE–2021–BT–WAV–0014, by any of the following methods:

1. *Federal eRulemaking Portal: www.regulations.gov.* Follow the instructions for submitting comments.

2. *Email:* to *REFPLUS2021WAV0014@ee.doe.gov.* Include docket number EERE–2021–BT–WAV–0014 in the subject line of the message.

No telefacsimiles (''faxes'') will be accepted. For detailed instructions on submitting comments and additional information on this process, see the **SUPPLEMENTARY INFORMATION** section of this document.

Although DOE has routinely accepted public comment submissions through a variety of mechanisms, including postal mail and hand delivery/courier, the Department has found it necessary to make temporary modifications to the comment submission process in light of the ongoing Covid–19 pandemic. DOE is currently suspending receipt of public comments via postal mail and hand delivery/courier. If a commenter finds that this change poses an undue hardship, please contact Appliance Standards Program staff at (202) 586–1445 to discuss the need for alternative arrangements. Once the Covid–19 pandemic health emergency is resolved, DOE anticipates resuming all of its regular options for public comment submission, including postal mail and hand delivery/courier.

Docket: The docket, which includes **Federal Register** notices, 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, such as those containing information that is exempt from public disclosure, may not be publicly available.

The docket web page can be found at *https://www.regulations.gov/docket?D=EERE-2021-BT-WAV-0014.* The docket web page contains instruction on how to access all documents, including public comments, in the docket. See the **SUPPLEMENTARY INFORMATION** section for information on how to submit comments through *www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Ms. Lucy deButts, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, Mailstop EE–5B, 1000 Independence Avenue SW, Washington, DC 20585–0121. Email: *AS_Waiver_Request@ee.doe.gov.*

Mr. Michael Kido, U.S. Department of Energy, Office of the General Counsel, Mail Stop GC–33, Forrestal Building, 1000 Independence Avenue SW, Washington, DC 20585–0103. Telephone: (202) 586–8145. Email: *Michael.Kido@hq.doe.gov.*

SUPPLEMENTARY INFORMATION: In this notice, DOE is publishing RefPlus's petition for waiver in its entirety, pursuant to 10 CFR 431.401(b)(1)(iv)).[1] DOE is also publishing the Interim Waiver Order granted to RefPlus, which serves as notification of DOE's determination regarding RefPlus's petition for an interim waiver, pursuant to 10 CFR 431.401(e)(1)(ii). DOE invites all interested parties to submit in writing by September 9, 2021, comments and information on all aspects of the petition, including the alternate test procedure. Pursuant to 10 CFR 431.401(d), any person submitting written comments to DOE must also send a copy of such comments to the petitioner. The contact information for the petitioner is Michel Lecompte, *mlecompte@refplus.com,* 2777, Grande-Allée St-Hubert, Quebec Canada, J4T 2R4.

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 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. If this instruction is followed, 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 website will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

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. Comments and documents submitted via email 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 on 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. Faxes will not be accepted.

[1] The petition did not identify any of the information contained therein as confidential business information.

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, written in English and 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. According 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 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. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

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).

Case Number 2021–006

Interim Waiver Order

I. Background and Authority

The Energy Policy and Conservation Act, as amended (''EPCA''),[2] authorizes the U.S. Department of Energy (''DOE'') to regulate the energy efficiency of a number of consumer products and certain industrial equipment. (42 U.S.C. 6291–6317). Title III, Part C[3] of EPCA, Public Law 94–163 (42 U.S.C. 6291–6309, as codified), added by the National Energy Conservation Policy Act, Public Law 95–619, sec. 441 (Nov. 9, 1978), established the Energy Conservation Program for Certain Industrial Equipment, which sets forth a variety of provisions designed to improve energy efficiency for certain types of industrial equipment. Through amendments brought about by the Energy Independence and Security Act of 2007, Public Law 110–140, sec. 312 (Dec. 19, 2007), this equipment includes walk-in coolers and walk-in freezers (collectively ''walk-ins''), the subject of this Interim Waiver Order. (42 U.S.C. 6311(1)(G)).

The energy conservation program under EPCA consists essentially of four parts: (1) Testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification and enforcement procedures. Relevant provisions of EPCA include definitions (42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6313), test procedures (42 U.S.C. 6314), labeling provisions (42 U.S.C. 6315), and the authority to require information and reports from manufacturers (42 U.S.C. 6316).

The Federal testing requirements consist of test procedures that manufacturers of covered equipment must use as the basis for: (1) Certifying to DOE that their equipment complies with the applicable energy conservation standards adopted pursuant to EPCA (42 U.S.C. 6316(a); 42 U.S.C. 6295(s)), and (2) making representations about the efficiency of that equipment (42 U.S.C. 6314(d)). Similarly, DOE must use these test procedures to determine whether the covered equipment complies with relevant standards promulgated under EPCA. (42 U.S.C. 6316(a); 42 U.S.C. 6295(s)).

Under 42 U.S.C. 6314, EPCA sets forth the criteria and procedures DOE is required to follow when prescribing or amending test procedures for covered equipment. EPCA requires that any test procedures prescribed or amended under this section must be reasonably designed to produce test results which reflect the energy efficiency, energy use or estimated annual operating cost of covered equipment during a representative average use cycle and requires that test procedures not be unduly burdensome to conduct. (42 U.S.C.6314(a)(2)) The test procedure for walk-in refrigeration systems is contained in the Code of Federal Regulations (''CFR'') at 10 CFR part 431, subpart R, appendix C, *Uniform Test Method for the Measurement of Net Capacity and AWEF of Walk-In Cooler and Walk-In Freezer Refrigeration Systems* (''Appendix C'').

Under 10 CFR 431.401, any interested person may submit a petition for waiver from DOE's test procedure requirements. DOE will grant a waiver from the test procedure requirements if DOE determines either that the basic model for which the waiver was requested contains a design characteristic that prevents testing of the basic model according to the prescribed test procedures, or that the prescribed test procedures evaluate the basic model in a manner so unrepresentative of its true energy consumption characteristics as to provide materially inaccurate comparative data. 10 CFR 431.401(f)(2). A petitioner must include in its petition any alternate test procedures known to the petitioner to evaluate the performance of the product type in a manner representative of the energy consumption characteristics of the basic model. 10 CFR 431.401(b)(1)(iii). DOE may grant the waiver subject to conditions, including adherence to alternate test procedures. 10 CFR 431.401(f)(2).

As soon as practicable after the granting of any waiver, DOE will publish in the **Federal Register** a notice of proposed rulemaking to amend its regulations so as to eliminate any need for the continuation of such waiver. 10 CFR 431.401(l). As soon thereafter as practicable, DOE will publish in the **Federal Register** a final rule to that effect. *Id.*

The waiver process also provides that DOE may grant an interim waiver if it appears likely that the underlying petition for waiver will be granted and/or if DOE determines that it would be desirable for public policy reasons to grant immediate relief pending a determination on the underlying petition for waiver. 10 CFR 431.401(e)(2). Within one year of issuance of an interim waiver, DOE will either: (i) Publish in the **Federal Register** a determination on the petition for waiver; or (ii) publish in the **Federal Register** a new or amended test procedure that addresses the issues presented in the waiver. 10 CFR 431.401(h)(1).

If DOE ultimately denies the petition for waiver, or if the alternate test procedure specified in the interim waiver differs from the alternate test procedure specified by DOE in a subsequent Decision and Order, DOE will provide a period of 180 days before the manufacturer is required to use the DOE test procedure or the alternate test procedure specified in the Decision and Order to make representations of energy efficiency. 10 CFR 431.401(i).[4] When

[2] All references to EPCA in this document refer to the statute as amended through the Energy Act of 2020, Public Law 116–260 (Dec. 27, 2020).

[3] For editorial reasons, upon codification in the U.S. Code, Part C was redesignated as Part A–1.

[4] In proposing an amendment to 10 CFR 431.401(i), DOE stated that—''The 180 day duration was proposed because that time frame is consistent with the EPCA provision that provides manufacturers 180 days from issuance of a new or amended test procedure to begin using that test procedure for representation of energy efficiency.''

Continued

DOE amends the test procedure to address the issues presented in a waiver, the waiver will automatically terminate on the date on which use of that test procedure is required to demonstrate compliance. 10 CFR 431.401(h)(3).

II. RefPlus's Petition for Waiver and Interim Waiver

On June 2, 2021, DOE received [5] from RefPlus a petition for waiver and interim waiver from the test procedure for walk-in refrigeration systems set forth at 10 CFR part 431, subpart R, appendix C. (RefPlus, No. 1 at p. 1).[6] DOE received an updated petition for waiver and interim waiver from RefPlus on July 12, 2021. (RefPlus, No. 2 at p. 1). The updated petition specifies additional basic models to be considered under the waiver request. (RefPlus, No. 2 at pp. 2–5). Pursuant to 10 CFR 431.401(b)(1)(iv), DOE has posted both petitions to the docket at, at: *www.regulations.gov/docket/EERE-2021-BT-WAV-0014* and has reproduced the most recent petition for waiver in this notice.[7]

RefPlus claims that the test conditions described in Table 15 and Table 16 of the Air-Conditioning, Heating, and Refrigeration Institute (''AHRI'') Standard 1250–2009, *Standard for Performance Rating of Walk-In Coolers and Freezers* (''AHRI 1250–2009'') (for walk-in refrigerator unit coolers and freezer unit coolers tested alone, respectively), as incorporated by Appendix C with modification, cannot be achieved by the specified basic models and are not consistent with the operation of RefPlus's CO_2 direct expansion unit coolers. RefPlus also stated that CO_2 has a critical temperature of 87.8 °F,[8] and thus the required liquid inlet saturation temperature of 105 °F and the required liquid inlet subcooling temperature of 9 °F are not achievable, and that the test conditions should be more consistent with typical operating conditions for a transcritical CO_2 booster system (RefPlus, No. 2, p. 5).

The statements made by RefPlus reference the difference in thermodynamic properties between CO_2 and other refrigerants. Many substances transition from a solid to a liquid to a gas at a given pressure as temperature increases. For example, a pure substance like water transitions from liquid to steam at a specific temperature, *e.g.* 212 °F, at atmospheric pressure. As heat is added during a liquid to gas transition, the temperature remains constant and the substance coexists as both liquid and vapor. Continuing to add heat converts more of the liquid to vapor at a constant temperature. The reverse occurs when heat is removed. However, the transition temperature depends on the pressure—the higher the pressure, the higher the transition temperature. This is a key principle in refrigeration systems, which operate at two pressure levels associated with two temperatures. A refrigerant absorbs heat when it is at a low temperature and pressure, converting to gas and cooling the surrounding space. At high temperature and pressure, the refrigerant transitions to a liquid while releasing heat to the environment. A compressor is used to raise a gas from low- high-pressure, and a throttle (pressure reduction device) is used to reduce the pressure once the refrigerant has been fully liquefied (condensed) at high pressure.

All refrigerants have a ''critical temperature'' and an associated ''critical pressure'' above which liquid and vapor phases cannot coexist. Above this critical point, the refrigerant will be a gas and its temperature will increase or decrease as heat is added or removed. For conventional refrigerants, the critical temperature is never exceeded in typical refrigeration cycles. For example, R404A is a common refrigerant used in refrigeration systems and has a critical temperature of 161.7 °F with an associated critical pressure of 540.8 psia.[9] However, CO_2 behaves differently, with a critical temperature of 87.8 °F and an associated critical pressure of 1,072 psia. The refrigerant temperature must be somewhat higher than the ambient temperature in order to reject refrigeration cycle heat to the ambient environment. Ambient temperatures greater than 87.8 °F are common and the performance of many refrigeration and air conditioning systems are tested using a 95 °F ambient temperature, as indicated by the A test condition in AHRI 1250–2009 Section 5. Above the critical temperature and critical pressure, the CO_2 refrigerant is in a supercritical state and heat is transferred to the environment. Since the temperature of the CO_2 refrigerant ranges from supercritical to subcritical within the system, CO_2 cycles are said to be ''transcritical.''

The transcritical nature of CO_2 generally requires a more complex refrigeration cycle design to approach the efficiency of traditional refrigerants (*i.e.,* R404A, R407A, R448A, etc.) during operation in high temperature conditions. To increase efficiency and prevent overheating, transcritical booster systems introduce (or use) multiple stages of compression and intercooling. CO_2 is cooled in the gas cooler of a transcritical booster system, then expands through a high-pressure control valve and is delivered to a subcritical-pressure flash tank. In the flash tank, the refrigerant is in the subcritical phase and the liquid and vapor phases can be separated. In a CO_2 booster system, subcooled liquid refrigerant from the flash tank supplies the unit cooler via expansion valves where the refrigerant is evaporated. The evaporated refrigerant is subsequently compressed up to gas cooler pressure to complete the cycle (Docket EERE–2021–BT–WAV–0014, No. 5).

As noted, RefPlus requests an interim waiver from the existing DOE test procedure. DOE will review the petition for interim waiver within 45 business days of receipt of the petition. 10 CFR 431.401(e)(1)(ii). If DOE does not notify the applicant of the disposition of the petition for interim waiver, in writing, within 45 business days of receipt of the petition, the interim waiver is granted utilizing the alternate test procedure requested in the petition. *Id.* DOE will grant an interim waiver if it appears likely that the petition for waiver will be granted, and/or if DOE determines that it would be desirable for public policy

84 FR 18414, 18416 (May 1, 2019); (*See* 42 U.S.C. 6293(c)(2)). In the final rule published December 11, 2020, stated that it was maintaining the 180-day grace period as proposed. 85 FR 79802, 79813. As such, were a Decision and Order issued with an alternate test procedure that differed from that required under this interim waiver, beginning 180 days following publication of the Decision and Order any representations made by the petitioner must fairly disclose the results of testing in accordance with the alternate test procedure specified by the final Order and the applicable requirements of 10 CFR part 429.

[5] A petition submitted under 10 CFR 431.401 is considered ''received'' on the date it is received by DOE through DOE's established email box for receipt of waiver petitions or, if delivered by mail, on the date the waiver petition is stamped as received by DOE. 10 CFR 431.401(e)(1)(iii).

[6] A notation in the form ''RefPlus, No. 1'' identifies a written submission: (1) Made by RefPlus; and (2) recorded in document number 1 that is filed in the docket of this petition for waiver (Docket No. EERE–2021–BT–WAV–0014) and available at *www.regulations.gov/docket?D=EERE-2021-BT-WAV-0014.*

[7] The petition did not identify any of the information contained therein as confidential business information.

[8] The test procedure specifies the unit cooler refrigerant inlet condition in terms of a saturation temperature (the temperature at which it completes the condensation process in a condenser) and the subcooling temperature (additional reduction in temperature lower than the specified saturation temperature). For CO_2, the critical temperature above which there cannot exist separate liquid and gas phases is below the saturation condition specified in the test procedure, hence the specified condition cannot be achieved.

[9] Absolute pressure is the pressure measured relative to a complete vacuum; ''psia'' represents the absolute pressure in pounds per square inch.

reasons to grant immediate relief pending a determination of the petition for waiver. 10 CFR 431.401(e)(2).

Based on the assertions in the petition, absent an interim waiver, the prescribed test procedure is not appropriate for RefPlus's CO_2 direct expansion unit coolers and the test conditions are not achievable. As discussed, CO_2 refrigerant has a critical temperature of 87.8 °F and the current DOE test procedure calls for a liquid inlet saturation temperature of 105 °F. The inability to achieve test conditions for the stated basic models would result in economic hardship from loss of sales stemming from the inability of the DOE test procedure to address the operating conditions of RefPlus's equipment. DOE has published decision and orders granting a waiver for other equipment relying on the same technology.[10]

III. Requested Alternate Test Procedure

EPCA requires that manufacturers use DOE test procedures when making representations about the energy consumption and energy consumption costs of covered equipment. (42 U.S.C. 6314(d)). Consistency is important when making representations about the energy efficiency of covered equipment, including when demonstrating compliance with applicable DOE energy conservation standards. Pursuant to 10 CFR 431.401, and after consideration of public comments on the petition, DOE may establish in a subsequent Decision and Order an alternate test procedure for the basic models addressed by the Interim Waiver Order.

RefPlus seeks to use an alternate test procedure to test and rate specific CO_2 direct expansion unit cooler basic models. RefPlus's suggested approach specifies using modified liquid inlet saturation and liquid inlet subcooling temperatures of 38 °F and 5 °F, respectively, for both walk-in refrigerator unit coolers and walk-in freezer unit coolers. (RefPlus, No. 2 at p. 5). Additionally, RefPlus recommended that because the subject units are used in transcritical CO_2 booster systems, the calculations in AHRI 1250–2009 section 7.9 should be used to determine Annual Walk-in Efficiency Factor (''AWEF'') and net capacity for unit coolers matched to parallel rack systems as required under the DOE test procedure. (RefPlus, No. 2 at pp. 5–6). This section of AHRI 1250–2009 is prescribed by the DOE test procedure for determining AWEF for all unit coolers tested alone (see 10 CFR part 431, subpart R, appendix C, section 3.3.1). Finally, RefPlus also recommended that AHRI 1250–2009 Table 17, EER for Remote Commercial Refrigerated Display Merchandisers and Storage Cabinets, should be used to determine power consumption of CO_2 direct expansion unit cooler systems as required under the DOE test procedure (RefPlus, No. 2 at p. 5).

IV. Interim Waiver Order

DOE has reviewed RefPlus's application for an interim waiver, the alternate test procedure requested by RefPlus, and the websites and product specification sheets for the basic models listed in RefPlus's petition. Based on this review, the suggested alternate test procedure appears to allow for the accurate measurement of the energy efficiency of the specified basic models, while alleviating the testing issues associated with RefPlus's implementation of walk-in cooler and walk-in freezer testing for these basic models. Review of the CO_2 refrigeration market confirms that the testing conditions and approach suggested by RefPlus would be representative for operation of a unit cooler used in a transcritical CO_2 booster system (Docket EERE–2021–BT–WAV–0014, No. 4). Specifically, CO_2 that is cooled in the gas cooler of a transcritical booster system expands through a high-pressure control valve that delivers CO_2 to a subcritical-pressure flash tank, where liquid and vapor phases of the refrigerant are separated. The liquid is then split, and the unit coolers receive the refrigerant at the same condition, consistent with the use of the same liquid inlet saturation temperature for both the medium- and low-temperature systems in RefPlus's suggested test approach. Calculations on other external CO_2 refrigeration system designs in the market indicate that the 38 °F liquid unit cooler inlet saturation temperature suggested by RefPlus is representative of CO_2 booster systems (Docket EERE–2021–BT–WAV–0014, No. 5). Regarding use of the EER values in AHRI 1250–2009 Table 17 to determine the representative compressor power consumption for CO_2 unit cooler systems, research into the performance of different configurations of CO_2 booster systems shows that enhanced CO_2 cycles (like those used in transcritical booster systems) can match conventional refrigerants in average annual efficiency (Docket EERE–2021–BT–WAV–0014, No. 3). The findings from this research, along with the other collective factors previously noted, justify the use of the EER values in AHRI 1250–2009 Table 17 for determining the power consumption for CO_2 booster system evaporators, despite these EER values being initially established for systems using conventional refrigerants. Consequently, DOE has determined that RefPlus's petition for waiver likely will be granted. Furthermore, DOE has determined that it is desirable for public policy reasons to grant RefPlus immediate relief pending a determination of the petition for waiver.

For the reasons stated, it is *ordered* that:

(1) RefPlus must test and rate the following RefPlus-branded, CO_2 direct expansion unit cooler basic models with the alternate test procedure set forth in paragraph (2).

Basic Model Numbers:

BILLING CODE 6450–01–P

[10] See Notice of Decision and Order granting a waiver to HTPG (Case No. 2020–009; 86 FR 14887 (Mar. 19, 2021)); Notice of Decision and Order granting a waiver to Hussmann (Case No. 2020–010; 86 FR 24606 (May 7, 2021)); Notice of Decision and Order granting a waiver to KeepRite (Case No. 2020–014; 86 FR 24603 (May 7, 2021)).

Basic Model Numbers:

LAA-0607-1	LAE-0577-2	LAG-0577-1	LAH-0577-1	LPA-0607-1	LPE-0577-2	LPG-0577-1	LPH-0577-1
LAA-0607-2	LAE-0577-5	LAG-0577-2	LAH-0577-2	LPA-0607-2	LPE-0577-5	LPG-0577-2	LPH-0577-2
LAA-0757-1	LAE-0727-2	LAG-0727-1	LAH-0727-1	LPA-0707-1	LPE-0677-2	LPG-0677-1	LPH-0677-1
LAA-0757-2	LAE-0727-5	LAG-0727-2	LAH-0727-2	LPA-0707-2	LPE-0677-5	LPG-0677-2	LPH-0677-2
LAA-0957-1	LAE-0907-2	LAG-0907-1	LAH-0907-1	LPA-0807-1	LPE-0767-2	LPG-0767-1	LPH-0767-1
LAA-0957-2	LAE-0907-5	LAG-0907-2	LAH-0907-2	LPA-0807-2	LPE-0767-5	LPG-0767-2	LPH-0767-2
LAA-1207-1	LAE-1147-2	LAG-1147-1	LAH-1147-1	LPA-1007-1	LPE-0957-2	LPG-0957-1	LPH-0957-1
LAA-1207-2	LAE-1147-5	LAG-1147-2	LAH-1147-2	LPA-1007-2	LPE-0957-5	LPG-0957-2	LPH-0957-2
LAA-1507-1	LAE-1437-2	LAG-1437-1	LAH-1437-1	LPA-1207-1	LPE-1157-2	LPG-1157-1	LPH-1157-1
LAA-1507-2	LAE-1437-5	LAG-1437-2	LAH-1437-2	LPA-1207-2	LPE-1157-5	LPG-1157-2	LPH-1157-2
LAA-1807-1	LAE-1707-2	LAG-1707-1	LAH-1707-1	LPA-1607-1	LPE-1527-2	LPG-1527-1	LPH-1527-1
LAA-1807-2	LAE-1707-5	LAG-1707-2	LAH-1707-2	LPA-1607-2	LPE-1527-5	LPG-1527-2	LPH-1527-2
LAA-2407-1	LAE-2307-2	LAG-2307-1	LAH-2307-1	LPA-2007-1	LPE-1907-2	LPG-1907-1	LPH-1907-1
LAA-2407-2	LAE-2307-5	LAG-2307-2	LAH-2307-2	LPA-2007-2	LPE-1907-5	LPG-1907-2	LPH-1907-2
LAA-2807-1	LAE-2707-2	LAG-2707-1	LAH-2707-1	LPA-2107-1	LPE-2007-2	LPG-2007-1	LPH-2007-1
LAA-2807-2	LAE-2707-5	LAG-2707-2	LAH-2707-2	LPA-2107-2	LPE-2007-5	LPG-2007-2	LPH-2007-2
LAA-3007-1	LAE-2867-2	LAG-2867-1	LAH-2867-1	LPA-2407-1	LPE-2307-2	LPG-2307-1	LPH-2307-1
LAA-3007-2	LAE-2867-5	LAG-2867-2	LAH-2867-2	LPA-2407-2	LPE-2307-5	LPG-2307-2	LPH-2307-2
LAA-3607-1	LAE-3437-2	LAG-3437-1	LAH-3437-1	LPA-2807-1	LPE-2707-2	LPG-2707-1	LPH-2707-1
LAA-3607-2	LAE-3437-5	LAG-3437-2	LAH-3437-2	LPA-2807-2	LPE-2707-5	LPG-2707-2	LPH-2707-2
LAA-4207-1	LAE-4007-2	LAG-4007-1	LAH-4007-1	LPA-3507-1	LPE-3347-2	LPG-3347-1	LPH-3347-1

LAA-4207-2	LAE-4007-5	LAG-4007-2	LAH-4007-2	LPA-3507-2	LPE-3347-5	LPG-3347-2	LPH-3347-2
LAA-4607-1	LAE-4387-2	LAG-4387-1	LAH-4387-1	LPA-4207-1	LPE-4007-2	LPG-4007-1	LPH-4007-1
LAA-4607-2	LAE-4387-5	LAG-4387-2	LAH-4387-2	LPA-4207-2	LPE-4007-5	LPG-4007-2	LPH-4007-2
LSA-0457-1	LSE-0437-2	LSR-0437-1	LST-0437-1	LVA-0707-1	LVA-3607-2	LVG-0707-1	LVH-0707-1
LSA-0457-2	LSE-0437-5	LSR-0437-2	LST-0437-2	LVA-0707-2	LVA-3607-5	LVG-0707-2	LVH-0707-2
LSA-0557-1	LSE-0527-2	LSR-0527-1	LST-0527-1	LVA-0707-5	LVA-4207-1	LVG-0807-1	LVH-0807-1
LSA-0557-2	LSE-0527-5	LSR-0527-2	LST-0527-2	LVA-0807-1	LVA-4207-2	LVG-0807-2	LVH-0807-2
LSA-0657-1	LSE-0627-2	LSR-0627-1	LST-0627-1	LVA-0807-2	LVA-4207-5	LVG-0907-1	LVH-0907-1
LSA-0657-2	LSE-0627-5	LSR-0627-2	LST-0627-2	LVA-0807-5	LVE-0707-2	LVG-0907-2	LVH-0907-2
LSA-0757-1	LSE-0727-2	LSR-0727-1	LST-0727-1	LVA-0907-1	LVE-0707-5	LVG-1207-1	LVH-1207-1
LSA-0757-2	LSE-0727-5	LSR-0727-2	LST-0727-2	LVA-0907-2	LVE-0807-2	LVG-1207-2	LVH-1207-2
LSA-0927-1	LSE-0887-2	LSR-0887-1	LST-0887-1	LVA-0907-5	LVE-0807-5	LVG-1507-1	LVH-1507-1
LSA-0927-2	LSE-0887-5	LSR-0887-2	LST-0887-2	LVA-1207-1	LVE-0907-2	LVG-1507-2	LVH-1507-2
LSA-1087-1	LSE-1037-2	LSR-1037-1	LST-1037-1	LVA-1207-2	LVE-0907-5	LVG-1907-1	LVH-1907-1
LSA-1087-2	LSE-1037-5	LSR-1037-2	LST-1037-2	LVA-1207-5	LVE-1207-2	LVG-1907-2	LVH-1907-2
LSA-1307-1	LSE-1247-2	LSR-1247-1	LST-1247-1	LVA-1507-1	LVE-1207-5	LVG-2407-1	LVH-2407-1
LSA-1307-2	LSE-1247-5	LSR-1247-2	LST-1247-2	LVA-1507-2	LVE-1507-2	LVG-2407-2	LVH-2407-2
LSA-1407-1	LSE-1337-2	LSR-1337-1	LST-1337-1	LVA-1507-5	LVE-1507-5	LVG-2707-1	LVH-2707-1
LSA-1407-2	LSE-1337-5	LSR-1337-2	LST-1337-2	LVA-1907-1	LVE-1907-2	LVG-2707-2	LVH-2707-2
LSA-1607-1	LSE-1527-2	LSR-1527-1	LST-1527-1	LVA-1907-2	LVE-1907-5	LVG-3007-1	LVH-3007-1
LSA-1607-2	LSE-1527-5	LSR-1527-2	LST-1527-2	LVA-1907-5	LVE-2407-2	LVG-3007-2	LVH-3007-2
LSA-1907-1	LSE-1807-2	LSR-1807-1	LST-1807-1	LVA-2407-1	LVE-2407-5	LVG-3607-1	LVH-3607-1
LSA-1907-2	LSE-1807-5	LSR-1807-2	LST-1807-2	LVA-2407-2	LVE-2707-2	LVG-3607-2	LVH-3607-2
LSA-2307-1	LSE-2207-2	LSR-2207-1	LST-2207-1	LVA-2407-5	LVE-2707-5	LVG-4207-1	LVH-4207-1
LSA-2307-2	LSE-2207-5	LSR-2207-2	LST-2207-2	LVA-2707-1	LVE-2707-8	LVG-4207-2	LVH-4207-2
LSA-2607-1	LSE-2407-2	LSR-2407-1	LST-2407-1	LVA-2707-2	LVE-2707-9		
LSA-2607-2	LSE-2407-5	LSR-2407-2	LST-2407-2	LVA-2707-5	LVE-3007-2		
LSA-3207-1	LSE-3007-2	LSR-3007-1	LST-3007-1	LVA-3007-1	LVE-3007-5		
LSA-3207-2	LSE-3007-5	LSR-3007-2	LST-3007-2	LVA-3007-2	LVE-3607-2		
LSA-3907-1	LSE-3707-2	LSR-3707-1	LST-3707-1	LVA-3007-5	LVE-3607-5		
LSA-3907-2	LSE-3707-5	LSR-3707-2	LST-3707-2	LVA-3607-1	LVE-4207-2		
					LVE-4207-5		
EJA-02600A-5	EJE-02500A-5	EJG-02600A-5	EJH-02600A-5	EJR-02600A-5	EJT-02600A-5	EQA-04900A-5	EQE-04800A-5
EJA-02600A-9	EJE-02500A-9	EJG-02600A-9	EJH-02600A-9	EJR-02600A-9	EJT-02600A-9	EQA-04900A-9	EQE-04800A-9
EJA-03200A-5	EJE-03100A-5	EJG-03200A-5	EJH-03200A-5	EJR-03200A-5	EJT-03200A-5	EQA-05800A-5	EQE-05700A-5
EJA-03200A-9	EJE-03100A-9	EJG-03200A-9	EJH-03200A-9	EJR-03200A-9	EJT-03200A-9	EQA-05800A-9	EQE-05700A-9
EJA-03800A-5	EJE-03700A-5	EJG-03800A-5	EJH-03800A-5	EJR-03800A-5	EJT-03800A-5	EQA-06800A-5	EQE-06700A-5
EJA-03800A-9	EJE-03700A-9	EJG-03800A-9	EJH-03800A-9	EJR-03800A-9	EJT-03800A-9	EQA-06800A-9	EQE-06700A-9
EJA-05200A-5	EJE-05100A-5	EJG-05200A-5	EJH-05200A-5	EJR-05200A-5	EJT-05200A-5	EQA-09900A-5	EQE-09600A-5
EJA-05200A-9	EJE-05100A-9	EJG-05200A-9	EJH-05200A-9	EJR-05200A-9	EJT-05200A-9	EQA-09900A-9	EQE-09600A-9
EJA-06300A-5	EJE-06200A-5	EJG-06300A-5	EJH-06300A-5	EJR-06300A-5	EJT-06300A-5	EQA-11600A-5	EQE-11500A-5
EJA-06300A-9	EJE-06200A-9	EJG-06300A-9	EJH-06300A-9	EJR-06300A-9	EJT-06300A-9	EQA-11600A-9	EQE-11500A-9
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EJA-09500A-5	EJE-09300A-5	EJG-09500A-5	EJH-09500A-5	EJR-09500A-5	EJT-09500A-5	EQA-17500A-5	EQE-17200A-5
EJA-09500A-9	EJE-09300A-9	EJG-09500A-9	EJH-09500A-9	EJR-09500A-9	EJT-09500A-9	EQA-17500A-9	EQE-17200A-9
EJA-11600A-5	EJE-11500A-5	EJG-11600A-5	EJH-11600A-5	EJR-11600A-5	EJT-11600A-5	EQA-20400A-5	EQE-20300A-5

EJA-11600A-9	EJE-11500A-9	EJG-11600A-9	EJH-11600A-9	EJR-11600A-9	EJT-11600A-9	EQA-20400A-9	EQE-20300A-9
EJA-12700A-5	EJE-15300A-5	EJG-12700A-5	EJH-12700A-5	EJR-12700A-5	EJT-12700A-5	EQA-23400A-5	EQE-26800A-5
EJA-12700A-9	EJE-15300A-9	EJG-12700A-9	EJH-12700A-9	EJR-12700A-9	EJT-12700A-9	EQA-23400A-9	EQE-26800A-9
EJA-15400A-5	EJE-19000A-5	EJG-15400A-5	EJH-15400A-5	EJR-15400A-5	EJT-15400A-5	EQA-26500A-5	EQE-33700A-5
EJA-15400A-9	EJE-19000A-9	EJG-15400A-9	EJH-15400A-9	EJR-15400A-9	EJT-15400A-9	EQA-26500A-9	EQE-33700A-9
EJA-19400A-5		EJG-19400A-5	EJH-19400A-5	EJR-19400A-5	EJT-19400A-5	EQA-34200A-5	
EJA-19400A-9		EJG-19400A-9	EJH-19400A-9	EJR-19400A-9	EJT-19400A-9	EQA-34200A-9	
EJA-21000A-5		EJG-21000A-5	EJH-21000A-5	EJR-21000A-5	EJT-21000A-5	EQA-44400A-5	
EJA-21000A-9		EJG-21000A-9	EJH-21000A-9	EJR-21000A-9	EJT-21000A-9	EQA-44400A-9	
EQG-04900A-5	EQH-04900A-5	EQR-04900A-5	EQT-04900A-5	EKA-1400-2	EKE-2200-5	EKR-4000-5	EMA-02150-2
EQG-04900A-9	EQH-04900A-9	EQR-04900A-9	EQT-04900A-9	EKA-1600-2	EKE-2900-2	EKR-5000-2	EMA-02150-5
EQG-05800A-5	EQH-05800A-5	EQR-05800A-5	EQT-05800A-5	EKA-1800-2	EKE-2900-5	EKR-5000-5	EMA-02550-2
EQG-05800A-9	EQH-05800A-9	EQR-05800A-9	EQT-05800A-9	EKA-2100-2	EKE-3400-2	EKR-6000-2	EMA-02550-5
EQG-06800A-5	EQH-06800A-5	EQR-06800A-5	EQT-06800A-5	EKA-2100-5	EKE-3400-5	EKR-6000-5	EMA-03000-2
EQG-06800A-9	EQH-06800A-9	EQR-06800A-9	EQT-06800A-9	EKA-2400-2	EKE-4000-2	EKT-1300-2	EMA-03000-5
EQG-09900A-5	EQH-09900A-5	EQR-09900A-5	EQT-09900A-5	EKA-2400-5	EKE-4000-5	EKT-1500-2	EMA-04300-2
EQG-09900A-9	EQH-09900A-9	EQR-09900A-9	EQT-09900A-9	EKA-3000-2	EKE-5000-2	EKT-1700-2	EMA-04300-5
EQG-11600A-5	EQH-11600A-5	EQR-11600A-5	EQT-11600A-5	EKA-3000-5	EKE-5000-5	EKT-1700-5	EMA-05100-2
EQG-11600A-9	EQH-11600A-9	EQR-11600A-9	EQT-11600A-9	EKA-3600-2	EKE-6000-2	EKT-2000-2	EMA-05100-5
EQG-13600A-5	EQH-13600A-5	EQR-13600A-5	EQT-13600A-5	EKA-3600-5	EKE-6000-5	EKT-2000-5	EMA-06000-2
EQG-13600A-9	EQH-13600A-9	EQR-13600A-9	EQT-13600A-9	EKA-4200-2	EKR-1300-2	EKT-2200-2	EMA-06000-5
EQG-17500A-5	EQH-17500A-5	EQR-17500A-5	EQT-17500A-5	EKA-4200-5	EKR-1500-2	EKT-2200-5	EMA-07650-2
EQG-17500A-9	EQH-17500A-9	EQR-17500A-9	EQT-17500A-9	EKA-5400-2	EKR-1700-2	EKT-2900-2	EMA-07650-5
EQG-20400A-5	EQH-20400A-5	EQR-20400A-5	EQT-20400A-5	EKA-5400-5	EKR-1700-5	EKT-2900-5	EMA-09000-2
EQG-20400A-9	EQH-20400A-9	EQR-20400A-9	EQT-20400A-9	EKA-6300-2	EKR-2000-2	EKT-3400-2	EMA-09000-5
EQG-23400A-5	EQH-23400A-5	EQR-23400A-5	EQT-23400A-5	EKA-6300-5	EKR-2000-5	EKT-3400-5	EMA-10200-2
EQG-23400A-9	EQH-23400A-9	EQR-23400A-9	EQT-23400A-9	EKE-1300-2	EKR-2200-2	EKT-4000-2	EMA-10200-5
EQG-26500A-5	EQH-26500A-5	EQR-26500A-5	EQT-26500A-5	EKE-1500-2	EKR-2200-5	EKT-4000-5	EMA-12000-2
EQG-26500A-9	EQH-26500A-9	EQR-26500A-9	EQT-26500A-9	EKE-1700-2	EKR-2900-2	EKT-5000-2	EMA-12000-5
EQG-34200A-5	EQH-34200A-5	EQR-34200A-5	EQT-34200A-5	EKE-1700-5	EKR-2900-5	EKT-5000-5	EMA-16100-5
EQG-34200A-9	EQH-34200A-9	EQR-34200A-9	EQT-34200A-9	EKE-2000-2	EKR-3400-2	EKT-6000-2	
EQG-44400A-5	EQH-44400A-5	EQR-44400A-5	EQT-44400A-5	EKE-2000-5	EKR-3400-5	EKT-6000-5	
EQG-44400A-9	EQH-44400A-9	EQR-44400A-9	EQT-44400A-9	EKE-2200-2	EKR-4000-2		
EME-02000-2	EME-07200-5	EMG-04000-2	EMG-11600-5	EMH-07200-2	EMR-02900-5	EMR-11600-2	EMT-05800-5
EME-02000-5	EME-08700-2	EMG-04000-5	EMH-02000-2	EMH-07200-5	EMR-04000-2	EMR-11600-5	EMT-07200-2
EME-02400-2	EME-08700-5	EMG-04800-2	EMH-02000-5	EMH-08700-2	EMR-04000-5	EMT-02000-2	EMT-07200-5
EME-02400-5	EME-09600-2	EMG-04800-5	EMH-02400-2	EMH-08700-5	EMR-04800-2	EMT-02000-5	EMT-08700-2
EME-02900-2	EME-09600-5	EMG-05800-2	EMH-02400-5	EMH-09600-2	EMR-04800-5	EMT-02400-2	EMT-08700-5
EME-02900-5	EME-11600-2	EMG-05800-5	EMH-02900-2	EMH-09600-5	EMR-05800-2	EMT-02400-5	EMT-09600-2
EME-04000-2	EME-11600-5	EMG-07200-2	EMH-02900-5	EMH-11600-2	EMR-05800-5	EMT-02900-2	EMT-09600-5
EME-04000-5	EMG-02000-2	EMG-07200-5	EMH-04000-2	EMH-11600-5	EMR-07200-2	EMT-02900-5	EMT-11600-2
EME-04800-2	EMG-02000-5	EMG-08700-2	EMH-04000-5	EMR-02000-2	EMR-07200-5	EMT-04000-2	EMT-11600-5
EME-04800-5	EMG-02400-2	EMG-08700-5	EMH-04800-2	EMR-02000-5	EMR-08700-2	EMT-04000-5	
EME-05800-2	EMG-02400-5	EMG-09600-2	EMH-04800-5	EMR-02400-2	EMR-08700-5	EMT-04800-2	
EME-05800-5	EMG-02900-2	EMG-09600-5	EMH-05800-2	EMR-02400-5	EMR-09600-2	EMT-04800-5	
EME-07200-2	EMG-02900-5	EMG-11600-2	EMH-05800-5	EMR-02900-2	EMR-09600-5	EMT-05800-2	

(2) The alternate test procedure for the RefPlus basic models identified in paragraph (1) of this Interim Waiver Order is the test procedure for walk-in cooler and walk-in freezer refrigeration systems prescribed by DOE at 10 CFR

part 431, subpart R, appendix C (''Appendix C''), except that the liquid inlet saturation temperature test condition and liquid inlet subcooling temperature test condition shall be modified to 38 °F and 5 °F, respectively, for both walk-in refrigerator unit coolers and walk-in freezer unit coolers, as detailed below. All other requirements of Appendix C and DOE's regulations remain applicable.

In Appendix C, under section 3.1. *General modifications: Test Conditions and Tolerances,* revise section 3.1.5., to read as follows:

3.1.5. Tables 15 and 16 shall be modified to read as follows:

TABLE 15—REFRIGERATOR UNIT COOLER

Test description	Unit cooler air entering dry-bulb, °F	Unit cooler air entering relative humidity, %	Saturated suction temp, °F	Liquid inlet saturation temp, °F	Liquid inlet subcooling temp, °F	Compressor capacity	Test objective
Off Cycle Fan Power	35	<50	—	—	—	Compressor Off	Measure fan input power during compressor off cycle.
Refrigeration Capacity Suction A	35	<50	25	38	5	Compressor On	Determine Net Refrigeration Capacity of Unit Cooler.

Note: Superheat to be set according to equipment specification in equipment or installation manual. If no superheat specification is given, a default superheat value of 6.5 °F shall be used. The superheat setting used in the test shall be reported as part of the standard rating.

TABLE 16—FREEZER UNIT COOLER

Test description	Unit cooler air entering dry-bulb, °F	Unit cooler air entering relative humidity, %	Saturated suction temp, °F	Liquid inlet saturation temp, °F	Liquid inlet subcooling temp, °F	Compressor capacity	Test objective
Off Cycle Fan Power	−10	<50	—	—	—	Compressor Off	Measure fan input power during compressor off cycle.
Refrigeration Capacity Suction A	−10	<50	−20	38	5	Compressor On	Determine Net Refrigeration Capacity of Unit Cooler.
Defrost	−10	Various	—	—	—	Compressor Off	Test according to Appendix C Section C11.

Note: Superheat to be set according to equipment specification in equipment or installation manual. If no superheat specification is given, a default superheat value of 6.5 °F shall be used. The superheat setting used in the test shall be reported as part of the standard rating.

(3) *Representations.* RefPlus may not make representations about the energy efficiency of a basic model listed in paragraph (1) for compliance, marketing, or other purposes unless that basic model has been tested in accordance with the provisions set forth in this alternate test procedure and such representations fairly disclose the results of such testing.

(4) This Interim Waiver Order shall remain in effect according to the provisions of 10 CFR 431.401.

(5) This Interim Waiver Order is issued on the condition that the statements, representations, test data, and documentary materials provided by RefPlus are valid. If RefPlus makes any modifications to the controls or configurations of a basic model subject to this Interim Waiver Order, such modifications will render the waiver invalid with respect to that basic model, and RefPlus will either be required to use the current Federal test method or submit a new application for a test procedure waiver. DOE may rescind or modify this waiver at any time if it determines the factual basis underlying the petition for the Interim Waiver Order is incorrect, or the results from the alternate test procedure are unrepresentative of the basic model's true energy consumption characteristics. 10 CFR 431.401(k)(1). Likewise, RefPlus may request that DOE rescind or modify the Interim Waiver Order if RefPlus discovers an error in the information provided to DOE as part of its petition, determines that the interim waiver is no longer needed, or for other appropriate reasons. 10 CFR 431.401(k)(2).

(6) Issuance of this Interim Waiver Order does not release RefPlus from the applicable requirements set forth at 10 CFR part 429.

DOE makes decisions on waivers and interim waivers for only those basic models specifically set out in the petition, not future models that may be manufactured by the petitioner. RefPlus may submit a new or amended petition for waiver and request for grant of interim waiver, as appropriate, for additional basic models of CO_2 direct expansion unit coolers. Alternatively, if appropriate, RefPlus may request that DOE extend the scope of a waiver or an interim waiver to include additional basic models employing the same technology as the basic model(s) set forth in the original petition consistent with 10 CFR 431.401(g).

Signing Authority

This document of the Department of Energy was signed on August 3, 2021, by Kelly Speakes-Backman, Principal Deputy Assistant Secretary and Acting Assistant Secretary for Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE **Federal Register** Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters

the legal effect of this document upon publication in the **Federal Register**.

Signed in Washington, DC, on August 5, 2021.

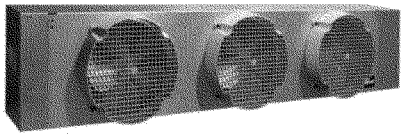
Treena V. Garrett,

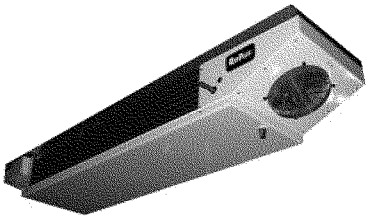
Federal Register Liaison Officer, U.S. Department of Energy.

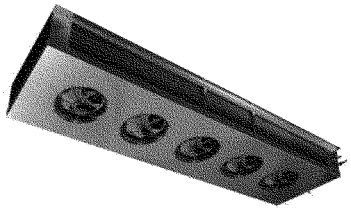
Application for Interim Waiver

Request for Interim Waiver from a DOE test procedure pursuant to provisions described in 10 CFR 431.401 for the following product on the grounds that ''the basic model contains one or more design characteristics that prevent testing of the basic model according to the prescribed test procedures.''

CO_2 Direct Expansion Unit Coolers in Medium and Low Temperature







The design characteristics constituting the grounds for the Interim Waiver Application:

- Appendix C to Subpart R of Part 431—Uniform Test Method for the Measurement of Net Capacity and AWEF of Walk-in Cooler and Walk-in Freezer Refrigeration Systems specifies that unit coolers tested alone use the test procedures described in AHRI 1250–2009. Table 15 and Table 16 of AHRI 1250–2009 are as follows:

Test description	Unit cooler air entering dry-bulb, °F	Unit cooler air entering relative humidity, %	Saturated suction temp, °F	Liquid inlet saturation temp, °F	Liquid inlet subcooling temp, °F	Compressor capacity	Test objective
Off Cycle Fan Power	35	<50	—	—	—	Compressor Off	Measure fan input power during compressor off cycle.
Refrigeration Capacity Suction A	35	<50	25	105	9	Compressor On	Determine Net Refrigeration Capacity of Unit Cooler.
Refrigeration Capacity Suction B	35	<50	20	105	9	Compressor On	Determine Net Refrigeration Capacity of Unit Cooler.

Test description	Unit cooler air entering dry-bulb, °F	Unit cooler air entering relative humidity, %	Saturated suction temp, °F	Liquid inlet saturation temp, °F	Liquid inlet subcooling temp, °F	Compressor capacity	Test objective
Off Cycle Fan Power	−10	<50	—	—	—	Compressor Off	Measure fan input power during compressor off cycle.
Refrigeration Capacity Suction A	−10	<50	−20	105	9	Compressor On	Determine Net Refrigeration Capacity of Unit Cooler.
Refrigeration Capacity Suction B	−10	<50	−26	105	9	Compressor On	Determine Net Refrigeration Capacity of Unit Cooler.
Defrost	−10	Various	—	—	—	Compressor Off	Test according to Appendix C Section C11.

- CO_2 refrigerant has a critical temperature of 87.8 °F thus the liquid inlet saturation temperature of 105 °F and the liquid inlet subcooling temperature of 9 °F as specified in Table 15 and Table 16 are not achievable.
- The test condition values need to be more inline with typical operating conditions for a CO_2 refrigeration application

LAA-0607-1	LAE-0577-2	LAG-0577-1	LAH-0577-1	LPA-0607-1	LPE-0577-2	LPG-0577-1	LPH-0577-1
LAA-0607-2	LAE-0577-5	LAG-0577-2	LAH-0577-2	LPA-0607-2	LPE-0577-5	LPG-0577-2	LPH-0577-2
LAA-0757-1	LAE-0727-2	LAG-0727-1	LAH-0727-1	LPA-0707-1	LPE-0677-2	LPG-0677-1	LPH-0677-1
LAA-0757-2	LAE-0727-5	LAG-0727-2	LAH-0727-2	LPA-0707-2	LPE-0677-5	LPG-0677-2	LPH-0677-2
LAA-0957-1	LAE-0907-2	LAG-0907-1	LAH-0907-1	LPA-0807-1	LPE-0767-2	LPG-0767-1	LPH-0767-1
LAA-0957-2	LAE-0907-5	LAG-0907-2	LAH-0907-2	LPA-0807-2	LPE-0767-5	LPG-0767-2	LPH-0767-2
LAA-1207-1	LAE-1147-2	LAG-1147-1	LAH-1147-1	LPA-1007-1	LPE-0957-2	LPG-0957-1	LPH-0957-1
LAA-1207-2	LAE-1147-5	LAG-1147-2	LAH-1147-2	LPA-1007-2	LPE-0957-5	LPG-0957-2	LPH-0957-2
LAA-1507-1	LAE-1437-2	LAG-1437-1	LAH-1437-1	LPA-1207-1	LPE-1157-2	LPG-1157-1	LPH-1157-1
LAA-1507-2	LAE-1437-5	LAG-1437-2	LAH-1437-2	LPA-1207-2	LPE-1157-5	LPG-1157-2	LPH-1157-2
LAA-1807-1	LAE-1707-2	LAG-1707-1	LAH-1707-1	LPA-1607-1	LPE-1527-2	LPG-1527-1	LPH-1527-1
LAA-1807-2	LAE-1707-5	LAG-1707-2	LAH-1707-2	LPA-1607-2	LPE-1527-5	LPG-1527-2	LPH-1527-2
LAA-2407-1	LAE-2307-2	LAG-2307-1	LAH-2307-1	LPA-2007-1	LPE-1907-2	LPG-1907-1	LPH-1907-1
LAA-2407-2	LAE-2307-5	LAG-2307-2	LAH-2307-2	LPA-2007-2	LPE-1907-5	LPG-1907-2	LPH-1907-2
LAA-2807-1	LAE-2707-2	LAG-2707-1	LAH-2707-1	LPA-2107-1	LPE-2007-2	LPG-2007-1	LPH-2007-1
LAA-2807-2	LAE-2707-5	LAG-2707-2	LAH-2707-2	LPA-2107-2	LPE-2007-5	LPG-2007-2	LPH-2007-2

LAA-3007-1	LAE-2867-2	LAG-2867-1	LAH-2867-1	LPA-2407-1	LPE-2307-2	LPG-2307-1	LPH-2307-1
LAA-3007-2	LAE-2867-5	LAG-2867-2	LAH-2867-2	LPA-2407-2	LPE-2307-5	LPG-2307-2	LPH-2307-2
LAA-3607-1	LAE-3437-2	LAG-3437-1	LAH-3437-1	LPA-2807-1	LPE-2707-2	LPG-2707-1	LPH-2707-1
LAA-3607-2	LAE-3437-5	LAG-3437-2	LAH-3437-2	LPA-2807-2	LPE-2707-5	LPG-2707-2	LPH-2707-2
LAA-4207-1	LAE-4007-2	LAG-4007-1	LAH-4007-1	LPA-3507-1	LPE-3347-2	LPG-3347-1	LPH-3347-1
LAA-4207-2	LAE-4007-5	LAG-4007-2	LAH-4007-2	LPA-3507-2	LPE-3347-5	LPG-3347-2	LPH-3347-2
LAA-4607-1	LAE-4387-2	LAG-4387-1	LAH-4387-1	LPA-4207-1	LPE-4007-2	LPG-4007-1	LPH-4007-1
LAA-4607-2	LAE-4387-5	LAG-4387-2	LAH-4387-2	LPA-4207-2	LPE-4007-5	LPG-4007-2	LPH-4007-2
LSA-0457-1	LSE-0437-2	LSR-0437-1	LST-0437-1	LVA-0707-1	LVA-3607-2	LVG-0707-1	LVH-0707-1
LSA-0457-2	LSE-0437-5	LSR-0437-2	LST-0437-2	LVA-0707-2	LVA-3607-5	LVG-0707-2	LVH-0707-2
LSA-0557-1	LSE-0527-2	LSR-0527-1	LST-0527-1	LVA-0707-5	LVA-4207-1	LVG-0807-1	LVH-0807-1
LSA-0557-2	LSE-0527-5	LSR-0527-2	LST-0527-2	LVA-0807-1	LVA-4207-2	LVG-0807-2	LVH-0807-2
LSA-0657-1	LSE-0627-2	LSR-0627-1	LST-0627-1	LVA-0807-2	LVA-4207-5	LVG-0907-1	LVH-0907-1
LSA-0657-2	LSE-0627-5	LSR-0627-2	LST-0627-2	LVA-0807-5	LVE-0707-2	LVG-0907-2	LVH-0907-2
LSA-0757-1	LSE-0727-2	LSR-0727-1	LST-0727-1	LVA-0907-1	LVE-0707-5	LVG-1207-1	LVH-1207-1
LSA-0757-2	LSE-0727-5	LSR-0727-2	LST-0727-2	LVA-0907-2	LVE-0807-2	LVG-1207-2	LVH-1207-2
LSA-0927-1	LSE-0887-2	LSR-0887-1	LST-0887-1	LVA-0907-5	LVE-0807-5	LVG-1507-1	LVH-1507-1
LSA-0927-2	LSE-0887-5	LSR-0887-2	LST-0887-2	LVA-1207-1	LVE-0907-2	LVG-1507-2	LVH-1507-2
LSA-1087-1	LSE-1037-2	LSR-1037-1	LST-1037-1	LVA-1207-2	LVE-0907-5	LVG-1907-1	LVH-1907-1
LSA-1087-2	LSE-1037-5	LSR-1037-2	LST-1037-2	LVA-1207-5	LVE-1207-2	LVG-1907-2	LVH-1907-2
LSA-1307-1	LSE-1247-2	LSR-1247-1	LST-1247-1	LVA-1507-1	LVE-1207-5	LVG-2407-1	LVH-2407-1
LSA-1307-2	LSE-1247-5	LSR-1247-2	LST-1247-2	LVA-1507-2	LVE-1507-2	LVG-2407-2	LVH-2407-2
LSA-1407-1	LSE-1337-2	LSR-1337-1	LST-1337-1	LVA-1507-5	LVE-1507-5	LVG-2707-1	LVH-2707-1
LSA-1407-2	LSE-1337-5	LSR-1337-2	LST-1337-2	LVA-1907-1	LVE-1907-2	LVG-2707-2	LVH-2707-2
LSA-1607-1	LSE-1527-2	LSR-1527-1	LST-1527-1	LVA-1907-2	LVE-1907-5	LVG-3007-1	LVH-3007-1
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LSA-2607-1	LSE-2407-2	LSR-2407-1	LST-2407-1	LVA-2707-2	LVE-2707-9		
LSA-2607-2	LSE-2407-5	LSR-2407-2	LST-2407-2	LVA-2707-5	LVE-3007-2		
LSA-3207-1	LSE-3007-2	LSR-3007-1	LST-3007-1	LVA-3007-1	LVE-3007-5		
LSA-3207-2	LSE-3007-5	LSR-3007-2	LST-3007-2	LVA-3007-2	LVE-3607-2		
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LSA-3907-2	LSE-3707-5	LSR-3707-2	LST-3707-2	LVA-3607-1	LVE-4207-2		
					LVE-4207-5		
EJA-02600A-5	EJE-02500A-5	EJG-02600A-5	EJH-02600A-5	EJR-02600A-5	EJT-02600A-5	EQA-04900A-5	EQE-04800A-5
EJA-02600A-9	EJE-02500A-9	EJG-02600A-9	EJH-02600A-9	EJR-02600A-9	EJT-02600A-9	EQA-04900A-9	EQE-04800A-9
EJA-03200A-5	EJE-03100A-5	EJG-03200A-5	EJH-03200A-5	EJR-03200A-5	EJT-03200A-5	EQA-05800A-5	EQE-05700A-5
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EJA-05200A-5	EJE-05100A-5	EJG-05200A-5	EJH-05200A-5	EJR-05200A-5	EJT-05200A-5	EQA-09900A-5	EQE-09600A-5
EJA-05200A-9	EJE-05100A-9	EJG-05200A-9	EJH-05200A-9	EJR-05200A-9	EJT-05200A-9	EQA-09900A-9	EQE-09600A-9
EJA-06300A-5	EJE-06200A-5	EJG-06300A-5	EJH-06300A-5	EJR-06300A-5	EJT-06300A-5	EQA-11600A-5	EQE-11500A-5
EJA-06300A-9	EJE-06200A-9	EJG-06300A-9	EJH-06300A-9	EJR-06300A-9	EJT-06300A-9	EQA-11600A-9	EQE-11500A-9
EJA-07700A-5	EJE-07600A-5	EJG-07700A-5	EJH-07700A-5	EJR-07700A-5	EJT-07700A-5	EQA-13600A-5	EQE-13400A-5

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EJA-09500A-9	EJE-09300A-9	EJG-09500A-9	EJH-09500A-9	EJR-09500A-9	EJT-09500A-9	EQA-17500A-9	EQE-17200A-9
EJA-11600A-5	EJE-11500A-5	EJG-11600A-5	EJH-11600A-5	EJR-11600A-5	EJT-11600A-5	EQA-20400A-5	EQE-20300A-5
EJA-11600A-9	EJE-11500A-9	EJG-11600A-9	EJH-11600A-9	EJR-11600A-9	EJT-11600A-9	EQA-20400A-9	EQE-20300A-9
EJA-12700A-5	EJE-15300A-5	EJG-12700A-5	EJH-12700A-5	EJR-12700A-5	EJT-12700A-5	EQA-23400A-5	EQE-26800A-5
EJA-12700A-9	EJE-15300A-9	EJG-12700A-9	EJH-12700A-9	EJR-12700A-9	EJT-12700A-9	EQA-23400A-9	EQE-26800A-9
EJA-15400A-5	EJE-19000A-5	EJG-15400A-5	EJH-15400A-5	EJR-15400A-5	EJT-15400A-5	EQA-26500A-5	EQE-33700A-5
EJA-15400A-9	EJE-19000A-9	EJG-15400A-9	EJH-15400A-9	EJR-15400A-9	EJT-15400A-9	EQA-26500A-9	EQE-33700A-9
EJA-19400A-5		EJG-19400A-5	EJH-19400A-5	EJR-19400A-5	EJT-19400A-5	EQA-34200A-5	
EJA-19400A-9		EJG-19400A-9	EJH-19400A-9	EJR-19400A-9	EJT-19400A-9	EQA-34200A-9	
EJA-21000A-5		EJG-21000A-5	EJH-21000A-5	EJR-21000A-5	EJT-21000A-5	EQA-44400A-5	
EJA-21000A-9		EJG-21000A-9	EJH-21000A-9	EJR-21000A-9	EJT-21000A-9	EQA-44400A-9	

EQG-04900A-5	EQH-04900A-5	EQR-04900A-5	EQT-04900A-5	EKA-1400-2	EKE-2200-5	EKR-4000-5	EMA-02150-2
EQG-04900A-9	EQH-04900A-9	EQR-04900A-9	EQT-04900A-9	EKA-1600-2	EKE-2900-2	EKR-5000-2	EMA-02150-5
EQG-05800A-5	EQH-05800A-5	EQR-05800A-5	EQT-05800A-5	EKA-1800-2	EKE-2900-5	EKR-5000-5	EMA-02550-2
EQG-05800A-9	EQH-05800A-9	EQR-05800A-9	EQT-05800A-9	EKA-2100-2	EKE-3400-2	EKR-6000-2	EMA-02550-5
EQG-06800A-5	EQH-06800A-5	EQR-06800A-5	EQT-06800A-5	EKA-2100-5	EKE-3400-5	EKR-6000-5	EMA-03000-2
EQG-06800A-9	EQH-06800A-9	EQR-06800A-9	EQT-06800A-9	EKA-2400-2	EKE-4000-2	EKT-1300-2	EMA-03000-5
EQG-09900A-5	EQH-09900A-5	EQR-09900A-5	EQT-09900A-5	EKA-2400-5	EKE-4000-5	EKT-1500-2	EMA-04300-2
EQG-09900A-9	EQH-09900A-9	EQR-09900A-9	EQT-09900A-9	EKA-3000-2	EKE-5000-2	EKT-1700-2	EMA-04300-5
EQG-11600A-5	EQH-11600A-5	EQR-11600A-5	EQT-11600A-5	EKA-3000-5	EKE-5000-5	EKT-1700-5	EMA-05100-2
EQG-11600A-9	EQH-11600A-9	EQR-11600A-9	EQT-11600A-9	EKA-3600-2	EKE-6000-2	EKT-2000-2	EMA-05100-5
EQG-13600A-5	EQH-13600A-5	EQR-13600A-5	EQT-13600A-5	EKA-3600-5	EKE-6000-5	EKT-2000-5	EMA-06000-2
EQG-13600A-9	EQH-13600A-9	EQR-13600A-9	EQT-13600A-9	EKA-4200-2	EKR-1300-2	EKT-2200-2	EMA-06000-5
EQG-17500A-5	EQH-17500A-5	EQR-17500A-5	EQT-17500A-5	EKA-4200-5	EKR-1500-2	EKT-2200-5	EMA-07650-2
EQG-17500A-9	EQH-17500A-9	EQR-17500A-9	EQT-17500A-9	EKA-5400-2	EKR-1700-2	EKT-2900-2	EMA-07650-5
EQG-20400A-5	EQH-20400A-5	EQR-20400A-5	EQT-20400A-5	EKA-5400-5	EKR-1700-5	EKT-2900-5	EMA-09000-2
EQG-20400A-9	EQH-20400A-9	EQR-20400A-9	EQT-20400A-9	EKA-6300-2	EKR-2000-2	EKT-3400-2	EMA-09000-5
EQG-23400A-5	EQH-23400A-5	EQR-23400A-5	EQT-23400A-5	EKA-6300-5	EKR-2000-5	EKT-3400-5	EMA-10200-2
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EQG-26500A-5	EQH-26500A-5	EQR-26500A-5	EQT-26500A-5	EKE-1500-2	EKR-2200-5	EKT-4000-5	EMA-12000-2
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EQG-34200A-5	EQH-34200A-5	EQR-34200A-5	EQT-34200A-5	EKE-1700-5	EKR-2900-5	EKT-5000-5	EMA-16100-5
EQG-34200A-9	EQH-34200A-9	EQR-34200A-9	EQT-34200A-9	EKE-2000-2	EKR-3400-2	EKT-6000-2	
EQG-44400A-5	EQH-44400A-5	EQR-44400A-5	EQT-44400A-5	EKE-2000-5	EKR-3400-5	EKT-6000-5	
EQG-44400A-9	EQH-44400A-9	EQR-44400A-9	EQT-44400A-9	EKE-2200-2	EKR-4000-2		

EME-02000-2	EME-07200-5	EMG-04000-2	EMG-11600-5	EMH-07200-2	EMR-02900-5	EMR-11600-2	EMT-05800-5
EME-02000-5	EME-08700-2	EMG-04000-5	EMH-02000-2	EMH-07200-5	EMR-04000-2	EMR-11600-5	EMT-07200-2
EME-02400-2	EME-08700-5	EMG-04800-2	EMH-02000-5	EMH-08700-2	EMR-04000-5	EMT-02000-2	EMT-07200-5
EME-02400-5	EME-09600-2	EMG-04800-5	EMH-02400-2	EMH-08700-5	EMR-04800-2	EMT-02000-5	EMT-08700-2
EME-02900-2	EME-09600-5	EMG-05800-2	EMH-02400-5	EMH-09600-2	EMR-04800-5	EMT-02400-2	EMT-08700-5
EME-02900-5	EME-11600-2	EMG-05800-5	EMH-02900-2	EMH-09600-5	EMR-05800-2	EMT-02400-5	EMT-09600-2
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EME-04800-2	EMG-02000-5	EMG-08700-2	EMH-04000-5	EMR-02000-2	EMR-07200-5	EMT-04000-2	EMT-11600-5
EME-04800-5	EMG-02400-2	EMG-08700-5	EMH-04800-2	EMR-02000-5	EMR-08700-2	EMT-04000-5	

EME-05800-2	EMG-02400-5	EMG-09600-2	EMH-04800-5	EMR-02400-2	EMR-08700-5	EMT-04800-2
EME-05800-5	EMG-02900-2	EMG-09600-5	EMH-05800-2	EMR-02400-5	EMR-09600-2	EMT-04800-5
EME-07200-2	EMG-02900-5	EMG-11600-2	EMH-05800-5	EMR-02900-2	EMR-09600-5	EMT-05800-2

All these basic models with brand name: RefPlus

Specific Requirements sought to be waived—Petitioning for a waiver and interim waiver to exempt CO_2 Direct Expansion Unit Coolers in Medium and Low Temperature application from being tested to the current test procedure. The prescribed test procedure is not appropriate for these products for the reasons stated previously (liquid inlet saturation temperature and liquid inlet subcooling temperature test condition values are not appropriate for a transcritical CO_2 booster system application).

List of manufacturers of all other basic models marketing in the United States and known to the petitioner to incorporate similar design characteristics—

Manufacturer: Heatcraft Refrigeration Products

Manufacturer: Heat Transfer Products Group (HTPG)

Manufacturer: Hussmann Corp. (Krack)

Manufacturer: Keeprite Refrigeration

Proposed alternate test procedure

1. Utilize the test procedure as outlined in Appendix C to Subpart R of Part 431—Uniform Test Method for the Measurement of Net Capacity and AWEF of Walk-in Cooler and Walk-in Freezer Refrigeration Systems with reference to AHRI 1250–2009 with the exception of modifying the test conditions in Table 15 and 16 for liquid inlet saturation temperature and liquid inlet subcooling temperature as noted below. In addition, per Appendix C to Subpart R of 431 use the calculations in AHRI 1250 section 7.9 to determine AWEF and net capacity for unit coolers matched to parallel rack systems. Use AHRI 1250 Table 17, EER for Remote Commercial Refrigerated Display Merchandisers and Storage Cabinets to determine the power consumption of the system.

TABLE 15—REFRIGERATOR UNIT COOLER

Test description	Unit cooler air entering dry-bulb, °F	Unit cooler air entering relative humidity, %	Saturated suction temp, °F	CO2 Liquid inlet saturation temp, °F	CO2 Liquid inlet subcooling temp, °F	Compressor capacity	Test objective
Off Cycle Fan Power	35	<50	—	—	—	Compressor Off	Measure fan input power during compressor off cycle.
Refrigeration Capacity Suction A	35	<50	25	38	5	Compressor On	Determine Net Refrigeration Capacity of Unit Cooler.

TABLE 16—FREEZER UNIT COOLER

Test description	Unit cooler air entering dry-bulb, °F	Unit cooler air entering relative humidity, %	Saturated suction temp, °F	CO2 Liquid inlet saturation temp, °F	CO2 Liquid inlet subcooling temp, °F	Compressor capacity	Test objective
Off Cycle Fan Power	−10	<50	—	—	—	Compressor Off	Measure fan input power during compressor off cycle.
Refrigeration Capacity Suction A	−10	<50	−20	38	5	Compressor On	Determine Net Refrigeration Capacity of Unit Cooler.
Defrost	−10	Various	—	—	—	Compressor Off	Test according to Appendix C Section C11.

Success of the application for Interim Waiver will: ensure that manufacturers of CO_2 Direct Expansion Unit Coolers in Medium and Low Temperature application can continue to participate in the market

What economic hardship and/or competitive disadvantage is likely to result absent a favorable determination on the Application for Interim Waiver—Economic hardship will be loss of sales due to not meeting the DOE requirements set forth.

Conclusion

RefPlus Inc. seeks an Interim Waiver from DOE's current requirement to test CO_2 direct expansion unit coolers.

Request Submitted by:
/s/
Michel Lecompte,
Vice-President, Research & Development Refplus Inc.

[FR Doc. 2021–16997 Filed 8–9–21; 8:45 am]

BILLING CODE 6450–01–C

DEPARTMENT OF ENERGY

Agency Information Collection Extension

AGENCY: Office of Environment, Health, Safety and Security, U.S. Department of Energy.

ACTION: Notice and request for comments.

SUMMARY: The Department of Energy (DOE), pursuant to the Paperwork Reduction Act of 1995, intends to extend for three years, an information collection request with the Office of Management and Budget (OMB). The purpose of this collection is to protect national security and other critical assets entrusted to the Department.

DATES: Comments regarding this proposed information collection must be received on or before October 12, 2021. If you anticipate difficulty in submitting comments within that period, contact the person listed below as soon as possible.

ADDRESSES: Written comments may be sent to Sandra Dentinger, AU–70/E–455 Germantown Building, U.S. Department of Energy, 1000 Independence Ave. SW, Washington, DC 20585–1290 or by email at *Sandra.Dentinger@hq.doe.gov.*

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument and instructions should be directed to Sandra Dentinger, AU–70/E–455 Germantown Building, U.S. Department of Energy, 1000 Independence Ave SW, Washington, DC 20585–1290, by email at *Sandra.Dentinger@hq.doe.gov* or by telephone at (301) 903–5139.

SUPPLEMENTARY INFORMATION: Comments are invited on: (a) Whether the extended collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

This information collection request contains:

(1) *OMB No.:* 1910–1800;

(2) *Information Collection Request Title:* Security, Information Collections;

(3) *Type of Review:* renewal;

(4) *Purpose:* The purpose of this collection is to protect national security and other critical assets entrusted to the Department. Information collected is for (1) Foreign Ownership, Control or Influence data from bidders on DOE contracts requiring personnel security clearances; and (2) individuals in the process of applying for a security clearance/access authorization or who already holds one. The collections instruments are: DOE Form 5631.18, Security Acknowledgement; DOE F 5631.20, Request for Visitor Access Approval; DOE Form 5631.29, Security

Termination Statement; DOE F 5631.34, Data Report on Spouse/Cohabitant; DOE Form 5631.5, The Conduct of Personnel Security Interviews; DOE Form 5639.3 Report of Security Incident/Infraction; DOE F 471.1, Security Incident Notification Report; DOE Form 472.3 Foreign Citizenship Acknowledgement; DOE Form 473.2, Security Badge Request; DOE Form 473.3, U.S. Department of Energy Clearance Access Request; Influence (e-FOCI) System (SF–328 used for entry); and the Foreign Access Central Tracking System (FACTS);

(5) *Estimated Number of Respondents:* 75,661;

(6) *Annual Estimated Number of Total Responses:* 84,621;

(7) *Annual Estimated Number of Burden Hours:* 13,251;

(8) *Annual Estimated Reporting and Recordkeeping Cost Burden:* $1,192,590.

Statutory Authority: Section 641 of the Department of Energy Organization Act, codified at 42 U.S.C. 7251, and the following additional authorities:

DOE F 5631.34, Data Report on Spouse/Cohabitant: Section 145(b) of the Atomic Energy Act of 1954, as amended, codified at 42 U.S.C. 2165; Executive Order 12968 (August 2, 1995); Executive Order 10865 (February 20, 1960); Executive Order 10450 (April 27, 1953); DOE O 472.2 (July 21, 2011).

Security Incident Notification Report and Report of Preliminary Security Incident/Infraction (DOE F 471.1 and DOE F 5639.3): Executive Order 13526 (December 29, 2009); 32 CFR part 2001; DOE O 470.4B (July 21, 2011).

DOE F 5631.20, Request for Visitor Access Approval: Section 145(b) of the Atomic Energy Act of 1954, as amended, codified at 42 U.S.C. 2165.

DOE Form 5631.18, Security Acknowledgement: Section 145(b) of the Atomic Energy Act of 1954, as amended, codified at 42 U.S.C. 2165; Executive Order 13526 (December 29, 2009); Executive Order 10865 (Feb. 20, 1960); Executive Order 10450 (April 27, 1953); DOE O 5631.2C (February 17, 1994).

DOE Form 5631.29, Security Termination Statement: Section 145(b) of the Atomic Energy Act of 1954, as amended, codified at 42 U.S.C. 2165; Executive Order 13526 (December 29, 2009); Executive Order 10865 (Feb. 20, 1960); Executive Order 10450 (Apr. 27, 1953); 32 CFR part 2001; DOE O 472.2 (July 21, 2011).

DOE Form 5631.5, The Conduct of Personnel Security Interviews: 10 CFR part 710; Executive Order 12968 (Aug. 2, 1995); Executive Order 10450 (April 27, 1953); DOE Order 472.2 (July 21, 2011).

DOE F 473.3 U.S. Department of Energy Clearance Access Request DOE F 471.1, Security Incident Notification Report; DOE Form 472.3 Foreign Citizenship Acknowledgement; and DOE Form 473.2, Security Badge Request; the Atomic Energy Act of 1954, as amended, and by Executive Orders 13764, 10865, and 13526.

Electronic Foreign Ownership, Control or Influence (e-FOCI) System: Executive Order 12829 (January 6, 1993); DOE O 470.4B (July 21, 2011).

Foreign Access Central Tracking System (FACTS): Presidential Decision Directive 61 (February 1999); DOE O 142.3A (October 14, 2010).

Signing Authority

This document of the Department of Energy was signed on August 5, 2021, by Matthew B. Moury, Associate Under Secretary for Environment, Health, Safety and Security, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the **Federal Register**.

Signed in Washington, DC, on August 5, 2021.

Treena V. Garrett,

Federal Register Liaison Officer, U.S. Department of Energy.

[FR Doc. 2021–17015 Filed 8–9–21; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER19–2505–006.

Applicants: Southern California Edison Company.

Description: Compliance filing: Errata to Settlement Filing WDAT Energy Storage ER19–2505–004 to be effective 10/30/2019.

Filed Date: 8/4/21.

Accession Number: 20210804–5087.

Comments Due: 5 p.m. ET 8/25/21.

Docket Numbers: ER21–1955–002.

Applicants: Duke Energy Progress, LLC.

Description: Tariff Amendment: DEP-American Beech ASOA—Response to Deficiency Letter to be effective 10/4/2021.

Filed Date: 8/4/21.

Accession Number: 20210804–5055.

Comments Due: 5 p.m. ET 8/25/21.

Docket Numbers: ER21–2158–001.

Applicants: VETCO.

Description: Compliance filing: eTariff Filing to Comply with Order in Docket No. ER21–712–000 Errata Filing to be effective 1/1/2021.

Filed Date: 8/4/21.

Accession Number: 20210804–5049.

Comments Due: 5 p.m. ET 8/25/21.

Docket Numbers: ER21–2605–000.

Applicants: esVolta, LP.

Description: Petition for Limited Waiver of esVolta, LP.

Filed Date: 8/4/21.

Accession Number: 20210804–5029.

Comments Due: 5 p.m. ET 8/18/21.

Docket Numbers: ER21–2606–000.

Applicants: Southwest Power Pool, Inc.

Description: § 205(d) Rate Filing: 3839 WAPA/Western MN Municipal/MRES Interconnection Agr to be effective 8/3/2021.

Filed Date: 8/4/21.

Accession Number: 20210804–5036.

Comments Due: 5 p.m. ET 8/25/21.

Docket Numbers: ER21–2607–000.

Applicants: Southern California Edison Company.

Description: § 205(d) Rate Filing: LGIA Arica Solar, LLC Sol Catcher BESS SA No. 272 to be effective 8/5/2021.

Filed Date: 8/4/21.

Accession Number: 20210804–5061.

Comments Due: 5 p.m. ET 8/25/21.

Docket Numbers: ER21–2608–000.

Applicants: Duke Energy Progress, LLC.

Description: Tariff Cancellation: DEP—Notice of Cancellation of Service Agreements Nos. 175 and 176 to be effective 10/4/2021.

Filed Date: 8/4/21.

Accession Number: 20210804–5067.

Comments Due: 5 p.m. ET 8/25/21.

Docket Numbers: ER21–2609–000.

Applicants: Duke Energy Indiana, LLC.

Description: § 205(d) Rate Filing: DEI—Peabody Facilities Relocation and Reimbursement Agreement RS No. 274 to be effective 8/5/2021.

Filed Date: 8/4/21.

Accession Number: 20210804–5070.

Comments Due: 5 p.m. ET 8/25/21.

Docket Numbers: ER21–2610–000.

Applicants: Tri-State Generation and Transmission Association, Inc.

Description: Tariff Cancellation: Notice of Cancellation of Rate Schedule FERC No. 101 to be effective 8/5/2021.

Filed Date: 8/4/21.

Accession Number: 20210804–5086.

Comments Due: 5 p.m. ET 8/25/21.

The filings are accessible in the Commission's eLibrary system (*https://elibrary.ferc.gov/idmws/search/fercgensearch.asp*) by querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: August 4, 2021.

Debbie-Anne A. Reese,

Deputy Secretary.

[FR Doc. 2021–17028 Filed 8–9–21; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Docket Numbers: RP21–1010–000.

Applicants: Equitrans, L.P.

Description: § 4(d) Rate Filing: Negotiated Rate Capacity Release Agreements—8/1/2021 to be effective 8/1/2021.

Filed Date: 8/2/21.

Accession Number: 20210802–5011.

Comments Due: 5 p.m. ET 8/16/21.

Docket Numbers: RP21–1012–000.

Applicants: Eastern Gas Transmission and Storage, Inc.

Description: § 4(d) Rate Filing: EGTS—August 2, 2021 Nonconforming Service Agreements to be effective 10/1/2021.

Filed Date: 8/2/21.

Accession Number: 20210802–5012.

Comments Due: 5 p.m. ET 8/16/21.

Docket Numbers: RP21–1013–000.

Applicants: Enable Gas Transmission, LLC.

Description: § 4(d) Rate Filing: Negotiated Rate Filing—July 1, 2021 Ternium to be effective 8/1/2021.

Filed Date: 8/2/21.

Accession Number: 20210802–5042.

Comments Due: 5 p.m. ET 8/16/21.

Docket Numbers: RP21–1014–000.

Applicants: Rover Pipeline LLC.

Description: § 4(d) Rate Filing: Summary of Negotiated Rate Capacity Release Agreements on 8–2–21 to be effective 8/1/2021.

Filed Date: 8/2/21.

Accession Number: 20210802–5077.

Comments Due: 5 p.m. ET 8/16/21.

Docket Numbers: RP21–1015–000.

Applicants: Inflection Energy LLC, JPMorgan Chase Bank, N.A.

Description: Joint Petition for Limited Waiver of Capacity Release Regulations, et al. of Inflection Energy LLC, et al.

Filed Date: 8/2/21.

Accession Number: 20210802–5167.

Comments Due: 5 p.m. ET 8/16/21.

The filings are accessible in the Commission's eLibrary system (*https://elibrary.ferc.gov/idmws/search/fercgensearch.asp*) by querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: August 4, 2021.

Debbie-Anne A. Reese,

Deputy Secretary.

[FR Doc. 2021–17026 Filed 8–9–21; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ER21–2597–000]

Rockhaven Wind Project, LLC; Supplemental Notice That Initial Market-Based Rate Filing Includes Request for Blanket Section 204 Authorization

This is a supplemental notice in the above-referenced proceeding of Rockhaven Wind Project, LLC's application for market-based rate authority, with an accompanying rate tariff, noting that such application includes a request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability.

Any person desiring to intervene or to protest should file with the Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant.

Notice is hereby given that the deadline for filing protests with regard to the applicant's request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability, is August 24, 2021.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov.* To facilitate electronic service, persons with internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically may mail similar pleadings to the Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426. Hand delivered submissions in docketed proceedings should be delivered to Health and Human Services, 12225 Wilkins Avenue, Rockville, Maryland 20852.

In addition to publishing the full text of this document in the **Federal Register**, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the internet through the Commission's Home Page (*http://www.ferc.gov*) using the ''eLibrary'' link. Enter the docket number excluding the last three digits in the docket number field to access the document. At this time, the Commission has suspended access to the Commission's Public Reference Room, due to the proclamation declaring a National Emergency concerning the Novel Coronavirus Disease (COVID–19), issued by the President on March 13, 2020. For assistance, contact the Federal Energy Regulatory Commission at *FERCOnlineSupport@ferc.gov* or call

toll-free, (886) 208–3676 or TYY, (202) 502–8659.

Dated: August 4, 2021.

Debbie-Anne A. Reese,

Deputy Secretary.

[FR Doc. 2021–17029 Filed 8–9–21; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. EF21–3–000]

Bonneville Power Administration; Notice of Filing

Take notice that on August 2, 2021, Bonneville Power Administration submitted tariff filing: BP–22 Rate Filing Part 4—Proposed FY 2022–2023 Wholesale Power and Transmission Rate Adjustment.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

The Commission strongly encourages electronic filings of comments, protests and interventions in lieu of paper using the ''eFiling'' link at *http://www.ferc.gov.* Persons unable to file electronically may mail similar pleadings to the Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426. Hand delivered submissions in docketed proceedings should be delivered to Health and Human Services, 12225 Wilkins Avenue, Rockville, Maryland 20852.

In addition to publishing the full text of this document in the **Federal Register**, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the internet through the Commission's Home Page (*http://ferc.gov*) using the ''eLibrary'' link. Enter the docket number excluding the last three digits in the docket number field to access the document. At this time, the Commission has suspended access to the Commission's Public Reference Room, due to the proclamation declaring a National Emergency concerning the Novel Coronavirus Disease (COVID–19), issued by the President on March 13, 2020. For assistance, contact the Federal Energy Regulatory Commission at *FERCOnlineSupport@ferc.gov* or call toll-free, (886) 208–3676 or TYY, (202) 502–8659.

Comment Date: 5:00 p.m. Eastern Time on September 1, 2021.

Dated: August 4, 2021.

Debbie-Anne A. Reese,

Deputy Secretary.

[FR Doc. 2021–17027 Filed 8–9–21; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 2530–057]

Brookfield White Pine Hydro LLC; Notice of Intent To Prepare an Environmental Assessment

On November 20, 2020, Brookfield White Pine Hydro LLC (White Pine Hydro) filed an application for a new license for the 10.9-megawatt Hiram Hydroelectric Project (Hiram Project) (FERC No. 2530). The Hiram Project is located on the Saco River near the towns of Hiram, Baldwin, Denmark, and Brownfield in Oxford and Cumberland Counties, Maine. The project does not occupy federal land.

In accordance with the Commission's regulations, on January 11, 2021, Commission staff issued a notice that the project was ready for environmental analysis (REA notice). Based on the information in the record, including comments filed on the REA notice, staff does not anticipate that licensing the project would constitute a major federal action significantly affecting the quality of the human environment. Therefore, staff intends to prepare an Environmental Assessment (EA) on the application to license the Hiram Project.

The EA will be issued and circulated for review by all interested parties. All comments filed on the EA will be analyzed by staff and considered in the Commission's final licensing decision.

The application will be processed according to the following schedule. Revisions to the schedule may be made as appropriate.

Milestone	Target date
Commission issues draft EA	October 2021.[1]
Comments on EA	November 2021.
Modified 4(e) and Fishway Prescriptions.	January 2022.
Issue final EA	April 2022.

Any questions regarding this notice may be directed to David Turner at (202) 502–6091 or *David.Turner@ferc.gov.*

Dated: August 4, 2021.

Kimberly D. Bose,

Secretary.

[FR Doc. 2021–16993 Filed 8–9–21; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 3063–000]

Blackstone Hydro Associates; Notice of Authorization for Continued Project Operation

On July 31, 2019, Blackstone Hydro Associates, licensee for the Central Falls Hydroelectric Project No. 3063, filed an Application for a Subsequent License pursuant to the Federal Power Act (FPA) and the Commission's regulations thereunder. The Central Falls Hydroelectric Project is located on the Blackstone River, in the City of Central Falls, Providence County, Rhode Island.

The license for Project No. 3063 was issued for a period ending July 31, 2021. Section 15(a)(1) of the FPA, 16 U.S.C. 808(a)(1), requires the Commission, at the expiration of a license term, to issue from year-to-year an annual license to the then licensee(s) under the terms and conditions of the prior license until a new license is issued, or the project is otherwise disposed of as provided in section 15 or any other applicable section of the FPA. If the project's prior license waived the applicability of section 15 of the FPA, then, based on section 9(b) of the Administrative Procedure Act, 5 U.S.C. 558(c), and as set forth at 18 CFR 16.21(a), if the licensee of such project has filed an application for a subsequent license, the licensee may continue to operate the

[1] The Council on Environmental Quality's (CEQ) regulations under 40 CFR 1501.10(b)(1) require that EAs be completed within 1 year of the federal action agency's decision to prepare an EA. This notice establishes the Commission's intent to prepare an EA for the Normanskill Project. Therefore, in accordance with CEQ's regulations, the EA must be issued within 1 year of the issuance date of this notice.

project in accordance with the terms and conditions of the license after the minor or minor part license expires, until the Commission acts on its application. If the licensee of such a project has not filed an application for a subsequent license, then it may be required, pursuant to 18 CFR 16.21(b), to continue project operations until the Commission issues someone else a license for the project or otherwise orders disposition of the project.

If the project is subject to section 15 of the FPA, notice is hereby given that an annual license for Project No. 3063 is issued to Blackstone Hydro Associates for a period effective August 1, 2021 through July 31, 2022 or until the issuance of a new license for the project or other disposition under the FPA, whichever comes first. If issuance of a new license (or other disposition) does not take place on or before July 31, 2022, notice is hereby given that, pursuant to 18 CFR 16.18(c), an annual license under section 15(a)(1) of the FPA is renewed automatically without further order or notice by the Commission, unless the Commission orders otherwise.

If the project is not subject to section 15 of the FPA, notice is hereby given that Blackstone Hydro Associates is authorized to continue operation of the Central Falls Hydroelectric Project, until such time as the Commission acts on its application for a subsequent license.

Dated: August 4, 2021.

Kimberly D. Bose,

Secretary.

[FR Doc. 2021–16990 Filed 8–9–21; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–8848–01–OW]

Notice of Public Webinar Briefing

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of public webinar briefing.

SUMMARY: The Environmental Protection Agency (EPA)'s Environmental Financial Advisory Board (EFAB) will hold a public webinar briefing on August 26, 2021. The purpose of the webinar will be for an Opportunity Zones Practitioner Panel for the EFAB Opportunity Zones Workgroup. Due to interest from the full Board, this webinar is being opened to the public.

DATES: The webinar will be held on August 26, 2021 from 12 p.m. to 1:30 p.m. (Eastern Time).

ADDRESSES: The webinar briefing will be conducted via webinar only and is open to the public. Interested persons must register in advance at the weblink below to access the meeting.

FOR FURTHER INFORMATION CONTACT: Any member of the public who wants information about the meeting may contact Ed Chu, the Designated Federal Officer, via telephone/voice mail at (913) 551–7333 or email to *efab@epa.gov.* General information concerning the EFAB is available at *https://www.epa.gov/waterfinancecenter/efab.*

SUPPLEMENTARY INFORMATION:

Background: The EFAB is an EPA advisory committee chartered under the Federal Advisory Committee Act (FACA), 5 U.S.C. app. 2, to provide advice and recommendations to EPA on innovative approaches to funding environmental programs, projects, and activities. Administrative support for the EFAB is provided by the Water Infrastructure and Resiliency Finance Center within EPA's Office of Water. Pursuant to FACA and EPA policy, notice is hereby given that the EFAB will hold a public webinar briefing for the following purpose:

(1) The purpose of the webinar will be for members of the EFAB to hear from Opportunity Zones practitioners who work on Opportunity Zones investments in disadvantaged communities and are willing to share their experiences to support the workgroup's charge. The webinar is open to the public, but no oral public comments will be accepted during the briefing. Written public comments relating to the Opportunity Zones Workgroup should be provided in accordance with the instructions below on written statements.

Registration for the Meeting: Register for the meeting at *https://www.eventbrite.com/e/us-epa-environmental-financial-advisory-board-opportunity-zones-panel-tickets-164877317495.*

Availability of Meeting Materials: Meeting materials (including the meeting agenda and briefing materials) will be available on EPA's website at *https://www.epa.gov/waterfinancecenter/efab.*

Procedures for Providing Public Input: Public comment for consideration by EPA's federal advisory committees has a different purpose from public comment provided to EPA program offices. Therefore, the process for submitting comments to a federal advisory committee is different from the process used to submit comments to an EPA program office. Federal advisory committees provide independent advice to EPA. Members of the public can submit comments on matters being considered by the EFAB for consideration by members as they develop their advice and recommendations to EPA.

Written Statements: Written statements for the webinar should be received by August 20, 2021 so that the information can be made available to the EFAB for its consideration. Written statements should be sent via email to *efab@epa.gov.* Members of the public should be aware that their personal contact information, if included in any written comments, may be posted to the EFAB website. Copyrighted material will not be posted without explicit permission of the copyright holder.

Accessibility: For information on access or services for individuals with disabilities or to request accommodations for a disability, please register for the webinar and list any special requirements or accommodations needed on the registration form at least 10 business days prior to the meeting to allow as much time as possible to process your request.

Dated: August 5, 2021.

Andrew D. Sawyers,

Director, Office of Wastewater Management, Office of Water.

[FR Doc. 2021–17030 Filed 8–9–21; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL DEPOSIT INSURANCE CORPORATION

[OMB No. 3064–0183; –0195; –0200]

Agency Information Collection Activities: Proposed Information Collection Renewal; Comment Request

AGENCY: Federal Deposit Insurance Corporation (FDIC).

ACTION: Notice and request for comment.

SUMMARY: The FDIC, as part of its obligations under the Paperwork Reduction Act of 1995 (PRA), invites the general public and other Federal agencies to take this opportunity to comment on the renewal of the existing information collections described below (OMB Control No. 3064–0183; –0195; and –0200).

DATES: Comments must be submitted on or before October 12, 2021.

ADDRESSES: Interested parties are invited to submit written comments to the FDIC by any of the following methods:

- *Agency website: https://www.fdic.gov/resources/regulations/federal-register-publications/.*

• *Email: comments@fdic.gov.* Include the name and number of the collection in the subject line of the message.

• *Mail:* Manny Cabeza (202–898–3767), Regulatory Counsel, MB–3128, Federal Deposit Insurance Corporation, 550 17th Street NW, Washington, DC 20429.

• *Hand Delivery:* Comments may be hand-delivered to the guard station at the rear of the 17th Street building (located on F Street), on business days between 7:00 a.m. and 5:00 p.m.

All comments should refer to the relevant OMB control number. A copy of the comments may also be submitted to the OMB desk officer for the FDIC: Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, Washington, DC 20503.

FOR FURTHER INFORMATION CONTACT: Manny Cabeza, Regulatory Counsel, 202–898–3767, *mcabeza@fdic.gov,* MB–3128, Federal Deposit Insurance Corporation, 550 17th Street NW, Washington, DC 20429.

SUPPLEMENTARY INFORMATION: *Proposal to renew the following currently approved collections of information:*

1. *Title:* Credit Risk Retention.

OMB Number: 3064–0183.

Form Number: None.

Affected Public: Insured state nonmember banks, state savings institutions, insured state branches of foreign banks, and any subsidiary of the aforementioned entities.

General Description of Collection: This information collection request comprises disclosure and recordkeeping requirements under the credit risk retention rule issued pursuant to section 15G of the Securities Exchange Act of 1934 (15 U.S.C. 78o–11), as added by Section 941 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (''Dodd-Frank'').[1] The Credit Risk Retention rule (''the Rule'') was jointly issued in 2015 by the Federal Deposit Insurance Corporation (''FDIC''), the Office of the Comptroller of the Currency (''OCC''), the Federal Reserve Board (''Board''), the Securities and Exchange Commission (''SEC'') and, with respect to the portions of the Rule addressing the securitization of residential mortgages, the Federal Housing Finance Agency (''FHFA'') and the Department of Housing and Urban Development (''HUD'').[2] The FDIC regulations corresponding to the Rule are found at 12 CFR part 373.[3]

Section 941 of Dodd-Frank requires the Board, the FDIC, the OCC (collectively, the ''Federal banking agencies''), the Commission and, in the case of the securitization of any ''residential mortgage asset,'' together with HUD and FHFA, to jointly prescribe regulations that (i) require a an issuer of an asset-backed security or a person who organizes and initiates an asset backed securities transaction by selling or transferring assets, either directly or indirectly, including through an affiliate, to the issuer (''issuer or organizer'') to retain not less than five percent of the credit risk of any asset that the issuer or organizer, through the issuance of an asset-backed security (''ABS''), transfers, sells or conveys to a third party and (ii) prohibit an issuer or organizer from directly or indirectly hedging or otherwise transferring the credit risk that the issuer or organizer is required to retain under section 941 and the agencies' implementing rules. Exempted from the credit risk retention requirements of section 941 are certain types of securitization transactions, including ABS collateralized solely by qualified residential mortgages (''QRMs''), as that term is defined in the Rule. In addition, Section 941 provides that the agencies must permit an issuer or organizer to retain less than five percent of the credit risk of residential mortgage loans, commercial real estate (''CRE'') loans, commercial loans and automobile loans that are transferred, sold or conveyed through the issuance of ABS by the issuer or organizer, if the loans meet underwriting standards established by the Federal banking agencies.

The FDIC implemented Section 941 of Dodd-Frank through 12 CFR part 373 (the ''Rule''). The Rule defines a securitizer as (1) The depositor of the asset-backed securities (if the depositor is not the sponsor); or (2) The sponsor of the asset-backed securities.[4] The Rule provides a menu of credit risk retention options from which securitizers can choose and sets out the standards, including disclosure, recordkeeping, and reporting requirements, for each option; identifies the eligibility criteria, including certification and disclosure requirements, that must be met for ABS offerings to qualify for the QRM and other exemptions; specifies the underwriting standards for CRE loans, commercial loans and automobile loans, as well as disclosure, certification and recordkeeping requirements, that must be met for ABS issuances collateralized by such loans to qualify for reduced credit risk retention; and sets forth the circumstances under which retention obligations may be allocated by sponsors to originators, including disclosure and monitoring requirements.

Part 373 contains several requirements that qualify as information collections under the Paperwork Reduction Act of 1995 (''PRA''). The information collection requirements are found in sections 373.4; 373.5; 373.6; 373.7; 373.8; 373.9; 373.10; 373.11; 373.13; 373.15; 373.16; 373.17; 373.18; and 373.19(g). The recordkeeping requirements relate primarily to (i) the adoption and maintenance of various policies and procedures to ensure and monitor compliance with regulatory requirements and (ii) certifications, including as to the effectiveness of internal supervisory controls. The required disclosures for each risk retention option are intended to provide investors with material information concerning the sponsor's retained interest in a securitization transaction (*e.g.,* the amount, form and nature of the retained interest, material assumptions and methodology, representations and warranties). Compliance with the information collection requirements is mandatory, responses to the information collections will not be kept confidential and, with the exception of the recordkeeping requirements in sections 373.4(d), 373.5(k)(3) and 373.15(d), the Rule does not specify a mandatory retention period for the information.

Burden Estimate:

Change Is Burden Estimation Methodology

(1) Prior Methodology

To determine the total paperwork burden for the requirements contained in the Credit Risk Retention Rule, FDIC first estimated the universe of sponsors that would be required to comply with the disclosure and recordkeeping requirements. FDIC estimated that approximately 270 unique sponsors conduct ABS offerings each year.[5] This estimate was based on the average number of ABS offerings from 2007 through 2017 reported by the ABS database Asset-Backed Alert for all non-CMBS transactions and by Commercial Mortgage Alert for all CMBS

[1] Public Law 111–2–3, 124 Stat. 1376 (2010).

[2] 79 FR 77740.

[3] Each agency adopted the same rule text but each agency's version of its rule is codified in different parts of the Code of Federal Regulations with substantially identical section numbers (*e.g.*__.01; _.02, etc.) Rule citations herein are to FDIC's version of the Rule which is codified at 12 CFR part 373.

[4] 12 CFR 373.2.

[5] By agreement among the agencies, the FDIC's Division of Insurance Research, in consultation with its counterparts at the other agencies, prepared and documented the burden estimation methodology used by all agencies in their respective ICRs.

transactions.[6] Of the 270 sponsors, the agencies assigned 8 percent of these sponsors to the Board, 12 percent to FDIC, 13 percent to the OCC, and 67 percent to the Commission.[7]

Next, FDIC estimated how many respondents keep records and make required disclosures by estimating the proportionate amount of offerings per year for each agency. The estimate was based on the average number of ABS offerings from 2007 through 2017. The agencies estimated the total number of annual offerings per year to be 1,400 [8] which resulted in the following:

(a) 13 offerings per year will be subject to disclosure and recordkeeping requirements under § 373.11, which are divided equally among the four agencies (*i.e.,* 3.25 offerings per year per agency);

(b) 110 offerings per year were estimated to be subject to disclosure and recordkeeping requirements under §§ 373.13 and 373.19(g), which were divided proportionately among the agencies based on the entity percentages described above:

(i) Nine (9) offerings per year for the Board (8%);

(ii) 13 offerings per year for the FDIC (12%);

(iii) 14 offerings per year for the OCC (13%);

(iv) 74 offerings per year for the Commission (67%).

(c) 132 offerings per year were estimated to be subject to the disclosure requirements under § 373.15, which were divided proportionately among the agencies based on the entity percentages described above:

(i) 11 offerings per year for the Board (8%);

(ii) 16 offerings per year for the FDIC (12%);

(iii) 17 offerings per year for the OCC (13%);

(iv) 88 offerings per year for the Commission (67%).

(d) Of these 132 offerings per year, 44 offerings per year were estimated to be subject to disclosure and recordkeeping requirements under §§ 373.16, 373.17, and 373.18, respectively, which were divided proportionately among the agencies based on the entity percentages described above:

(i) 4 offerings per year for each section for the Board (8%);

(ii) 6 offerings per year for each section for the FDIC (12%);

(iii) 6 offerings per year for each section for the OCC (13%);

(iv) 29 offerings per year for each section for the Commission (67%).

To obtain the estimated number of responses (equal to the number of offerings) for each option in subpart B of the rule, FDIC multiplied the number of offerings estimated to be subject to the base risk retention requirements (*i.e.,* 1,158) [9] by the sponsor percentages described above. The result was the number of base risk retention offerings per year per agency. For the FDIC, this was calculated by multiplying 1,158 offerings per year by 12 percent, which equals 139 offerings per year. This number was then divided by the number of base risk retention options under subpart B of the rule (*i.e.,* nine) [10] to arrive at the estimate of the number of offerings per year per agency per base risk retention option. For the FDIC, this was calculated by dividing 139 offerings per year by nine options, resulting in 15 offerings per year per base risk retention option.

The agencies assumed that 90% of institutions use the vertical interest form of risk retention while the remaining 10% use the combined vertical and horizontal form of risk retention. The burden tables above use this allocation and of the 45 responses attributed to § 373.4, we allocated 40 (90%) to the vertical form of risk retention and 5 (10%) to the other two options (1 response to the horizontal form of risk retention and 4 responses to the combined vertical and horizontal form of risk retention.

FDIC believes that the burden estimation methodology previously used overestimates the number of ABS offerings by FDIC-supervised institutions. Furthermore, the OCC has confirmed that the estimates it used for its 2021 renewal of OCC's Credit Risk Retention information collection are based on the expertise of the OCC's subject matter experts rather than the 2015 interagency methodology.[11] As a result of these two factors, the FDIC has decided to diverge from the interagency methodology used in 2015 and 2018 and instead use the new methodology described below to estimate burden for this information collection.

(2) New Methodology

Potential respondents to this information collection (IC) are FDIC-supervised insured depository institutions (''IDIs'') including state nonmember banks, state savings institutions, insured state branches of foreign banks, and any subsidiary of the aforementioned entities. As of December 31, 2020, the FDIC supervised 3,227 state nonmember banks, state savings institutions, and insured state branches of foreign banks. Of these 3,227 IDIs, 2,382 are small for the purposes of the Regulatory Flexibility Act (RFA).[12]

Respondents to this information collection are FDIC-supervised IDIs that are securitizers of ABS. To generate a universe of potential securitizers, FDIC obtained data from Call Reports for the quarter ending on December 31 for the years 2018, 2019, and 2020, for all FDIC-supervised IDIs that reported a non-zero amount in either: (a) Outstanding principal balance of assets sold and securitized with servicing retained or with recourse or other seller-provided credit enhancements; [13] or (b) amount of loans and leases held for investment, net of allowance, and held for sale held by consolidated variable interest entities (VIEs).[14] This search resulted in a list of 79 IDIs that were potential securitizers. Using this list, FDIC searched for each IDI's name in FitchConnect's repository

[6] Data was provided by the Securities and Exchange Commission. See SEC supporting statement for its information collection for the Credit Risk Retention rule (3235–0712) available at *https://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201803-3235-014.*

[7] The allocation percentages among the agencies were based on the agencies' latest assessment of data as of August 13, 2018, including the securitization activity reported by FDIC-insured depository institutions in the June 30, 2017 Consolidated Reports of Condition.

[8] Based on ABS issuance data from Asset-Backed Alert on the initial terms of offerings, supplemented with information from Commercial Mortgage Alert. This estimate included registered offerings, offerings made under Securities Act Rule 144A, and traditional private placements. This estimate was for offerings not exempted under §§ _.19(a)–(f) and _.20 of the Rule.

[9] Estimate of 1,400 offerings per year, minus the estimate of the number of offerings qualifying for an exemption under §§ 373.13, 373.15, and 19(g) as described in (b) and (c) above (*i.e.* 1,400 minus (b) 110 minus (c) 132 equals 1,158).

[10] For purposes of this calculation, the horizontal, vertical, and combined horizontal and vertical risk retention methods under the standard risk retention option (§ 373.4) are each counted as a separate option under subpart B of the rule. The other six are: § 373.5; § 373.6; § 373.7; § 373.8; § 373.9; and § 373.10.

[11] The supporting statement for the OCC's 2021 renewal is titled ''1557–0249 Credit Risk Retention Supporting Statement 5–18–21 1244.docx''and can be found at *https://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=202101-1557-003.*

[12] The SBA defines a small banking organization as having $600 million or less in assets, where an organization's ''assets are determined by averaging the assets reported on its four quarterly financial statements for the preceding year.'' See 13 CFR 121.201 (as amended by 84 FR 34261, effective August 19, 2019). In its determination, the ''SBA counts the receipts, employees, or other measure of size of the concern whose size is at issue and all of its domestic and foreign affiliates.'' See 13 CFR 121.103. Following these regulations, the FDIC uses a respondent's affiliated and acquired assets, averaged over the preceding four quarters, to determine whether the respondent is ''small'' for the purposes of RFA.

[13] Schedule RC–S, item 1 on forms 031 and 041; Supplemental Info, item 4(a) on form 051.

[14] Schedule RC–V, item 1(c) on forms 031 and 041.

of ABS offerings (''deals'') [15] and compiled a list of deals for which an IDI was listed as the issuer, sponsor, originator, or servicer of the offering. For IDIs for which deals were not found on FitchConnect, the following method was followed: The queried Call Report item labeled ''(a)'' above includes assets sold with recourse or other seller-provided credit enhancements, which are outside the scope of the Credit Risk Retention rule. To identify IDIs which securitized from those that did not, a $75 million threshold of year over year growth in that item is used to identify new securitizations in 2018, 2019, and 2020, as FDIC assumes that growth of less than $75 million would be unlikely to reflect sponsorship or issuance of new term ABS offerings during that period. This method yielded a list of 20 institutions. FDIC reviewed examination records for the 20 IDIs identified as potential securitizers to determine which institutions actually securitize. FDIC cross-referenced the list of securitizing IDIs and the list of aforementioned ABS offering naming conventions found using FitchConnect with Intex's database of prospectuses.[16] From this cross-referencing, FDIC found a count of deals associated with each deal name. Finally, FDIC determined whether the sponsor or depositor for each deal was an FDIC-supervised IDI or subsidiary of an FDIC-supervised institution by reading the prospectus of each deal.

Once the set of deals, with corresponding FDIC-supervised securitizers, was constructed, FDIC matched each deal with the sections in Part 373 that imposed one or more PRA requirements on that deal. Most sections impose both disclosure and recordkeeping requirements.[17] For those sections, FDIC separately estimated the burdens for each of the two types of PRA requirements. The following details the estimated respondent counts for each of these sections:

(a) Two FDIC-supervised IDIs were involved in deals in which credit risk was retained through horizontal interest (§ 373.4(a)(2) Standard Risk Retention—Horizontal Interest). These two IDIs were involved in four, three, and four such deals in 2018, 2019, and 2020, respectively. FDIC therefore estimates two annual respondents, with an average annual response rate of two responses per respondent, for the disclosure requirement associated with § 373.4(a)(2) and the corresponding reporting requirement in § 373.4(d).[18]

(b) Two FDIC-supervised IDIs were involved in deals in which credit risk was retained through vertical interest (§ 373.4(a)(1) Standard Risk Retention—Vertical Interest). These two IDIs were involved in 0, 0, and 13 such deals in 2018, 2019, and 2020, respectively. FDIC therefore estimates two annual respondents, with an average annual response rate of two responses per respondent, for the disclosure requirement associated with § 373.4(a)(1) and the corresponding reporting requirement in § 373.4(d).[19]

(c) Three FDIC-supervised IDIs were involved in deals in which credit risk was retained through revolving master trusts (§ 373.5 Revolving Master Trusts). These three IDIs were involved in eight, six, and zero such deals in 2018, 2019, and 2020, respectively. FDIC therefore estimates three annual respondents, with an average annual response rate of two responses per respondent, for the disclosure requirement associated with § 373.5 and the corresponding reporting requirement in § 373.5(k)(3).[20]

Using the above methodology, FDIC could not find any ABS offerings that (1) involved an FDIC-supervised IDI or subsidiary of an FDIC-supervised IDI as a securitizer and (2) were subject to the PRA requirements listed in one or more of the following ten sections: §§ 373.4(a)(3); 373.6; 373.7; 373.10; 373.11; 373.13; 373.15; 373.16; 373.17; and 373.18. It is possible that an FDIC-supervised IDI or subsidiary of an FDIC-supervised IDI would be a respondent to burden items related to these sections in the next three years. As such, FDIC is using one respondent and one annual response per respondent for the disclosure and recordkeeping requirements related to each of these ten sections to preserve the associated burden estimate.

Of the seven unique institutions with securitizations between 2018 and 2020, none are considered small for the purposes of the RFA.[21]

The estimated time per response varies by burden item, and these estimates are unchanged from the previous renewal which remains in line with the burden estimated adopted by the agencies.

Two burden items included in the 2018 information collection request have been removed from this renewal request. The disclosure burden related to § 373.8 Fannie Mae and Freddie Mac was removed as FDIC has determined that it is not possible for FDIC-supervised IDIs or subsidiaries of FDIC-supervised IDIs to be respondents to this burden item. The disclosure burden related to § 373.9 Open Market Collateralized Loan Obligations (''CLOs'') was removed because the D.C. Circuit Court invalidated section 941 of Dodd-Frank as it applies to CLOs.[22]

The estimated annual burden, in hours, is the product of the estimated number of respondents, number of responses per respondent, and time per response, as summarized in the table below. The total estimated annual burden for this information collection is 376 hours, a 3,075-hour reduction from the 2018 burden estimate, which reflects the aforementioned change in methodology.

SUMMARY OF ESTIMATED ANNUAL BURDEN

IC description	Type of burden (obligation to respond)	Frequency of response	Estimated number of respondents	Number of responses/ respondent	Hours per response	Total annual estimated burden
Disclosure Burdens						
§ 373.4(a)(2) Standard Risk Retention—Horizontal Interest.	Disclosure (Mandatory).	On Occasion	2	2	5.5	22

[15] *http://app.fitchconnect.com,* using ''ABS'', ''CMBS'', and ''RMBS'' sections under the ''Sectors'' tab, last accessed on June 11, 2021.

[16] *https://www.intex.com/main/.*

[17] With the noted exception of § 373.10 Qualified Tender Option Bonds, which has no recordkeeping burden associated with it.

[18] 4+3+4=11 total deals. 11/(3 years*2 respondents)=1.83 responses per respondent annually.

[19] 0+0+13=13 total deals. 13/(3 years*2 respondents)=2.17 responses per respondent annually.

[20] 8+6+0=14 total deals. 14/(3 years*3 respondents)=1.56 responses per respondent annually.

[21] As of December 31, 2020.

[22] The Loan Syndication and Trading Association v. Securities and Exchange Commission and Board of Governors of the Federal Reserve System (No. 17–5004).

SUMMARY OF ESTIMATED ANNUAL BURDEN—Continued

IC description	Type of burden (obligation to respond)	Frequency of response	Estimated number of respondents	Number of responses/ respondent	Hours per response	Total annual estimated burden
§ 373.4(a)(1) Standard Risk Retention—Vertical Interest.	Disclosure (Mandatory).	On Occasion	2	2	2.0	8
§ 373.4(a)(3) Standard Risk Retention—Combined Interest*.	Disclosure (Mandatory).	On Occasion	1	1	7.5	8
§ 373.5 Revolving Master Trusts	Disclosure (Mandatory).	On Occasion	3	2	7.0	42
§ 373.6 Eligible ABCP Conduits*	Disclosure (Mandatory).	On Occasion	1	1	3.0	3
§ 373.7 Commercial MBS*	Disclosure (Mandatory).	On Occasion	1	1	20.75	21
§ 373.10 Qualified Tender Option Bonds*.	Disclosure (Mandatory).	On Occasion	1	1	6.0	6
§ 373.11 Allocation of Risk Retention to an Originator*.	Disclosure (Mandatory).	On Occasion	1	1	2.5	3
§ 373.13 Exemption for Qualified Residential Mortgages*.	Disclosure (Mandatory).	On Occasion	1	1	1.25	1
§ 373.15 Exemption for Qualifying Commercial Loans, Commercial Real Estate and Automobile Loans*.	Disclosure (Mandatory).	On Occasion	1	1	20.0	20
§ 373.16 Underwriting Standards for Qualifying Commercial Loans*.	Disclosure (Mandatory).	On Occasion	1	1	1.25	1
§ 373.17 Underwriting Standards for Qualifying Commercial Real Estate Loans*.	Disclosure (Mandatory).	On Occasion	1	1	1.25	1
§ 373.18 Underwriting Standards for Qualifying Automobile Loans*.	Disclosure (Mandatory).	On Occasion	1	1	1.25	1
Disclosure Subtotal	.....	.....	.....	.....	.....	137
Recordkeeping Burdens						
§ 373.4(a)(2) Standard Risk Retention—Horizontal Interest.	Recordkeeping (Mandatory).	On Occasion	2	2	0.5	2
§ 373.4(a)(1) Standard Risk Retention—Vertical Interest.	Recordkeeping (Mandatory).	On Occasion	2	2	0.5	2
§ 373.4(a)(3) Standard Risk Retention—Combined Interest*.	Recordkeeping (Mandatory).	On Occasion	1	1	0.5	1
§ 373.5 Revolving Master Trusts	Recordkeeping (Mandatory).	On Occasion	3	2	0.5	3
§ 373.6 Eligible ABCP Conduits*	Recordkeeping (Mandatory).	On Occasion	1	1	20.0	20
§ 373.7 Commercial MBS*	Recordkeeping (Mandatory).	On Occasion	1	1	30.0	30
§ 373.11 Allocation of Risk Retention to an Originator*.	Recordkeeping (Mandatory).	On Occasion	1	1	20.0	20
§ 373.13 Exemption for Qualified Residential Mortgages*.	Recordkeeping (Mandatory).	On Occasion	1	1	40.0	40
§ 373.15 Exemption for Qualifying Commercial Loans, Commercial Real Estate and Automobile Loans*.	Recordkeeping (Mandatory).	On Occasion	1	1	0.5	1
§ 373.16 Underwriting Standards for Qualifying Commercial Loans*.	Recordkeeping (Mandatory).	On Occasion	1	1	40.0	40
§ 373.17 Underwriting Standards for Qualifying Commercial Real Estate Loans*.	Recordkeeping (Mandatory).	On Occasion	1	1	40.0	40
§ 373.18 Underwriting Standards for Qualifying Automobile Loans*.	Recordkeeping (Mandatory).	On Occasion	1	1	40.0	40
Recordkeeping Subtotal	.....	.....	.....	.....	.....	239
Total Annual Burden Hours	.....	.....	.....	.....	.....	376

Source: *FDIC.*

*There are currently zero estimated respondents for these items however, FDIC is using 1 as a placeholder to preserve the burden estimate in case an institution becomes subject to these provisions.

2. *Title:* Minimum Requirements for Appraisal Management Companies

OMB Number: 3064–0195.

Form Number: None.

Affected Public: Individuals or households; business or other for profit.

General Description of Collection: This information collection comprises recordkeeping and disclosure requirements under regulations issued by the Federal Deposit Insurance Corporation (FDIC), jointly with the Office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System (FRB), the National Credit Union Administration (NCUA), the Bureau of Consumer Financial Protection (CFPB), and the Federal Home Finance Agency (FHFA) (collectively, ''the agencies'') that implement the minimum requirements in Section 1473 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act or the Act) to be applied by states [23] in the registration and supervision of appraisal management companies (AMCs). The regulations also implement the requirement in Section 1473 of the Dodd-Frank Act for states to report to the Appraisal Subcommittee (ASC) of the Federal Financial Institutions Examination Council (FFIEC) the information required by the ASC to administer the new national registry of appraisal management companies (AMC National Registry or Registry). The information collection (IC) requirements are established in Part 323 of the FDIC's codified regulations.

This information collection was last approved for renewal on October 16, 2018 (''2018 ICR'') with a total annual burden estimate of 421 hours. The 2018 ICR contains two recordkeeping and two reporting IC requirements. The FDIC notes that the ASC has issued its own regulations or guidance implementing the requirements from the Act related to the information to be presented to the ASC by the participating states, and submitted an IC related to this reporting requirement.[24] Accordingly, the FDIC is not taking PRA burden for the associated IC (previously included as ''State Reporting Requirements to Appraisal Subcommittee'') and has removed it from its current ICR submission.

For each of the remaining ICs, FDIC's estimation methodology is to compute the total estimated burden hours for that IC and then assign an agreed-upon share of the burden hours to each of the regulatory agencies (FDIC, FRB, OCC, and FHFA).[25] The FDIC's estimated annual burden is calculated by finding the product of the estimated annual number of respondents, the estimated annual number of responses per respondent, the estimated burden hours per response and the share of the burden attributable to the FDIC.

Burden Estimate:

Estimated Number of Respondents

IC #1: Written Notice of Appraiser Removal From Network or Panel

This IC relates to the written notice of appraiser removal from the network or panel pursuant to § 323.10. The number of respondents is estimated to be equal to the number of appraisers who leave the profession each year multiplied by the estimated percentage of appraisers who work for AMCs. The number of appraisers who leave is calculated by adding the number of appraisers who are laid off or resign to the number of appraisers that have had their licenses revoked or surrendered. This estimation methodology is similar to the methodology used in the 2018 ICR.

The number of appraisers who are laid off or resign each year is estimated by multiplying the annual rate of ''Total separations'' by the number of appraisers for each year. Using data from the Bureau of Labor Statistics (BLS) for the finance and insurance industry, shown in Table 1 below, the annual rate of ''Total separations'' in 2020 is 25.1 percent.[26] The rate for 2020 is within the range of annual rates between 2011 and 2020 (20.4 to 26.0 percent, with a median of 24.8 percent) and is a reasonable estimate for future periods.

TABLE 1—ANNUAL RATE OF TOTAL SEPARATIONS FOR THE FINANCE AND INSURANCE INDUSTRY IN THE UNITED STATES

Year	Value (in %)
2011	20.4
2012	23.6
2013	26.0
2014	25.0
2015	24.5
2016	23.9
2017	25.2
2018	24.2
2019	24.6
2020	25.1

Source: BLS, ''Job Openings and Labor Turnover Survey: Finance and Insurance'' (Series ID: JTU520000000000000TSR), available at *https://www.bls.gov/data/* (accessed June 4, 2021).

The number of appraisers is estimated by using the number of appraisers in 2020 as a proxy for the level of appraiser employment over the next three years.[27] In 2020, the total number of appraisers was 86,000 and is similar to the annual average of 87,000 appraisers between 2011 and 2020. Table 2 contains data on annual employment level for appraisers in the U.S. between 2011 and 2020:

TABLE 2—ANNUAL LEVEL OF EMPLOYMENT FOR APPRAISERS IN THE UNITED STATES

Year	Value (in thousands)
2011	88
2012	93
2013	98
2014	95
2015	76
2016	73
2017	97
2018	84
2019	84
2020	86

Source: BLS, ''Employed—Appraisers and assessors of real estate'' (Series ID: LNU02038218), available at *https://beta.bls.gov/dataViewer/view/timeseries/LNU02038218* (accessed June 2, 2021).

Given the data summarized above, the number of appraisers who are laid off or resign is estimated by multiplying the annual number of appraisers by the annual separation rate $86{,}000 \times 25.1$ percent = 21,586.

As stated above, respondents to this IC also include appraisers who have their license revoked or surrendered each year. According to the ASC, between January 1, 2010 and December 31, 2019, the counts of appraisers who have had their license revoked or surrendered are 804 and 576,

[23] States include the 50 U.S. states, the District of Columbia, and the territories of Guam, Mariana Islands, Puerto Rico, and the U.S. Virgin Islands. *See* 12 CFR 323.9.

[24] *See* OMB No. 3139–0009 and the accompanying Supporting Statement submitted by the ASC in 2021, available at *https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=202102-3139-001* (accessed June 2, 2021).

[25] The agencies agreed to this burden-sharing methodology in 2018.

[26] Bureau of Labor Statistics (BLS), ''Job Openings and Labor Turnover Survey: Finance and Insurance'' (Series ID: JTU520000000000000TSR), available at *https://www.bls.gov/data/* (accessed June 4, 2021).

[27] BLS, ''Employed—Appraisers and assessors of real estate'' (Series ID: LNU02038218), available at *https://beta.bls.gov/dataViewer/view/timeseries/LNU02038218* (accessed June 2, 2021).

respectively.[28] Therefore, the annual average over the ten-year span is 138 licenses revoked or surrendered per year.[29]

The number of appraisal removal notices for AMCs is then calculated by adding the estimate of appraisers who are laid off or resign to the number of appraisers who have their licenses revoked or surrendered, and multiplying by the estimated percent of total appraisers who work for AMCs. According the Appraisal Institute, approximately 81 percent of appraisers are sole proprietors, executives in a firm, or are listed as having other forms of employment status.[30] The remaining 19 percent of appraisers are employees or staff members in firms such as AMCs, appraisal services companies, or other companies. Using 19 percent as the estimate of the percentage of appraisers who work for AMCs, the estimated total number of appraiser removal notices for AMCs is 4,130 notices per year, rounded to the nearest ten.[31] Thus, the estimated number of annual respondents for this information collection is 4,130. The respondents to this IC are either natural persons or AMCs. There are no data available currently on the number of AMCs that are considered ''small,'' for the purposes of the Regulatory Flexibility Act (RFA), and none of the respondents who are natural persons are small for the purposes of the RFA. As a rough approximation, to estimate the number of small respondents to this IC FDIC uses the percentage of insured depository institutions that are small (70 percent) for purposes of the RFA,[32] and assume that all respondents are AMCs. Thus, FDIC estimates that 2,891 respondents to this IC are small for purposes of the RFA.[33] This is likely a conservative estimate of small respondents for this information collection because not all respondents to this IC are AMCs.

The estimated number of notices per year is lower than the 2018 ICR estimate by 5,751 notices.[34] Two factors contributed to the drop in estimated notices: First, the number of appraisers who are laid off or resign, and the number that have had their licenses revoked or surrendered (138 and 21,586, respectively) are lower than the estimates in the 2018 ICR (245 and 23,280); second, there is more granular data available to calculate the share of appraisers employed by AMCs, appraisal services companies, or other companies. The most recent data from the Appraisal Institute contains nine separate categories for Appraiser Employment Status, whereas the data available for the 2018 ICR contained only four categories.[35] Given the level of aggregation available in 2018, the estimate of the share of appraisers in the 2018 ICR likely included appraisers who are employees or staff members in a government or regulatory agency, and individuals with employment statuses such as valuation consultant, professor or other academic professional, semi-retired or retired, or student. The FDIC notes that appraisers or individuals with the five employment statuses listed above would not be subject to this IC. Consequently, the share (19 percent) is much lower than the share (42 percent) used in the 2018 ICR.

IC #2: Develop and Maintain a State Licensing Program

The second information collection pertains to developing and maintaining a state licensing program for AMCs pursuant to Section 323.14. Section 323.14 requires that each state electing to register AMCs for purposes of permitting AMCs to provide appraisal management services relating to covered transactions in the state must submit to the ASC certain information required under the Rule and any additional information required by the ASC concerning AMCs. Thus, this burden falls on the states, especially those that have not developed a system to register and oversee AMCs. According to the ASC there are four states (the territories of Guam, Mariana Islands, Puerto Rico, and the U.S. Virgin Islands) that have not developed a system to register and oversee AMCs.[36] Thus, the estimated number of annual respondents for this burden is four. Since respondents to this IC are states, none of the respondents are considered ''small'' for purposes of the RFA.

IC #3: AMC Disclosure Requirements (State-Regulated AMCs)[37]

The third information collection relates to disclosure requirements for AMCs that are not federally regulated AMCs[38] (''state-regulated AMCs'') pursuant to Section 323.12, which involves information sent by AMCs to third parties, including states and the AMC National Registry. The disclosure requirement for this IC includes registration limitations/requirements. According to the National Registry, accessed on June 2, 2021, there are 3,854 active AMCs, of which 3,817 are state-regulated AMCs.[39] FDIC does not have the data to estimate the change in the number of active state-regulated AMCs using historical information because the National Registry became available for the states to populate in July 2018, and the states' reporting characteristics vary over time.[40] For the

[28] Federal Financial Institution Examination Council: Appraisal Subcommittee, ''Annual Report 2019: Appendix E Appraiser Disciplinary Actions Reported by State,'' available at *https://www.asc.gov/About-the-ASC/AnnualReports.aspx* (accessed June 2, 2021).

[29] The average over the ten years is calculated as (1,380, or 804 + 576) divided by 10.

[30] Appraisal Institute, ''U.S. VALUATION PROFESSION FACT SHEET Q1 2019,'' available at *https://www.appraisalinstitute.org/file.aspx?DocumentId=2342,* (accessed June 2, 2021).

[31] The estimated total number of appraiser removal notices for AMCs is calculated as (21,586 + 138) × 19 percent, which yields 4,127.56 notices, or 4,130 after rounding to the nearest ten. The estimate is rounded to the nearest ten because 10 percent of the respondents will be allocated to FHFA, and OMB systems require whole number inputs.

[32] December 31, 2020, Call Report data. The Small Business Administration (SBA) defines a small banking organization as having $600 million or less in assets, where an organization's ''assets are determined by averaging the assets reported on its four quarterly financial statements for the preceding year.'' *See* 13 CFR 121.201 (as amended by 84 FR 34261, effective August 19, 2019). In its determination, the ''SBA counts the receipts, employees, or other measure of size of the concern whose size is at issue and all of its domestic and foreign affiliates.'' *See* 13 CFR 121.103. Following these regulations, the FDIC uses a covered entity's affiliated and acquired assets, averaged over the preceding four quarters, to determine whether the covered entity is ''small'' for the purposes of RFA.

[33] The estimated number of small respondents to this IC is calculated by multiplying the estimated number of respondents (4,130) by 70 percent.

[34] *See* OMB No. 3064–0195 and the accompanying Supporting Statement submitted by the FDIC in 2018, available at *https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201804-3064-013* (accessed June 2, 2021).

[35] The most recent data available from the Appraisal Institute includes five new categories (employee or staff member in a government or regulatory agency, valuation consultant, professor or other academic professional, semi-retired or retired, and student), in addition to the four categories that match closely to the data in the 2018 ICR (employee or staff member of a firm, sole proprietor of own business (no employees/partners), executive in a firm, and other).

[36] ASC, ''States' Status on Implementation of AMC Programs,'' available at *https://www.asc.gov/National-Registries/StatesStatus.aspx* (accessed June 2, 2021).

[37] Based on conversations between the SMEs at the FDIC, FRB, OCC, and FHFA, the current ICR splits the IC #3 from the 2018 ICR (titled ''AMC Reporting Requirements (State and Federal AMCs) (323.12 & 13(c))'') in to two separate ICs, one each for state-regulated AMCs, and federally regulated AMCs.

[38] Section 323.9 defines a federally regulated AMC as ''an AMC that is owned and controlled by an insured depository institution, as defined in 12 U.S.C. 1813 and regulated by [the OCC, FRB, or FDIC].''

[39] ASC nonpublic data, obtained as of June 3, 2021, stored under this memo's workpapers on FDIC SharePoint.

[40] The most recent Annual Report of the ASC notes that as of December 31, 2019, the National Registry contained 1,374 AMCs registered from 14 states. As of June 2, 2021, the date I accessed the ASC's website, there are 40 states currently populating the National Registry. *See* Federal Financial Institution Examination Council:

purposes of this analysis FDIC assumes the number of state-regulated AMCs to remain approximately the same over the next three years. Thus, the estimated number of annual respondents for this burden is 3,820, after rounding up to the nearest ten.[41] There are no data available currently on the number of AMCs that are small. As a rough approximation, FDIC uses the percentage of insured depository institutions that are small (70 percent) for purposes of the RFA to estimate the number of small respondents to this IC. Using this methodology FDIC estimates that 2,674 respondents to this IC are small for purposes of the RFA.[42]

IC #4: AMC Disclosure Requirements (Federally Regulated AMCs)

The fourth information collection relates to AMC disclosure requirements for federally regulated AMCs pursuant to Section 323.13(c). The disclosure requirements for this IC include registration limitations/requirements as well as information regarding the determination of the AMC National Registry fee. Of the 3,854 active AMCs, 37 are federally regulated AMCs.[43] FDIC does not have the data to estimate the change in the number of active federally regulated AMCs using historical information because the National Registry became available for the states to populate in July 2018, and the states' reporting characteristics vary over time.[44] For the purposes of this analysis FDIC assumes the number of federally regulated AMCs to remain approximately the same over the next three years. Thus, the estimated number of annual respondents for this burden is 39, after rounding up to the nearest multiple of three.[45] There are no data available currently on the number of AMCs that are small. As a rough approximation, FDIC uses the percentage of insured depository institutions that are small (70 percent) for purposes of the RFA to estimate the number of small respondents to this IC. Accordingly, FDIC estimates that 27 respondents to this IC are small for purposes of the RFA.[46]

Estimated Number of Responses

For IC #1, FDIC assumes an AMC receives one written notice from each appraiser[47] asking to be removed from the appraiser panel, or sends one notice to each appraiser removing him/her from the panel. Thus, the estimated number of responses per respondent is one.

For IC #2, FDIC assumes that states without a registration and licensing program would develop and maintain a single program for each state. Thus, the estimated number of responses per respondent is one.

For IC #3 and IC #4, FDIC estimates the number of responses per respondent as the number of states that do not have an AMC registration program in which the average state-regulated or federally regulated AMC operates. As discussed previously, there are four states that currently do not have an AMC registration program. As noted in the Supporting Statement accompanying the 2018 ICR, a 2013 survey conducted by the CFPB found that the average AMC operates in 19.56 states.[48] Thus, the average state-regulated or federally regulated AMC operates in approximately 2 states that do not have AMC registration systems: (4 states/55 states) × 19.56 states = 1.422 states ~ rounded up to 2 states.

Frequency of Responses

For IC #1, as discussed above, the AMC receives (or sends) a written notice in the event an appraiser no longer serves on the panel. Since this event occurs on occasion, FDIC uses ''On Occasion'' as the Frequency of Reponses for this IC and assumes a frequency of one.

For IC #2, FDIC assumes the states that have currently elected not to register and oversee AMCs could choose to do so at any time. Since this event occurs on occasion, FDIC uses ''On Occasion'' as the Frequency of Reponses for this IC and assumes a frequency of one.

For IC #3 and IC #4, FDIC assumes the state-regulated or federally regulated AMCs that are currently operating in a state but have not yet registered with that state could choose to do so any time. Since this event occurs on occasion, FDIC uses ''On Occasion'' as the Frequency of Reponses for this IC and assumes a frequency of one.

Estimated Time per Response

The 2018 ICR estimate of the hour burden per written notice of appraiser removal was 0.08 hours. The FDIC believes this estimate remains reasonable and appropriate for this IC and uses 0.08 hours as the estimated time per response for IC #1.

The 2018 ICR estimate of the hour burden for a state without a registration program or system to establish one was 40 hours. The FDIC believes this estimate remains reasonable and appropriate for this IC and uses 40 hours as the estimated time per response for IC #2.

The 2018 ICR estimate of the hour burden for a state-regulated or federally regulated AMC to register in a state in which it operates was one hour. The FDIC believes this estimate remains reasonable and appropriate for IC #3 and IC #4 and uses one hour each as the estimated time per response for IC #3 and IC #4.

The estimated annual burden, in hours, for the four agencies (FDIC, FRB, OCC, and FHFA) is the product of the estimated number of respondents per year allocated to each agency, the number of responses per respondent per year, and the hours per response, as summarized in Tables 3 and 4 below. For IC #1, and IC #3, the estimated respondents are split between the four agencies the FDIC, FRB, OCC, and FHFA, at a ratio of 3:3:3:1.[49] Thus, the

Appraisal Subcommittee, ''Annual Report 2019: Appendix E Appraiser Disciplinary Actions Reported by State,'' available at *https://www.asc.gov/About-the-ASC/AnnualReports.aspx* (accessed June 2, 2021); and ASC, ''States' Status on Implementation of AMC Programs,'' available at *https://www.asc.gov/National-Registries/StatesStatus.aspx* (accessed June 2, 2021).

[41] The estimate is rounded to the nearest ten because 10 percent of the respondents will be allocated to FHFA, and OMB systems require whole number inputs.

[42] The estimated number of small respondents to this IC is calculated by multiplying the estimated number of respondents (3,820) by 70 percent.

[43] ASC nonpublic data, obtained as of June 3, 2021.

[44] *See* footnote 40.

[45] The estimate is rounded to the nearest multiple of three because the estimated respondents will be allocated equally to the FDIC, FRB, and OCC, and OMB systems require whole number inputs. The aggregate estimated number of respondents for IC #3 and IC #4 in the current ICR (state-regulated and federally regulated AMCs) is higher than the corresponding estimate in the 2018 ICR by 3,659. The increase in the number of respondents in the current ICR is attributable to the definitive information available from the National Registry after 2018, when AMC registration requirements became effective.

[46] The estimated number of small respondents to this IC is calculated by multiplying the estimated number of respondents (39) by 70 percent.

[47] In the event of an appraiser's death or incapacitation, the AMC receives notice of death or incapacity. *See* 12 CFR 323.10.

[48] *See* OMB No. 3064–0195 and the accompanying Supporting Statement submitted by the FDIC in 2018, available at *https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201804-3064-013* (accessed June 2, 2021). Additional details on the survey can be found in the text accompanying the final rule. *See* Minimum Requirements for Appraisal Management Companies, 80 FR 32,677 (June 9, 2015).

[49] The assumption to divide the burden hours between the agencies is based on conversations between the subject matter experts at the FDIC, FRB, OCC, and FHFA and is based on the approximate proportion of AMCs supervised by the three banking agencies and evenly split among the three banking agencies. The burden hours are shared using the same ratio as the 2018 ICR. The ratio does not affect the total amount of burden imposed by the collections of information under the joint AMC regulations, and relates only to the appropriate distribution among the rulemaking

Continued

estimated number of annual respondents attributable to the FDIC, FRB, and OCC for IC #1, and IC #3 are 1,239, and 1,146 each, respectively. Similarly, the estimated number of annual respondents attributable to the FHFA for IC #1, and IC #3 are 413, and 382, respectively. For IC #2, the estimated number of respondents is split equally amongst the four agencies which amounts to one respondent each.[50] For IC #4, the estimated number of respondents (39) is split equally amongst the three banking agencies (13 each) as Section 323.9 defines a federally regulated AMC as an AMC owned and controlled by an insured depository institution, which is regulated by the FDIC, FRB, or OCC. The total estimated annual burden for this information collection is 8,208 hours.[51] The FDIC, FRB, and OCC will each have equally-sized shares of the total estimated burden, with each agency responsible for 2,457 hours. The FHFA is responsible for the remaining 837 hours.

TABLE 3—SUMMARY OF ESTIMATED ANNUAL BURDENS—FDIC, FRB, AND OCC SHARE

[OMB No. 3064–0195]

IC description	Type of burden (obligation to respond)	Frequency of response	Number of respondents	Number of responses per respondent	Hours per response	Annual burden (hours)
IC #1—Written Notice of Appraiser Removal From Network or Panel (12 CFR part 323.10).	Disclosure[52] (Mandatory)	On occasion ...	1,239	1	0.08	99
IC #2—State Recordkeeping Requirements (12 CFR parts 323.11(a) and 323.11(b)).	Recordkeeping (Mandatory)	On occasion ...	1	1	40	40
IC #3—AMC Disclosure Requirements (State-regulated AMCs) (12 CFR part 323.12).	Disclosure[53] (Mandatory)	On occasion ...	1,146	2	1	2,292
IC #4—AMC Disclosure Requirements (Federally regulated AMCs) (12 CFR parts 323.12 and 323.13(c)).	Disclosure (Mandatory)	On occasion ...	13	2	1	26
Total Annual Burden Hours (FDIC, FRB, and OCC Share).	.....	.....	.....	.....	.....	2,457

Source: FDIC.

3. *Title:* Joint Standards for Assessing Diversity Policies and Practices.

OMB Number: 3064–00200.

Form Number: 2710/05—Diversity Self-Assessment (paper form).

2710/06—Diversity Self-Assessment (electronic form).

Affected Public: Insured state nonmember banks, and insured state savings associations.

Burden Estimate: FDIC is revising the burden estimates associated with this information collection as a result of the update of the electronic version of the reporting form. The update will allow respondents who have previously completed a diversity self-assessment (DSA) to copy and clone their previous submission. This copy/clone capability reduces the reporting burden for returning respondents. However, it does not change the burden for respondents who fill out the electronic form for the first time or respondents who choose an alternative method of assessing their diversity policies and practices. As such, this ICR revises the IC line items to distinguish between the *implementation burden* incurred by first time respondents from the *ongoing burden* incurred by returning respondents. This ICR also updates the respondent count estimates for the other line items in this IC. Finally, this ICR adds a line to cover the burdens of non-material (not responsive) submissions.

In October 2020, the FDIC implemented a copy/clone feature in FID–SA for submissions covering the 2020 reporting period and beyond. This feature allows the respondent to pre-populate a new diversity self-assessment with the information that was previously completed and submitted. In addition, the FDIC Office of Minority and Women Inclusion (OMWI) have identified several submissions that complete the pro forma form but do not provide the FDIC with any material self-assessments. With the addition of these two submission types, there are now five distinct submission types for this IC:

1. *Paper Form Submissions,* which are DSA submissions that use the ''Diversity Self-Assessment of Financial Institutions Regulated by the FDIC'' form and submit the form as an email attachment or via the United States Postal Service;

2. *Electronic Form (Implementation) Submissions,* which are DSA submissions that utilize the online FID–SA application, and the financial institution has not previously submitted a DSA;

3. *Electronic Form (Ongoing) Submissions,* which are DSA submissions that utilize the online FID–

agencies of responsibility (under the PRA) for a portion of the total estimated burden. *See* OMB No. 2590–0013 and the accompanying Supporting Statement submitted by the FHFA in 2018, available at *https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201807-2590-002* (accessed June 16, 2021).

[50] For IC #2, the assumption to divide the burden hours equally between the agencies is based on conversations between the SMEs at the FDIC, FRB, OCC, and FHFA. The burden hours are shared using the same ratio as the 2018 ICR.

[51] The estimated total annual burden hours of 8,208 is obtained by aggregating the estimated total annual burden hours for the FDIC, FRB, and OCC in Table 3 (7,371, or 2,457 × 3) with the corresponding value for the FHFA in Table 4 (837).

The estimated hour burden in the current ICR (8,208) higher than the 2018 ICR estimate by 6,763 hours. The increase is predominantly driven by the increase in the aggregate estimated number of respondents to IC #3 and IC #4. As discussed previously, the estimated number of respondents in higher than the estimate in the 2018 ICR due to the definitive information available from the National Registry after 2018.

[52] The 2018 ICR erroneously classified IC #1 as a Recordkeeping requirement. The burden for this IC has been changed to a Disclosure requirement.

[53] The 2018 ICR erroneously classified IC #3 as a Reporting requirement. The burden for this IC has been changed to a Disclosure requirement.

SA application and are able to use the copy/clone feature in FID–SA;

4. *Free-Form Submissions,* which are submissions that do not use the ''Diversity Self-Assessment of Financial Institutions Regulated by the FDIC'' form; and

5. *Non-Material Submissions,* which are pro forma submissions that do not provide any material self-assessments.

Estimated Number of Respondents and Responses

Responses to this information collection are voluntary and may be submitted by any FDIC-regulated financial institution. As such, potential respondents to this IC are all FDIC-regulated financial institutions. As of December 31, 2020, the FDIC regulates 3,227 insured depository institutions (IDIs). Of these institutions, 2,380 are considered small for the purposes of the Regulatory Flexibility Act (RFA).

Respondents submit a single response per year. To estimate the number of respondents for this ICR, FDIC reviewed and summarized data from historical submissions by FDIC-regulated IDIs covering diversity activities in the reporting periods 2016–2019. Submissions were categorized as a first-time submission if no prior submission was made by the same IDI. Otherwise, the submission was categorized as a repeat submission. FDIC did not categorize 2016 submissions since 2016 was the first year for which the agency has submission data. A summary of these results is provided in Table 1 below:

TABLE 1—OMWI SUBMISSION COUNTS, BY SUBMISSION TYPE AND REPORTING PERIOD

Submission type	2016	2017	2018	2019
All submissions *	95	137	133	152
All submissions, small IDIs **	17	26	26	33
First-time submissions	.....	81	42	38
First-time submissions, small IDIs **	.....	18	13	16
Repeat submissions	.....	56	91	113
Repeat submissions, small IDIs **	.....	8	13	17

Source: FDIC OMWI.

* These counts include two financial institutions (CERTs 20399 in 2016 and 29845 in 2019) that were later found to not be regulated by the FDIC during their respective reporting periods. We include them here to align the table with other OMWI published analyses (available at *https://www.fdic.gov/about/diversity/analysisdsa.html*).

** IDIs are counted as small if they meet the SBA's definition of ''small'' for purposes of RFA as of December 31st in each reporting period.

As Table 1 shows, there were 152 total submissions in 2019, the most recent reporting year. This is an increase of approximately 20 submissions from the previous year. This increase is due to the introduction of the online FID–SA application and an expanded outreach effort by the FDIC to educate and increase awareness about the DSA. The FDIC expects that submission counts will continue to climb upwards due to continued expanded outreach efforts as well as the introduction of the copy/clone feature to facilitate responses. Based on the historical submission counts and the expected rise in submissions, the FDIC expects it will receive 195 submissions per year with the majority of these submissions using the online FID–SA application. Based on the historical trends of first-time and repeating submissions future expectations, the FDIC anticipates annual respondent counts of 45 Electronic Form (Implementation) and 130 Electronic Form (Ongoing) submissions.[54] In addition, the FDIC anticipates annual counts of five Free-Form Submissions and ten Non-material Submissions.[55] Finally, FDIC recognizes that some IDIs may prefer to continue providing Paper Submissions and anticipate five such submissions per year.

Estimated Hourly Burden

The FDIC estimates that Electronic Form (Implementation) Submissions will take seven hours, the same burden that was recorded in the *Electronic Form* line item in the 2020 ICR. For Electronic Form (Ongoing) Submissions, the FDIC estimates that the copy/clone feature will save respondents an average of four hours per submission, for a net burden of three hours per response. For Non-material Submissions, the FDIC estimates that the pro forma completion of the submission application will take six minutes, or 0.1 hours. The FDIC has reviewed the hourly burden estimates for Paper Submissions and for Free-Form Submissions and found that the estimates from the 2020 ICR remain reasonable and appropriate. Finally, the FDIC estimates that each respondent will incur one hour of burden per year, on average, to disclose a portion of its submission to the public, in a manner reflective of the entity's size and other characteristics.

The estimated annual burden for each submission type, in hours, is the product of the estimated number of respondents, number of responses per respondent per year, and time per response, as summarized in Table 2 below. The total estimated annual burden for this information collection is 100, 106 hours, a reduction of 559 hours from the previously approved ICR. [56]

[54] Steady state averages of 25 percent for Electronic Form (Implementation) and 75 percent for Electronic Form (Ongoing) submissions were estimated from historical submissions by FDIC-regulated IDIs covering diversity activities in 2019, the first reporting period for which the online submission was available, and multiplied by 175, the anticipated number of annual Electronic Form submissions, to arrive at estimates of 45 Electronic Form (Implementation) and 130 Electronic Form (Ongoing) submissions. For the purposes of annualizing the estimated number of respondents, it is assumed that the estimated annual count of respondents for Electronic Form (Ongoing) Submissions includes returning Electronic Form (Implementation) Submissions from the previous year.

[55] The FDIC found 0, 0, and 4 Free-Form submissions and 3, 3, and 12 Non-material submissions in 2017, 2018, and 2019, respectively. Based on these historical numbers and their supervisory experience, the FDIC anticipates approximately 5 Free-Form and 10 Non-material Submissions going forward.

[56] The average burden hour estimate across all submission types is 4 hours and 8 minutes per response.

TABLE 2—SUMMARY OF ESTIMATED ANNUAL BURDEN

[OMB No. 3064–0006]

Information collection description—submission type	Type of burden (obligation to respond)	Frequency of response	Number of respondents	Number of responses per respondent	Hours per response	Annual burden (hours)
Joint Standards for Assessing Diversity Policies and Practices—*Paper Form*.	Reporting (Voluntary)	Annual	5	1	8	40
Joint Standards for Assessing Diversity Policies and Practices—*Electronic Form (Implementation)*.	Reporting (Voluntary)	Annual	45	1	7	315
Joint Standards for Assessing Diversity Policies and Practices—*Electronic Form* (Ongoing).	Reporting (Voluntary)	Annual	130	1	3	390
Joint Standards for Assessing Diversity Policies and Practices—*Free-Form*.	Reporting (Voluntary)	Annual	5	1	12	60
Joint Standards for Assessing Diversity Policies and Practices—*Non-material*.	Reporting (Voluntary)	Annual	10	1	0.1	1
Joint Standards for Assessing Diversity Policies and Practices—*Public Disclosure*.	Disclosure (Voluntary) ...	Annual	195	1	1	195
Total Annual Burden (Hours):.	.....	.....	.....	.....	.....	1,001

Source: FDIC.

General Description of Collection

Section 342 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Act) required the Office of the Comptroller of the Currency (OCC), Board of Governors of the Federal Reserve System (Board), Federal Deposit Insurance Corporation (FDIC), Bureau of Consumer Financial Protection (CFPB), National Credit Union Administration (NCUA), and Securities and Exchange Commission (SEC) (together, Agencies and separately, Agency) each to establish an Office of Minority and Women Inclusion (OMWI) to be responsible for all matters of the Agency relating to diversity in management, employment, and business activities. The Act also instructed each OMWI Director to develop standards for assessing the diversity policies and practices of entities regulated by the Agency. The Agencies worked together to develop joint standards and, on June 10, 2015, they jointly published in the **Federal Register** [57] the ''Final Interagency Policy Statement Establishing Joint Standards for Assessing the Diversity Policies and Practices of Entities Regulated by the Agencies'' (Policy Statement).

The Policy Statement contains a ''collection of information'' within the meaning of the Paperwork Reduction Act of 1995 (PRA). The Policy Statement includes Joint Standards that cover ''Practices to Promote Transparency of Organizational Diversity and Inclusion.'' These Joint Standards contemplate that a regulated entity is transparent about its diversity and inclusion activities by making certain information available to the public annually on its website or through other appropriate communications methods, in a manner reflective of the entity's size and other characteristics. The specific information referenced in these standards is: (a) Leadership commitment to diversity and inclusion; (b) workforce diversity and employment practices; (c) progress toward achieving diversity and inclusion in its procurement activities; and (d) opportunities available at the entity that promote diversity.

In addition, the Policy Statement includes Joint Standards that address ''Entities' Self-Assessment.'' The Joint Standards for Entities' Self-Assessment envision that a regulated entity, in a manner reflective of its size and other characteristics, (a) conducts annually a voluntary self-assessment of its diversity policies and practices; (b) monitors and evaluates its performance under its diversity policies and practices on an ongoing basis; (c) provides information pertaining to its self-assessment to the OMWI Director of its primary federal financial regulator; and (d) publishes information pertaining to its efforts with respect to the Joint Standards.

The collection of information described above is reported to the FDIC via the form entitled ''Diversity Self-Assessment of Financial Institutions Regulated by the FDIC,'' which can be submitted in paper [58] or electronic format.[59] To facilitate DSA submissions, the FDIC has developed the automated Financial Institution Diversity Self-Assessment (FID–SA) application. FID–SA provides FDIC-regulated financial institutions an easy and efficient way to electronically complete the diversity self-assessment; work with multiple users; view previous submissions; attach supporting material; and print and save in pdf format.[60]

Request for Comment

Comments are invited on: (a) Whether the collection of information is necessary for the proper performance of the FDIC's functions, including whether

[57] 80 FR 33016.

[58] The paper version of the ''Diversity Self-Assessment of Financial Institutions Regulated by the FDIC'' form (form number 2710/05) can be viewed at the following location: *https://www.fdic.gov/resources/regulations/federal-register-publications/2021/2021-form-2710-05-diversity-self-assessment-paper-form.pdf*.

[59] The electronic version of the ''Diversity Self-Assessment of Financial Institutions Regulated by the FDIC'' form (form number 2710/06) can be viewed at the following location: *https://www.fdic.gov/resources/regulations/federal-register-publications/2021/2021-form-2710-06-diversity-self-assessment-screen-shots.docx*.

[60] As described in the FID–SA portal, available at *https://www.fdic.gov/about/diversity/fidsaportal.html (accessed May 1, 2021).*

the information has practical utility; (b) the accuracy of the estimates of the burden of the information collection, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. All comments will become a matter of public record.

Federal Deposit Insurance Corporation.

Dated at Washington, DC, on August 4, 2021.

James P. Sheesley,

Assistant Executive Secretary.

[FR Doc. 2021–16963 Filed 8–9–21; 8:45 am]

BILLING CODE 6714–01–P

FEDERAL RESERVE SYSTEM

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

The companies listed in this notice have given notice under section 4 of the Bank Holding Company Act (12 U.S.C. 1843) (BHC Act) and Regulation Y, (12 CFR part 225) to engage de novo, or to acquire or control voting securities or assets of a company, including the companies listed below, that engages either directly or through a subsidiary or other company, in a nonbanking activity that is listed in § 225.28 of Regulation Y (12 CFR 225.28) or that the Board has determined by Order to be closely related to banking and permissible for bank holding companies. Unless otherwise noted, these activities will be conducted throughout the United States.

The public portions of the applications listed below, as well as other related filings required by the Board, if any, are available for immediate inspection at the Federal Reserve Bank(s) indicated below and at the offices of the Board of Governors. This information may also be obtained on an expedited basis, upon request, by contacting the appropriate Federal Reserve Bank and from the Board's Freedom of Information Office at *https://www.federalreserve.gov/foia/request.htm.* Interested persons may express their views in writing on the question whether the proposal complies with the standards of section 4 of the BHC Act.

Unless otherwise noted, comments regarding the applications must be received at the Reserve Bank indicated or the offices of the Board of Governors, Ann E. Misback, Secretary of the Board, 20th Street and Constitution Avenue NW, Washington, DC 20551–0001, not later than September 9, 2021.

A. Federal Reserve Bank of Philadelphia (William Spaniel, Senior Vice President) 100 North 6th Street, Philadelphia, Pennsylvania 19105–1521. Comments can also be sent electronically to *Comments.applications@phil.frb.org:*

1. *Columbia Bank MHC and Columbia Financial, Inc., both of Fair Lawn, New Jersey;* to acquire Freehold MHC and Freehold Bancorp, and indirectly acquire Freehold Bank, all of Freehold, New Jersey, and thereby engage in operating a savings association pursuant to Section 225.28(b)(4)(ii) of Regulation Y.

Board of Governors of the Federal Reserve System, August 5, 2021.

Ann Misback,

Secretary of the Board.

[FR Doc. 2021–17023 Filed 8–9–21; 8:45 am]

BILLING CODE 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 (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 applications are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The public portions of the applications listed below, as well as other related filings required by the Board, if any, are available for immediate inspection at the Federal Reserve Bank(s) indicated below and at the offices of the Board of Governors. This information may also be obtained on an expedited basis, upon request, by contacting the appropriate Federal Reserve Bank and from the Board's Freedom of Information Office at *https://www.federalreserve.gov/foia/request.htm.* Interested persons may express their views in writing on the standards enumerated in paragraph 7 of the Act.

Comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors, Ann E. Misback, Secretary of the Board, 20th Street and Constitution Avenue NW, Washington, DC 20551–0001, not later than August 25, 2021.

A. Federal Reserve Bank of Chicago (Colette A. Fried, Assistant Vice President) 230 South LaSalle Street, Chicago, Illinois 60690–1414:

1. *Cheryl Allen, Sterling, Illinois; Gregg DeVries, Byron, Illinois; and Sandra K. DeVries Trust, Sandra K. Devries, as trustee, and Roger P. DeVries Trust, Roger P. DeVries, as trustee, all of Milledgeville, Illinois; as the DeVries Family Control Group, a group acting in concert; and Edward M. Tyne, Kay F. Tyne, and Margaret A. Tyne, all of Polo, Illinois; and Courtney Tyne, Washington, DC; as the Tyne Family Control Group, a group acting in concert,* to acquire additional voting shares of Milledgeville Bancorp, Inc., and thereby indirectly acquire voting shares of Milledgeville State Bank, both of Milledgeville, Illinois.

Board of Governors of the Federal Reserve System, August 5, 2021.

Ann Misback,

Secretary of the Board.

[FR Doc. 2021–17022 Filed 8–9–21; 8:45 am]

BILLING CODE P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

[CFDA Numbers: 93.581, 93.587, 93.612]

Notice of Final Issuance on the Administration for Native Americans Program Policies and Procedures

AGENCY: Administration for Native Americans, (ANA), Administration for Children and Families (ACF), Department of Health and Human Services (HHS).

ACTION: Notice of final issuance.

SUMMARY: Pursuant to section 814 of the Native American Programs Act of 1974 (NAPA), as amended, ANA is required to provide members of the public an opportunity to comment on proposed changes in interpretive rules and general statements of policy and to give notice of the proposed changes no less than 30 days before such changes become effective. On February 19, 2021, ANA published a Notice of Public Comment (NOPC) in the **Federal Register** regarding its proposed interpretive rules and general statements of policy relative to its six FY 2021 Funding Opportunity Announcements (FOAs): Environmental Regulatory Enhancement (HHS–2021–ACF–ANA–NR–1907); Native American Language Preservation and Maintenance—Esther Martinez

Immersion (HHS–2021–ACF–ANA–NB–1958); Native American Language Preservation and Maintenance (HHS–2021–ACF–ANA–NL–1924); Social and Economic Development Strategies (HHS–2021–ACF–ANA–NA–1906); Social and Economic Development Strategies—Alaska (HHS–2021–ACF–ANA–NK–1902); and Social and Economic Strategies—Growing Organizations (HHS–2021–ACF–ANA–NN–1918). This Notice of Issuance responds to the public comments received from the NOPC.

DATES: The FY 2021 FOAs have been published, and these FOAs serve as the final notice of ANA's proposed changes.

FOR FURTHER INFORMATION CONTACT: Carmelia Strickland, Director, Division of Program Operations, Administration for Native Americans, (877) 922–9262, *anacomments@acf.hhs.gov.*

SUPPLEMENTARY INFORMATION: Pursuant to section 814 of NAPA, as amended, ANA is required to provide members of the public an opportunity to comment on proposed changes in interpretive rules and general statements of policy and to give notice of the proposed changes no less than 30 days before such changes become effective.

ANA published a NOPC (86 FR 10283) on February 19, 2021, with proposed policy and program clarifications, modifications, and activities for the FY 2021 FOAs. The NOPC provided proposed clarifications, modifications, and new text for six FY 2021 FOAs. During the 30-day comment period, ANA received three responses to the NOPC. ANA reviewed the comments and determined them non-substantive and therefore would not require changes to the FOAs.

The following are the public comments received in response to the NOPC and ANA's responses:

Comment: My comment is that I hope to have ANA implement a requirement that all data collected in Indian Country by non-Indigenous and Indigenous entities are collected in a manner that ensures the tribe and community will have ownership, guardianship, and access to that data.

Response: ANA highly encourages tribes to be aware of their rights to intellectual property rights and data sovereignty. In the past, ANA has provided trainings at grantee meetings and webinars through ANA's training and technical assistance centers. In addition, ANA included a statement in all FY 2021 FOAs that encouraged applicants to educate themselves on intellectual property rights and the protection of ownership of Native language materials, ceremonies, music and dance, and other forms of knowledge and cultural practices that originate from Native communities. However, due to the variety of laws, rights, and jurisdictions of these matters, ANA leaves this up to the discretion of grantees and applicants.

Comment: We urge ANA to discontinue the use of ''normalized scoring.'' While the intent of this practice is to normalize scoring across all review panels, it has had a negative impact on applications that obtain high scores in their review panels, but end up with a much lower scaled score, unjustly knocking them out of the competitive range for a funding award.

Response: ANA may use the statistical technique of ''normalization'' to convert raw scores from review panels to a standardized scale to negate any differences or biases in scoring behaviors among different panels and numerous reviewers. The decision to normalize scores occurs in advance of the panel session so as not to prejudice any specific competition and that all awards are made consistently across the different funding competitions when there are three or more panels. ANA has left the option for using normalized scores in the FY 2021 FOAs but will keep this comment in mind for planning the FY 2022 competitions.

Comment: We would like clarification about whether training and technical assistance information will still be available and accessible on the websites of the regional training and technical assistance providers, and that applicants who do not provide a letter of intent will be able to access such services.

Response: ANA provides technical assistance throughout all stages of the application process, regardless of providing a letter of intent.

Comment: Project-specific funding does not clearly define ''essentially identical or similar in whole or in part.'' It is not clear if the development of resources, like textbooks, would count as ''essentially identical or similar'' projects if they build on previous work and use similar project designs.

Response: ANA has a long-standing policy that it will not fund projects that are essentially identical or similar in whole or in part to previously funded projects proposed by the same applicant. While an applicant can have previously developed materials, the new project cannot duplicate the same materials and must address different subjects, populations, etc. If an applicant has concerns about whether ANA has funded them in the past for a project ''essentially identical or similar in whole or in part,'' ANA encourages them to reach out to ANA or an ANA technical assistance center for clarification.

Comment: ANA is requiring applicants to the Esther Martinez Immersion (EMI) language FOA to submit ''an official document that certifies the applicant has at least 3 years of experience in operating and administering'' an immersion school or language nest as required by the statute. As it stands, there are very few immersion schools and language nests in the United States where applicants could gain experience. We propose that this be modified to provide a training alternative for applicants without access to existing immersion programs. We recommend that ANA provide examples of certifications that will be accepted.

Response: The requirement of a certification by the applicant having not less than 3 years of experience in operating and administering a Native American language survival school or a Native American language nest is in the authorizing legislation of the Native American Programs Act for the EMI. ANA only clarified in the FOA that this was a requirement. In the EMI FOA, it states that the application should include an official document signed by the authorized representative that certifies that the applicant has at least 3 years of experience operating and administering a Native American language nest, Native American language survival school, or any other education program in which instruction is conducted in a Native American language in accordance with Public Law 109–394 (42 U.S.C. 2991b–3(c)(7)). ANA's training and technical assistance centers are available to help applicants meet the requirements of the EMI FOA.

Comment: We would like to commend ANA for the proposed changes to the FY 2021 FOAs. We appreciate the revision resulting from the Indian Community Economic Enhancement Act (ICEEA) of 2020, which added Native community development financial institutions (CDFIs) as eligible entities. Similarly, we strongly support the new economic development legislative priorities that will be incorporated into the program areas of interest for the SEDS FOA. We encourage ANA to make it clear that these economic development priority points are available for applications from existing Native CDFIs that proposed economic development projects as well as from eligible applicants who propose to develop new Native CDFIs. In addition, we applaud the proposed efforts to reduce the redundancy and the number of scoring criteria in the FY 2021 FOAs.

Response: Thank you for your comment. The new ICEEA law does allow for the development of existing Native CDFIs. Therefore, should a Native CDFI submit an application that proposes a project for any of the following projects: (1) The development of a tribal code or courts system for purposes of economic development, including commercial codes, training for court personnel, (2) the development of non-profit subsidiaries or other tribal business structures; or ''(3) the development of a tribal master plan for community and economic development and infrastructure'' and the application includes the economic priority area(s) in the project goal, all objectives and indicators as reflected in the project's framework, project approach, OWP, and outcome tracker, they will be awarded points. ANA will instruct reviewers to provide all bonus points for applications that propose an economic priority project that expands or creates a Native CDFI.

Elizabeth Leo,

Senior Grants Policy Specialist, Office of Grants Policy, Administration for Children and Families.

[FR Doc. 2021–16959 Filed 8–9–21; 8:45 am]

BILLING CODE 4184–34–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

Submission for OMB Review; Survey of the National Survey of Child and Adolescent Well-Being (NSCAW) Adopted Youth, Young Adults, and Adoptive Parents (0970–0555)

AGENCY: Office of Planning, Research, and Evaluation, Administration for Children and Families, HHS.

ACTION: Request for public comment.

SUMMARY: The Administration for Children and Families (ACF) at the U.S. Department of Health and Human Services (HHS) seeks approval for an extension with no changes to a one-time study to examine familial outcomes 8 years or more after a child's adoption from the child welfare system. The primary objective of this study is to estimate the prevalence of instability events that occur in families who have adopted children who have exited the foster care system. The second objective is to understand risk and protective factors associated with post adoption instability. Office of Management and Budget (OMB) approval expires September 30, 2021, and this request is to extend approval to allow for the completion of data collection.

DATES: *Comments due within 30 days of publication.* OMB must make a decision about the collection of information between 30 and 60 days after publication of this document in the **Federal Register**. Therefore, a comment is best assured of having its full effect if OMB receives it within 30 days of publication.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function.

SUPPLEMENTARY INFORMATION:

Description: Through this study, ACF is conducting web or telephone surveys with adopted youth, young adults, and adults as well as adoptive parents who were participants in the first or second cohort of NSCAW (NSCAW I, II; OMB #0970–0202). The surveys are designed to collect information about instability events (such as foster care re-entry or running away that occurred after a child's adoption) as well as family functioning, perceptions of the adoption relationship, and services and support received after adoption. Due to the COVID–19 pandemic, initial activities to contact potential respondents were delayed. As a result, ACF is requesting an extension to collect data beyond the current OMB expiration date of September 30, 2021.

Respondents: Adopted youth, young adults, adults, and their associated adoptive parents who participated in NSCAW I or II.

ANNUAL BURDEN ESTIMATES

Instrument	Number of respondents (total over request period)	Number of responses per respondent (total over request period)	Average burden per response (in hours)	Total burden (in hours)	Annual burden (in hours)
Survey of NSCAW Adopted Youth, Young Adults, and Adults	588	1	.5	294	294
Survey of NSCAW Adoptive Parents	554	1	.5	277	277

Estimated Total Annual Burden Hours: 571.

Authority: Child Abuse Prevention and Treatment and Adoption Reform Act of 1978.

Mary B. Jones,

ACF/OPRE Certifying Officer.

[FR Doc. 2021–16979 Filed 8–9–21; 8:45 am]

BILLING CODE 4184–44–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket Nos. FDA–2010–N–0190; FDA–2012–N–0197; FDA–2014–N–1414; and FDA–2014–N–0913]

Agency Information Collection Activities; Announcement of Office of Management and Budget Approvals

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is publishing a list of information collections that have been approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995.

FOR FURTHER INFORMATION CONTACT: Ila S. Mizrachi, Office of Operations, Food and Drug Administration, Three White Flint North, 10A–12M, 11601 Landsdown St., North Bethesda, MD

20852, 301–796–7726, *PRAStaff@fda.hhs.gov.*

SUPPLEMENTARY INFORMATION: The following is a list of FDA information collections recently approved by OMB under section 3507 of the Paperwork Reduction Act of 1995 (44 U.S.C. 3507). The OMB control number and expiration date of OMB approval for each information collection are shown in table 1. Copies of the supporting statements for the information collections are available on the internet at *https://www.reginfo.gov/public/do/PRAMain.* 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.

TABLE 1—LIST OF INFORMATION COLLECTIONS APPROVED BY OMB

Title of collection	OMB control number	Date approval expires
Infant Formula Requirements	0910–0256	5/31/2024
Shortages Data Collection	0910–0491	6/30/2024
Guidance on Labeling for Natural Rubber Latex Condoms	0910–0633	6/30/2024
Section 513(g) Requests for Information	0910–0705	6/30/2024

Dated: August 5, 2021.

Lauren K. Roth,

Acting Principal Associate Commissioner for Policy.

[FR Doc. 2021–17045 Filed 8–9–21; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2020–N–1648]

Pediatric Advisory Committee; Notice of Meeting; Establishment of a Public Docket; Request for Comments

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice; establishment of a public docket; request for comments.

SUMMARY: The Food and Drug Administration (FDA) announces a forthcoming public advisory committee meeting of the Pediatric Advisory Committee. The general function of the committee is to provide advice and recommendations to FDA on regulatory issues. The meeting will be open to the public. FDA is establishing a docket for public comment on this document.

DATES: The meeting will be held on September 17, 2021, from 10 a.m. to 4:30 p.m. Eastern Time.

ADDRESSES: Please note that due to the impact of the COVID–19 pandemic, all meeting participants will be joining this advisory committee meeting via an online teleconferencing platform. Answers to commonly asked questions including information regarding special accommodations due to a disability, visitor parking, and transportation may be accessed at: *https://www.fda.gov/AdvisoryCommittees/AboutAdvisoryCommittees/ucm408555.htm.*

FDA is establishing a docket for public comment on this meeting. The docket number is FDA–2020–N–1648. The docket will close on September 16, 2021. Submit either electronic or written comments on this public meeting by September 16, 2021. Please note that late, untimely filed comments will not be considered. Electronic comments must be submitted on or before September 16, 2021. The *https://www.regulations.gov* electronic filing system will accept comments until 11:59 p.m. Eastern Time at the end of September 16, 2021. Comments received by mail/hand delivery/courier (for written/paper submissions) will be considered timely if they are postmarked or the delivery service acceptance receipt is on or before that date.

Comments received on or before September 3, 2021, will be provided to the committee. Comments received after that date will be taken into consideration by FDA. In the event that the meeting is cancelled, FDA will continue to evaluate any relevant applications or information, and consider any comments submitted to the docket, as appropriate.

You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- *Federal eRulemaking Portal: https://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *https://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *https://www.regulations.gov.*
- If you want to submit a comment with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission and in the manner detailed (see ''Written/Paper Submissions'' and ''Instructions'').

Written/Paper Submissions

Submit written/paper submissions as follows:

- Mail/Hand delivery/Courier (for written/paper submissions): Dockets Management Staff (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Dockets Management Staff, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in ''Instructions.''

Instructions: All submissions received must include the Docket No. FDA–2020–N–1648 for ''Pediatric Advisory Committee; Notice of Meeting; Establishment of a Public Docket; Request for Comments.'' Received comments, those filed in a timely manner (see **ADDRESSES**), will be placed in the docket and, except for those submitted as ''Confidential Submissions,'' publicly viewable at *https://www.regulations.gov* or at the Dockets Management Staff between 9 a.m. and 4 p.m., Monday through Friday, 240–402–7500.

- Confidential Submissions—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper

submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states ''THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION.'' FDA will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *https://www.regulations.gov.* Submit both copies to the Dockets Management Staff. If you do not wish your name and contact information be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify the information as ''confidential.'' Any information marked as ''confidential'' will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September 18, 2015, or access the information at: *https://www.govinfo.gov/content/pkg/FR-2015-09-18/pdf/2015-23389.pdf.*

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *https://www.regulations.gov* and insert the docket number, found in brackets in the heading of this document, into the ''Search'' box and follow the prompts and/or go to the Dockets Management Staff, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852, 240–402–7500.

FOR FURTHER INFORMATION CONTACT: Marieann Brill, Office of Pediatric Therapeutics, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 32, Rm. 5154, Silver Spring, MD 20993–0002, 240–402–3838, *Marieann.Brill@fda.hhs.gov,* or FDA Advisory Committee Information Line, 1–800–741–8138 (301–443–0572 in the Washington, DC area). A notice in the **Federal Register** about last minute modifications that impact a previously announced advisory committee meeting cannot always be published quickly enough to provide timely notice. Therefore, you should always check FDA's website at *https://www.fda.gov/AdvisoryCommittees/default.htm* and scroll down to the appropriate advisory committee meeting link, or call the advisory committee information line to learn about possible modifications before coming to the meeting.

SUPPLEMENTARY INFORMATION: *Agenda:* The meeting presentations will be heard, viewed, captioned, and recorded through an online teleconferencing platform. On September 17, 2021, the Pediatric Advisory Committee (PAC) will discuss pediatric-focused safety reviews, as mandated by the Best Pharmaceuticals for Children Act (Pub. L. 107–109) and the Pediatric Research Equity Act of 2003 (Pub. L. 108–155).

The PAC will meet to discuss the following product: Center for Devices and Radiological Health FLOURISH™ Pediatric Esophageal Atresia Device (humanitarian device exemption).

FDA intends to make background material available to the public no later than 2 business days before the meeting. If FDA is unable to post the background material on its website prior to the meeting, the background material will be made publicly available at the location of the advisory committee meeting, and the background material will be posted on FDA's website after the meeting. Background material is available at *https://www.fda.gov/AdvisoryCommittees/Calendar/default.htm.* Scroll down to the appropriate advisory committee meeting link.

Procedure: Interested persons may present data, information, or views, orally or in writing, on issues pending before the committee. All electronic and written submissions submitted to the Docket (see **ADDRESSES**) on or before September 10. 2021, will be provided to the committee. Oral presentations from the public will be scheduled between approximately 11:30 a.m. and 12:30 p.m. Those individuals interested in making formal oral presentations should notify the contact person and submit a brief statement of the general nature of the evidence or arguments they wish to present, the names and addresses of proposed participants, and an indication of the approximate time requested to make their presentation on or before September 2, 2021. Time allotted for each presentation may be limited. If the number of registrants requesting to speak is greater than can be reasonably accommodated during the scheduled open public hearing session, FDA may conduct a lottery to determine the speakers for the scheduled open public hearing session. The contact person will notify interested persons regarding their request to speak by September 2, 2021.

Persons attending FDA's advisory committee meetings are advised that FDA is not responsible for providing access to electrical outlets.

For press inquiries, please contact the Office of Media Affairs at *fdaoma@fda.hhs.gov* or 301–796–4540.

FDA welcomes the attendance of the public at its advisory committee meetings and will make every effort to accommodate persons with disabilities. If you require accommodations due to a disability, please contact Marieann Brill (see **FOR FURTHER INFORMATION CONTACT**) at least 7 days in advance of the meeting.

FDA is committed to the orderly conduct of its advisory committee meetings. Please visit our website at *https://www.fda.gov/AdvisoryCommittees/AboutAdvisoryCommittees/ucm111462.htm* for procedures on public conduct during advisory committee meetings.

Notice of this meeting is given under the Federal Advisory Committee Act (5 U.S.C. app. 2).

Dated: August 4, 2021.

Lauren K. Roth,

Acting Principal Associate Commissioner for Policy.

[FR Doc. 2021–16984 Filed 8–9–21; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2021–N–0834]

Post-Marketing Pediatric-Focused Product Safety Reviews; Establishment of a Public Docket; Request for Comments

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice; establishment of a public docket; request for comments.

SUMMARY: The Food and Drug Administration (FDA) is establishing a public docket to collect comments related to the post-marketing pediatric-focused safety reviews of products posted between September 2, 2020, and September 2, 2021, on FDA's website but not presented at the September 17, 2021, Pediatric Advisory Committee (PAC) meeting. These reviews are intended to be available for review and comment by members of the PAC, interested parties (such as academic researchers, regulated industries, consortia, and patient groups), and the general public.

DATES: Submit either electronic or written comments by September 24, 2021.

ADDRESSES: FDA is establishing a docket for public comment on this document. The docket number is FDA–2021–N–0834. The docket will close on September 24, 2021. Submit either electronic or written comments by that

date. Please note that late, untimely comments will not be considered. Electronic comments must be submitted on or before September 24, 2021. The *https://www.regulations.gov* electronic filing system will accept comments until 11:59 p.m. Eastern Time at the end of September 24, 2021. Comments received by mail/hand delivery/courier (for written/paper submissions) will be considered timely if they are postmarked or the delivery service acceptance receipt is on or before that date.

You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- *Federal eRulemaking Portal: https://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *https://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *https://www.regulations.gov.*
- If you want to submit a comment with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission and in the manner detailed (see ''Written/Paper Submissions'' and ''Instructions'').

Written/Paper Submissions

Submit written/paper submissions as follows:

- *Mail/Hand delivery/Courier (for written/paper submissions):* Dockets Management Staff (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Dockets Management Staff, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in ''Instructions.''

Instructions: All submissions received must include the Docket No. FDA–2021–N–0834 for ''Post-Marketing Pediatric-Focused Product Safety Reviews; Establishment of a Public Docket; Request for Comments.'' Received comments, those filed in a timely manner (see **ADDRESSES**), will be placed in the docket and, except for those submitted as ''Confidential Submissions,'' publicly viewable at *https://www.regulations.gov* or at the Dockets Management Staff between 9 a.m. and 4 p.m., Monday through Friday, 240–402–7500.

- Confidential Submissions—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states ''THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION.'' FDA will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *https://www.regulations.gov.* Submit both copies to the Dockets Management Staff. If you do not wish your name and contact information be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify the information as ''confidential.'' Any information marked as ''confidential'' will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September18, 2015, or access the information at: *https://www.govinfo.gov/content/pkg/FR-2015-09-18/pdf/2015-23389.pdf.*

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *https://www.regulations.gov* and insert the docket number, found in brackets in the heading of this document, into the ''Search'' box and follow the prompts and/or go to the Dockets Management Staff, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852, 240–402–7500.

FOR FURTHER INFORMATION CONTACT: Marieann Brill, Office of the Commissioner, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 32, Rm. 5154, Silver Spring, MD 20993, 240–402–3838, *marieann.brill@fda.hhs.gov.*

SUPPLEMENTARY INFORMATION: FDA is responsible for protecting the public health by assuring the safety, efficacy, and security of human and veterinary drugs, biological products, medical devices, our Nation's food supply, cosmetics, and products that emit radiation. FDA also has responsibility for regulating the manufacturing, marketing, and distribution of tobacco products to protect the public health and to reduce tobacco use by minors.

FDA is establishing a public docket, Docket No. FDA–2021–N–0834, to receive input on post-marketing pediatric-focused safety reviews of products posted between September 2, 2020, and September 2, 2021, available on FDA's website at *https://www.fda.gov/AdvisoryCommittees/CommitteesMeetingMaterials/PediatricAdvisoryCommittee/ucm510701.htm* but not presented at the September 17, 2021, PAC meeting. FDA welcomes comments by members of the PAC, as mandated by the Best Pharmaceuticals for Children Act (Pub. L. 107–109) and the Pediatric Research Equity Act of 2003 (Pub. L. 108–155), interested parties (such as academic researchers, regulated industries, consortia, and patient groups), and the general public. The docket number is FDA–2021–N–0834. The docket will open on September 3, 2021, and remain open until September 24, 2021. The post-marketing pediatric-focused safety reviews are for the following products from the following centers at FDA:

Center for Biologics Evaluation and Research

1. CUVITRU (immune globulin subcutaneous (human), 20 percent solution)
2. EPICEL (cultured epidermal autografts)
3. JIVI (antihemophilic factor (recombinant), PEGylated-aucl)
4. T.R.U.E. TEST (thin-layer rapid use epicutaneous patch test)
5. REBINYN (nonacog beta pegol (N9–GP))
6. RUBBER PANEL T.R.U.E. TEST (Rubber Panel thin-layer rapid use epicutaneous patch test)
7. ROTATEQ (Rotavirus vaccine, live, oral, pentavalent)

Center for Drug Evaluation and Research

1. APTIOM (eslicarbazepine acetate)
2. CIALIS (tadalafil)
3. COTEMPLA XR–ODT (methylphenidate extended release orally disintegrating tablets)
4. EMEND (fosaprepitant dimeglumine)
5. ENBREL (etanercept), ERELZI (etanercept-szzs), ETICOVO (etanercept-ykro)
6. FASENRA (benralizumab)
7. INTELENCE (etravirine)
8. PEGASYS (peginterferon alfa-2a)

9. TEKTURNA (aliskiren hemifumarate)
10. VIMOVO (naproxen/esomeprazole magnesium)
11. VIREAD (tenofovir disoproxil fumarate)
12. XOFLUZA (baloxavir marboxil)

Center for Devices and Radiological Health

1. CONTEGRA PULMONARY VALVED CONDUIT (Humanitarian Device Exemption (HDE))
2. ELANA SURGICAL KIT (HDE)
3. ENTERRA THERAPY SYSTEM (HDE)
4. LIPOSORBER LA–15 SYSTEM (HDE)
5. MEDTRONIC ACTIVA DYSTONIA THERAPY (HDE)
6. MINIMALLY INVASIVE DEFORMITY CORRECTION (MID–C) SYSTEM
7. PLEXIMMUNE IN–VITRO DIAGNOSTIC TEST (HDE)
8. PULSERIDER ANEURYSM NECK RECONSTRUCTION DEVICE (HDE)
9. THE TETHER—VERTEBRAL BODY TETHERING SYSTEM

Dated: August 5, 2021.

Lauren K. Roth,

Acting Principal Associate Commissioner for Policy.

[FR Doc. 2021–17041 Filed 8–9–21; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Office of the Director, National Institutes of Health; Notice of Meeting

Notice is hereby given of a meeting of the HEAL (Helping to End Addiction Long-Term) Multi-Disciplinary Working Group.

The meeting will be open to the public as indicated below via NIH Videocast. Individuals who need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

The meeting will 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 program documents and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the program documents, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: HEAL Multi-Disciplinary Working Group (MDWG) Meeting.

Date: September 1–2, 2021.

Open: September 01, 2021, 10:30 a.m. to 11:30 a.m.

Closed: September 02, 2021, 11:30 a.m. to 4:30 p.m.

Closed: September 02, 2021, 10:30 a.m. to 3:45 p.m.

Agenda: Provide an update on Helping to End Addiction Long-Term (HEAL) Initiative projects and obtain expertise from MDWG relevant to the NIH HEAL Initiative and to specific HEAL projects.

Videocast: The open portion of the meeting will be live webcast at: *https://videocast.nih.gov/.*

Place: National Institutes of Health, Building 1, Wilson Hall, 1 Center Drive, Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Rebecca G Baker, Ph.D., Office of the Director, National Institutes of Health, 1 Center Drive, Room 103A, Bethesda, MD 20892, (301) 402–1994, *Rebecca.baker@nih.gov*.

Any interested person may file written comments with the committee by forwarding the statement to the Contact Person listed on this notice. The statement should include the name, address, telephone number and when applicable, the business or professional affiliation of the interested person.

Information is also available on the Office of the Director for the NIH HEAL Initiative website: *https://heal.nih.gov/news* where an agenda and any additional information for the meeting will be posted when available.

(Catalogue of Federal Domestic Assistance Program Nos. 93.853, Clinical Research Related to Neurological Disorders; 93.854, Biological Basis Research in the Neurosciences, National Institutes of Health, HHS)

Dated: August 5, 2021.

Tyeshia M. Roberson-Curtis,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2021–17012 Filed 8–9–21; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; Notice of Meeting

Pursuant to section 10(a) of the Federal Advisory Committee Act, as amended, notice is hereby given of a meeting of the Center for Scientific Review Advisory Council.

The meeting will be open to the public, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

URL for virtual access:—*https://videocast.nih.gov/watch=42556*

Name of Committee: Center for Scientific Review Advisory Council.

Date: September 27, 2021.

Time: 1:00 p.m. to 4:30 p.m.

Agenda: Provide advice to the Director, Center for Scientific Review (CSR), on matters related to planning, execution, conduct, support, review, evaluation, and receipt and referral of grant applications at CSR.

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

Contact Person: Bruce Reed, Ph.D., Deputy Director, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (301) 594–9159, *reedbr@mail.nih.gov*.

Information is also available on the Institute's/Center's home page: *https://public.csr.nih.gov/AboutCSR/Organization/CSRAdvisoryCouncil,* where an agenda and any additional information for the meeting will be posted when available.

(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: August 5, 2021.

Miguelina Perez,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2021–17043 Filed 8–9–21; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Notice of Listing of Members of the National Institutes of Health's Senior Executive Service 2021 Performance Review Board (PRB)

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The National Institutes of Health (NIH) announces the persons who will serve on the National Institutes of Health's Senior Executive Service 2021 Performance Review Board.

FOR FURTHER INFORMATION CONTACT: For further information about the NIH Performance Review Board, contact Mr. Kha Nguyen, Director, Division of Senior and Scientific Executive Management, Office of Human Resources, National Institutes of Health, Building 31, Room 1C31P, Bethesda, Maryland 20892, telephone 301.594.3022 (not a toll-free number), email *kha.nguyen@nih.gov.*

SUPPLEMENTARY INFORMATION: This action is being taken in accordance with

Title 5, U.S.C., section 4314 (c) (4), which requires that members of performance review boards be appointed in a manner to ensure consistency, stability, and objectivity in performance appraisals and requires that notice of the appointment of an individual to serve as a member be published in the **Federal Register**.

The following persons will serve on the NIH Performance Review Board, which oversees the evaluation of performance appraisals of NIH Senior Executive Service (SES) members:

Alfred Johnson, Chair
Courtney Billet
Michael Gottesman
Darla Hayes
Michael Lauer
Kathleen Stephan
Lawrence Tabak

Dated: August 2, 2021.

Lawrence A. Tabak,

Principal Deputy Director, National Institutes of Health.

[FR Doc. 2021–17039 Filed 8–9–21; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Prospective Grant of an Exclusive Patent License: Multi-Domain Amphipathic Helical Peptide for Use as A Human Therapeutic in Patients With Atherosclerotic Cardiovascular Disease, Including Patients Undergoing Cardiovascular Surgery Who Are at risk of Acute Kidney Injury

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The National Heart, Lung, and Blood Institute, an institute of the National Institutes of Health, Department of Health and Human Services, is contemplating the grant of an exclusive patent license to Phyxius Therapeutics, Inc., a start-up company incorporated as a C corporation under the laws of the state of Delaware, to practice the inventions covered by the patent estate listed in the **SUPPLEMENTARY INFORMATION** section of this notice. This is a first notice intended to apprise the public of a change in prospective licensee of the subject intellectual property rights in the stated field of use.

DATES: Only written comments and/or applications for a license which are received by the National Heart, Lung, and Blood Institute on or before August 25, 2021 will be considered.

ADDRESSES: Requests for copies of the patent application, inquiries, and comments relating to the contemplated an exclusive patent license should be directed to: Michael Davis, J.D., Ph.D., Senior Technology Transfer Manager, 31 Center Drive Room 4A29, MSC2479, Bethesda, MD 20892–2479, phone number 301–451–9032, or *michael.davis4@nih.gov.*

SUPPLEMENTARY INFORMATION: Intellectual Property

NIH REF No.	Title	Patent Application No.	Filing Date	Issued Patent No.	Issue Date
E–114–2004–0–US–01.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	60/619,392	10/15/04	.....	.....
E–114–2004–0–PCT–02.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	PCT/US2005/	10/14/05	.....	.....
E–114–2004–0–AU–03.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	2005295640	10/14/05	2005295640	11/10/11
E–114–2004–0–CA–04.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	2584048	10/14/05	2584048	08/09/16
E–114–2004–0–EP–05.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	05815961.7	10/14/05	1812474	05/26/10
E–114–2004–0–JP–06.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	2007–536912	10/14/05	5,091,679	09/21/12
E–114–2004–0–US–07.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	11/577,259	04/13/07	7,572,771	08/11/09
E–114–2004–0–US–08.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	12/497,443	07/02/09	8,071,746	12/06/11
E–114–2004–0–US–09.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	12/766,761	04/23/10	8,148,323	04/03/12
E–114–2004–0–CH–11.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	05815961.7	10/14/05	1812474	05/26/10
E–114–2004–0–DE–12.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	05815961.7	10/14/05	1812474	05/26/10
E–114–2004–0–ES–13.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	05815961.7	10/14/05	1812474	05/26/10
E–114–2004–0–FR–14.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	05815961.7	10/14/05	1812474	05/26/10
E–114–2004–0–GB–15.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	05815961.7	10/14/05	1812474	05/26/10
E–114–2004–0–IT–16.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	05815961.7	10/14/05	1812474	05/26/10
E–114–2004–0–US–17.	Multi-Domain Amphipathic Helical Peptides And Methods Of Their Use.	13/407,132	02/28/12	8,835,378	09/16/14

All U.S. and foreign patents and applications claiming priority to any member of the above.

The patent rights in these inventions have been assigned or exclusively licensed to the Government of the United States of America.

The prospective exclusive license territory may be worldwide and in fields of use that may be limited to use as a human therapeutic in patients with atherosclerotic cardiovascular disease (ASCVD), including patients undergoing cardiovascular surgery who are at risk of acute kidney injury.

The patents listed above cover an invention directed to peptides or

peptide analogs with multiple amphipathic alpha helical domains that promote lipid efflux from cells via an ABCA1-dependent pathway. This invention is also directed to methods of identifying non-cytotoxic peptides that promote ABCA1-dependent lipid efflux from cells, and to methods of using multi-domain amphipathic alpha helical peptides or peptide analogs to treat or inhibit dyslipidemic disorders.

This notice is made in accordance with 35 U.S.C. 209 and 37 CFR part 404. The prospective exclusive license will be royalty bearing. The prospective exclusive license may be granted unless within fifteen (15) days from the date of this published notice, the National Heart, Lung, and Blood Institute receives written evidence and argument that establishes that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR part 404.

In response to this Notice, the public may file comments or objections. Comments and objections, other than those in the form of a license application, will not be treated confidentially, and may be made publicly available.

License applications submitted in response to this notice will be presumed to contain business confidential information and any release of information in these license applications will be made only as required and upon a request under the Freedom of Information Act, 5 U.S.C. 552.

Bruce D. Goldstein,

Director, Office of Technology Transfer and Development, National Heart, Lung, and Blood Institute.

[FR Doc. 2021–17011 Filed 8–9–21; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HOMELAND SECURITY

[Docket Number—DHS–2021–0037]

Agency Information Collection Activities: Office of the Immigration Detention Ombudsman Intake Form

AGENCY: Department of Homeland Security (DHS).

ACTION: 60-Day Notice and request for comments; Office of the Immigration Detention Ombudsman Intake Form, 1601–0030, Extension without change.

SUMMARY: The Department of Homeland Security, will submit the following Information Collection Request (ICR) to the Office of Management and Budget (OMB) for review and clearance in accordance with the Paperwork Reduction Act of 1995.

DATES: Comments are encouraged and will be accepted until October 12, 2021.

ADDRESSES: You may submit comments, identified by docket number Docket # DHS–2021–0037 at:

○ *Federal rulemaking Portal: http://www.regulations.gov.* Please follow the instructions for submitting comments.

Instructions: All submissions received must include the agency name and docket number Docket # DHS–2021–0037. All comments received will be posted without change to *http://www.regulations.gov,* including any personal information provided.

Docket: For access to the docket to read background documents or comments received, go to *http://www.regulations.gov.*

SUPPLEMENTARY INFORMATION: The Department of Homeland Security's (DHS) Office of the Immigration Detention Ombudsman (OIDO) is an independent office tasked with resolving individual complaints from or about individuals in immigration detention regarding the potential violation of immigration detention standards or other potential misconduct. OIDO was established by Congress (Sec. 106 of the Consolidated Appropriations Act, 2020, Pub. L. 116–93). Its intake form is intended for use by individuals wishing to submit a complaint to OIDO. Information collected will provide the office with details about the allegations the submitter seeks to have OIDO address.

The information collected on this form will allow OIDO to identify: (1) The individual submitting the complaint and their contact information; (2) the detained individual who is the subject of the complaint; (3) the government-owned or contracted facility where the individual is or was detained and for how long; and (4) relevant details about the complaint. All of this information will be used by OIDO to investigate, resolve, and if appropriate, provide redress.

The use of this form is the most efficient means for collecting and processing the required data. Initially, collection will be via a paper form, which may be obtained from OIDO staff conducting routine visits in detention facilities. The form will also be available for download from the OIDO website. The PDF form will be able to be completed online, printed out, and submitted to OIDO by email, mail, or fax, or handed to a staff member in a detention facility.

After approval of the form described in this supporting statement, an electronic version will be developed so that submitters may complete and file via the OIDO website. The paper version will continue to be available; it will be noted on the form that using the paper method may result in processing delays for OIDO to complete data entry.

This information collection does not have an impact on small businesses or other small entities.

If this information is not collected, OIDO will not be able to accomplish its Congressional mandate to provide assistance to individuals who may be affected by misconduct, excessive force, or other violations of law or detention standards.

The assurance of confidentiality provided to the respondents for this information collection is based on the forthcoming Privacy Impact Assessment for the Immigration Detention Ombudsman Case Management System (ID–CMS) (Summer 2021). Additionally, the information collected is covered by DHS/ALL–020 Department of Homeland Security Internal Affairs, April 28, 2014, 79 FR 23361 and DHS/ALL–025 Law Enforcement Authority in Support of the Protection of Property Owned, Occupied, or Secured by the Department of Homeland Security System of Records, June 14, 2017, 82 FR 27274.

This information collection was constructed in compliance with regulations and authorities under the purview of the DHS Privacy Office, DHS OCIO, DHS Records Management, and OMB regulations regarding data collection, use, sharing, storage, information security, and retrieval of information.

There are no changes to the information being collected and there is no change to the estimated burden associated with this collection.

The Office of Management and Budget is particularly interested in comments which:

1. Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

2. Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

3. Enhance the quality, utility, and clarity of the information to be collected; and

4. Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other

technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submissions of responses.

Analysis

Agency: Department of Homeland Security (DHS).

Title: Office of the Immigration Detention Ombudsman Intake Form.

OMB Number: 1601–0030.

Frequency: Every 3 years.

Affected Public: Members of the Public or non-government organizations.

Number of Respondents: 30,000.

Estimated Time per Respondent: 1.

Total Burden Hours: 30,000.

Robert Dorr,

Acting Executive Director, Business Management Directorate.

[FR Doc. 2021–17002 Filed 8–9–21; 8:45 am]

BILLING CODE 9112–FL–P

DEPARTMENT OF HOMELAND SECURITY

Transportation Security Administration

Extension of Agency Information Collection Activity Under OMB Review: Law Enforcement Officer Flying Armed Training

AGENCY: Transportation Security Administration, Homeland Security (DHS).

ACTION: 30-Day notice.

SUMMARY: This notice announces that the Transportation Security Administration (TSA) has forwarded the Information Collection Request (ICR), Office of Management and Budget (OMB) control number 1652–0034, abstracted below to OMB for review and approval of an extension of the currently approved collection under the Paperwork Reduction Act (PRA). The ICR describes the nature of the information collection and its expected burden. The collection involves the Federal Air Marshal Service (FAMS) maintenance of a database of all territorial, tribal, Federal, municipal, county, State, and authorized railroad law enforcement agencies that have received the Law Enforcement Officers Flying Armed Training course.

DATES: Send your comments by September 9, 2021. A comment to OMB is most effective if OMB receives it within 30 days of publication.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection, OMB control number 1652–0034, by selecting ''Currently under Review—Open for Public Comments'' and by using the find function.

FOR FURTHER INFORMATION CONTACT: Christina A. Walsh, TSA PRA Officer, Information Technology (IT), TSA–11, Transportation Security Administration, 6595 Springfield Center Drive, Springfield, VA 20598–6011; telephone (571) 227–2062; email *TSAPRA@tsa.dhs.gov.*

SUPPLEMENTARY INFORMATION: TSA published a **Federal Register** notice, with a 60-day comment period soliciting comments, of the following collection of information on April 8, 2021, 86 FR 18292.

Comments Invited

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The ICR documentation will be available at *http://www.reginfo.gov* upon its submission to OMB. Therefore, in preparation for OMB review and approval of the following information collection, TSA is soliciting comments to—

(1) Evaluate whether the proposed information requirement is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden;

(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 using appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Information Collection Requirement

Title: Law Enforcement Officers Flying Armed Training.

Type of Request: Extension of a currently approved collection.

OMB Control Number: 1652–0034.

Forms(s): N/A.

Affected Public: Law Enforcement Officers.

Abstract: TSA requires territorial, tribal, Federal, municipal, county, State, and authorized railroad law enforcement officers (LEOs) who have a mission need to fly armed to complete the LEOs Flying Armed Training under 49 CFR 1544.219. Eligibility is based on requirements stated in 49 CFR 1544.219. TSA will gather information, including, but not limited to, agency name and address, and name of each individual who will receive the training from law enforcement agencies that have requested the LEOs Flying Armed training course. Applicant verification ensures that only LEOs with a valid need to fly armed aboard commercial aircraft receive training. Applicants come from territorial, tribal, Federal, municipal, county, State, and authorized railroad law enforcement agencies throughout the country. For more information about the program, please see *https://www.tsa.gov/travel/law-enforcement.*

Number of Respondents: 2,000.

Estimated Annual Burden Hours: An estimated 167 hours annually.

Dated: August 5, 2021.

Christina A. Walsh,

TSA Paperwork Reduction Act Officer, Information Technology.

[FR Doc. 2021–17007 Filed 8–9–21; 8:45 am]

BILLING CODE 9110–05–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–R8–NWRS–2021–N015; FXRS12610800000–212–FF08R04000]

San Diego National Wildlife Refuge, CA; Final Comprehensive Conservation Plan/Environmental Assessment and Finding of No Significant Impact

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), announce the availability of a final Comprehensive Conservation Plan (CCP), environmental assessment (EA), and finding of no significant impact (FONSI) for the San Diego National Wildlife Refuge (Refuge) in California. The CCP/EA/FONSI, prepared in accordance with the National Wildlife Refuge System Improvement Act of 1997, and in accordance with the National Environmental Policy Act, describes how the Service will manage the Refuge for the next 15 years. Compatibility determinations for five public uses are also included in the final CCP.

ADDRESSES: *Document Availability:* You may view or download copies of the final CCP and the EA/FONSI on the Refuge's website at *https://ecos.fws.gov/ServCat/Reference/Profile/133810.*

FOR FURTHER INFORMATION CONTACT: Victoria Touchstone, Refuge Planner, at *victoria_touchstone@fws.gov,* or by phone at (619) 476–9150 ex 101; Dwane Binns, Refuge Manager, at *dwane_binns@fws.gov.*

SUPPLEMENTARY INFORMATION: We announce the availability of a final comprehensive conservation plan, environmental assessment, and finding of no significant impact (CCP/EA/FONSI) for San Diego National Wildlife Refuge (Refuge, or NWR), which is located in San Diego County, California. The CCP/EA/FONSI, prepared under the National Wildlife Refuge System Improvement Act of 1997, and in accordance with the National Environmental Policy Act of 1969, describes how the Service will manage the Refuge for the next 15 years. Compatibility determinations for public uses are also included in the final CCP.

Introduction

With this notice, we complete the CCP process for San Diego National Wildlife Refuge, which we began by publishing a notice of intent in the **Federal Register** on May 24, 2006 (71 FR 29973). For more about the initial process and the history of the Refuge, see that notice. We released the draft CCP and EA to the public, announcing and requesting comments in a notice of availability on June 19, 2014 (79 FR 35183). The 90-day comment period ended on September 17, 2014. A summary of public comments and our responses are included in the final CCP.

Background

The National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd–668ee), which amended the National Wildlife Refuge System Administration Act of 1966, requires the Service to develop a CCP for each National Wildlife Refuge. The purpose of developing a CCP is to provide refuge managers with a 15-year plan for achieving refuge purposes and contributing toward the mission of the National Wildlife Refuge System (NWRS), consistent with sound principles of fish and wildlife management, conservation, legal mandates, and our policies. In addition to outlining broad management direction on conserving wildlife and their habitats, CCPs identify wildlife-dependent recreational opportunities available to the public, including opportunities for hunting, fishing, wildlife observation, and photography, environmental education, and interpretation. We will review and update the CCP at least every 15 years in accordance with the Improvement Act.

Each unit of the NWRS was established for specific purposes. We use these purposes as the foundation for developing and prioritizing the management goals and objectives for each refuge within the NWRS, and to determine how the public can use each refuge. The planning process is a way for us to evaluate management goals and objectives that will ensure the best possible approach to wildlife, plant, and habitat conservation, while providing for wildlife-dependent recreation opportunities that are compatible with each refuge's establishing purposes and the mission of the NWRS.

Additional Information

The final CCP can be found at *https://ecos.fws.gov/ServCat/Reference/Profile/133810.* The final CCP includes detailed information about the planning process, Refuge, issues, and management alternative selected. The website also includes an EA, prepared in accordance with the National Environmental Policy Act (NEPA) (43 U.S.C. 4321 *et seq.*). The EA includes discussion of five management alternatives. The Service's selected alternative is reflected in the final CCP, and also in the FONSI.

A modified version of Alternative D was selected for implementation. Under the selected alternative, we will optimize species and habitat protection, with a focus on conserving listed and sensitive species and their habitats. Wildlife and habitat management activities will also include monitoring of listed and sensitive species, invasive species control, and habitat restoration. A step-down Feral Pig Monitoring and Eradication Plan and an Integrated Pest Management Plan, both provided for review and comment along with the draft CCP/EA, will also be implemented. Existing wildlife-dependent recreational uses will be expanded, per available funding and staffing. Following the completion of a hunt plan and processing of an opening package, hunting in accordance with California Department of Fish and Wildlife regulations for big game, resident small game, and resident and migratory upland game birds will be permitted on about 160 acres in the southeastern portion of Refuge. A designated multiple use trail system would be established, and leashed dogs will be permitted on multiple use trails.

National Environmental Policy Act Compliance

We announce our decision and the availability of the FONSI for the Final CCP/EA for the San Diego National Wildlife Refuge, in accordance with the National Environmental Policy Act requirements (40 CFR 1506.6(b)). We completed a thorough analysis of impacts on the human environment, which we included in the draft EA that accompanied the Draft CCP. This notice is in addition to our announcement of the completion of the CCP process on the Refuge website.

The final EA discusses the direct, indirect, and cumulative impacts of the alternatives on biological resources, cultural resources, water quality, and other environmental resources. Measures to minimize adverse environmental effects are identified and discussed in the final CCP/EA.

Martha Maciel,

Acting Regional Director, Sacramento, California.

[FR Doc. 2021–16524 Filed 8–9–21; 8:45 am]

BILLING CODE 4333–15–P

DEPARTMENT OF THE INTERIOR

Geological Survey

[DOI–2020–0017; 212G0804MD GGHDFA3500 GF0200000 GX20FA35SA40000]

Privacy Act of 1974; System of Records

AGENCY: United States Geological Survey, Interior.

ACTION: Rescindment of a system of records notice.

SUMMARY: In accordance with the Privacy Act of 1974, as amended, the Department of the Interior (DOI) is rescinding the system of records notice (SORN), INTERIOR/USGS–01, National Water Information System: NWIS. This notice was maintained by the United States Geological Survey (USGS) and is no longer required as the NWIS records are neither stored nor retrieved by use of an individual's personal identifier. All records in NWIS are stored and retrieved by site identification data. As such, NWIS does not meet the statutory definition of a system of records under the Privacy Act.

DATES: These changes take effect on August 10, 2021.

ADDRESSES: You may send comments identified by docket number [DOI–2020–0017] by any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for sending comments.
- *Email: DOI_Privacy@ios.doi.gov.* Include docket number [DOI–2020–0017] in the subject line of the message.

• *U.S. mail or hand-delivery:* Teri Barnett, Departmental Privacy Officer, U.S. Department of the Interior, 1849 C Street NW, Room 7112, Washington, DC 20240.

Instructions: All submissions received must include the agency name and docket number [DOI–2020–0017]. All comments received will be posted without change to *http://www.regulations.gov,* including any personal information provided.

Docket: For access to the docket to read background documents or comments received, go to *http://www.regulations.gov.*

You should be aware your entire comment including your personally identifiable information, such as your address, phone number, email address, or any other personal information in your comment, may be made publicly available at any time. While you may request to withhold your personally identifiable information from public review, we cannot guarantee we will be able to do so.

FOR FURTHER INFORMATION CONTACT: Cozenja Berry, Associate Privacy Officer, Office of Enterprise Information, U.S. Geological Survey, 12201 Sunrise Valley Drive, Room 4A209, Mail Stop 159, Reston, VA 20192, *privacy@usgs.gov* or (703) 648–7062.

SUPPLEMENTARY INFORMATION: Pursuant to the provisions of the Privacy Act of 1974, as amended, 5 U.S.C. 552a, DOI is rescinding the INTERIOR/USGS–01, National Water Information System: NWIS, SORN as this system of records no longer meets the statutory definition under the Privacy Act. This rescindment complies with the Privacy Act of 1974, and the Office of Management and Budget Circular A–108, *Federal Agency Responsibilities for Review, Reporting, and Publication under the Privacy Act.*

An assessment of NWIS records by the USGS Associate Privacy Officer revealed that the records contained therein are not stored, maintained or retrieved by use of an individual's personal identifier. The USGS Water Mission Area utilizes NWIS to preserve a repository of hydrologic data that is collected as part of cooperative hydrologic studies nation-wide. The records include contact information for individuals or groups that own or have physical control of access sites (site owners) where USGS collects groundwater data. Site owner contact information stored in NWIS includes name, address, phone number, and when provided an email address. The records in NWIS are saved and retrieved by use of the site identification data; records cannot be retrieved by use of the site owner's personal information. Indexing in NWIS is by the site name and number, with the site name being the name given to the body of water and the number a unique identifier assigned to that specific location (example Mississippi River near Bemidji, MN, 05200430). To narrow searches, other site identification data or attributes may be used to retrieve records (state/territory, regional water center, geographic coordinates, water body type, altitude, drainage zone, depth, or aquifer code/name). Controls are in place to ensure contact information is only accessible to authorized USGS personnel; it is not published or released to the public. Rescindment of this notice has no adverse impact on individual privacy of the site owners. The affected records will continue to be maintained under their disposition schedules as approved by the National Archives and Records Administration. This rescindment will promote the overall streamlining and management of DOI Privacy Act systems of records. Members of the public can access hydrological historical data via the NWIS web page (*https://help.waterdata.usgs.gov/*) or may request NWIS records under the provisions of the Freedom of Information Act (*https://www.usgs.gov/about/organization/science-support/foia*). This notice hereby rescinds INTERIOR/USGS–01, National Water Information System: NWIS.

SYSTEM NAME AND NUMBER:

INTERIOR/USGS–01, National Water Information System: NWIS.

HISTORY:

73 FR 54425 (September 19, 2008); modification published at 74 FR 23430 (May 19, 2009).

Teri Barnett,

Departmental Privacy Officer,Department of the Interior.

[FR Doc. 2021–16978 Filed 8–9–21; 8:45 am]

BILLING CODE 4338–11–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLNVB01000.L19900000.EX0000.21X.MO: 4500152487]

Notice of Intent To Prepare an Environmental Impact Statement for Nevada Gold Mines LLC's Goldrush Mine Project, Lander and Eureka Counties, Nevada

AGENCY: Bureau of Land Management, Interior.

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

SUMMARY: The Bureau of Land Management (BLM) will consider authorizing the proposed Nevada Gold Mines LLC (NGM) Goldrush Mine Project in Lander and Eureka Counties, Nevada.

DATES: The BLM requests comments concerning the scope of the analysis and identification of relevant information, studies, and analyses. All comments must be received by September 9, 2021. The Draft Environmental Impact Statement (EIS) is scheduled for publication in December 2021, and the Final EIS is scheduled for publication in April 2022, with a Record of Decision in May 2022. The BLM will announce dates of scoping meetings at least 15 days in advance of the meeting on the BLM National ePlanning website, *https://go.usa.gov/xsVs8.* Scoping meetings will be held online.

ADDRESSES: Send written comments to Goldrush Mine EIS c/o BLM Mount Lewis Field Office, 50 Bastian Road, Battle Mountain, NV 89820. Comments may also be sent via email to *sdistel@blm.gov.* Submit comments online at the website *https://go.usa.gov/xsVs8.*

FOR FURTHER INFORMATION CONTACT: Scott Distel, Project Manager, telephone: (775) 635–4093; address: 50 Bastian Road, Battle Mountain, Nevada 89820; email: *sdistel@blm.gov.* Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Relay Service (FRS) at 1–800–877–8339 between 8 a.m. and 8 p.m., Eastern Time, Monday through Friday.

SUPPLEMENTARY INFORMATION:

Purpose and Need for the Proposed Action

The BLM's purpose for the action is to respond to NGM's proposal as described in the proposed Plan of Operations and to analyze the environmental effects associated with the proponent's Proposed Action and alternatives to the Proposed Action. The National Environmental Policy Act (NEPA) mandates that the BLM evaluate the effects of the Proposed Action and develop alternatives when necessary to lessen any effects to environmental resources. The BLM's need for the action is established by its responsibilities under Section 302 of the Federal Land Policy and Management Act and the BLM Surface Management Regulations at 43 CFR 3809 to respond to a proposed Plan of Operations and ensure that operations prevent unnecessary or undue degradation of

public lands. NGM's purpose and need is to develop the mineral resource.

Preliminary Proposed Action and Alternatives

NGM is proposing to construct, operate, close, and reclaim a new underground mining project in the Cortez Mining District. The proposed Goldrush Mine is located approximately 30 miles south of Beowawe, Nevada, in Lander and Eureka Counties, Nevada.

The proposed Goldrush Mine Plan of Operations boundary would encompass approximately 19,895 acres, of which 772 acres would be on private land controlled by NGM and 19,123 acres on public lands administered by the BLM Battle Mountain District, Mount Lewis Field Office and BLM Elko District, Tuscarora Field Office. The proposed Goldrush Mine would include approximately 1,717 acres of new proposed disturbance and approximately 1,037 acres of existing/authorized and reclassified disturbance, for a total disturbance of approximately 2,754 acres.

The proposed underground mining and surface support activities for the Goldrush Mine would include: (1) A materials handling system for transporting ore and waste rock from the underground workings to the surface and transporting aggregate and supplies to the underground workings and surface backfill plant; (2) a dewatering system, including wells, pipelines and pipeline corridors, a water treatment plant (WTP), rapid infiltration basins (RIBs), and a multi-use shop; (3) a contact water pipeline; (4) ventilation raises; (5) a backfill aggregate paste plant and crusher; (6) a shotcrete/cemented rock fill (CRF) plant; (7) two new power lines, including a 120-kilovolt (kV) power line with two switching stations, and a 13.8-kV power line; (8) new ancillary surface facilities, including bulk material storage, access roads, power supply, stormwater controls, laydown and parking areas, lighting, growth media stockpiles, dewatering and monitoring wells, gravel pit expansion, potable water and septic systems, dry facilities (change rooms), service boreholes for electrical and fuel delivery, fire suppression system, water truck refill stations, emergency helipads, fencing, and modular information technology (IT) and communications buildings; (9) dual use of existing facilities within the nearby Cortez Mine Plan boundary; and (10) continued surface and underground exploration activities.

A fleet of over-the-road haul truck and trailer units would be used for ore transportation to either the NGM-operated Goldstrike or Gold Quarry off-site processing facilities. The Proposed Action would result in changes to the Horse Canyon Mine Plan (NVN–066896), Horse Canyon/Cortez Unified Exploration Project (HC/CUEP) Plan (NVN–066621), West Pine Valley Exploration Plan (NVN–077213), and Cortez Mine Plan (NVN–067575).

The Goldrush Mine would operate 24 hours per day, 365 days per year for approximately 24 years. The work force would be approximately 570 persons, which includes both NGM employees and contractors. The construction work force would be approximately 495 workers.

Reclamation of disturbed areas resulting from mining operations would be completed in accordance with BLM and Nevada Division of Environmental Protection (NDEP) regulations. Concurrent reclamation would take place where practicable and safe and when an area is no longer needed. Reclamation activities at the end of mining are anticipated to take approximately 36 months.

In addition to the No Action and the Proposed Action, other alternatives may be identified through scoping comments or through analysis.

Summary of Expected Impacts

The BLM has identified the following preliminary resource concerns associated with the Project: (1) Properties of Cultural and Religious Importance (PCRI) and Native American concerns. Up to 50 National Register of Historic Places-eligible or unevaluated cultural properties would be physically altered, resulting in an adverse effect to these cultural sites. Adverse impacts would occur to approximately 392 acres of the Horse Canyon PCRI. Vegetation communities important to Native American traditional values may be impacted by the Proposed Action. (2) Impacts to wildlife resources. Potential impacts include habitat change, habitat loss, alterations to water sources, fatalities as a result of collisions with vehicles, displacement due to human activity and disturbance, and impediments to movement through corridors. (3) Potential impacts to BLM sensitive species including greater sage-grouse and golden eagles. For greater sage-grouse, the Proposed Action would disturb approximately 805 acres of Priority Habitat Management Areas, 14 acres of General Habitat Management Areas, 618 acres of Other Habitat Management Areas, and 79 acres of Non-Habitat Management Areas. Exploration activities could result in up to 210 acres of additional disturbance to any of the greater sage-grouse habitat types. For golden eagles, the Proposed Action would result in the removal of 1,094 acres of foraging habitat. Additionally, eight golden eagle territories occur within one mile of the proposed Project disturbance area. (4) Potential impacts to visual resources. The Proposed Action would add form, line, texture, and color to the existing landscape. (5) Potential impacts to air quality. Modeling has determined that impacts from the Proposed Action would not exceed National Ambient Air Quality Standards for PM_{10}, $PM_{2.5}$, CO, NO_X, and SO_2. Total facility-wide Hazardous Air Pollutants (HAP) are estimated to be 1.8 tons per year (tpy), with 0.5 tpy of the highest single HAP, arsenic. The facility-wide HAP emissions are within U.S. Environmental Protection Agency (USEPA) thresholds. Greenhouse gas emissions, including off-site ore transport, are estimated to be 96,624 tpy CO_2e. Mercury emissions are estimated to be 0.014 tpy. (6) Potential impacts to surface and groundwater resources. Potential impacts to seep, spring, and stream flow may occur from proposed dewatering operations if the source of the water is connected to the regional aquifer. Dewatering operations would also result in a lowering of the local groundwater table. Sedimentation and erosion may also occur due to Project-related surface disturbance. (7) Potential impacts to traffic. The Proposed Action would result in two ore hauling trucks per hour on the transportation route, as well as 89 trips each shift for employees and contractors during construction and up to 71 trips during operations along the transportation route. Changes in the level of service at some locations along the transportation route may occur, but there would be no degrading of the level of service below acceptable levels. (8) Potential impacts to livestock grazing. The Proposed Action would result in new surface disturbance of 1,717 acres, which would impact forage utilized by livestock. Approximately 119 Animal Unit Months (AUMs) would be impacted in the Carico Lake, Grass Valley, JD, and South Buckhorn allotments. The 210 acres of proposed exploration disturbance may result in an impact ranging from 9 to 19 AUMs, depending on the allotment in which the activities occur. (9) Potential impacts on vegetation communities and soil productivity. The Proposed Action would result in disturbance to soil and removal of vegetation on 1,717 acres. (10) Potential for subsidence. In the post-closure period, underground mine induced rock collapse may occur over open workings and result in the

development of localized ground deformation/subsidence type features, which are unlikely to impact surface features due to the strength and thickness of the overlying rock, and any surface expression is anticipated to be local to the immediate mining area and not propagate extensively. Additionally, at the end of mining, model-predicted subsidence from dewatering may cause a four-inch contour of land with the potential for development of fissures. (11) Reclamation to reduce permanent disturbance. Approximately 2,232 acres of total surface disturbance would be reclaimed and would return to post-reclamation land uses, including open space, grazing, dispersed recreation, and wildlife habitat, while 523 acres would remain permanently altered.

The proposed project has the potential to affect golden eagle nests and territories; therefore, NGM has prepared an Eagle Conservation Plan (ECP) and has requested an incidental take permit for golden eagles in the area in which NGM proposes to conduct mining operations. The U.S. Fish and Wildlife Service (USFWS) is considering the applicant's request for incidental take, as allowed under the Bald and Golden Eagle Protection Act (Eagle Act) for the purpose of resource development and recovery operations. The USFWS will evaluate the applicant's ECP, which describes NGM's request for incidental take authorization for impacts resulting from their proposed mining operations. The DEIS will analyze any potential effects and impacts of the proposed project on golden eagles and may also analyze impacts and develop alternatives associated with the USFWS eagle take permit decision under the Eagle Act.

Anticipated Permits and Authorizations

The BLM anticipates that the following permits and authorizations will be required for the mine:

- Air Quality Operating Permit: NDEP (Bureau of Air Pollution Control)
- Eagle Take Permit: USFWS
- Explosives Permit: U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives
- General Stormwater Discharge Permit: NDEP (Bureau of Water Pollution Control)
- Hazardous Materials Storage Permit: Nevada Department of Public Safety, State Fire Marshall, and State Emergency Response Commission
- Industrial Artificial Pond Permit: Nevada Department of Wildlife (Habitat Division)
- Jurisdictional Delineation Report Concurrence: U.S. Army Corps of Engineers
- Liquefied Petroleum Gas License: Nevada Board of the Regulation of Liquefied Petroleum Gas Notification of Commencement of Operations MSHA
- Permit to Appropriate Water: Nevada Division of Water Resources
- Permit to Operate: Nevada Division of Minerals
- Plan of Operations/Record of Decision: BLM
- Potable Water System Permit: Nevada Bureau of Safe Drinking Water
- Radioactive Materials License: Nevada Division of Public and Behavioral Health
- Reclamation Permit and Reclamation Cost Determination: NDEP (Bureau of Mining Regulation and Reclamation)
- Section 401 Certification: NDEP (Bureau of Water Pollution Control)
- Septic Treatment Permit, Holding Tank Permit, Sewage Disposal System Permit: NDEP (Bureau of Water Pollution Control)
- Water Pollution Control Permit: NDEP (Bureau of Mining Regulation and Reclamation)

Schedule for the Decision-Making Process

The BLM anticipates a decision in May of 2022.

Public Scoping Process

This notice of intent initiates the scoping process, which guides the development of the environmental impact statement. Scoping meetings will be virtual. An announcement about when and how to access the virtual meetings online will be posted on the BLM's project website.

The purpose of public scoping is to identify relevant issues that will influence the scope of the environmental analysis, including alternatives, and guide the process for developing the environmental impact statement. The BLM will use and coordinate the NEPA public scoping to help fulfill the public involvement requirements under the National Historic Preservation Act (54 U.S.C. 306108) as provided in 36 CFR 800.2(d)(3). The information about historic and cultural resources within the area potentially affected by the proposed action will assist the BLM in identifying and evaluating impacts to such resources.

The BLM will conduct government-to-government consultation with Indian Tribes in accordance with Executive Order 13175 and other policies. Agencies will give due consideration to Tribal concerns, including impacts on Indian trust assets and treaty rights and potential impacts to cultural resources.

The BLM invites Federal, State, and local agencies, along with Tribes and other stakeholders that may be interested in or affected by the proposed Goldrush Mine to participate in scoping. Agencies with regulatory authority or special expertise, if eligible, may request or be requested by the BLM to participate in the development of the environmental analysis as a cooperating agency.

Request for Identification of Potential Alternatives, Information, and Analyses Relevant to the Proposed Action

The BLM requests assistance with identifying potential alternatives to the Proposed Action to be considered. As alternatives should resolve a problem with the Proposed Action, please indicate the purpose of the suggested alternative. The BLM also requests that potential impacts that should be analyzed be identified. Impacts should be a result of the action; therefore, please identify the activity and the potential impact that should be analyzed. Information that reviewers have that would assist in the development of alternatives or analysis of resources issues is also helpful.

Lead and Cooperating Agencies

The BLM is the lead agency. Cooperating agencies include the USFWS, the USEPA, the Nevada Department of Wildlife, the Nevada Department of Transportation, and Eureka County.

Decision Maker

The BLM Battle Mountain District Manager, Doug Furtado, is the responsible official.

Nature of Decision To Be Made

The BLM will issue a decision on the proposed Plan of Operations for the Goldrush mine 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.

Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted

anonymously will also be accepted and considered.

Authority: 40 CFR 1501.7.

Bradlee A. Matthews,

Acting Field Manager, Mount Lewis Field Office, Battle Mountain District.

[FR Doc. 2021–17040 Filed 8–9–21; 8:45 am]

BILLING CODE 4310–HC–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–WASO–NRNHL–DTS#–32381; PPWOCRADI0, PCU00RP14.R50000]

National Register of Historic Places; Notification of Pending Nominations and Related Actions

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: The National Park Service is soliciting electronic comments on the significance of properties nominated before July 24, 2021, for listing or related actions in the National Register of Historic Places.

DATES: Comments should be submitted electronically by August 25, 2021.

ADDRESSES: Comments are encouraged to be submitted electronically to *National_Register_Submissions@nps.gov* with the subject line ''Public Comment on <property or proposed district name, (County) State>.'' If you have no access to email you may send them via U.S. Postal Service and all other carriers to the National Register of Historic Places, National Park Service, 1849 C Street NW, MS 7228, Washington, DC 20240.

FOR FURTHER INFORMATION CONTACT: Sherry A. Frear, Chief, National Register of Historic Places/National Historic Landmarks Program, 1849 C Street NW, MS 7228, Washington, DC 20240, *sherry_frear@nps.gov,* 202–913–3763.

SUPPLEMENTARY INFORMATION: The properties listed in this notice are being considered for listing or related actions in the National Register of Historic Places. Nominations for their consideration were received by the National Park Service before July 24, 2021. Pursuant to Section 60.13 of 36 CFR part 60, comments are being accepted concerning the significance of the nominated properties under the National Register criteria for evaluation.

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.

Nominations submitted by State or Tribal Historic Preservation Officers:

ILLINOIS

Bureau County

Oakland Cemetery Historic District, 1013 Park Ave. West, Princeton, SG100006864

Cook County

Ravisloe Country Club, 18231 Park Ave., Homewood, SG100006865

Kankakee County

Pope Brace Company Building, 197 South West Ave., Kankakee, SG100006866

McLean County

Fairview Sanatorium, 905 North Main St., Normal, SG100006867

Winnebago County

Witwer House, 504 North 1st St., Rockford, SG100006872

MASSACHUSETTS

Worcester County

W.S. Reed Toy Company-Wachusett Shirt Company Historic District 41–45, Summer St., Leominster, SG100006863

MICHIGAN

Leelanau County

South Fox Island Light Station, South Fox Island, Leelanau Township vicinity, SG100006861

Wayne County

Alpha House, (The Civil Rights Movement and the African American Experience in 20th Century Detroit MPS), 293 Eliot St., Detroit, MP100006860

OHIO

Lucas County

Madison Avenue Historic District Superior Street (Boundary Increase), 311, 315–317, 319–323, 325–327, 329, 331–333, 335 North Superior St., Toledo, BC100006862

WASHINGTON

Walla Walla County

Walla Walla Downtown Historic District, Roughly bounded by Rose St., Palouse St., alley between Alder and Popular Sts., and 3rd Ave., Walla Walla, SG100006868

Additional documentation has been received for the following resources:

MINNESOTA

Yellow Medicine County

Canby Commercial Historic District (Additional Documentation), Roughly 1st and 2nd Sts. and St. Olaf Ave., Canby, AD80002189

VIRGINIA

Brunswick County

Lawrenceville Historic District (Additional Documentation) Roughly bounded by West 6th Ave., Maria St., Lawrenceville townline, Rose Cr., and Thomas St., Lawrenceville vicinity, AD00000313

Nominations submitted by Federal Preservation Officers:

The State Historic Preservation Officer reviewed the following nominations and responded to the Federal Preservation Officer within 45 days of receipt of the nominations and supports listing the properties in the National Register of Historic Places.

GUAM

Guam County

Dådi Beach Japanese Bunker, Address Restricted, Santa Rita vicinity, SG100006869

Dobo Spring Latte Set Complex, Address Restricted, Santa Rita vicinity, SG100006870

Maulap River Complex Site, Address Restricted, Santa Rita vicinity, SG100006871

Authority: Section 60.13 of 36 CFR part 60.

Dated: July 27, 2021.

Sherry A. Frear,

Chief, National Register of Historic Places/National Historic Landmarks Program.

[FR Doc. 2021–17010 Filed 8–9–21; 8:45 am]

BILLING CODE 4312–52–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337–TA–1082 (Modification)]

Certain Gas Spring Nailer Products and Components Thereof; Notice of a Commission Determination To Adopt a Recommended Determination; Termination of the Modification Proceeding

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission (''the Commission'') has determined to adopt a recommended determination (''RD'') of the presiding chief administrative law judge (''CALJ'') finding that redesigned products of respondent Koki Holdings America Ltd. (''Koki'') of Braselton, Georgia are not covered by the limited exclusion order (''LEO'') and cease and desist order (''CDO'') issued in the underlying investigation. The Commission has terminated the modification proceeding.

FOR FURTHER INFORMATION CONTACT: Clint Gerdine, Esq., Office of the

General Counsel, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436, telephone (202) 708–2310. Copies of non-confidential documents filed in connection with this investigation may be viewed on the Commission's electronic docket (EDIS) at *https://edis.usitc.gov.* For help accessing EDIS, please email *EDIS3Help@usitc.gov.* General information concerning the Commission may also be obtained by accessing its internet server at *https://www.usitc.gov.* Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal, telephone (202) 205–1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on November 20, 2017, based on a complaint filed on behalf of Kyocera Senco Brands, Inc. (now known as Kyocera Senco Industrial Tools, Inc.) (''Kyocera'') of Cincinnati, Ohio. 82 FR 55118–19 (Nov. 20, 2017). The complaint, as amended and supplemented, alleged violations of the Tariff Act of 1930, as amended, 19 U.S.C. 1337 (''section 337''), based upon the importation into the United States, the sale for importation, and the sale within the United States after importation of certain gas spring nailer products and components thereof by reason of infringement of, *inter alia,* claims 1, 10, and 16 of U.S. Patent Nos. 8,387,718 (''the '718 patent''). The complaint further alleged the existence of a domestic industry. The Commission's notice of investigation named Koki as a respondent. The Office of Unfair Import Investigations did not participate in the investigation.

On March 5, 2020, the Commission issued its final determination finding a violation of section 337 based on infringement of the asserted claims of the '718 patent. 85 FR 14244–46 (Mar. 11, 2020). The Commission issued an LEO directed against Koki's infringing products, and a CDO directed against Koki. *Id.* On July 1, 2020, Koki filed an appeal to the U.S. Court of Appeals for the Federal Circuit, which is currently pending (Appeal No. 20–2050).

On June 30, 2020, U.S. Customs and Border Protection (''CBP'') issued a ruling, pursuant to 19 CFR part 177, that the redesigned products are outside of the scope of the LEO issued in the investigation. *See* RX–1001 (CBP Ruling); CX–1017C (Ltr. Requesting CBP Ruling). In response, on August 17, 2020, Kyocera petitioned for institution of a modification proceeding, requesting the Commission to determine if the redesigned products are outside of the scope of the LEO and CDO. On August 27, 2020, Koki opposed the petition.

On September 16, 2020, the Commission instituted a modification proceeding to determine whether the redesigned products are covered by the LEO and CDO. *See* 85 FR 59543–44 (Sept. 22, 2020); Comm'n Order (Sept. 16, 2020). On October 22, 2020, the Commission issued a revised modification institution order that clarified that the presiding ALJ would consider, in the first instance, any issues regarding potentially impermissible arguments raised by Kyocera in the course of the modification proceeding. *See* Revised Comm'n Order (Oct. 22, 2020).

On July 2, 2021, the CALJ issued the subject RD finding that Koki's redesigned products are not covered by the LEO and CDO.

On July 16, 2021, Kyocera submitted comments on the RD. On July 22, 2021, Koki filed a response to Kyocera's comments.

Having reviewed the record and the parties' submissions, the Commission has determined to adopt the RD's finding that the redesigned products do not infringe claims 1, 10, and 16 of the '718 patent and thus are not covered by the LEO and CDO. The Commission has issued a contemporaneous order indicating that the redesigned products are exempt from the scope of the LEO and CDO.

The modification proceeding is terminated.

The Commission vote for this determination took place on August 4, 2021.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, and in Part 210 of the Commission's Rules of Practice and Procedure, 19 CFR part 210.

By order of the Commission.

Issued: August 4, 2021.

Lisa Barton,

Secretary to the Commission.

[FR Doc. 2021–16976 Filed 8–9–21; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337–TA–1274]

Certain Optical Enclosures, Components Thereof, and Products Containing the Same; Institution of Investigation

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that a complaint was filed with the U.S. International Trade Commission on July 2, 2021, under section 337 of the Tariff Act of 1930, as amended, on behalf of Criterion Technology, Inc. of Thomaston, Georgia. A supplement was filed on July 23, 2021. The complaint alleges violations of section 337 based upon the importation into the United States, and in the sale of certain optical enclosures, components thereof, and products containing the same by reason of the misappropriation of trade secrets, the threat or effect of which is to destroy or substantially injure a domestic industry. The complainant requests that the Commission institute an investigation and, after the investigation, issue a limited exclusion order and cease and desist orders.

ADDRESSES: The complaint, except for any confidential information contained therein, may be viewed on the Commission's electronic docket (EDIS) at *https://edis.usitc.gov.* For help accessing EDIS, please email *EDIS3Help@usitc.gov.* Hearing impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at (202) 205–2000. General information concerning the Commission may also be obtained by accessing its internet server at *https://www.usitc.gov.*

FOR FURTHER INFORMATION CONTACT: Pathenia M. Proctor, The Office of Unfair Import Investigations, U.S. International Trade Commission, telephone (202) 205–2560.

SUPPLEMENTARY INFORMATION:

AUTHORITY: The authority for institution of this investigation is contained in section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, and in section 210.10 of the Commission's Rules of Practice and Procedure, 19 CFR 210.10 (2020).

SCOPE OF INVESTIGATION: Having considered the complaint, the U.S. International Trade Commission, on August 4, 2021, ORDERED THAT—

(1) Pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, an investigation be instituted to determine whether there is a violation of subsection (a)(1)(A) of section 337 in the importation into the United States, or in the sale of certain products identified in paragraph (2) by reason of misappropriation of trade

secrets, the threat or effect of which is to destroy or substantially injure an industry in the United States;

(2) Pursuant to section 210.10(b)(1) of the Commission's Rules of Practice and Procedure, 19 CFR 210.10(b)(1), the plain language description of the accused products or category of accused products, which defines the scope of the investigation, is ''polycarbonate and nylon optical enclosures'';

(3) For the purpose of the investigation so instituted, the following are hereby named as parties upon which this notice of investigation shall be served:

(a) The complainant is:

Criterion Technology, Inc., 101 McIntosh Parkway, Thomaston, GA 30289.

(b) The respondents are the following entities alleged to be in violation of section 337, and are the parties upon which the complaint is to be served:

Velodyne Lidar USA, Inc., 5521 Hellyer Avenue, San Jose, CA 95138.

Fujian Fran Optics Co., Ltd., No. 25, Standard Workshop, Juyuanzhou, Jinshan Industrial District, Fuzhou, 350002, Fujian, China

(c) The Office of Unfair Import Investigations, U.S. International Trade Commission, 500 E Street SW, Suite 401, Washington, DC 20436; and

(4) For the investigation so instituted, the Chief Administrative Law Judge, U.S. International Trade Commission, shall designate the presiding Administrative Law Judge.

Responses to the complaint and the notice of investigation must be submitted by the named respondents in accordance with section 210.13 of the Commission's Rules of Practice and Procedure, 19 CFR 210.13. Pursuant to 19 CFR 201.16(e) and 210.13(a), as amended in 85 FR 15798 (March 19, 2020), such responses will be considered by the Commission if received not later than 20 days after the date of service by the complainant of the complaint and the notice of investigation. Extensions of time for submitting responses to the complaint and the notice of investigation will not be granted unless good cause therefor is shown.

Failure of a respondent to file a timely response to each allegation in the complaint and in this notice may be deemed to constitute a waiver of the right to appear and contest the allegations of the complaint and this notice, and to authorize the administrative law judge and the Commission, without further notice to the respondent, to find the facts to be as alleged in the complaint and this notice and to enter an initial determination and a final determination containing such findings, and may result in the issuance of an exclusion order or a cease and desist order or both directed against the respondent.

By order of the Commission.

Issued: August 4, 2021.

Lisa Barton,

Secretary to the Commission.

[FR Doc. 2021–16975 Filed 8–9–21; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Proposed Consent Decree Under the Clean Water Act

On August 2, 2021, the Department of Justice lodged a proposed consent decree with the United States District Court for the Northern District of West Virginia (Clarksburg Division) in the lawsuit entitled *United States of America et al.* v. *LPG Land & Development Corporation,* No. 1:21–cv–33–TSK.

The United States and the State of West Virginia, by and through the West Virginia Department of Environmental Protection, filed this lawsuit against LPG Land & Development Corporation (''Defendant''), pursuant to the Clean Water Act and the West Virginia Water Pollution Control Act. The United States and West Virginia seek injunctive relief and civil penalties from the Defendant for violations relating to the discharge of pollutants into waters of the United States without a permit, and in violation of a permit, at the Mon Fayette Industrial Park located in Morgantown, West Virginia. The proposed consent decree resolves these allegations by requiring the Defendant to purchase mitigation bank credits and pay a civil penalty of $125,000 (with half paid to the United States and the other half paid to the State).

The publication of this notice opens a period for public comment on the consent decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and should refer to *United States of America et al.* v. *LPG Land & Development Corporation,* D.J. Ref. Nos. 90–5–1–1–20587 & 90–5–1–1–20587/1. 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 e-mail	*pubcomment-ees.enrd@usdoj.gov.*
By mail	Assistant Attorney General, U.S. DOJ—ENRD, P.O. Box 7611, Washington, D.C. 20044–7611.

During the public comment period, the consent decree may be examined and downloaded at this Justice Department website: *https://www.justice.gov/enrd/consent-decrees.* 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 $108.50 (25 cents per page reproduction cost) payable to the United States Treasury. For a paper copy without the appendices, the cost is $12.75.

Susan Akers,

Assistant Section Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 2021–16974 Filed 8–9–21; 8:45 am]

BILLING CODE 4410–15–P

DEPARTMENT OF JUSTICE

[OMB Number 1121–0336]

Agency Information Collection Activities; Proposed eCollection eComments Requested; Revision of a Currently Approved Collection: Office for Victims of Crime Training and Technical Assistance Center—Trafficking Information Management System (TIMS)

AGENCY: Office for Victims of Crime, Department of Justice.

ACTION: 60-Day notice.

SUMMARY: The Department of Justice (DOJ), Office of Justice Programs, Office for Victims of Crime, will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995.

DATES: Comments are encouraged and will be accepted for 60 days until October 12, 2021.

FOR FURTHER INFORMATION CONTACT: If you have additional comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection

instrument with instructions or additional information, please contact Shelby Jones Crawford, (202) 532–3611, Program Manager, Office for Victims of Crime, Office of Justice Programs, Department of Justice, 810 7th Street NW, Washington, DC 20530.

SUPPLEMENTARY INFORMATION: Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

—Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Bureau of Justice Statistics, 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;
—Evaluate whether and if so how the quality, utility, and clarity of the information to be collected can be enhanced; and
—Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

Overview of this information collection:

1. *Type of Information Collection:* Revision of Existing Collection.

2. *The Title of the Form/Collection:* Office for Victims of Crime Training and Technical Assistance Center- Trafficking Information Management System (TIMS).

3. *The agency form number, if any, and the applicable component of the Department sponsoring the collection:* NA. The applicable component within the Department of Justice is the Office for Victims of Crime, in the Office of Justice Programs.

4. *Affected public who will be asked or required to respond, as well as a brief abstract:*

Primary: OVC Grantees.

Abstract: The current package for OMB approval is designed to simplify performance reporting for OVC grantees through the OVC Trafficking Information Management System (TIMS) Online system, a Web-based database and reporting system for the Victims of Human Trafficking Grant and the Enhanced Collaborative Model Grant initiatives. OVC will require OVC Grantees to use this electronic tool to submit grant performance data, including demographics about human trafficking victims. Since 2012, OVC has published annual analyses of these data to provide the crime victims' field with stronger evidence for practices and programs.

5. *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* There are approximately 60 OVC Services to Victims of Human Trafficking Grantees per six-month reporting period. On average, it should take each grantee one hour to seven hours, depending on client case load per reporting period, to enter information into TIMS Online. There are two reporting periods per year.

6. *An estimate of the total public burden (in hours) associated with the collection:* 480 hours (average 60 OVC grantees * average 4 hours * 2 times per year).

If additional information is required contact: Jerri Murray, Department Clearance Officer, United States Department of Justice, Justice Management Division, Policy and Planning Staff, Two Constitution Square, 145 N Street NE, 3E.405B, Washington, DC 20530.

Dated: August 3, 2021

Melody Braswell,

Department Clearance Officer for PRA, U.S. Department of Justice.

[FR Doc. 2021–16893 Filed 8–9–21; 8:45 am]

BILLING CODE 4410–18–P

DEPARTMENT OF LABOR

Employment and Training Administration

Agency Information Collection Activities; Comment Request; ETA 9161—Self Employment Assistance (SEA)

ACTION: Notice.

SUMMARY: The Department of Labor's (DOL's) Employment and Training Administration (ETA) is soliciting comments concerning a proposed extension for the authority to conduct the information collection request (ICR) titled *ETA 9161—Self Employment Assistance (SEA).* This comment request is part of continuing Departmental efforts to reduce paperwork and respondent burden in accordance with the Paperwork Reduction Act of 1995 (PRA).

DATES: Consideration will be given to all written comments received by October 12, 2021.

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 by contacting Sybil Felton by telephone at 202–693–3741, TTY 1–877–889–5627 (these are not toll-free numbers), or by email at *Felton.Sybil.O@dol.gov.*

Submit written comments about, or requests for a copy of, this ICR by mail or courier to the U.S. Department of Labor, Employment and Training Administration, Office of Unemployment Insurance, Room S–4520, 200 Constitution Avenue NW, Washington, DC 20210, by email: *Felton.Sybil.O@dol.gov;* or by Fax (202) 693–3975.

FOR FURTHER INFORMATION CONTACT: David H. King by telephone at 202–693–2698 (this is not a toll-free number) or by email at *King.David.H@dol.gov.*

SUPPLEMENTARY INFORMATION: DOL, as part of continuing efforts to reduce paperwork and respondent burden, conducts a pre-clearance consultation program to provide the general public and Federal agencies an opportunity to comment on proposed and/or continuing collections of information before submitting them to the Office of Management and Budget (OMB) for final approval. This program helps to ensure requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements can be properly assessed.

The Noncitizen Benefit Clarification and Other Technical Amendments Act of 1998 (Pub. L. 105–306) permanently authorized the SEA program, which is a reemployment program that helps Unemployment Insurance (UI) claimants start their own businesses. Public Law 112–96, the Middle Class Tax Relief and Job Creation Act of 2012 (the 2012 Act), expanded the SEA program to provide states the opportunity to allow UI claimants receiving Extended Benefits to participate in the SEA program. Currently, five states use this reemployment program.

Section 2183(b)(1) of the 2012 Act directs the Secretary of Labor to establish reporting requirements for States that have established SEA programs, which shall include reporting on:

(A) The total number of individuals who received unemployment compensation and (i) were referred to a SEA program; (ii) participated in such

program; and (iii) received an allowance under such program;

(B) the total amount of allowances provided to individuals participating in a SEA program;

(C) the total income (as determined by survey or other appropriate method) for businesses that have been established by individuals participating in a SEA program, as well as the total number of individuals employed through such businesses; and

(D) any additional information, as determined appropriate by the Secretary. ETA currently uses Form ETA–9161 as an electronic reporting mechanism to collect this required information. In addition to Public Law 112–96, collection of data is used for oversight of the program as authorized under Section 303(a)(6) of the Social Security Act. Also, the code of Federal Regulations authorizes this information collection See 5 CFR 1320.5(a) and 1320.6.

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 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.

Interested parties are encouraged to provide comments to the contact shown in the **ADDRESSES** section. Comments must be written to receive consideration, and they will be summarized and included in the request for OMB approval of the final ICR. In order to help ensure appropriate consideration, comments should mention OMB control number 1205–0490.

Submitted comments will also be a matter of public record for this ICR and posted on the internet, without redaction. DOL encourages commenters not to include personally identifiable information, confidential business data, or other sensitive statements/information in any comments.

DOL 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–ETA.

Type of Review: Extension without changes.

Title of Collection: Self Employment Assistance.

Form: ETA 9161.

OMB Control Number: 1205–0490.

Affected Public: State Workforce Agencies.

Estimated Number of Respondents: 3,105.

Frequency: Quarterly.

Total Estimated Annual Responses: 24,820.

Estimated Average Time per Response: Varies.

Estimated Total Annual Burden Hours: 12,440 hours.

Total Estimated Annual Other Cost Burden: $0.

Authority: 44 U.S.C. 3506(c)(2)(A).

Suzan LeVine,

Acting Assistant Secretary for Employment and Training, Labor.

[FR Doc. 2021–16991 Filed 8–9–21; 8:45 am]

BILLING CODE 4510–FW–P

DEPARTMENT OF LABOR

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Vehicle-Mounted Elevating and Rotating Work Platforms Standard (Aerial Lifts)

ACTION: Notice of availability; request for comments.

SUMMARY: The Department of Labor (DOL) is submitting this Occupational Safety and Health Administration (OSHA)-sponsored information collection request (ICR) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995 (PRA). Public comments on the ICR are invited.

DATES: The OMB will consider all written comments that agency receives on or before September 9, 2021.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function.

Comments are invited on: (1) Whether the collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; (2) if the information will be processed and used in a timely manner; (3) the accuracy of the agency's estimates of the burden and cost of the collection of information, including the validity of the methodology and assumptions used; (4) ways to enhance the quality, utility and clarity of the information collection; and (5) ways to minimize the burden of the collection of information on those who are to respond, including the use of automated collection techniques or other forms of information technology.

FOR FURTHER INFORMATION CONTACT: Crystal Rennie by telephone at 202–693–0456 or by email at *DOL_PRA_PUBLIC@dol.gov.*

SUPPLEMENTARY INFORMATION: The Standard requires that when aerial lifts are ''field modified'' for uses other than those intended by the manufacturer, the manufacturer or other equivalent entity, such as a nationally recognized testing laboratory, must certify in writing that the modification is in conformity with all applicable provisions of ANSI A92.2–1969 and the OSHA standard and that the modified aerial lift is at least as safe as the equipment was before modification. Employers are to maintain the certification record and make it available to OSHA compliance officers. This record provides assurance to employers, workers, and compliance officers that the modified aerial lift is safe for use; thereby, preventing failure while workers are being elevated. The certification record also provides the most efficient means for the compliance officers to determine that an employer is complying with the Standard. For additional substantive information about this ICR, see the related notice published in the **Federal Register** on May 5, 2021 (86 FR 23434).

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 the OMB approves it 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 OMB Control Number. *See* 5 CFR 1320.5(a) and 1320.6.

DOL seeks PRA authorization for this information collection for three (3) years. OMB authorization for an ICR cannot be for more than three (3) years without renewal. The DOL notes that information collection requirements submitted to the OMB for existing ICRs receive a month-to-month extension while they undergo review.

Agency: DOL–OSHA.

Title of Collection: Vehicle-Mounted Elevating and Rotating Work Platforms Standard (Aerial Lifts).

OMB Control Number: 1218–0230.

Affected Public: Private Sector: Businesses or other for-profits.

Total Estimated Number of Respondents: 1,000.

Total Estimated Number of Responses: 1,000.

Total Estimated Annual Time Burden: 17 hours.

Total Estimated Annual Other Costs Burden: $0.

Authority: 44 U.S.C. 3507(a)(1)(D).

Crystal Rennie,

Senior PRA Analyst.

[FR Doc. 2021–16998 Filed 8–9–21; 8:45 am]

BILLING CODE 4510–26–P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice (21–054)]

Performance Review Board, Senior Executive Service (SES)

AGENCY: National Aeronautics and Space Administration (NASA).

ACTION: Notice of Membership of SES Performance Review Board.

SUMMARY: The Civil Service Reform Act of 1978, Public Law 95–454 (Section 405) requires that appointments of individual members to the Performance Review Board (PRB) be published in the **Federal Register**. The performance review function for the SES in NASA is being performed by the NASA PRB. The following individuals are serving on the Board:

Performance Review Board

Chairperson, Associate Administrator, NASA Headquarters
Deputy Associate Administrator, NASA Headquarters
Chief Human Capital Officer, NASA Headquarters
Associate Administrator for the Office of Diversity and Equal Opportunity, NASA Headquarters
Associate Administrator for Human Exploration and Operations, NASA Headquarters
Chief Information Officer, NASA Headquarters
Center Director, NASA Glenn Research Center

Cheryl Parker,

Federal Register Liaison Officer.

[FR Doc. 2021–17017 Filed 8–9–21; 8:45 am]

BILLING CODE 7510–13–P

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

National Endowment for the Humanities

Meeting of Humanities Panel

AGENCY: National Endowment for the Humanities; National Foundation on the Arts and the Humanities.

ACTION: Notice of meeting.

SUMMARY: The National Endowment for the Humanities (NEH) will hold eight meetings, by videoconference, of the Humanities Panel, a federal advisory committee, during September 2021. The purpose of the meetings is for panel review, discussion, evaluation, and recommendation of applications for financial assistance under the National Foundation on the Arts and the Humanities Act of 1965.

DATES: See **SUPPLEMENTARY INFORMATION** for meeting dates. The meetings will open at 8:30 a.m. and will adjourn by 5:00 p.m. on the dates specified below.

FOR FURTHER INFORMATION CONTACT: Elizabeth Voyatzis, Committee Management Officer, 400 7th Street SW, Room 4060, Washington, DC 20506; (202) 606–8322; *evoyatzis@neh.gov.*

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (5 U.S.C. app.), notice is hereby given of the following meetings:

1. Date: September 1, 2021

This video meeting will discuss applications on the topics of Art and Literature, for the Digital Projects for the Public: Production Grants program, submitted to the Division of Public Programs.

2. Date: September 2, 2021

This video meeting will discuss applications on the topics of U.S. History and Civics, for the Digital Projects for the Public: Production Grants program, submitted to the Division of Public Programs.

3. Date: September 8, 2021

This video meeting will discuss applications on the topic of World History, for the Digital Projects for the Public: Production Grants program, submitted to the Division of Public Programs.

4. Date: September 8, 2021

This video meeting will discuss applications on the topic of Scholarly Communications, for the Digital Humanities Advancement Grants program, submitted to the Office of Digital Humanities.

5. Date: September 9, 2021

This video meeting will discuss applications on the topic of Computation Analysis, for the Digital Humanities Advancement Grants program, submitted to the Office of Digital Humanities.

6. Date: September 16, 2021

This video meeting will discuss applications on the topics of Data Visualization and Spatial Humanities, for the Digital Humanities Advancement Grants program, submitted to the Office of Digital Humanities.

7. Date: September 20, 2021

This video meeting will discuss applications on the topics of Pedagogy and Public Humanities, for the Digital Humanities Advancement Grants program, submitted to the Office of Digital Humanities.

8. Date: September 22, 2021

This video meeting will discuss applications on the topics of Collections and Access, for the Digital Humanities Advancement Grants program, submitted to the Office of Digital Humanities.

Because these meetings will include review of personal and/or proprietary financial and commercial information given in confidence to the agency by grant applicants, the meetings will be closed to the public pursuant to sections 552b(c)(4) and 552b(c)(6) of Title 5, U.S.C., as amended. I have made this determination pursuant to the authority granted me by the Chairman's Delegation of Authority to Close Advisory Committee Meetings dated April 15, 2016.

Dated: August 5, 2021.

Elizabeth Voyatzis,

Committee Management Officer.

[FR Doc. 2021–17048 Filed 8–9–21; 8:45 am]

BILLING CODE 7536–01–P

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

National Endowment for the Humanities

Meeting of Humanities Panel

AGENCY: National Endowment for the Humanities; National Foundation on the Arts and the Humanities.

ACTION: Notice of meeting.

SUMMARY: The National Endowment for the Humanities (NEH) will hold twenty-seven meetings, by videoconference, of the Humanities Panel, a federal advisory committee, during August 2021. The purpose of the meetings is for panel review, discussion, evaluation, and recommendation of applications for financial assistance under the National Foundation on the Arts and the Humanities Act of 1965.

DATES: See **SUPPLEMENTARY INFORMATION** for meeting dates. The meetings will open at 8:30 a.m. and will adjourn by 5:00 p.m. on the dates specified below.

FOR FURTHER INFORMATION CONTACT: Elizabeth Voyatzis, Committee Management Officer, 400 7th Street SW, Room 4060, Washington, DC 20506; (202) 606–8322; *evoyatzis@neh.gov.*

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (5 U.S.C. app.), notice is hereby given of the following meetings:

1. Date: August 2, 2021

This video meeting will discuss applications on the topics of Art and American Studies, for the Fellowships grant program, submitted to the Division of Research Programs.

2. Date: August 2, 2021

This video meeting will discuss applications on the topics of Comparative Literature, Literacy Theory, Middle Eastern Studies, and Migration Studies, for the Fellowships grant program, submitted to the Division of Research Programs.

3. Date: August 2, 2021

This video meeting will discuss applications for the Humanities Initiatives at Colleges and Universities grant program, submitted to the Division of Education Programs.

4. Date: August 3, 2021

This video meeting will discuss applications for the Humanities Initiatives at Colleges and Universities grant program, submitted to the Division of Education Programs.

5. Date: August 3, 2021

This video meeting will discuss applications on the topics of Ancient to Renaissance Literature and Studies, for the Fellowships grant program, submitted to the Division of Research Programs.

6. Date: August 3, 2021

This video meeting will discuss applications on the topics of U.S. History, Political Science, and Jurisprudence, for the Fellowships grant program, submitted to the Division of Research Programs.

7. Date: August 4, 2021

This video meeting will discuss applications on the topics of Religious Studies and American Studies, for the Fellowships grant program, submitted to the Division of Research Programs.

8. Date: August 4, 2021

This video meeting will discuss applications on the topics of Film, Media, Communication, and Rhetoric, for the Fellowships grant program, submitted to the Division of Research Programs.

9. Date: August 4, 2021

This video meeting will discuss applications for the Humanities Initiatives at Colleges and Universities grant program, submitted to the Division of Education Programs.

10. Date: August 5, 2021

This video meeting—the first of two on this date—will discuss applications for the Humanities Initiatives at Colleges and Universities grant program, submitted to the Division of Education Programs.

11. Date: August 5, 2021

This video meeting—the second of two on this date—will discuss applications for the Humanities Initiatives at Colleges and Universities grant program, submitted to the Division of Education Programs.

12. Date: August 5, 2021

This video meeting will discuss applications on the topics of Philosophy and Ethics, for the Fellowships grant program, submitted to the Division of Research Programs.

13. Date: August 5, 2021

This video meeting will discuss applications on the topics of U.S. History and Environmental and Science Studies, for the Fellowships grant program, submitted to the Division of Research Programs.

14. Date: August 6, 2021

This video meeting will discuss applications on the topics of Music, Dance, and Theater, for the Fellowships grant program, submitted to the Division of Research Programs.

15. Date: August 6, 2021

This video meeting will discuss applications on the topics of American Literature and Studies, for the Fellowships grant program, submitted to the Division of Research Programs.

16. Date: August 6, 2021

This video meeting will discuss applications for the Humanities Initiatives at Colleges and Universities grant program, submitted to the Division of Education Programs.

17. Date: August 9, 2021

This video meeting—the first of two on this date—will discuss applications for the Humanities Initiatives at Hispanic-Serving Institutions grant program, submitted to the Division of Education Programs.

18. Date: August 9, 2021

This video meeting—the second of two on this date—will discuss applications for the Humanities Initiatives at Hispanic-Serving Institutions grant program, submitted to the Division of Education Programs.

19. Date: August 10, 2021

This video meeting—the first of two on this date—will discuss applications for the Humanities Initiatives at Hispanic-Serving Institutions grant program, submitted to the Division of Education Programs.

20. Date: August 10, 2021

This video meeting—the second of two on this date—will discuss applications for the Humanities Initiatives at Hispanic-Serving Institutions grant program, submitted to the Division of Education Programs.

21. Date: August 11, 2021

This video meeting will discuss applications for the Humanities Initiatives at Hispanic-Serving Institutions grant program, submitted to the Division of Education Programs.

22. Date: August 12, 2021

This video meeting will discuss applications for the Humanities Initiatives at Community Colleges grant program, submitted to the Division of Education Programs.

23. Date: August 13, 2021

This video meeting will discuss applications for the Humanities

Initiatives at Community Colleges grant program, submitted to the Division of Education Programs.

24. Date: August 16, 2021

This video meeting will discuss applications on the topic of Humanities Initiatives at Historically Black Colleges and Universities grant program, submitted to the Division of Education Programs.

25. Date: August 25, 2021

This video meeting will discuss applications on the topic of Conservation Science, for the Research and Development grant program, submitted to the Division of Preservation and Access.

26. Date: August 26, 2021

This video meeting will discuss applications on the topic of Digital Preservation, for the Research and Development grant program, submitted to the Division of Preservation and Access.

27. Date: August 30, 2021

This video meeting will discuss applications on the topics of Race and Gender Studies, for the Digital Projects for the Public: Discovery Grants program, submitted to the Division of Public Programs.

Because these meetings will include review of personal and/or proprietary financial and commercial information given in confidence to the agency by grant applicants, the meetings will be closed to the public pursuant to sections 552b(c)(4) and 552b(c)(6) of Title 5, U.S.C., as amended. I have made this determination pursuant to the authority granted me by the Chairman's Delegation of Authority to Close Advisory Committee Meetings dated April 15, 2016.

Dated: August 5, 2021

Elizabeth Voyatzis,

Committee Management Officer.

[FR Doc. 2021–17047 Filed 8–9–21; 8:45 am]

BILLING CODE 7536–01–P

NATIONAL SCIENCE FOUNDATION

National Artificial Intelligence Research Resource Task Force; Notice of Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation (NSF) announces the following meeting:

Name and Committee Code: National Artificial Intelligence Research Resource Task Force (84629) (Virtual).

Date and Time: December 13, 2021, 11:00 a.m. to 5:00 p.m. EDT.

Place: NSF, 2415 Eisenhower Avenue, Alexandria, VA 22314; Virtual meeting.

To attend the virtual meeting, please send your request for the virtual meeting link to the following email: *cmessam@nsf.gov.*

Type of Meeting: Open.

Contact Person: Brenda Williams, National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314; Telephone: 703–292–8900; email: *bwilliam@nsf.gov.*

Purpose of Meeting: The Task Force shall investigate the feasibility and advisability of establishing and sustaining a National Artificial Intelligence Research Resource; and propose a roadmap detailing how such resource should be established and sustained.

Agenda: In this meeting, the Task Force will receive readouts from working group discussions held on the topics of priority capabilities for inclusion in a National AI Research Resource, including data resources, user tools and resources, and testing or testbed resources. The Task Force will discuss associated requirements for the resource in terms of security and access controls; and privacy, civil rights, and civil liberties.

Dated: August 5, 2021.

Crystal Robinson,

Committee Management Officer.

[FR Doc. 2021–16981 Filed 8–9–21; 8:45 am]

BILLING CODE 7555–01–P

NATIONAL SCIENCE FOUNDATION

National Artificial Intelligence Research Resource Task Force; Notice of Meeting

In accordance with the Federal Advisory Committee Act (Pub., L. 92–463, as amended), the National Science Foundation (NSF) announces the following meeting:

Name and Committee Code: National Artificial Intelligence Research Resource Task Force (84629) (Virtual).

Date and Time: October 25, 2021, 11:00 a.m. to 5:00 p.m. EDT.

Place: NSF, 2415 Eisenhower Avenue, Alexandria, VA 22314; Virtual meeting.

To attend the virtual meeting, please send your request for the virtual meeting link to the following email: *cmessam@nsf.gov.*

Type of Meeting: Open.

Contact Person: Brenda Williams, National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314; Telephone: 703–292–8900; email: *bwilliam@nsf.gov.*

Purpose of Meeting: The Task Force shall investigate the feasibility and advisability of establishing and sustaining a National Artificial Intelligence Research Resource; and propose a roadmap detailing how such resource should be established and sustained.

Agenda: In this meeting, the Task Force will receive readouts from working group discussions held on the topics of governance models and compute capabilities for a National AI Research Resource, and discuss priority capabilities to incorporate into the resource, including curated data sets, educational tools, a user-interface portal, and links to testing or testbed resources. The Task Force will also discuss the challenges and possible solutions to responsibly sharing government data.

Dated: August 5, 2021.

Crystal Robinson,

Committee Management Officer.

[FR Doc. 2021–16980 Filed 8–9–21; 8:45 am]

BILLING CODE 7555–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–268, 50–270 and 50–287; NRC–2021–0146]

Notice of Intent To Conduct Scoping Process and Prepare Environmental Impact Statement; Duke Energy Carolina, LLC; Duke Energy; Oconee Nuclear Station, Units 1, 2, and 3

AGENCY: Nuclear Regulatory Commission.

ACTION: Intent to conduct scoping process and prepare environmental impact statement; public scoping meeting and request for comment.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) will conduct a scoping process to gather information necessary to prepare an environmental impact statement (EIS) to evaluate the environmental impacts for the subsequent license renewal (SLR) of the operating licenses for Oconee Nuclear Station, Units 1, 2, and 3 (ONS). The NRC is seeking public comment on this action and has scheduled a public scoping meeting that will take place as an online webinar.

DATES: The NRC will hold a public scoping meeting as an online webinar on August 25, 2021, from 2:00 p.m. to 4:00 p.m. Eastern Time (ET). Submit comments on the scope of the EIS by September 9, 2021. Comments received after this date will be considered if it is practical to do so, but the NRC is able

to ensure consideration only for comments received on or before this date.

ADDRESSES: You may submit comments by any of the following methods; however, the NRC encourages electronic comment submission through the Federal Rulemaking website:

- *Federal Rulemaking website:* Go to *https://regulations.gov* and search for Docket ID NRC–2021–0146. Address questions about Docket IDs in *Regulations.gov* to Stacy Schumann; telephone: 301–415–0624; email: *Stacy.Schumann@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *Email:* Comments may be submitted to the NRC electronically using the email address *OconeeEnvironmental@nrc.gov.*
- *Mail comments to:* Office of Administration, Mail Stop: TWFN–7–A60M, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, ATTN: Program Management, Announcements and Editing Staff.

For additional direction on obtaining information and submitting comments, see ''Obtaining Information and Submitting Comments'' in the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Lance Rakovan, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–2589, email: *Lance.Rakovan@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC–2021–0146 when contacting the NRC about the availability of information for this action. You may obtain publicly available information related to this action by any of the following methods:

- *Federal Rulemaking website:* Go to *https://regulations.gov* and search for Docket ID NRC–2021–0146.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly available documents online in the ADAMS Public Documents collection at *https://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''Begin Web-based ADAMS Search.'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced in this document (if it is available in ADAMS) is provided the first time that it is referenced.
- *Attention:* The PDR, where you may examine and order copies of public documents, is currently closed. You may submit your request to the PDR via email at *pdr.resource@nrc.gov* or call 1–800–397–4209 or 301–415–4737, between 8:00 a.m. and 4:00 p.m. ET, Monday through Friday, except Federal holidays.

B. Submitting Comments

The NRC encourages electronic comment submission through the Federal Rulemaking website (*https://www.regulations.gov*). Please include Docket ID NRC–2021–0146 in the subject line of your comment submission in order to ensure that the NRC is able to make your comment submission available to the public in this docket.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at *https://www.regulations.gov* as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

II. Discussion

By letter dated June 7, 2021 (ADAMS Package Accession No. ML21158A193), Duke Energy Carolina, LLC (Duke Energy) submitted to the NRC an application for subsequent license renewal of Renewed Facility Operating License Nos. DPR–38, DPR–47, and DPR–55 for ONS, Units 1, 2, and 3, respectively, for an additional 20 years of operation. This submission initiated the NRC's proposed action of determining whether to grant the SLR application. The ONS units are pressurized water reactors designed by Babcock & Wilcox and are located in Seneca, South Carolina, approximately 30 miles west of Greenville. The current renewed facility operating license for Unit 1 expires at midnight on February 6, 2033, the current renewed facility operating license for Unit 2 expires at midnight on October 6, 2033, and the current renewed facility operating license for Unit 3 expires at midnight on July 19, 2034. The SLR application was submitted pursuant to part 54 of title 10 of the *Code of Federal Regulations* (10 CFR), ''Requirements for Renewal of Operating Licenses for Nuclear Power Plants,'' and seeks to extend the renewed facility operating license for Unit 1 to midnight on February 6, 2053, the renewed facility operating license for Unit 2 to midnight on October 6, 2053, and the renewed facility operating license for Unit 3 to midnight on July 19, 2054. A notice of receipt and availability of the application was published in the **Federal Register** on June 25, 2021 (86 FR 33784). A notice of acceptance for docketing of the application and of opportunity to request a hearing was published in the **Federal Register** on July 28, 2021 (86 FR 40662) and is available on the Federal Rulemaking website (*https://www.regulations.gov*) by searching for Docket ID NRC–2021–0127.

III. Request for Comment

This notice informs the public of the NRC's intention to conduct environmental scoping and prepare an EIS related to the SLR application for ONS, and to provide the public an opportunity to participate in the environmental scoping process, as defined in 10 CFR 51.29, ''Scoping-environmental impact statement and supplement to environmental impact statement.''

The regulations in 36 CFR 800.8, ''Coordination With the National Environmental Policy Act,'' allow agencies to use their National Environmental Policy Act of 1969 (42 U.S.C. 4321, *et seq.*) (NEPA) process to fulfill the requirements of Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. 300101, *et seq.*) (NHPA). Therefore, pursuant to 36 CFR 800.8(c), the NRC intends to use its process and documentation required for the preparation of the EIS on the proposed action to comply with Section 106 of the NHPA in lieu of the procedures set forth at 36 CFR 800.3 through 800.6.

In accordance with 10 CFR 51.53(c) and 10 CFR 54.23, Duke Energy submitted an environmental report (ER) as part of the SLR application. The ER was prepared pursuant to 10 CFR part 51, ''Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions,'' and is publicly available in ADAMS under

Package Accession No. ML21158A193. The ER will also be available for viewing at *https://www.nrc.gov/reactors/operating/licensing/renewal/subsequent-license-renewal.html.* In addition, the SLR application, including the ER, is available for public review at the Seneca Branch of the Oconee County Public Library, 300 E. South 2nd Street, Seneca, SC 29678.

The NRC intends to gather the information necessary to prepare a plant-specific supplement to NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants'' (ADAMS Package Accession No. ML13107A023) (GEIS), related to the SLR application for Oconee. The NRC is required by 10 CFR 51.95 to prepare a plant-specific supplement to the GEIS in connection with the renewal of an operating license. This notice is being published in accordance with NEPA and the NRC's regulations at 10 CFR part 51.

The supplement to the GEIS will evaluate the environmental impacts of subsequent license renewal for ONS, and reasonable alternatives thereto. Possible alternatives to the proposed action include the no action alternative and reasonable alternative energy sources.

As part of its environmental review, the NRC will first conduct a scoping process for the plant-specific supplement to the GEIS and, as soon as practicable thereafter, will prepare a draft supplement to the GEIS for public comment. Participation in this scoping process by members of the public and local, State, Tribal, and Federal government agencies is encouraged. The scoping process for the supplement to the GEIS will be used to accomplish the following:

a. Define the proposed action that is to be the subject of the supplement to the GEIS;

b. Determine the scope of the supplement to the GEIS and identify the significant issues to be analyzed in depth;

c. Identify and eliminate from detailed study those issues that are peripheral or are not significant or that have been covered by prior environmental review;

d. Identify any environmental assessments and other ElSs that are being or will be prepared that are related to, but are not part of, the scope of the supplement to the GEIS under consideration;

e. Identify other environmental review and consultation requirements related to the proposed action;

f. Indicate the relationship between the timing of the preparation of the environmental analyses and the NRC's tentative planning and decision-making schedule;

g. Identify any cooperating agencies and, as appropriate, allocate assignments for preparation and schedules for completing the supplement to the GEIS to the NRC and any cooperating agencies; and

h. Describe how the supplement to the GEIS will be prepared, including any contractor assistance to be used.

The NRC invites the following entities to participate in scoping:

a. The applicant, Duke Energy;

b. Any Federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved or that is authorized to develop and enforce relevant environmental standards;

c. Affected State and local government agencies, including those authorized to develop and enforce relevant environmental standards;

d. Any affected Indian Tribe;

e. Any person who requests or has requested an opportunity to participate in the scoping process; and

f. Any person who has petitioned or intends to petition for leave to intervene under 10 CFR 2.309.

IV. Public Scoping Meeting

In accordance with 10 CFR 51.26(b), the scoping process for an EIS may include a public scoping meeting to help identify significant issues related to the proposed action and to determine the scope of issues to be addressed in the EIS.

The NRC is announcing that it will hold a public scoping meeting as an online webinar for the ONS SLR supplement to the GEIS. The webinar will include a telephone line for members of the public to provide comments. A court reporter will transcribe all comments received during the webinar. To be considered, comments must be provided either at the transcribed public meeting or in writing, as discussed in the **ADDRESSES** section of this notice. The public scoping webinar will be held on August 25, 2021, from 2:00 p.m. to 4:00 p.m. ET. Persons interested in attending this online webinar should monitor the NRC's Public Meeting Schedule website at *https://www.nrc.gov/pmns/mtg* for additional information, agenda for the meeting, and access information for the webinar. Please contact Mr. Lance Rakovan no later than August 18, 2021, if accommodations or special equipment is needed to attend or to provide comments, so that the NRC staff can determine whether the request can be accommodated.

The public scoping meeting will include: (1) An overview by the NRC staff of the environmental and safety review processes, the proposed scope of the supplement to the GEIS, and the proposed review schedule; and (2) the opportunity for interested government agencies, organizations, and individuals to submit comments or suggestions on environmental issues or the proposed scope of the ONS SLR supplement to the GEIS.

Participation in the scoping process for the ONS SLR supplement to the GEIS does not entitle participants to become parties to the proceeding to which the supplement to the GEIS relates. Matters related to participation in any hearing are outside the scope of matters to be discussed at this public meeting.

Dated: August 5, 2021.

For the Nuclear Regulatory Commission.

Robert B. Elliott,

Chief, Environmental Review License Renewal Branch, Division of Rulemaking, Environment, and Financial Support, Office of Nuclear Material Safety and Safeguards.

[FR Doc. 2021–17036 Filed 8–9–21; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[NRC–2021–0152]

Monthly Notice; Applications and Amendments to Facility Operating Licenses and Combined Licenses Involving No Significant Hazards Considerations

AGENCY: Nuclear Regulatory Commission.

ACTION: Monthly notice.

SUMMARY: Pursuant to the Atomic Energy Act of 1954, as amended (the Act), the U.S. Nuclear Regulatory Commission (NRC) is publishing this regular monthly notice. The Act requires the Commission to publish notice of any amendments issued, or proposed to be issued, and grants the Commission the authority to issue and make immediately effective any amendment to an operating license or combined license, as applicable, upon a determination by the Commission that such amendment involves no significant hazards consideration (NSHC), notwithstanding the pendency before the Commission of a request for a hearing from any person. This monthly notice includes all amendments issued, or proposed to be issued, from July 14, 2021, to July 22, 2021. The last monthly notice was published on July 13, 2021.

DATES: Comments must be filed by September 9, 2021. A request for a hearing or petitions for leave to intervene must be filed by October 12, 2021.

ADDRESSES: You may submit comments by any of the following methods, however, the NRC encourages electronic comment submission through the Federal Rulemaking website:

- *Federal Rulemaking website:* Go to *https://www.regulations.gov* and search for Docket ID NRC–2021–0152. Address questions about Docket IDs in *Regulations.gov* to Stacy Schumann; telephone: 301–415–0624; email: *Stacy.Schumann@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *Mail comments to:* Office of Administration, Mail Stop: TWFN–7–A60M, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, ATTN: Program Management, Announcements and Editing Staff.

For additional direction on obtaining information and submitting comments, see ''Obtaining Information and Submitting Comments'' in the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Karen Zeleznock, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone: 301–415–1118, email: *Karen.Zeleznock@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC–2021–0152, facility name, unit number(s), docket number(s), application date, and subject when contacting the NRC about the availability of information for this action. You may obtain publicly available information related to this action by any of the following methods:

- *Federal Rulemaking website:* Go to *https://www.regulations.gov* and search for Docket ID NRC–2021–0152.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly available documents online in the ADAMS Public Documents collection at *https://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''Begin Web-based ADAMS Search.'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document.
- Attention: The PDR, where you may examine and order copies of public documents, is currently closed. You may submit your request to the PDR via email at *pdr.resource@nrc.gov* or call 1–800–397–4209 or 301–415–4737, between 8:00 a.m. and 4:00 p.m. (ET), Monday through Friday, except Federal holidays.

B. Submitting Comments

The NRC encourages electronic comment submission through the Federal Rulemaking website (*https://www.regulations.gov*). Please include Docket ID NRC–2021–0152, facility name, unit number(s), docket number(s), application date, and subject, in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at *https://www.regulations.gov* as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

II. Notice of Consideration of Issuance of Amendments to Facility Operating Licenses and Combined Licenses and Proposed No Significant Hazards Consideration Determination

For the facility-specific amendment requests shown in this notice, the Commission finds that the licensees' analyses provided, consistent with section 50.91 of title 10 of *the Code of Federal Regulations* (10 CFR) ''Notice for public comment; State consultation,'' are sufficient to support the proposed determinations that these amendment requests involve NSHC. Under the Commission's regulations in 10 CFR 50.92, operation of the facilities in accordance with the proposed amendments would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The Commission is seeking public comments on these proposed determinations. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determinations.

Normally, the Commission will not issue the amendments until the expiration of 60 days after the date of publication of this notice. The Commission may issue any of these license amendments before expiration of the 60-day period provided that its final determination is that the amendment involves NSHC. In addition, the Commission may issue any of these amendments prior to the expiration of the 30-day comment period if circumstances change during the 30-day comment period such that failure to act in a timely way would result, for example in derating or shutdown of the facility. If the Commission takes action on any of these amendments prior to the expiration of either the comment period or the notice period, it will publish in the **Federal Register** a notice of issuance. If the Commission makes a final NSHC determination for any of these amendments, any hearing will take place after issuance. The Commission expects that the need to take action on any amendment before 60 days have elapsed will occur very infrequently.

A. Opportunity To Request a Hearing and Petition for Leave To Intervene

Within 60 days after the date of publication of this notice, any persons (petitioner) whose interest may be affected by any of these actions may file a request for a hearing and petition for leave to intervene (petition) with respect to that action. Petitions shall be filed in accordance with the Commission's ''Agency Rules of Practice and Procedure'' in 10 CFR part 2. Interested persons should consult a current copy of 10 CFR 2.309. The NRC's regulations are accessible electronically from the NRC Library on the NRC's website at *https://www.nrc.gov/reading-rm/doc-collections/cfr/.* If a petition is filed, the Commission or a presiding officer will rule on the petition and, if appropriate, a notice of a hearing will be issued.

As required by 10 CFR 2.309(d) the petition should specifically explain the reasons why intervention should be permitted with particular reference to the following general requirements for standing: (1) The name, address, and telephone number of the petitioner; (2)

the nature of the petitioner's right to be made a party to the proceeding; (3) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (4) the possible effect of any decision or order which may be entered in the proceeding on the petitioner's interest.

In accordance with 10 CFR 2.309(f), the petition must also set forth the specific contentions that the petitioner seeks to have litigated in the proceeding. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner must provide a brief explanation of the bases for the contention and a concise statement of the alleged facts or expert opinion that support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to the specific sources and documents on which the petitioner intends to rely to support its position on the issue. The petition must include sufficient information to show that a genuine dispute exists with the applicant or licensee on a material issue of law or fact. Contentions must be limited to matters within the scope of the proceeding. The contention must be one that, if proven, would entitle the petitioner to relief. A petitioner who fails to satisfy the requirements at 10 CFR 2.309(f) with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene. Parties have the opportunity to participate fully in the conduct of the hearing with respect to resolution of that party's admitted contentions, including the opportunity to present evidence, consistent with the NRC's regulations, policies, and procedures.

Petitions must be filed no later than 60 days from the date of publication of this notice. Petitions and motions for leave to file new or amended contentions that are filed after the deadline will not be entertained absent a determination by the presiding officer that the filing demonstrates good cause by satisfying the three factors in 10 CFR 2.309(c)(1)(i) through (iii). The petition must be filed in accordance with the filing instructions in the ''Electronic Submissions (E-Filing)'' section of this document.

If a hearing is requested, and the Commission has not made a final determination on the issue of NSHC, the Commission will make a final determination on the issue of NSHC. The final determination will serve to establish when the hearing is held. If the final determination is that the amendment request involves NSHC, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing would take place after issuance of the amendment. If the final determination is that the amendment request involves a significant hazards consideration, then any hearing held would take place before the issuance of the amendment unless the Commission finds an imminent danger to the health or safety of the public, in which case it will issue an appropriate order or rule under 10 CFR part 2.

A State, local governmental body, Federally recognized Indian Tribe, or agency thereof, may submit a petition to the Commission to participate as a party under 10 CFR 2.309(h)(1). The petition should state the nature and extent of the petitioner's interest in the proceeding. The petition should be submitted to the Commission no later than 60 days from the date of publication of this notice. The petition must be filed in accordance with the filing instructions in the ''Electronic Submissions (E-Filing)'' section of this document, and should meet the requirements for petitions set forth in this section, except that under 10 CFR 2.309(h)(2) a State, local governmental body, or Federally recognized Indian Tribe, or agency thereof does not need to address the standing requirements in 10 CFR 2.309(d) if the facility is located within its boundaries. Alternatively, a State, local governmental body, Federally recognized Indian Tribe, or agency thereof may participate as a non-party under 10 CFR 2.315(c).

If a petition is submitted, any person who is not a party to the proceeding and is not affiliated with or represented by a party may, at the discretion of the presiding officer, be permitted to make a limited appearance pursuant to the provisions of 10 CFR 2.315(a). A person making a limited appearance may make an oral or written statement of his or her position on the issues but may not otherwise participate in the proceeding. A limited appearance may be made at any session of the hearing or at any prehearing conference, subject to the limits and conditions as may be imposed by the presiding officer. Details regarding the opportunity to make a limited appearance will be provided by the presiding officer if such sessions are scheduled.

B. Electronic Submissions (E-Filing)

All documents filed in NRC adjudicatory proceedings including documents filed by an interested State, local governmental body, Federally recognized Indian Tribe, or designated agency thereof that requests to participate under 10 CFR 2.315(c), must be filed in accordance with 10 CFR 2.302. The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases, to mail copies on electronic storage media, unless an exemption permitting an alternative filing method, as further discussed, is granted. Detailed guidance on electronic submissions is located in the Guidance for Electronic Submissions to the NRC (ADAMS Accession No. ML13031A056) and on the NRC website at *https://www.nrc.gov/site-help/e-submittals.html.*

To comply with the procedural requirements of E-Filing, at least 10 days prior to the filing deadline, the participant should contact the Office of the Secretary by email at *hearing.docket@nrc.gov,* or by telephone at 301–415–1677, to (1) Request a digital identification (ID) certificate, which allows the participant (or its counsel or representative) to digitally sign submissions and access the E-Filing system for any proceeding in which it is participating; and (2) advise the Secretary that the participant will be submitting a petition or other adjudicatory document (even in instances in which the participant, or its counsel or representative, already holds an NRC-issued digital ID certificate). Based upon this information, the Secretary will establish an electronic docket for the proceeding if the Secretary has not already established an electronic docket.

Information about applying for a digital ID certificate is available on the NRC's public website at *https://www.nrc.gov/site-help/e-submittals/getting-started.html.* After a digital ID certificate is obtained and a docket created, the participant must submit adjudicatory documents in Portable Document Format. Guidance on submissions is available on the NRC's public website at *https://www.nrc.gov/site-help/electronic-sub-ref-mat.html.* A filing is considered complete at the time the document is submitted through the NRC's E-Filing system. To be timely, an electronic filing must be submitted to the E-Filing system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system timestamps the document and sends the submitter an email confirming receipt of the document. The E-Filing system also distributes an email that provides access to the document to the NRC's Office of the General Counsel

and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the document on those participants separately. Therefore, applicants and other participants (or their counsel or representative) must apply for and receive a digital ID certificate before adjudicatory documents are filed to obtain access to the documents via the E-Filing system.

A person filing electronically using the NRC's adjudicatory E-Filing system may seek assistance by contacting the NRC's Electronic Filing Help Desk through the ''Contact Us'' link located on the NRC's public website at *https://www.nrc.gov/site-help/e-submittals.html,* by email to *MSHD.Resource@nrc.gov,* or by a toll-free call at 1–866–672–7640. The NRC Electronic Filing Help Desk is available between 9 a.m. and 6 p.m., Eastern Time, Monday through Friday, excluding government holidays.

Participants who believe that they have good cause for not submitting documents electronically must file an exemption request, in accordance with 10 CFR 2.302(g), with their initial paper filing stating why there is good cause for not filing electronically and requesting authorization to continue to submit documents in paper format. Such filings must be submitted in accordance with 10 CFR 2.302(b)–(d). Participants filing adjudicatory documents in this manner are responsible for serving their documents on all other participants. Participants granted an exemption under 10 CFR 2.302(g)(2) must still meet the electronic formatting requirement in 10 CFR 2.302(g)(1), unless the participant also seeks and is granted an exemption from 10 CFR 2.302(g)(1).

Documents submitted in adjudicatory proceedings will appear in the NRC's electronic hearing docket, which is publicly available at *https://adams.nrc.gov/ehd,* unless excluded pursuant to an order of the presiding officer. If you do not have an NRC-issued digital ID certificate as previously described, click ''cancel'' when the link requests certificates and you will be automatically directed to the NRC's electronic hearing dockets where you will be able to access any publicly available documents in a particular hearing docket. Participants are requested not to include personal privacy information such as social security numbers, home addresses, or personal phone numbers in their filings unless an NRC regulation or other law requires submission of such information. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants should not include copyrighted materials in their submission.

The table in this notice provides the plant name, docket number, date of application, ADAMS accession number, and location in the application of the licensees' proposed NSHC determinations. For further details with respect to these license amendment applications, see the applications for amendment, which are available for public inspection in ADAMS. For additional direction on accessing information related to this document, see the ''Obtaining Information and Submitting Comments'' section of this document.

License Amendment Requests

Duke Energy Carolinas, LLC; Catawba Nuclear Station, Units 1 and 2; York County, SC; Duke Energy Carolinas, LLC; McGuire Nuclear Station, Units 1 and 2; Mecklenburg County, NC; Duke Energy Carolinas, LLC; Oconee Nuclear Station, Units 1, 2, and 3; Oconee County, SC; Duke Energy Progress, LLC; H. B. Robinson Steam Electric Plant, Unit No. 2; Darlington County, SC

Docket No(s).	50–413, 50–414, 50–369, 50–370, 50–269, 50–270, 50–287, 50–261.
Application date	June 9, 2021, as supplemented by letter dated July 16, 2021.
ADAMS Accession No.	ML21160A008, ML21197A046.
Location in Application of NSHC	Pages 10–12 of the Enclosure.
Brief Description of Amendment(s)	The proposed change would delete second Completion Times from the affected Required Actions contained in Technical Specifications (TSs), along with removing the example contained in TS Section 1.3 and adding a discussion about alternating between Conditions. These changes are consistent with NRC-approved Traveler Technical Specification Task Force (TSTF) Traveler TSTF–439, Revision 2, ''Eliminate Second Completion Times Limiting Time From Discovery of Failure to Meet an LCO [Limiting Condition for Operation].''
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	Michelle Spak, General Counsel, Duke Energy Corporation, 550 South Tryon St.—DEC45A, Charlotte, NC 28202.
NRC Project Manager, Telephone Number	Andrew Hon, 301–415–8480.

Entergy Operations, Inc.; Arkansas Nuclear One, Unit 1; Pope County, AR

Docket No(s).	50–313.
Application date	May 26, 2021.
ADAMS Accession No.	ML21147A234.
Location in Application of NSHC	Pages 26–28 of Enclosure 1.
Brief Description of Amendment(s)	The proposed amendment would modify the licensing basis by the addition of a license condition to allow for the implementation of the provisions of 10 CFR 50.69, ''Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors,'' for Arkansas Nuclear One, Unit 1. These provisions would allow adjustment of the scope of equipment subject to special treatment controls (*e.g.,* quality assurance, testing, inspection, condition monitoring, assessment, and evaluation). For equipment determined to be of low safety significance, alternative treatment requirements could be implemented in accordance with this regulation.
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	Anna Vinson Jones, Senior Counsel, Entergy Services, Inc.,101 Constitution Avenue NW, Suite 200 East, Washington, DC 20001.
NRC Project Manager, Telephone Number	Thomas Wengert, 301–415–4037.

LICENSE AMENDMENT REQUESTS—Continued

Entergy Operations, Inc.; Arkansas Nuclear One, Unit 2; Pope County, AR	
Docket No(s).	50–368.
Application date	May 26, 2021.
ADAMS Accession No.	ML21147A264.
Location in Application of NSHC	Pages 27–28 of Enclosure 1.
Brief Description of Amendment(s)	The proposed amendment would modify the licensing basis by the addition of a license condition to allow for the implementation of the provisions of 10 CFR 50.69, ''Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors,'' for Arkansas Nuclear One, Unit 2. These provisions would allow adjustment of the scope of equipment subject to special treatment controls (*e.g.,* quality assurance, testing, inspection, condition monitoring, assessment, and evaluation). For equipment determined to be of low safety significance, alternative treatment requirements could be implemented in accordance with this regulation.
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	Anna Vinson Jones, Senior Counsel, Entergy Services, Inc.,101 Constitution Avenue NW, Suite 200 East, Washington, DC 20001.
NRC Project Manager, Telephone Number	Thomas Wengert, 301–415–4037.
Entergy Operations, Inc.; Arkansas Nuclear One, Units 1 and 2; Pope County, AR; Entergy Operations, Inc.; Waterford Steam Electric Station, Unit 3; St. Charles Parish, LA	
Docket No(s).	50–313, 50–368, 50–382.
Application date	July 1, 2021.
ADAMS Accession No.	ML21182A158.
Location in Application of NSHC	Pages 3–5 of Enclosure 1.
Brief Description of Amendment(s)	The proposed amendments would revise technical specifications (TSs) to adopt Technical Specifications Task Force (TSTF) Traveler TSTF–577, Revision 1, ''Revised Frequencies for Steam Generator Tube Inspections'' for Arkansas Nuclear One, Units 1 and 2, and Waterford Steam Electric Station, Unit 3. The TSs related to steam generator (SG) tube inspections and reporting are revised based on operating history. The proposed changes would revise the TSs related to SG tube inspection and reporting requirements in the administration controls section of the TSs. TSTF–577 would revise the TSs related to SG tube inspections to extend the inspection interval for thermally treated Alloy 600 and thermally treated Alloy 690 SG tubing. The NRC issued a final safety evaluation approving TSTF–577, Revision 1, on April 14, 2021 (ADAMS Package Accession No. ML21099A086).
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	Anna Vinson Jones, Senior Counsel, Entergy Services, Inc.,101 Constitution Avenue NW, Suite 200 East, Washington, DC 20001.
NRC Project Manager, Telephone Number	Siva Lingam, 301–415–1564.
Exelon Generation Company, LLC; Limerick Generating Station, Units 1 and 2; Montgomery County, PA	
Docket No(s).	50–352, 50–353.
Application date	March 11, 2021, as supplemented by letter dated May 5, 2021.
ADAMS Accession No.	ML21070A412, ML21125A215.
Location in Application of NSHC	Pages 20–22 of the Enclosure.
Brief Description of Amendment(s)	The proposed amendments would modify the licensing basis by revising the license condition in Appendix C to allow the use of an alternate defense-in-depth categorization process, an alternate pressure boundary categorization process, and an alternate Seismic Tier 1 categorization process to allow the implementation of risk-informed categorization and treatment of structures, systems and components in accordance with 10 CFR 50.69.
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	Tamra Domeyer, Associate General Counsel, Exelon Generation Company, LLC, 4300 Winfield Road, Warrenville, IL 60555.
NRC Project Manager, Telephone Number	V. Sreenivas, 301–415–2597.
Exelon Generation Company, LLC; R. E. Ginna Nuclear Power Plant; Wayne County, New York	
Docket No(s).	50–244.
Application date	May 20, 2021.
ADAMS Accession No.	ML21140A324.
Location in Application of NSHC	Pages 5–6 of the Enclosure.
Brief Description of Amendment(s)	The proposed amendment would modify technical specification (TS) requirements to allow the use of Risk-Informed Completion Times in accordance with Technical Specifications Task Force (TSTF) Traveler TSTF–505, Revision 2, ''Provide Risk-Informed Extended Completion Times—RITSTF [Risk-Informed TSTF] Initiative 4b'' (ADAMS Accession No. ML18183A493). This would change the TS requirements related to Completion Times (CTs) for Required Actions (Action allowed outage times) to provide the option to calculate a longer, risk-informed CT.
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	Tamra Domeyer, Associate General Counsel, Exelon Generation Company, LLC, 4300 Winfield Road, Warrenville, IL 60555.
NRC Project Manager, Telephone Number	V. Sreenivas, 301–415–2597.

LICENSE AMENDMENT REQUESTS—Continued

Exelon Generation Company, LLC; R. E. Ginna Nuclear Power Plant; Wayne County, New York	
Docket No(s).	50–244.
Application date	May 20, 2021.
ADAMS Accession No.	ML21141A009.
Location in Application of NSHC	Pages 29–31 of the Enclosure.
Brief Description of Amendment(s)	The proposed amendment would modify the licensing basis, by the addition of a license condition, to allow for the implementation of the provisions of 10 CFR 50.69, ''Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors.'' The provisions of 10 CFR 50.69 allow adjustment of the scope of equipment subject to special treatment controls (*e.g.,* quality assurance, testing, inspection, condition monitoring, assessment, and evaluation).
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	Tamra Domeyer, Associate General Counsel, Exelon Generation Company, LLC, 4300 Winfield Road, Warrenville, IL 60555.
NRC Project Manager, Telephone Number	V. Sreenivas, 301–415–2597.
PSEG Nuclear LLC; Salem Nuclear Generating Station, Units 1 and 2; Salem County, NJ	
Docket No(s).	50–272, 50–311.
Application date	June 17, 2021.
ADAMS Accession No.	ML21173A090.
Location in Application of NSHC	Pages 5–7 of the Enclosure.
Brief Description of Amendment(s)	The proposed changes would revise the Salem Unit No. 2 Technical Specification (TS) Table 4.3–2 Functional Unit 8.f, ''Auxiliary Feedwater—Trip of Main Feedwater Pumps,'' Channel Functional Test surveillance frequency and the Mode in which Salem Unit No.1 TS Table 4.3–2 Functional Unit 8.f, ''Auxiliary Feedwater—Trip of Main Feedwater Pumps'' is required; and remove Salem Unit No. 2 Surveillance Requirement 4.7.1.3.4 to verify the service water spool piece is onsite.
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	Jodi Varon, PSEG Services Corporation, 80 Park Plaza, T–5, Newark, NJ 07102.
NRC Project Manager, Telephone Number	James Kim, 301–415–4125.
Southern Nuclear Operating Company, Inc.; Joseph M Farley Nuclear Plant, Units 1 and 2; Houston County, AL; Southern Nuclear Operating Company, Inc.; Vogtle Electric Generating Plant, Units 1 and 2; Burke County, GA	
Docket No(s).	50–348, 50–364, 50–424, 50–425.
Application date	June 9, 2021.
ADAMS Accession No.	ML21160A257.
Location in Application of NSHC	Pages E–12 through E–13 of the Enclosure.
Brief Description of Amendment(s)	The proposed amendments would revise Technical Specification (TS) 3.1.7, ''Rod Position Indication''; TS 3.2.1, ''Heat Flux Hot Channel Factor ($F_Q(Z)$)''; and TS 3.3.1, ''Reactor Trip System (RTS) Instrumentation,'' to allow the use of an alternate means of determining power distribution information. The proposed TS changes would allow the use of a dedicated on-line core power distribution monitoring system (PDMS) to perform surveillance of core thermal limits. The PDMS to be used at Joseph M. Farley Nuclear Plant, Units 1 and 2; and Vogtle Electric Generating Plant, Units 1 and 2, is the Westinghouse proprietary core analysis system called Best Estimate Analyzer for Core Operations—Nuclear.
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	Millicent Ronnlund, Vice President and General Counsel, Southern Nuclear Operating Co., Inc., P.O. Box 1295, Birmingham, AL 35201–1295.
NRC Project Manager, Telephone Number	John Lamb, 301–415–3100.
Tennessee Valley Authority; Watts Bar Nuclear Plant, Units 1 and 2; Rhea County, TN	
Docket No(s).	50–390, 50–391.
Application date	June 1, 2021.
ADAMS Accession No.	ML21153A071.
Location in Application of NSHC	Pages E7–E9 of the Enclosure.
Brief Description of Amendment(s)	The proposed amendments would revise Watts Bar Nuclear Plant, Units 1 and 2, Technical Specification (TS) 3.3.6, ''Containment Ventilation Isolation Instrumentation,'' and TS 3.3.7, ''Control Room Emergency Ventilation System (CREVS) Actuation Instrumentation,'' to delete a redundant unit of measure associated with containment purge exhaust and control room air intake radiation monitors.
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	David Fountain, Executive VP and General Counsel, Tennessee Valley Authority, 400 West Summit Hill Drive, WT 6A, Knoxville, TN 37902.
NRC Project Manager, Telephone Number	Kimberly Green, 301–415–1627.
Wolf Creek Nuclear Operating Corporation; Wolf Creek Generating Station, Unit 1; Coffey County, KS	
Docket No(s).	50–482.
Application date	May 25, 2021.
ADAMS Accession No.	ML21145A238.
Location in Application of NSHC	Pages 12–13 of Attachment 1.

LICENSE AMENDMENT REQUESTS—Continued

Brief Description of Amendment(s)	The proposed amendment would revise the Emergency Plan related to on-shift staffing for Wolf Creek Generating Station, Unit 1.
Proposed Determination	NSHC.
Name of Attorney for Licensee, Mailing Address	Thomas C. Poindexter, Morgan, Lewis and Bockius LLP, 1111 Pennsylvania Avenue NW, Washington, DC 20004–2541.
NRC Project Manager, Telephone Number	Samson Lee, 301–415–3168.

III. Notice of Issuance of Amendments to Facility Operating Licenses and Combined Licenses

During the period since publication of the last monthly notice, the Commission has issued the following amendments. The Commission has determined for each of these amendments that the application complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR chapter I, which are set forth in the license amendment.

A notice of consideration of issuance of amendment to facility operating license or combined license, as applicable, proposed NSHC determination, and opportunity for a hearing in connection with these actions, was published in the **Federal Register** as indicated in the safety evaluation for each amendment.

Unless otherwise indicated, the Commission has determined that these amendments satisfy the criteria for categorical exclusion in accordance with 10 CFR 51.22 ''Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review.'' Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared for these amendments. If the Commission has prepared an environmental assessment under the special circumstances provision in 10 CFR 51.22(b) and has made a determination based on that assessment, it is so indicated in the safety evaluation for the amendment.

For further details with respect to each action, see the amendment and associated documents such as the Commission's letter and safety evaluation, which may be obtained using the ADAMS accession numbers indicated in the following table. The safety evaluation will provide the ADAMS accession numbers for the application for amendment and the **Federal Register** citation for any environmental assessment. All of these items can be accessed as described in the ''Obtaining Information and Submitting Comments'' section of this document.

LICENSE AMENDMENT ISSUANCES

Dominion Energy South Carolina, Inc.; Virgil C. Summer Nuclear Station, Unit 1, Fairfield County, SC

Docket No(s)	50–395.
Amendment Date	June 30, 2021.
ADAMS Accession No	ML21112A108.
Amendment No(s)	219.
Brief Description of Amendment(s)	The amendment revised Technical Specification 6.9.1.11, ''Core Operating Limits Report [COLR],'' to add the Westinghouse Topical Report WCAP 16996 P A, Revision 1, ''Realistic LOCA [Loss-of-Coolant Accident] Evaluation Methodology Applied to the Full Spectrum of Break Sizes (FULL SPECTRUM LOCA Methodology),'' to the list of NRC approved analytical methodologies approved for reference in the COLR.
Public Comments Received as to Proposed NSHC (Yes/No).	No.

Energy Harbor Nuclear Corp. and Energy Harbor Nuclear Generation LLC; Perry Nuclear Power Plant, Unit No. 1; Lake County, OH

Docket No(s)	50–440.
Amendment Date	July 12, 2021.
ADAMS Accession No	ML21158A212.
Amendment No(s)	194.
Brief Description of Amendment(s)	The amendment revised Technical Specification 3.8.3, ''Diesel Fuel Oil, Lube Oil, and Starting Air,'' by removing Surveillance Requirement 3.8.3.6 and placing it under licensee control. The changes are consistent with Technical Specifications Task Force (TSTF) Traveler TSTF 002, Revision 1, ''Relocate the 10 Year Sediment Cleaning of the Fuel Oil Storage Tank to Licensee Control.''
Public Comments Received as to Proposed NSHC (Yes/No).	No.

Entergy Louisiana, LLC, and Entergy Operations, Inc.; River Bend Station, Unit 1; West Feliciana Parish, LA

Docket No(s)	50–458.
Amendment Date	July 2, 2021.
ADAMS Accession No	ML21162A211.
Amendment No(s)	208.
Brief Description of Amendment(s)	The amendment revised License Condition 2.C.(10), ''Fire Protection (Section 9.5.1, SER [Safety Evaluation Report] and SSER [Supplement to Original SER] 3),'' by replacing the current wording with standard wording from Generic Letter 86–10, ''Implementation of Fire Protection Requirements,'' and deleted Attachment 4, ''Fire Protection Program Requirements,'' from the River Bend Station, Unit 1 Renewed Facility Operating License.

LICENSE AMENDMENT ISSUANCES—Continued

Public Comments Received as to Proposed NSHC (Yes/No).	No.

Exelon Generation Company, LLC; Braidwood Station, Units 1 and 2, Will County, IL

Docket No(s)	50–456, 50–457.
Amendment Date	July 13, 2021.
ADAMS Accession No	ML21154A046.
Amendment No(s)	222 (Unit 1) and 222 (Unit 2).
Brief Description of Amendment(s)	The amendments revised Technical Specification Surveillance Requirement 3.7.9.2 to allow an ultimate heat sink temperature of less than or equal to 102.8 degrees Fahrenheit through September 30, 2021.
Public Comments Received as to Proposed NSHC (Yes/No).	No.

Exelon Generation Company, LLC; Clinton Power Station, Unit No. 1; DeWitt County, IL

Docket No(s)	50–461.
Amendment Date	June 28, 2021.
ADAMS Accession No	ML21132A288.
Amendment No(s)	238.
Brief Description of Amendment(s)	The amendment modified the technical specifications to permit the use of risk-informed completion times in accordance with Technical Specifications Task Force (TSTF) Traveler TSTF–505, Revision 2, ''Provide Risk Informed Extended Completion Times—RITSTF [Risk-Informed TSTF] Initiative 4b.''
Public Comments Received as to Proposed NSHC (Yes/No).	No.

Exelon Generation Company, LLC; LaSalle County Station, Units 1 and 2; LaSalle County, IL

Docket No(s)	50–373, 50–374.
Amendment Date	July 13, 2021.
ADAMS Accession No	ML21158A228.
Amendment No(s)	250 (Unit 1) and 236 (Unit 2).
Brief Description of Amendment(s)	The amendments modified technical specification (TS) requirements in TS 3.7.3, ''Ultimate Heat Sink (UHS),'' as follows: (1) TS 3.7.3, Condition A, was modified to remove reference to the UHS bottom elevation limit; (2) TS 3.7.3, Condition B, was deleted; (3) TS Figure 3.7.3–1 diurnal curve was modified; (4) Surveillance Requirement (SR) 3.7.3.1 was modified to correct a discrepancy in the TS and allow proper application of TS 3.7.3; (5) Sedimentation Level in SR 3.7.3.2 was modified from 18 inches to 6 inches; and (6) SR 3.7.3.3 was deleted.
Public Comments Received as to Proposed NSHC (Yes/No).	No.

Holtec Decommissioning International, LLC; Oyster Creek Nuclear Generating Station; Forked River, NJ

Docket No(s)	50–219.
Amendment Date	June 25, 2021.
ADAMS Accession No	ML21119A056 (Package).
Amendment No(s)	299.
Brief Description of Amendment(s)	NRC issued Amendment No. 299 to Renewed Facility Operating License No. DPR–16 for the Oyster Creek Nuclear Generating Station (Oyster Creek). The amendment consisted of revisions to the Renewed Facility Operating License and the Permanently Defueled Technical Specifications. These changes reflected the removal of all spent nuclear fuel from the spent fuel pool and its transfer to dry cask storage within an on-site Independent Spent Fuel Storage Installation (ISFSI). These changes will more fully reflect the permanently shutdown status of the decommissioning facility, as well as the reduced scope of structures, systems, and components necessary to ensure plant safety now that all spent fuel has been permanently moved to the Oyster Creek ISFSI, an activity which was completed as of May 21, 2021 (ADAMS Accession No. ML21160A065).
Public Comments Received as to Proposed NSHC (Yes/No).	No.

Holtec Decommissioning International, LLC; Oyster Creek Nuclear Generating Station; Forked River, NJ

Docket No(s)	50–219.
Amendment Date	June 25, 2021.
ADAMS Accession No	ML21159A242 (Package).
Amendment No(s)	300.

LICENSE AMENDMENT ISSUANCES—Continued

Brief Description of Amendment(s)	The NRC issued the Amendment No. 300 to Renewed Facility Operating License No. DPR–16 for the Oyster Creek Nuclear Generating Station (Oyster Creek). The amendment replaced the Oyster Creek Permanently Defueled Emergency Plan and associated Permanently Defueled Emergency Action Level (EAL) Technical Bases Document with an Independent Spent Fuel Storage Installation Only Emergency Plan and associated EAL scheme. These changes will more fully reflect the permanently shutdown status of the decommissioning facility, as well as the complete removal of all fuel from the spent fuel pool and permits specific reductions in the size and makeup of the Emergency Response Organization due to the elimination of the design basis accident related to the spent fuel (fuel handling accident).
Public Comments Received as to Proposed NSHC (Yes/No).	No.

Holtec Decommissioning International, LLC; Oyster Creek Nuclear Generating Station; Forked River, NJ

Docket No(s)	50–219.
Amendment Date	June 25, 2021.
ADAMS Accession No	ML21176A155.
Amendment No(s)	301.
Brief Description of Amendment(s)	The amendment to Renewed Facility Operating License No. DPR–16 for the Oyster Creek Nuclear Generating Station (Oyster Creek) reflected the requirements associated with the security changes set forth in the revised Oyster Creek Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan (the Plan) for the independent spent fuel storage installation (ISFSI) only configuration, consistent with the permanent removal of all spent fuel from the spent fuel pool which occurred on May 21, 2021. Implementation of the changes also required the installation or modification of those security structures, systems, and components necessary to support the ISFSI-only plan. Additionally, the implementation of the proposed changes required appropriate security measures to be in place during the transition from the current Plan to the ISFSI-only plan.
Public Comments Received as to Proposed NSHC (Yes/No).	No.

NextEra Energy Point Beach, LLC; Point Beach Nuclear Plant, Units 1 and 2; Manitowoc County, WI

Docket No(s)	50–266, 50–301.
Amendment Date	July 21, 2021.
ADAMS Accession No	ML21148A255.
Amendment No(s)	269 (Unit 1) and 271 (Unit 2).
Brief Description of Amendment(s)	The amendments modified the technical specifications to implement new surveillance methods for nuclear transient heat flux hot channel factor. The new surveillance methods are applicable to plants using either relaxed axial offset control (RAOC) or constant axial offset control (CAOC) surveillance formulations, as described in the NRC-approved topical report WCAP–17661–P–A, ''Improved RAOC and CAOC FQ Surveillance Technical Specifications.''
Public Comments Received as to Proposed NSHC (Yes/No).	No.

Northern States Power Company; Monticello Nuclear Generating Plant; Wright County, MN

Docket No(s)	50–263.
Amendment Date	July 12, 2021.
ADAMS Accession No	ML21148A274.
Amendment No(s)	206.
Brief Description of Amendment(s)	The amendment revised technical specification requirements to permit the use of risk-informed completion times for actions to be taken when limiting conditions for operation are not met. The changes are based on Technical Specifications Task Force (TSTF) Traveler TSTF–505, Revision 2, ''Provide Risk-Informed Extended Completion Times—RITSTF [Risk-Informed TSTF] Initiative 4b.''
Public Comments Received as to Proposed NSHC (Yes/No).	No.

PSEG Nuclear LLC; Salem Nuclear Generating Station, Unit Nos. 1 and 2; Salem County, NJ

Docket No(s)	50–272, 50–311.
Amendment Date	July 19, 2021.
ADAMS Accession No	ML21110A052.
Amendment No(s)	337 (Unit No. 1) and 318 (Unit No. 2).
Brief Description of Amendment(s)	The amendments replaced the current technical specification (TS) limit on the reactor coolant system (RCS) gross specific activity with a new limit on RCS noble gas specific activity. The noble gas specific activity is based on a new dose equivalent xenon-133 definition that replaced the current E-Bar average disintegration energy definition. The proposed changes are consistent with NRC-approved Technical Specifications Task Force (TSTF) Traveler, TSTF–490, Revision 0, ''Deletion of E Bar Definition and Revision to RCS Specific Activity Tech Spec.''

LICENSE AMENDMENT ISSUANCES—Continued

Public Comments Received as to Proposed NSHC (Yes/No).	No.
Southern Nuclear Operating Company, Inc.; Joseph M Farley Nuclear Plant, Units 1 and 2; Houston County, AL	
Docket No(s)	50–348, 50–364.
Amendment Date	June 30, 2021.
ADAMS Accession No	ML21137A247.
Amendment No(s)	233 (Unit 1) and 230 (Unit 2).
Brief Description of Amendment(s)	The amendments modified the Joseph M. Farley Nuclear Plant, Units 1 and 2, licensing basis, by the addition of a license condition, to allow for the implementation of the provisions of 10 CFR 50.69, ''Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors.''
Public Comments Received as to Proposed NSHC (Yes/No).	No.
Tennessee Valley Authority; Watts Bar Nuclear Plant, Unit 2; Rhea County, TN	
Docket No(s)	50–391.
Amendment Date	June 24, 2021.
ADAMS Accession No	ML21161A239.
Amendment No(s)	54.
Brief Description of Amendment(s)	The amendment revised the Watts Bar Nuclear Plant Updated Final Safety Analysis Report, for Unit 2 only, to apply a temperature adjustment to the voltage growth rate calculation used to determine the end-of-cycle distribution of indications in axial outer diameter stress corrosion cracking at tube support plates in support of the Unit 2 operational assessment for its steam generators.
Public Comments Received as to Proposed NSHC (Yes/No).	No.
Wolf Creek Nuclear Operating Corporation; Wolf Creek Generating Station, Unit 1; Coffey County, KS	
Docket No(s)	50–482.
Amendment Date	July 20, 2021.
ADAMS Accession No	ML21095A192.
Amendment No(s)	229.
Brief Description of Amendment(s)	The amendment consisted of changes to the Renewed Facility Operating License No. NPF–42 to reflect a corporate name change for the owner licensee names for Kansas Gas and Electric Company to Evergy Kansas South, Inc., and Kansas City Power & Light Company to Evergy Metro, Inc.
Public Comments Received as to Proposed NSHC (Yes/No).	No.

IV. Notice of Issuance of Amendment to Facility Operating Licenses and Combined Licenses and Final Determination of No Significant Hazards Consideration and Opportunity for a Hearing (Exigent Circumstances or Emergency Situation)

Since publication of the last monthly notice, the Commission has issued the following amendment. The Commission has determined for this amendment that the application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR chapter I, which are set forth in the license amendment.

Because of exigent circumstances or emergency situation associated with the date the amendment was needed, there was not time for the Commission to publish, for public comment before issuance, its usual notice of consideration of issuance of amendment, proposed NSHC determination, and opportunity for a hearing.

For exigent circumstances, the Commission has either issued a **Federal Register** notice providing opportunity for public comment or has used local media to provide notice to the public in the area surrounding a licensee's facility of the licensee's application and of the Commission's proposed determination of NSHC. The Commission has provided a reasonable opportunity for the public to comment, using its best efforts to make available to the public means of communication for the public to respond quickly, and in the case of telephone comments, the comments have been recorded or transcribed as appropriate and the licensee has been informed of the public comments.

In circumstances where failure to act in a timely way would have resulted, for example, in derating or shutdown of a nuclear power plant or in prevention of either resumption of operation or of increase in power output up to the plant's licensed power level, the Commission may not have had an opportunity to provide for public comment on its NSHC determination. In such case, the license amendment has been issued without opportunity for comment prior to issuance. If there has been some time for public comment but less than 30 days, the Commission may provide an opportunity for public comment. If comments have been requested, it is so stated. In either event, the State has been consulted by telephone whenever possible.

Under its regulations, the Commission may issue and make an amendment immediately effective, notwithstanding the pendency before it of a request for a hearing from any person, in advance of the holding and completion of any required hearing, where it has determined that NSHC is involved.

The Commission has applied the standards of 10 CFR 50.92 and has made a final determination that the

amendments involve NSHC. The basis for this determination is contained in the documents related to each action. Accordingly, the amendment has been issued and made effective as indicated. For those amendments that have not been previously noticed in the **Federal Register**, within 60 days after the date of publication of this notice, any persons (petitioner) whose interest may be affected by this action may file a request for a hearing and petition for leave to intervene (petition) with respect to the action. Petitions shall be filed in accordance with the guidance concerning the Commission's ''Agency Rules of Practice and Procedure'' in 10 CFR part 2 as discussed in section II.A of this document.

Unless otherwise indicated, the Commission has determined that the amendment satisfies the criteria for categorical exclusion in accordance with 10 CFR 51.22. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared for this amendment. If the Commission has prepared an environmental assessment under the special circumstances provision in 10 CFR 51.12(b) and has made a determination based on that assessment, it is so indicated in the safety evaluation for the amendment.

For further details with respect to these actions, see the amendment and associated documents such as the Commission's letter and safety evaluation, which may be obtained using the ADAMS accession numbers indicated in the following table. The safety evaluation will provide the ADAMS accession number(s) for the application for amendment and the **Federal Register** citation for any environmental assessment. All of these items can be accessed as described in the ''Obtaining Information and Submitting Comments'' section of this document.

LICENSE AMENDMENT ISSUANCE—EXIGENT/EMERGENCY CIRCUMSTANCES

Pacific Gas and Electric Company; Diablo Canyon Power Plant, Unit 1; San Luis Obispo County, CA	
Docket No(s)	50–275.
Amendment Date	July 8, 2021.
ADAMS Accession No	ML21188A345.
Amendment No(s)	238.
Brief Description of Amendment(s)	The amendment provided a new Technical Specification 3.7.8 Condition A note, to allow a one-time Completion Time of 144 hours to replace the Auxiliary Saltwater System Pump 1–1 motor during Cycle 23.
Local Media Notice (Yes/No)	No.
Public Comments Requested as to Proposed NSHC (Yes/No).	No.

Dated: August 4, 2021.

For the Nuclear Regulatory Commission.

Michael I. Dudek,

Deputy Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. 2021–16925 Filed 8–9–21; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[NRC–2021–0137]

Systematic Assessment for How the NRC Addresses Environmental Justice in Its Programs, Policies, and Activities

AGENCY: Nuclear Regulatory Commission.

ACTION: Extension of comment period.

SUMMARY: On July 9, 2021, the U.S. Nuclear Regulatory Commission (NRC) requested comments as part of its systematic review for how NRC programs, policies, and activities address environmental justice. Specifically, the NRC requested input on how the agency is addressing environmental justice, considering the agency's mission and statutory authority. The information will be used to inform the agency's assessment of how it addresses environmental justice. The public comment period was originally scheduled to close on August 23, 2021. The NRC has decided to extend the public comment period to allow more time for members of the public to develop and submit their comments.

DATES: The due date for comments requested in the notice published on July 9, 2021 (86 FR 36307) is extended. Submit comments by September 22, 2021. Comments received after this date will be considered if it is practical to do so, but the NRC is able to ensure consideration only for comments received on or before this date.

ADDRESSES: You may submit comments by any of the following methods:

- *Telephone:* 301–415–3875 or 800–882–4672.
- *Email: NRC-EJReview@nrc.gov.*
- *Mail comments to:* Office of Administration, Mail Stop: TWFN–7–A60M, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, ATTN: Program Management, Announcements and Editing Staff.
- *Federal Rulemaking website:* Go to *https://www.regulations.gov* and search for Docket ID NRC–2021–0137. Address questions about Docket IDs in *Regulations.gov* to Stacy Schumann; telephone: 301–415–0624; email: *Stacy.Schumann@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

For additional direction on obtaining information and submitting comments, see ''Obtaining Information and Submitting Comments'' in the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Allen Fetter, Office of the Executive Director for Operations, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone: 301–415–8556, email: *Allen.Fetter@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC–2021–0137 when contacting the NRC about the availability of information for this action. You may obtain publicly available information related to this action by any of the following methods:

- *Federal Rulemaking website:* Go to *https://www.regulations.gov* and search for Docket ID NRC–2021–0137.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly available documents online in the ADAMS Public Documents collection at *https://www.nrc.gov/reading-rm/adams.html.* To begin the search, select

''Begin Web-based ADAMS Search.'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The Staff Requirements Memorandum (SRM)–M210218B, ''Briefing on Equal Employment Opportunity, Affirmative Employment, and Small Business, 10:00 a.m., Thursday, February 18, 2021, Video Conference Meeting,'' dated April 23, 2021, which provides direction to the staff or this assessment, is available in ADAMS under Accession No. ML21113A070.

• *Attention:* The PDR, where you may examine and order copies of public documents, is currently closed. You may submit your request to the PDR via email at *pdr.resource@nrc.gov* or call 1–800–397–4209 or 301–415–4737, between 8:00 a.m. and 4:00 p.m. (ET), Monday through Friday, except Federal holidays.

B. Submitting Comments

The NRC encourages comment submission via email and phone. Please reference Docket ID NRC–2021–0137 in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post comment submissions received via regulations.gov at *https://www.regulations.gov* as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

II. Background

The NRC is an independent agency established by the Energy Reorganization Act of 1974 that began operations in 1975 as a successor to the licensing and regulatory activities of the Atomic Energy Commission. The NRC's mission is to license and regulate the Nation's civilian use of radioactive materials to provide reasonable assurance of adequate protection of public health and safety and to promote the common defense and security and to protect the environment. As part of its licensing and regulatory activities, the NRC conducts safety, security, and environmental reviews.

Specifically, with respect to environmental reviews, the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. 4321 *et seq.,* requires all Federal agencies to evaluate the impacts of proposed major actions on the human environment. As part of its responsibilities under NEPA, the NRC considers environmental justice. According to the Commission, ''[t]he term 'environmental justice' refers to the federal policy established in 1994 by Executive Order 12898, which directed federal agencies to identify and address 'disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.''' *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), CLI–15–6, 81 NRC 340, 369 (2015).

The NRC, as an independent agency, was requested, rather than directed, to comply with Executive Order 12898, and this Executive Orderdid not, in itself, create new substantive authority for Federal agencies. In a March 31, 1994, letter to President Clinton, NRC Chairman Ivan Selin indicated that the NRC would endeavor to carry out the measures set forth in Executive Order 12898 and the accompanying memorandum as part of the NRC's efforts to comply with NEPA (ADAMS Accession No. ML033210526). As noted in the NRC's 1995 Environmental Justice Strategy (ADAMS Accession No. ML20081K602 (March 24, 1995)), because ''the NRC is not a 'land management' agency, *i.e.,* it neither sites, owns, or manages facilities or properties,'' the NRC determined that Executive Order 12898 would ''primarily apply to [NRC] efforts to fulfill'' NEPA requirements as part of NRC's licensing process.

On August 24, 2004, following public comment on a draft Policy Statement (68 FR 62642), the Commission issued its ''Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions'' (69 FR 52040). The purpose of this Policy Statement was to set forth a ''comprehensive statement of the Commission's policy on the treatment of environmental justice matters in NRC regulatory and licensing actions.'' *Id.* at 52,041. The Policy Statement explains that the focus of an environmental justice review ''should be on identifying and weighing disproportionately significant and adverse environmental impacts on minority and low-income populations that may be different from the impacts on the general population. It is not a broad-ranging or even limited review of racial or economic discrimination.'' *Id.* at 52,047.

The Policy Statement also reiterates guidance on defining the geographic area for environmental justice assessments and identifying low-income and minority communities. *Id.* In addition, it explains that a scoping process is used to ''assist the NRC in ensuring that minority and low-income communities, including transient populations, affected by the proposed action are not overlooked in assessing the potential for significant impacts unique to those communities.'' *Id.* at 52,048. In performing a NEPA analysis, ''published demographic data, community interviews and public input through well-noticed public scoping meetings should be used in identifying minority and low-income communities that may be subject to adverse environmental impacts.'' *Id.*

On April 23, 2021, in a Staff Requirements Memorandum (ADAMS Accession No. ML21113A070), the Commission directed the staff to ''systematically review how the agency's programs, polices, and activities address environmental justice.'' As part of this review, the Commission directed the staff to evaluate recent Executive Orders and assess whether environmental justice is appropriately considered and addressed in the agency's programs, policies, and activities, given the agency's mission. As directed, the staff will consider the practices of other Federal, State, and Tribal agencies and evaluate whether the NRC should incorporate environmental justice beyond implementation through NEPA. The staff will also review the adequacy of the 2004 Policy Statement. The Commission further directed the staff to consider whether establishing formal mechanisms to gather external stakeholder input would benefit any future environmental justice efforts. To carry out the Commission's direction, the staff is seeking to engage stakeholders and interested persons representing a broad range of perspectives. This **Federal Register** notice is part of this engagement effort.

III. Requested Information and Comments

On July 9, 2021, the NRC published a notice in the **Federal Register** (86 FR 36307) requesting comments. The comment period was originally scheduled to close on August 23, 2021. The NRC staff has decided to extend the comment period until September 13,

2021, to allow more time for members of the public to submit their comments.

The NRC is interested in obtaining a broad range of perspectives from stakeholders and interested persons. The focus of this request is to gather information to inform a systematic assessment for how the NRC addresses environmental justice in its programs, policies, and activities, considering the agency's mission and statutory authority. The NRC is particularly interested in receiving input on the following questions:

(1) What is your understanding of what is meant by environmental justice at the NRC?

(2) As described in the Commission's 2004 Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions (69 FR 52040), the NRC currently addresses environmental justice in its NEPA reviews to determine if a proposed agency action will have disproportionately high and adverse impacts on minority and low-income communities, defined as environmental justice communities.

(a) When the NRC is conducting licensing and other regulatory reviews, the agency uses a variety of ways to gather information from stakeholders and interested persons on environmental impacts of the proposed agency action, such as in-person and virtual meetings, **Federal Register** notices requesting input, and dialog with community organizations.

(i) How could the NRC expand how it engages and gathers input?

(ii) What formal tools might there be to enhance information gathering from stakeholders and interested persons in NRC's programs, policies, and activities?

(iii) Can you describe any challenges that may affect your ability to engage with the NRC on environmental justice issues?

(b) How could the NRC enhance opportunities for members of environmental justice communities to participate in licensing and regulatory activities, including the identification of impacts and other environmental justice concerns?

(c) What ways could the NRC enhance identification of environmental justice communities?

(d) What has the NRC historically done well, or currently does well that we could do more of or expand with respect to environmental justice in our programs, policies, and activities, including engagement efforts? In your view, what portions of the 2004 Policy Statement are effective?

(3) What actions could the NRC take to enhance consideration of environmental justice in the NRC's programs, policies and activities and agency decision-making, considering the agency's mission and statutory authority?

(a) Would you recommend that NRC consider any particular organization's environmental justice program(s) in its assessment?

(b) Looking to other Federal, State, and Tribal agencies' environmental justice programs, what actions could the NRC take to enhance consideration of environmental justice in the NRC's programs, policies, and activities?

(c) Considering recent Executive Orders on environmental justice, what actions could the NRC take to enhance consideration of environmental justice in the NRC's programs, policies, and activities?

(d) Are there opportunities to expand consideration of environmental justice in NRC programs, policies, and activities, considering the agency's mission? If so, what are they?

Dated: August 4, 2021.

For the Nuclear Regulatory Commission.

Gregory F. Suber,

Director, Environmental Justice Review Team, Office of the Executive Director for Operations.

[FR Doc. 2021–16970 Filed 8–9–21; 8:45 am]

BILLING CODE 7590–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–92561; File No. SR–FINRA–2021–009]

Self-Regulatory Organizations; Financial Industry Regulatory Authority, Inc.; Order Approving a Proposed Rule Change To Adopt a Supplemental Liquidity Schedule, and Instructions Thereto, Pursuant to FINRA Rule 4524 (Supplemental FOCUS Information)

August 4, 2021.

I. Introduction

On April 30, 2021, the Financial industry Regulatory Authority (''FINRA'') filed with the Securities and Exchange Commission (''SEC'' or ''Commission''), pursuant to Section 19(b)(1) of the Securities Exchange Act (''Exchange Act'') [1] and Rule 19b–4 thereunder,[2] a proposed rule change to adopt a Supplemental Liquidity Schedule, and Instructions thereto, pursuant to FINRA Rule 4524 (Supplemental FOCUS Information).

The proposed rule change was published for comment in the **Federal Register** on May 18, 2021.[3] The comment period closed on June 8, 2021. The Commission received one comment letter in response to the Notice.[4] On June 22, 2021, FINRA extended the time period in which the Commission must approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change to August 16, 2021. On July 7, 2021, FINRA responded to the comment letter received in response to the Notice.[5] For the reasons discussed below, the Commission is approving the proposed rule change.

II. Description of the Proposed Rule Change [6]

FINRA Rule 4524 provides in part that FINRA may require certain members to file supplements to the Financial and Operational Combined Uniform Single Report (''FOCUS Report''), which is filed pursuant to Rule 17a–5 under the Exchange Act [7] and FINRA Rule 2010. These supplements may include such additional financial or operational schedules or reports as FINRA may deem necessary or appropriate for the protection of investors or in the public interest. FINRA Rule 4524 further requires FINRA to file a proposed schedule or report with the Commission pursuant to section 19(b) of the Exchange Act. Pursuant to FINRA Rule 4524, FINRA proposed to adopt a Supplemental Liquidity Schedule (''SLS''), and Instructions thereto.

A FINRA member that would be required to file the Form SLS would report detailed information relating to the member's:

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] *See* Exchange Act Release No. 91876 (May 12, 2021), 86 FR 27005 (May 18, 2021) (File No. SR–FINRA–2021–009) (''Notice'').

[4] *See* Letter from Kevin Zambrowicz, Managing Director & Associate General Counsel, the Securities Industry and Financial Markets Association (''SIFMA''), dated June 8, 2021 (''SIFMA Letter'').

[5] *See* Letter from Adam Arkel, Associate General Counsel, Office of General Counsel, FINRA, to Vanessa Countryman, Secretary, U.S. Securities and Exchange Commission, dated July 7, 2021 (''FINRA Letter''). The FINRA Letter is available on FINRA's website at *https://www.finra.org/sites/default/files/2021-07/sr-finra-2021-009-response-to-comments.pdf,* on the Commission's website at *https://www.sec.gov/comments/sr-finra-2021-009/srfinra2021009.htm,* and at the Commission's Public Reference Room.

[6] The subsequent description of the proposed rule change is substantially excerpted from FINRA's description in the Notice. See Notice, 86 FR at 27005–06.

[7] 17 CFR 240.17a–5 (''Rule 17a–5''). Paragraph (a) of Rule 17a–5 requires a broker-dealer to file a version of the FOCUS Report.

• Reverse repurchase and repurchase agreements;
• securities borrowed and securities loaned;
• non-cash reverse repurchase and securities borrowed transactions;
• non-cash repurchase and securities loaned transactions;
• bank loan and other committed and uncommitted credit facilities;
• total available collateral in the member's custody;
• margin and non-purpose loans;
• collateral securing margin loans;
• deposits at clearing organizations; and
• cash and securities received and delivered on derivative transactions not cleared through a central clearing counterparty (''CCP'').

According to FINRA, the SLS is tailored to apply only to members with the largest customer and counterparty exposures. Unless otherwise permitted by FINRA in writing, each carrying member with $25 million or more in free credit balances, as defined under Exchange Act Rule 15c3–3(a)(8),[8] and each member whose aggregate amount outstanding under repurchase agreements, securities loan contracts and bank loans is equal to or greater than $1 billion, as reported on the member's most recently filed FOCUS report, would be required to file the SLS. The SLS would be required to be completed as of the last business day of each month and filed within 24 business days after the end of the month. A member would not need to file the SLS for any period where the member does not meet the $25 million or $1 billion thresholds.

III. Comment Summary

As noted above, the Commission received one comment letter in response to the Notice.[9] In its comment letter, SIFMA asked that the implementation timing of the SLS be aligned with the implementation of the Federal Reserve Board's ''6G'' reporting framework with respect to the FR 2052a reports required to be filed by FINRA member firms that have bank holding company affiliates,[10] or that additional time be allotted for the implementation of the SLS.[11]

Additionally, noting that some of the reporting requirements for the SLS may be duplicative of information that must be reported to the Federal Reserve Board on FR 2052a reports, SIFMA has asked that the SLS contain an ''overlay'' that is mapped to the 5G/6G reporting frameworks of the Federal Reserve Board. According to SIFMA, this would have the effect of consolidating certain reporting categories where the respective categories and definitions align for the FINRA and the Federal Reserve Board reports, which would in turn streamline the reporting process for firms that are required to file with both FINRA and the Federal Reserve Board. Firms that are not required to file with both FINRA and the Federal Reserve Board would not be impacted, according to SIFMA.[12]

In response, FINRA reiterated that the proposed SLS is designed to improve FINRA's ability to monitor for events that signal an adverse change in the liquidity risk of broker-dealers that that file the schedule. FINRA also noted the extensive prior outreach and discussions that FINRA conducted regarding the potential burdens on broker-dealers that are subsidiaries of bank holding companies. According to FINRA, this consultation resulted in the alignment of categories in the proposed SLS with reporting required in the Federal Reserve Board's Complex Institution Liquidity Monitoring Report (referred to as ''FR 2052a'').[13]

FINRA also stated the SLS serves an important regulatory purpose because access to the information that would be reported on the SLS is important for FINRA to efficiently monitor on an ongoing basis the liquidity profile of its members. FINRA stated that the information would facilitate FINRA's efforts to understand and respond to firms that may appear similar based on their balance sheets, but in fact have different liquidity risk profiles which could negatively the ability to fund operations during periods of market stress or other stress events. Absent the reporting set forth in the SLS, FINRA noted that it would need to request such information on a firm-by-firm basis as the need arises, which could, according to FINRA, result in similar or potentially larger costs for some firms.[14]

While acknowledging that some members that would be subject to the proposed SLS could face potential burdens with respect to reporting requirements from other regulators, FINRA stated that it would revisit the reporting categories in the proposed SLS as appropriate with respect to potential alignments of such categories with other reporting requirements, including the FR 2052a, depending on how they evolve in the future. Consequently, FINRA stated that it believes it would not be appropriate to delay implementation of the proposed SLS.[15]

Finally, FINRA stated that it believes that the proposed timeframe for implementation of the proposed SLS set forward in the Notice affords members sufficient time to prepare.[16]

IV. Discussion and Commission Findings

After careful review of the proposed rule change, the comment letter, and FINRA's response to the comment letter, the Commission finds that the proposal is consistent with the requirements of the Exchange Act and the rules and regulations thereunder that are applicable to a national securities association.[17] Specifically, the Commission finds that the proposed rule change is consistent with Section 15A(b)(6) of the Exchange Act,[18] which requires, among other things, that the Commission determine any FINRA rule to be designed to protect investors and the public interest.

The Commission believes that the proposed SLS, which will require certain FINRA members, subject to the thresholds described above, to provide detailed information regarding various aspects of the member's liquidity profile will enable more effective monitoring of the liquidity risk of FINRA members by the Commission and FINRA. The Commission believes that regular and ongoing access to such information is important for the purpose of understanding the liquidity risks that member firms face, as well as differences in liquidity risks among firms that otherwise may appear to be similar based on similar characteristics in the firms' balance sheets. By enabling more effective monitoring of liquidity risk, the Commission believes that the information obtained through the SLS will protect investors and the public interest by providing FINRA and the Commission with information needed to better anticipate and respond to the risks that FINRA member firms may face during market or other stress events that could jeopardize their ability to fund their operations. FINRA estimates that between 85 and 100 broker-dealers will be required to file Form SLS, the universe of broker-dealers carrying customer accounts with at least $25 million in free credit balances or with

[8] 17 CFR 240.15c3–3 (''Rule 15c3–3'').

[9] *See supra* note 4.

[10] According to SIFMA, member firms are expected to be working on the implementation of the Federal Reserve 6G reporting through the end of 2022.

[11] *See* SIFMA Letter at 3.

[12] *See* SIFMA Letter at 3–4.

[13] *See* FINRA Letter at 2.

[14] *Id.*

[15] *Id.* at 3.

[16] *Id.*

[17] In approving this rule change, the Commission has considered the rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[18] 15 U.S.C. 78o–3(b)(6).

a minimum of $1 billion in repurchase agreements, bank loans or securities loans outstanding. Therefore, the Commission believes that the proposed Form SLS is reasonably designed to apply only to those broker-dealers that have the highest potential to adversely affect investors and the public interest in a liquidity stress event.

Finally, the Commission believes that FINRA has reasonably addressed the concerns raised by SIFMA's comment letter. Specifically, the Commission agrees that the SLS would serve an important regulatory purpose by providing FINRA and the Commission with information useful in evaluating a member firm's liquidity risk profile. While the Commission recognizes that there is the potential for burdens on certain member firms that are subject to the regulatory reporting requirements of other regulators, the Commission believes that the important regulatory purpose served by the SLS justifies the potential burdens. The Commission believes that absent the SLS, FINRA and the Commission would be required to request the information supplied in the SLS repeatedly and on a firm-by-firm basis in order to obtain the information necessary to monitor member firms for potential liquidity concerns. Such an approach would not only create regulatory inefficiency, but could also result in similar or potentially larger costs for firms, as FINRA noted.

Moreover, in light of the prior outreach that FINRA has conducted including publishing an earlier version of SLS in January 2018 and revising it in response to feedback from industry participants,[19] the Commission believes that FINRA's proposed approach to revisit the reporting categories in the SLS with a view to potential alignments of such categories with other reporting requirements depending on how they evolve would have the effect of further minimizing the regulatory burdens on member firms subject to the SLS. Consequently, the Commission believes that FINRA has appropriately addressed concerns raised in the comment letter concerning reducing the reporting costs imposed by the SLS.

Finally, the Commission agrees with FINRA that it is not appropriate to delay implementation of the SLS beyond the timeframe set forth in the Notice. Because FINRA previously published a version of the SLS in 2018, and will announce an effective date that will be 180 days following the publication of a Regulatory Notice published no later than 30 days after Commission approval, the Commission believes that member firms will have sufficient time to prepare to implement the SLS. Furthermore, in light of recent events connected to market volatility, which were discussed in the Notice,[20] the Commission believes that further delaying implementation of the SLS will undermine the regulatory interest that the Commission and FINRA have in monitoring member firms' liquidity risk profiles.

[19] *See* Regulatory Notice 18–02 (January 2018) (Liquidity Reporting and Notification). *See also* Notice, 86 FR at 27006.

[20] *See* Notice, 86 FR at 27005.

V. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,[21] that the proposed rule change (SR–FINRA–2021–009) be, and hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[22]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2021–16965 Filed 8–9–21; 8:45 am]

BILLING CODE 8011–01–P

[21] 15 U.S.C. 78s(b)(2).

[22] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–92559; File No. SR–NYSEAMER–2021–34]

Self-Regulatory Organizations; NYSE American LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend the NYSE American Options Fee Schedule

August 4, 2021.

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 July 28, 2021, NYSE American LLC (''NYSE American'' or the ''Exchange'') 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 amend the NYSE American Options Fee Schedule (''Fee Schedule''). The Exchange proposes to implement the fee change effective July 28, 2021. The proposed rule change is available on the Exchange's website at *www.nyse.com,* at the principal office of the Exchange, and at the Commission's Public Reference Room.

[1] 15 U.S.C. 78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

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, 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 amend the Fee Schedule to remove language associated with fee waivers that expired at the close of business on June 30, 2021.

On March 18, 2020, the Exchange announced that it would temporarily close the Trading Floor, effective Monday, March 23, 2020, as a precautionary measure to prevent the potential spread of COVID–19. Following the temporary closure of the Trading Floor, the Exchange waived certain Floor-based fixed fees for April, May, and June 2020.[4] Although the Trading Floor partially reopened on May 26, 2020 and Floor-based open outcry activity was supported, certain participants were unable to resume pre-Floor closure levels of operations. As a result, the Exchange extended the fee waiver through June 2021, but only for Floor Broker firms that were unable to operate at more than 50% of their March 2020 on-Floor staffing levels and for Market Maker firms that had vacant or ''unmanned'' Podia for the entire month

[4] *See* Securities Exchange Act Release Nos. 88595 (April 8, 2020), 85 FR 20737 (April 14, 2020) (SR–NYSEAMER–2020–25) (waiving Floor-based fixed fees); 88840 (May 8, 2020), 85 FR 28992 (May 14, 2020) (SR–NYSEAMER–2020–37) (extending April 2020 fee changes through May 2020); and 89049 (June 11, 2020), 85 FR 36649 (June 17, 2020) (SR–NYSEAMER–2020–44) (extending April and May fee changes through June 2020).

due to COVID–19 related considerations (the ''Qualifying Firms'').[5]

Because the Trading Floor continued to operate with reduced capacity, the Exchange extended the fee waivers for Qualifying Firms through ''the earlier of the first full month of a full reopening of the Trading Floor facilities to Floor personnel or June 2021''.

As the Trading Floor re-opened without social distancing requirements for vaccinated personnel on June 25, 2021 and the expiration date has passed, the Exchange is submitting this proposed rule change to remove the language related to the fee waivers from the Fee Schedule.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,[6] in general, and furthers the objectives of Sections 6(b)(4) and (5) of the Act,[7] in particular, because it provides for the equitable allocation of reasonable dues, fees, and other charges among its members, issuers and other persons using its facilities and does not unfairly discriminate between customers, issuers, brokers or dealers.

The Exchange believes that the proposed modifications to the Fee Schedule to remove expired fee waivers that the Exchange no longer offers are reasonable, equitable, and not unfairly discriminatory because the changes would provide clarity to the Fee Schedule, and do not affect any current activity by any ATP Holder.

B. Self-Regulatory Organization's Statement on Burden on Competition

In accordance with Section 6(b)(8) of the Act, the Exchange does not believe that the proposed rule change would impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. Instead, the proposed change is meant to add clarity and transparency to the Fee Schedule to the benefit of all market participants that trade on the Exchange.

[5] *See* Securities Exchange Act Release Nos. 89241 (July 7, 2020), 85 FR 42034 (July 13, 2020) (SR–NYSEAMER–2020–47); 89482 (August 5, 2020), 85 FR 48577 (August 11, 2020) (SR–NYSEAMER–2020–55); 89692 (August 27, 2020), 85 FR 54611 (September 2, 2020) (SR–NYSEAMER–2020–65); 90193 (October 15, 2020), 85 FR 67069 (October 21, 2020) (SR–NYSEAMER–2020–76); 90833 (December 30, 2020), 86 FR 641 (January 6, 2021) (SR–NYSEAMER–2020–87), 91366 (March 19, 2021) 86 FR 15987 (March 25, 2021) (SR–NYSEAMER–2021–14).

[6] 15 U.S.C. 78f(b).

[7] 15 U.S.C. 78f(b)(4) and (5).

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

The foregoing rule change is effective upon filing pursuant to Section 19(b)(3)(A)[8] of the Act and subparagraph (f)(2) of Rule 19b–4[9] thereunder, because it establishes a due, fee, or other charge imposed by the Exchange.

At any time within 60 days of the filing of such proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings under Section 19(b)(2)(B)[10] of the Act 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–NYSEAMER–2021–34 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSEAMER–2021–34. 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 website (*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 website 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. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEAMER–2021–34, and should be submitted on or before August 31, 2021.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[11]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2021–16964 Filed 8–9–21; 8:45 am]

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[8] 15 U.S.C. 78s(b)(3)(A).

[9] 17 CFR 240.19b–4(f)(2).

[10] 15 U.S.C. 78s(b)(2)(B).

[11] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–92562; File No. SR–CBOE–2021–043]

Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Rules 3.31, 3.33 and 3.34

August 4, 2021.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the ''Act''),[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on July 22, 2021, Cboe Exchange, Inc. (the ''Exchange'' or ''Cboe Options'') 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 substantially prepared by the

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

Exchange. The Exchange filed the proposal as a ''non-controversial'' proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act [3] and Rule 19b–4(f)(6) thereunder.[4] 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 amend Rules 3.31, 3.34 and 3.33. The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is available on the Exchange's website (*http://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx*), at the Exchange's Office of the Secretary, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend certain registration rules including (i) Rule 3.31 to update an incorrect cross-reference, (ii) Rule 3.33 to update a Regulatory Element Program reference and (iii) Rule 3.34 to provide the option of filing an initial or a transfer electronic Form U4 filing and any amendments to the disclosure information on Form U4 based on a manually or an electronically signed copy of the form, each as described below.

Proposed Rule Change to Rule 3.31

Rule 3.31 (Registration Categories) currently sets forth registration requirements for principal and representative registration categories. In particular, Rule 3.31(a)(2) provides that each principal as defined in paragraph (a)(1) (of Rule 3.31) is required to register with the Exchange as a General Securities Principal, subject to certain exceptions. More specifically, Rule 3.31(a)(2) provides that if a principal's activities include the functions of a Compliance Officer, a Financial and Operations Principal, a Securities Trader Principal, a Securities Trader Compliance Officer, or a Registered Options Principal ''as specified in paragraphs (a)(3) through (a)(6) of . . . Rule [3.31],'' then the principal must appropriately register in one or more of these categories. The Exchange notes however that the aforementioned categories are described under paragraphs (a)(3) through (a)(7) [5] (instead of through (a)(6)) and that the Exchange inadvertently omitted to cross-reference subparagraph (a)(7). Accordingly, the Exchange proposes to update the reference to (a)(6) to (a)(7) in the rule text to accurately reflect the corresponding subparagraphs to the registration categories listed under Rule 3.31(a)(2)(A)(i).

Proposed Rule Change to Rule 3.33

Existing Rule 3.33 (Continuing Education for Registered Persons) includes Regulatory Elements for Exchange registered persons. The Regulatory Elements are Continuing Education (''CE'') programs administered by the Financial Industry Regulatory Industry, Inc. (''FINRA'') and consist of periodic computer-based training on regulatory, compliance, ethical, and supervisory subjects, and sales practice standards. Pursuant to current Rule 3.33(a)(3), the Exchange offers the following Regulatory Elements for Exchange registered persons: The S201 for registered principals and supervisors; the S106 for persons registered only as Investment Company and Variable Contracts Representatives; and the S101 for all other registered persons. The Exchange proposes to amend Rule 3.33(a)(3), to be consistent with FINRA's most current CE programs. Specifically, the Exchange proposes to remove the language in Rule 3.33(a)(3) that provides that the S106 Regulatory Element CE Program is offered for persons registered only as Investment Company and Variable Contracts Representatives. In December 2018, the content from S106 became part of the S101 Regulatory Element CE Program and was retired as a stand-alone program.[6] As a result, persons registered only as Investment Company and Variable Contracts Representatives who complete the S106 CE Program, pursuant to Rule 3.33(a)(3), are now required to complete the S101 CE Program, as is currently the case for all other registered persons. Therefore, the Exchange proposes to update Rule 3.33(a)(3) to reflect this CE Program change by removing the language in Rule 3.33(a)(3) that provides that the S106 is offered for persons registered only as Investment Company and Variable Contracts Representatives while maintaining the existing language that provides that the S101 is offered for all other registered persons.

Proposed Rule Change to Rule 3.34

Paragraph (c) of Rule 3.34 (Electronic Filing Requirements for Uniform Forms), currently sets forth Form U4 filing requirements. Specifically, Rule 3.34(c) provides that initial and transfer electronic Form U4 filings and any amendments to the disclosure information on Form U4 must be based on a manually signed Form U4 provided to the Trading Permit Holder (''TPH'') or applicant for membership by the person on whose behalf the Form U4 is being filed, consistent with FINRA Rule 1010(c). However, FINRA recently amended their Rule 1010(c) to permit firms to choose to rely on electronic signatures to satisfy the signature requirements when filing Form U4.[7] The Exchange proposes to amend Rule 3.34 to similarly allow firms to rely on electronic signatures when filing Form U4, consistent with FINRA Rule 1010(c).

Specifically, the Exchange proposes to amend Exchange Rule 3.34, similar to the amendments made by FINRA, to provide firms the option of filing an initial or a transfer Form U4 based on a manually or an electronically signed copy of the form provided to the TPH, or applicant for membership, by the individual on whose behalf the form is being filed. As such, the proposed rule change removes the term ''manual'' from manual signature and the term ''manually'' from manually signed in Rule 3.34(c) and in Interpretation and Policy .03 to Rule 3.34.[8] The proposed

[3] 15 U.S.C. 78s(b)(3)(A)(iii).

[4] 17 CFR 240.19b–4(f)(6).

[5] *See* Rule 3.31(a)(7), which describes the requirements to register as a Registered Options Principal.

[6] *See* FINRA Information Notice, Administrative Changes to the Continuing Education Regulatory Element Programs (December 2, 2018), available at: *https://www.finra.org/rules-guidance/notices/information-notice-100218.*

[7] *See* Securities Exchange Release No. 91262 (March 5, 2021), 86 FR 13935 (March 11, 2021) (SR–FINRA–2021–003).

[8] The proposed rule change also makes minor, nonsubstantive formatting changes, including: Adding a period at the end of the heading for Rule 3.34(c), which is uniform with subparagraph headings throughout the Rulebook; and adding the phrase ''of this Rule'' following references to subparagraph (c)(3) to provide for additional clarity regarding rule references.

rule change provides TPHs, and applicants for membership, with an opportunity to better manage operational challenges. Particularly, the COVID–19 pandemic amplified the need to better manage operational challenges like those that arose during the pandemic [9] and that may continue to arise in the future. The proposed rule change would not require the use of a particular type of technology to obtain a valid electronic signature from the associated person. The Exchange believes that some firms may be unable to obtain the manual signature of applicants for registration resulting in a significant operational backlog. By permitting these firms to rely on electronic signatures to satisfy the signature requirements of Exchange Rule 3.34, the proposed rule change may reduce or eliminate this backlog. For purposes of the proposed rule change, a valid electronic signature would be any electronic mark that clearly identifies the signatory and is otherwise in compliance with the Electronic Signatures in Global and National Commerce Act (''E-Sign Act'') and the guidance issued by the Commission relating to the E-Sign Act.[10]

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the ''Act'') and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.[11] Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5) [12] requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

In particular, the Exchange believes the proposed rule change promotes just and equitable principles of trade and removes impediments to and perfects the mechanisms of a free and open market and a national market system and, in general, protects investors and the public interest, by amending an incorrect cross-reference in Rule 3.31 and a reference to an obsolete CE Program to reflect the current CE Programs administered by FINRA. Moreover, the proposed rule change updates the Exchange Rules to be consistent with current CE Program requirements and is designed to protect investors by ensuring accuracy and clarity relating to cross references in its rules and regarding CE for TPHs in Rule 3.33. Furthermore, the proposed rule change provides firms with the flexibility to rely on electronic signatures to satisfy the signature requirements of Rule 3.34. Specifically, the Exchange proposes to amend Exchange Rule 3.34, similar to the amendments made by FINRA, to provide the option of filing an initial or a transfer Form U4 based on a manually or an electronically signed copy of the form provided to the TPH, or applicant for membership, by the individual on whose behalf the form is being filed. Considering the technological advancements that provide for enhanced authentication and security of electronic signatures, the Exchange believes that it is appropriate to amend Rule 3.34 to provide such flexibility. The proposed rule change also addresses the ongoing public health risks stemming from the outbreak of COVID–19 and the operational challenges that firms continue to face as a result of pandemic repercussions.[13] By permitting these firms to rely on electronic signatures to satisfy the signature requirements of Rule 3.34, the proposed rule change may reduce or eliminate an operational backlog due to the difficulty firms may have faced in obtaining the manual signature of applicants for registration as a result of the impact of the pandemic on daily work environments.

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 Exchange does not believe that the proposed rule change will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act as the proposed rule changes to update an incorrect cross-reference and delete an obsolete CE Program reference are merely clarifying in nature and are not meant to address any competitive issue. The proposed change relating to manual signatures is, in all material respects, substantively identical to recent rule changes adopted by FINRA. The Exchange believes the proposed change will reduce a regulatory burden for TPHs by allowing them to rely on Form U4 copies with an electronic signature. All TPHs will have the option to rely on such forms with an electronic signature (or continue to rely on forms with a manual signature). Also, all persons registered only as Investment Company and Variable Contracts Representatives Regulatory Element are already required to complete the S101 CE Program, as FINRA replaced S106 with S101 in 2018; the proposed rule change just updates the Regulatory Element number in the Rules accordingly.

The Exchange does not believe that the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because the proposed rule changes are based upon the same changes recently made to FINRA Rule 1010(c) and consistent with the current Regulatory Element CE Programs administered by FINRA, as well as updates an incorrect cross-reference in the rules.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act [14] and Rule 19b–4(f)(6) [15] thereunder.

A proposed rule change filed under Rule 19b–4(f)(6) normally does not become operative for 30 days after the date of filing. However, pursuant to Rule 19b–4(f)(6)(iii), the Commission may designate a shorter time if such action is consistent with the protection of investors and the public interest. The

[9] *See* SR–FINRA–2021–003, 86 FR at 13937 (noting the same in connection with the FINRA filing).

[10] *See accord* Securities Exchange Act Release No. 85282 (March 11, 2019), 84 FR 9573 (March 15, 2019) (Order Approving File No. SR–FINRA–2018–040) (discussing valid electronic signatures under existing guidance).

[11] 15 U.S.C. 78f(b).

[12] 15 U.S.C. 78f(b)(5).

[13] *See supra* note 9.

[14] 15 U.S.C. 78s(b)(3)(A).

[15] 17 CFR 240.19b–4(f)(6).

Exchange has asked the Commission to waive the 30-day operative delay so that the proposed rule change may become operative immediately upon filing. As noted by the Exchange, correcting the cross-reference in Rule 3.31(a)(2)(A)(i) and updating the reference to an obsolete CE Program in Rule 3.33(a)(3) would immediately alleviate potential confusion in connection with the Exchange's publicly available rulebook. The Exchange also states that the proposed rule changes will help ensure accuracy and clarity relating to cross references in its rules and regarding CE for TPHs. Additionally, the Exchange notes that the proposed rule change to Exchange Rule 3.34 is based on a similar rule change by FINRA that has already taken effect. Finally, as the Exchange notes above in regard to its proposed rule change allowing electronic signatures to satisfy the signature requirements of Rule 3.34, the COVID–19 pandemic amplified the need to better manage operational challenges like those that arose during the pandemic [16] and that may continue to arise in the future.

For these reasons, the Commission believes that waiver of the 30-day operative delay is consistent with the protection of investors and the public interest. Accordingly, the Commission hereby waives the 30-day operative delay and designates the proposal operative upon filing.[17]

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule 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–CBOE–2021–043 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–1090.

All submissions should refer to File Number SR–CBOE–2021–043. 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 website (*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 website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or 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–CBOE–2021–043 and should be submitted on or before August 31, 2021.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[18]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2021–16966 Filed 8–9–21; 8:45 am]

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[16] *See supra* note 9 (where FINRA noted the same). In that filing, FINRA also requested and the Commission granted a waiver of the 30-day operative delay. *See* SR–FINRA–2021–003, 86 FR at 13938–9.

[17] For purposes only of waiving the 30-day operative delay, the Commission has considered the proposed rule change's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[18] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-92563; File No. SR–NYSEARCA–2021–68]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing of Proposed Rule Change New Rule 6.91P–O

August 4, 2021.

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 July 23, 2021, NYSE Arca, Inc. (''NYSE Arca'' or the ''Exchange'') 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 new Rule 6.91P–O (Electronic Complex Order Trading) to reflect the implementation of the Exchange's Pillar trading technology on its options market and to make conforming amendments to Rule 6.47A–O (Order Exposure Requirements—OX). The proposed change is available on the Exchange's website 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, of the most significant parts of such statements.

[1] 15 U.S.C. 78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

Background

The Exchange plans to transition its options trading platform to its Pillar technology platform. The Exchange's and its national securities exchange affiliates'[4] (together with the Exchange, the ''NYSE Exchanges'') cash equity markets are currently operating on Pillar. For this transition, the Exchange proposes to use the same Pillar technology already in operation for its cash equity market. In doing so, the Exchange will be able to offer not only common specifications for connecting to both of its cash equity and equity options markets, but also common trading functions. The Exchange plans to roll out the new technology platform over a period of time based on a range of symbols, anticipated for the fourth quarter of 2021.

In this regard, the Exchange recently filed a proposal to add new rules to reflect how options, particularly single-leg options, would trade on the Exchange once Pillar is implemented.[5] The current proposal sets forth how Electronic Complex Orders[6] would trade on the Exchange once Pillar is implemented. As noted in the Single-Leg Pillar Filing, as the Exchange transitions to Pillar, certain rules would continue to be applicable to symbols trading on the current trading platform, but would not be applicable to symbols that have transitioned to trading on Pillar.[7] Consistent with the Single-Leg Pillar Filing, proposed Rule 6.91P–O would have the same number as the current Electronic Complex Order Trading rule, but with the modifier ''P'' appended to the rule number. Current Rule 6.91–O, governing Electronic Complex Order Trading, would remain unchanged and continue to apply to any trading in symbols on the current system. Proposed Rule 6.91P–O would govern Electronic Complex Orders for trading in options symbols migrated to the Pillar platform.

Similar to the Single-Leg Pillar Filing, proposed Rule 6.91P–O would (1) use Pillar terminology that is based on Exchange Rule 7–E Pillar terminology governing cash equity trading; and (2) introduce new functionality for Electronic Complex Order trading.

Finally, as discussed in the Single-Leg Pillar Filing, the Exchange will announce by Trader Update when symbols are trading on the Pillar trading platform. The Exchange intends to transition Electronic Complex Order trading on Pillar at the same time that single-leg trading is transitioned to Pillar.

Proposed Rule 6.91P–O: Electronic Complex Order Trading

Current Rule 6.91–O (Electronic Complex Order Trading) specifies how the Exchange processes Electronic Complex Orders submitted to the Exchange. The Exchange proposes new Rule 6.91P–O to establish how such orders would be processed after the transition to Pillar. To promote clarity and transparency, the Exchange proposes to add a preamble to current Rule 6.91–O specifying that it would not be applicable to trading on Pillar.

As discussed in greater detail below, the Exchange is not proposing fundamentally different functionality regarding how Electronic Complex Orders would trade on Pillar than is currently available on the Exchange. However, with Pillar, the Exchange would introduce certain new or updated functionality available for options trading on the Pillar platform and use Pillar terminology.

Definitions. Proposed Rule 6.91P–O(a) would set forth the definitions applicable to trading on Pillar under the new rule.

- Proposed Rule 6.91P–O(a)(1) would define the term ''Electronic Complex Order'' or ''ECO'' to mean a Complex Order as defined in proposed Rule 6.62P–O(f) or a Stock/Option Order or Stock/Complex Order as defined in proposed Rule 6.62P–O(h)(6)(A), (B), respectively, that would be submitted electronically to the Exchange.[8] This proposed definition is based on the preamble to Rule 6.91–O without any substantive differences, except that reference to the ''NYSE Arca System'' would be replaced with the term ''Exchange'' and cross-references have been updated to reflect rules proposed in the Single-Leg Pillar Filing.
- Proposed Rule 6.91P–O(a)(2) would define the term ''ECO Order Instruction'' to mean a request to cancel, cancel and replace, or modify an ECO. As described further below, this concept relates to order processing when a series opens or reopens for trading and is based on the term ''order instruction'' as used in Rule 7.35–E(g) and proposed to be used in Rules 6.64P–O(e) and (f), which (similarly) would define an ''order instruction'' for options as a request to cancel, cancel and replace, or modify an order or quote.[9]
- Proposed Rule 6.91P–O(a)(3) would define the term ''leg'' or ''leg market'' to mean each of the component option series that comprise an ECO. This definition is consistent with the concept of leg markets as used in current Rule 6.91–O(a), which defines legs as individual orders and quotes in the Consolidated Book. The Exchange believes the proposed definition would add clarity regarding how the terms ''leg'' and ''leg market'' would be used in connection with ECO trading on Pillar.
- Proposed Rule 6.91P–O(a)(4) would define the term ''Complex NBBO'' to mean the derived national best bid and derived national best offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy. This definition is based on current Rule 6.1A–O(a)(2)(b), without any substantive differences.
- Proposed Rule 6.91P–O(a)(5) would define the term ''Complex strategy'' to mean a particular combination of leg components and their ratios to one another. The proposed definition would further provide that new complex strategies can be created when the Exchange receives either a request to create a new complex strategy or an ECO with a new complex strategy. This proposed definition is new and is consistent with how this concept is defined on other options exchanges and would promote clarity and transparency.[10]

[4] The Exchange's national securities exchange affiliates are the New York Stock Exchange LLC (''NYSE''), NYSE American LLC (''NYSE American''), NYSE National, Inc. (''NYSE National''), and NYSE Chicago, Inc. (''NYSE Chicago'').

[5] *See* Securities Exchange Act Release No. 92304 (June 30, 2021), 86 FR 36440 (July 9, 2021) (SR–NYSEArca–2021–047) (''Single-Leg Pillar Filing'').

[6] The term ''Electronic Complex Order'' is currently defined in the preamble to Rule 6.91–O to mean any Complex Order, as defined in Rule 6.62–O(e) or any Stock/Option Order or Stock/Complex Order as defined in Rule 6.62–O(h) that is entered into the NYSE Arca System (the ''System'').

[7] *See* Single-Leg Pillar Filing (providing that, once a symbol is trading on the Pillar trading platform, a rule with the same number as a rule with a ''P'' modifier would no longer be operative for that symbol and the Exchange would announce by Trader Update when symbols are trading on the Pillar trading platform).

[8] The proposed definitions of Complex Order, Stock/Option Order and Stock/Complex Order under Pillar are set forth in proposed Rules 6.62P–O(f), (h)(6)(A), and (h)(6)(B), as described in the Single-Leg Pillar Filing, and are substantially identical to the current definitions.

[9] *See* Single-Leg Pillar Filing (describing proposed opening Auction Process rule per Rule 6.64P–O).

[10] *See, e.g.,* Cboe Exchange Inc. (''Cboe'') Rule 5.33(a) (defining ''complex strategy'' as ''a particular combination of components and their ratios to one another'' and further providing that ''[n]ew complex strategies can be created as the result of the receipt of a complex instrument

Continued

• Proposed Rule 6.91P–O(a)(6) would define the term ''DBBO'' to address situations where it is necessary to derive a (theoretical) bid or offer for a particular complex strategy. As proposed, ''DBBO'' would mean the derived best bid (''DBB'') and derived best offer (''DBO'') for a complex strategy calculated using the Exchange BBO [11] for each leg (or the Away Market NBBO [12] for a leg if there is no Exchange BBO), provided that the bid (offer) price used to calculate the DBBO would never be lower (higher) than the greater of $0.05 or 5% below (above) the Away Market NBB (NBO). The proposed definition would also provide that the DBBO would be updated as the Exchange's calculation of the Exchange BBO or Away Market NBBO, as applicable, is likewise updated.

Proposed Rule 6.91P–O(a)(6)(A) would provide further detail about how the DBBO would be derived in the absence of an Exchange BB (BO) or Away Market NBB (NBO) for a given leg. As proposed, in such circumstances, the bid (offer) price used to calculate the DBBO would be the offer (bid) price for that leg minus (plus) ''one collar value,'' which would be (i) $0.25 where the best offer (bid) is priced $1.00 or lower; or (ii) the lower of $2.50 or 25% where the best offer (bid) is priced above $1.00, provided however that, per proposed Rule 6.91P–O(a)(6)(A)(i), if the best offer is equal to or less than one collar value, the best bid price used to calculate the DBBO for that leg would be $0.01.

This proposed definition is new and is based, in part, on the current definition of Complex BBO set forth in Rule 6.1A–O(a)(2)(b), as well as on how this concept is defined on other options exchanges, including on NYSE American.[13] The Exchange believes that the additional detail about how the DBBO would be calculated in the absence of an Exchange BBO and/or Away Market NBBO would promote clarity and transparency. In addition, the Exchange believes that it is appropriate to require that the DBBO be calculated within a certain amount of the Away Market NBBO as an additional protection against ECOs being executed on the Exchange at prices away from the current market.

Proposed Rule 6.91P–O(a)(7) would define ''Complex Order Auction'' or ''COA'' to mean an auction of an ECO as set forth in proposed Rule 6.91P–O(f) (discussed below). This definition is based on the title of paragraph (c) of current Rule 6.91–O, which sets forth the COA Process for ECOs without any substantive differences. Proposed Rule 6.91P–O(a)(7) would also state that the terms defined in paragraphs (a)(7)(A)–(D) would be used for purposes of a COA.

Proposed Rule 6.91P–O(a)(7)(A) would define a ''COA Order'' to mean an ECO that is designated by the OTP Holder as eligible to initiate a COA. This definition is based on the definition of a ''COA-eligible order'' as set forth in current Rule 6.91–O(c)(1) and (c)(1)(i), with a difference that the proposed definition would not require that an option class be designated as COA-eligible because all option classes that trade on Pillar would be COA-eligible.

Proposed Rule 6.91P–O(a)(7)(B) would define the term ''Request for Response'' or ''RFR'' to refer to the message disseminated to the Exchange's proprietary complex data feed announcing that the Exchange has received a COA Order and that a COA has begun. As further proposed, the definition would provide that each RFR message would identify the component series, the price, and the size and side of the market of the COA Order. This definition is based on the description of RFR in Rule 6.91–O(c)(3) without any substantive differences. The Exchange proposes a clarifying difference to make clear that RFR messages would be sent over the Exchange's proprietary complex data feed, which is based on current functionality.

Proposed Rule 6.91P–O(a)(7)(C) would define the term ''RFR Response'' to mean any ECO received during the Response Time Interval (defined below) that is in the same complex strategy, on the opposite side of the market of the COA Order that initiated the COA, and marketable against the COA Order.[14] This definition is based in part on the description of RFR Responses in Rule 6.91–O(c)(5). However, unlike the current definition, an RFR Response would not have a time-in-force contingency for the duration of the COA. Instead, the Exchange would consider any ECOs received during the Response Time Interval (defined below) that are marketable against the COA Order as an RFR Response. As described below, the Exchange proposes to define separately the term ''ECO GTX Order,'' which would be more akin to the current definition of RFR Response. In addition, the proposed definition omits the current rule description that an RFR Response may be entered in $0.01 increments or that such responses may be modified or cancelled because these features are applicable to all ECOs and therefore not necessary to separately state in connection with RFR Responses.

Proposed Rule 6.91P–O(a)(7)(D) would define the term ''Response Time Interval'' to mean the period of time during which RFR Responses for a COA may be entered and would provide that the Exchange would determine and announce by Trader Update the length of the Response Time Interval; provided, however, that the duration of the Response Time Interval would not be less than 100 milliseconds and would not exceed one (1) second. This definition is based in part on the description of Response Time Interval in Rule 6.91–O(c)(4), with a difference that the Exchange proposes to reduce the minimum time from 500 milliseconds to 100 milliseconds. While other option exchanges do not establish a minimum duration for a COA, the Exchange notes that the proposed 100 milliseconds minimum is consistent the minimum auction length for electronic-paired auctions on NYSE American.[15]

Types of ECOs. Proposed Rule 6.91P–O(b) would set forth the types of ECOs that would trade on Pillar. Proposed Rule 6.91P–O(b)(1) would provide that ECOs may be entered as Limit Orders or Limit Orders designated as Complex Only Orders. This proposed text is based on current Rule 6.91–O(b)(1), with a difference to provide that the Exchange would offer Complex Only Orders on Pillar. Complex Only Orders

creation request or complex order for a complex strategy that is not currently in the System''); MIAX Options Exchange (''MIAX'') Rule 518(a)(6) (same).

[11] The term BBO when used with respect to options traded on the Exchange would mean ''the best displayed bid or best displayed offer on the Exchange.'' *See* Single-Leg Pillar Filing (defining BBO in proposed Rule 1.1, which definition is substantially identical to the current definition of BBO in Rule 6.1A–O(a)(2)(a)).

[12] In the Single-Leg Pillar Filing, the Exchange proposes that the (new) term ''Away Market NBBO'' would refer to a calculation of the NBBO that excludes the Exchange's BBO. *See* Single-Leg Pillar Filing (defining Away Market NBBO in proposed Rule 1.1).

[13] *See, e.g.,* NYSE American Rule 900.2NY(7)(b) (providing that the Derived BBO ''is calculated using the BBO from the Consolidated Book for each of the options series comprising a given complex order strategy''); Cboe Rule 5.33(a) (defining ''Synthetic Bed Bid or Offer and SBBO'' for complex orders as ''the best bid and offer on the Exchange for a complex strategy calculated using'' the ''BBO for each component (or the NBBO for a component if the BBO for that component is not available) of a complex strategy from the Simple Book'').

[14] The term ''marketable'' is defined in proposed Rule 1.1 of the Single-Leg Pillar Filing.

[15] *See e.g.,* Cboe Rule 5.33(d)(3) (providing that Cboe ''determines the duration of the Response Time Interval on a class-by-class basis, which may not exceed 3000 milliseconds''); NYSE American Rule 971.1NY(c)(2)(B) (providing that for a Customer Best Execution Auction ''[t]he minimum/maximum parameters for the Response Time Interval will be no less than 100 milliseconds and no more than one (1) second'').

(as described below) are based in part on existing functionality for PNP Plus orders, which likewise may trade only with other Electronic Complex Orders, with updated functionality available on Pillar.[16] The Exchange proposes to rename this order type in a manner consistent with similar order types available on other options exchanges and therefore this proposed order type is not new or novel.[17]

• Proposed Rule 6.91P–O(b)(1)(A) would set forth the details of a Complex Only Order. As proposed, an ECO designated as a Complex Only Order would trade solely with ECOs and would not trade with the leg markets; provided that, if there is displayed Customer interest on all legs of the Complex Only Order, such order would not trade below (above) one penny ($0.01) times the smallest leg ratio inside the DBB (DBO) containing Customer interest, which requirement ensures that a Complex Only Order would price improve at least a portion of the displayed leg markets. In such case, a Complex Only Order would remain on the Consolidated Book until it can trade with another ECO at this improved price. As noted above, the Complex Only Order type is based in part on existing PNP Plus order functionality, with updated functionality based on Pillar. Specifically, the Exchange would no longer reprice a resting Complex Only Order and instead would restrict it from trading until it can trade at a price at or inside the DBBO, as described below.

• Proposed Rule 6.91P–O(b)(2) would set forth the time-in-force contingencies available to ECOs, which would be Day, IOC, FOK, or GTC, as those terms are defined in the Single-Leg Pillar Filing in proposed Rule 6.62P–O(b), and GTX (per proposed Rule 6.91P–O(b)(2)(B) as described below). The proposed text is based on current Rules 6.91–O(b)(2) and (3), except that it adds GTX (as described below). The proposed text also omits AON because the Exchange would not offer AONs for ECO trading on Pillar.

• Proposed Rule 6.91P–O(b)(2)(A) would provide that an ECO designated as IOC or FOK would be rejected if entered during a pre-open state,[18] which is consistent with the time-in-force of the order (because they could not be traded when a complex strategy is not open for trading) as well as with current functionality.

• Proposed Rule 6.91P–O(b)(2)(B) would provide that an ECO designated as GTX would be defined as an ''ECO GTX Order'' and would have the following features: It would not be displayed; it may be entered only during the Response Time Interval of a COA; it must be on the opposite side of the market as the COA Order; and it must specify the price, size, and side of the market. As further proposed, ECO GTX Orders may be modified or cancelled during the Response Time Interval and any remaining size that does not trade with the COA Order would be cancelled at the end of the COA. This definition is based on the description of an RFR Response in current Rule 6.91–O(c)(5)(A)—(C), which likewise are not displayed and expire at the end of the COA.

Priority and Pricing of ECOs. Proposed Rule 6.91P–O(c) would set forth how ECOs would be prioritized and priced under Pillar. As proposed, an ECO received by the Exchange that is not immediately executed (or cancelled) would be ranked in the Consolidated Book according to price-time priority based on the total net price and the time of entry of the order. This proposed rule is based on Rule 6.91–O(a)(1), without any substantive differences. The Exchange proposes a non-substantive difference to refer simply to a ''net price'' rather than a ''net debit or credit price,'' which streamlined terminology is consistent with the use of the term ''net price'' on other options exchanges.[19]

Proposed Rule 6.91P–O(c) would further provide that, unless otherwise specified in this Rule, ECOs would be processed as follows:

• Proposed Rule 6.91P–O(c)(1) would provide that when trading with the leg markets:

○ An ECO must trade at or within the greater of $0.05 or 5% higher (lower) than the Away Market NBO (NBB) (see proposed Rule 6.91P–O(c)(1)(A)). This would be new under Pillar and operate as an additional protection against ECOs being executed on the Exchange at prices away from the current market.

○ An ECO would trade at the prices of the leg markets (see proposed Rule 6.91P–O(c)(1)(B)). This proposed rule would make clear that when trading with the leg markets, the components of the ECO would trade at the prices of the leg markets, which is consistent with current functionality. For example, if there is sell interest in a leg market at $1.00, and a leg of an ECO to buy could trade up to $1.05, the ECO would trade with such leg market at $1.00. This would result in the ECO receiving price improvement and is consistent with the ECO trading as the aggressing order.

• Proposed Rule 6.91P–O(c)(2) would provide that when trading with another ECO, an ECO must trade at a price at or within the DBBO and no leg of an ECO may trade at a price of zero. This provision is based in part on current Rule 6.91–O(a)(2), which provides that no leg of an ECO will be executed outside of the Exchange BBO, and adds detail about other limitations on executions based on the DBBO. This proposed rule, which ensures that ECOs would never trade through interest in the leg markets, is consistent with current functionality and adds clarity and transparency to the proposed Rule. This proposed rule is also consistent with how ECOs are processed on other options exchanges.[20]

• Proposed Rule 6.91P–O(c)(3) would provide that an ECO may trade without consideration of prices of the same complex strategy available on other exchanges, which is based on the same text as contained in current Rule 6.91–O(a)(2) without any substantive differences.

• Proposed Rule 6.91P–O(c)(4) would provide that an ECO may trade in one cent ($0.01) increments regardless of the MPV otherwise applicable to any leg of the complex strategy, which is based on current Rule 6.91–O, Commentary .01 without any substantive differences.

Execution of ECOs at the Open (or Reopening after a Trading Halt). Current Rule 6.91–O(a)(2)(i) sets forth how ECOs are executed upon opening or reopening of trading. Proposed Rule 6.91P–O(d) would set forth details about how ECOs would be executed at the open or reopen following a trading halt.

With the transition to Pillar, the Exchange proposes new functionality

[16] *See* Rule 6.62–O(y) (describing PNP Plus orders as ECOs that may only trade with other ECOs, but which will continuously be repriced if locking or crossing the Complex BBO).

[17] Other options exchanges likewise offer Complex Orders that trade only with Complex Orders. *See, e.g.,* Cboe Rule 5.33(a) (defining ''Complex Only'' order as an ECO ''designate[ ] to execute only against complex orders in the COB and not Leg into the Simple Book'').

[18] The term ''pre-open state'' is defined in proposed Rule 6.64P–O(a)(10), as described in the Single-Leg Pillar Filing, to mean ''the period before a series is opened or reopened.''

[19] *See, e.g.,* Cboe Rule 5.33(f)(2) (setting forth parameters for the ''net price'' of complex orders traded on Cboe); Nasdaq ISE, LLC (''Nasdaq ISE''), Options 3, Section 14(c) (providing, in relevant part, that ''[c]omplex strategies will not be executed at prices inferior to the best net price achievable from the best ISE bids and offers for the individual legs'').

[20] *See, e.g.,* Cboe Rule 5.33(f)(2) (setting forth substantially identical execution parameters for complex orders executed on Cboe, including that complex orders may not execute at a net price that would cause any component of the complex strategy to be executed at a price of zero, or worse than or equal to the Cboe SBBO when there is a Priority Customer at the SBBO, or would cause any component of the complex strategy to be executed at a price worse than the individual component prices on the Simple Book).

regarding the ''ECO Opening Auction Process'' on the Exchange, which would be applicable both to openings and reopenings following a trading halt. The Exchange proposes to incorporate into the ECO Opening Auction Process certain functionality currently available on the Exchange's cash equity platform, which the Exchange has similarly proposed to include in the Auction Process for single-leg options.[21] Accordingly, proposed Rule 6.91P–O(d) would use Pillar terminology relating to auctions that is based in part on Pillar terminology set forth in Rule 7.35–E for cash equity trading and in part on proposed Rule 6.64P–O for single-leg options.

• Proposed Rule 6.91P–O(d)(1) would set forth the conditions required for the commencement of an ECO Opening Auction Process. Specifically, as proposed, the Exchange would initiate an ECO Opening Auction Process for a complex strategy only if all legs of the complex strategy have opened or reopened for trading, which text is based on current Rule 6.91–O(a)(2)(i)(A) without any substantive differences. Proposed Rule 6.91P–O(d)(1)(A)–(C) would set forth conditions that would prevent the opening of a complex strategy, as follows:

○ Any leg of the complex strategy has no BO or NBO;

○ The bid and offer prices used to calculate the DBBO for the complex strategy are locking or crossing; or

○ All legs of the complex strategy include displayed Customer interest and the width of the DBBO is less than or equal to one penny ($0.01) times the smallest leg ratio.

The proposal to detail these conditions for opening are consistent with current functionality. The Exchange believes that this added detail would add clarity and transparency to Exchange rules and would promote a fair and orderly ECO Opening Auction Process.

• Proposed Rule 6.91P–O(d)(2) would provide that any ECOs in a complex strategy with prices that lock or cross one another would be eligible to trade in the ECO Opening Auction Process. This proposed rule is based on current Rule 6.91–O(a)(2)(i)(B), which provides than an opening process will be used if there are ECOs that ''are marketable against each other.'' The Exchange proposes a difference in Pillar not to require that such ECOs be ''priced within the Complex NBBO'' because the proposed ECO Opening Auction Process under Pillar would instead rely on the DBBO (as described below).

Proposed Rule 6.91P–O(d)(2)(A) would provide that an ECO received during a pre-open state would not participate in the Auction Process for the leg markets pursuant to proposed Rule 6.64P–O, which is based on the same text (in the second sentence) of current Rule 6.91–O(a)(2)(i)(A) without any substantive differences.

Proposed Rule 6.91P–O(d)(2)(B) would provide that a complex strategy created intra-day when all leg markets are open would not be subject to an ECO Opening Auction Process and would instead trade pursuant to paragraph (e) of the proposed Rule (discussed below) regarding the handling of ECOs during Core Trading Hours.

Proposed Rule 6.91P–O(d)(2)(C) would provide that the ECO Opening Auction Process would be used to reopen trading in ECOs after a trading halt. This proposed rule is based in part on current Rule 6.64–O(d) and makes clear that the ECO Opening Auction Process would be applicable to reopenings.

• Proposed Rule 6.91P–O(d)(3) would describe each aspect of the ECO Opening Auction Process. First, proposed Rule 6.91P–O(d)(3)(A) would describe the ''ECO Auction Collars,'' which terminology would be new for ECO trading and is based on the term ''Auction Collars'' used in Rule 7.35–E for trading cash equity securities as well as in proposed Rule 6.64P–O(a)(2) for single-leg options trading.[22]

As proposed, the upper (lower) price of an ECO Auction Collar for a complex strategy would be the DBO (DBB); provided, however, that if there is displayed Customer interest on all legs of a complex strategy, the upper (lower) price of an ECO Auction Collar would be one penny ($0.01) times the smallest leg ratio inside the DBO (DBB) containing Customer interest. This new functionality on Pillar would ensure that ECOs trade within the DBBO and thus avoid trading through displayed Customer interest in the leg markets, which the Exchange believes is consistent with fair and orderly markets and investor protection.

• Next, proposed Rule 6.91P–O(d)(3)(B) would describe the ''ECO Auction Price.'' As proposed, the ECO Auction Price would be the price at which the maximum volume of ECOs can be traded in an ECO Opening Auction, subject to the proposed ECO Auction Collar. As further proposed, if there is more than one price at which the maximum volume of ECOs can be traded within the ECO Auction Collar, the ECO Auction Price would be the price closest to the midpoint of the ECO Auction Collar, or, if the midpoint falls within such prices, the ECO Auction Price would be the midpoint, provided that the ECO Auction Price would not be lower (higher) than the highest (lowest) price of an ECO to buy (sell) that is eligible to trade in the ECO Opening Auction Process. The concept of an ECO Auction Price is based in part on the concept of ''single market clearing price'' set forth in current Rule 6.91–O(a)(2)(i)(B). For Pillar, the Exchange proposes to determine the ECO Auction Price in a manner that is based in part on how an Indicative Match Price is determined for trading of cash equity securities, as set forth in on Rule 7.35–E(a)(8)(A), and how the Exchange proposes to determine the price for Auctions on Pillar for single-leg options trading.[23]

Finally, as proposed, if the ECO Auction Price would be a sub-penny price, it would be rounded to the nearest whole penny, which text is based on current Rule 6.91–O(a)(2)(i)(B), with a difference that the current rule refers to the midpoint of the Complex NBBO (which could be a sub-penny price) as opposed to referring to the ECO Auction Price, which would be a new Pillar term for trading ECOs.

Proposed Rule 6.91P–O(d)(3)(B)(i) would provide that an ECO to buy (sell) with a limit price at or above (below) the upper (lower) ECO Auction Collar would be included in the ECO Auction Price calculation at the price of the upper (lower) ECO Auction Collar, but ranked for participation in the ECO Opening (or Reopening) Auction Process in price-time priority based on its limit price. This proposed text is based in part on current Rule 6.91–O(a)(2)(i)(B). The proposed rule is also based on how the Exchange processes auctions for cash equity trading, as described in Rules 7.35–E(a)(10)(B) and (a)(6) and how the Exchange proposes to process Auctions on Pillar for single-leg options trading.[24]

Proposed Rule 6.91P–O(d)(3)(B)(ii) would provide that locking and crossing ECOs in a complex strategy would trade at the ECO Auction Price. As further proposed, if there are no locking or crossing ECOs in a complex strategy at or within the ECO Auction Collars, the Exchange would open the complex strategy without a trade. This proposed

[21] *See* Single-Leg Pillar Filing (describing proposed opening Auction Process rule per Rule 6.64P–O).

[22] *See* Single-Leg Pillar Filing (defining Auction Collars in proposed Rule 6.64P–O(a)(2)).

[23] *See* Single-Leg Pillar Filing (describing proposed Rule 6.64P–O(a)(7)).

[24] *See* Single-Leg Pillar Filing (describing proposed Rules 6.64P–O(a)(7)(B)(i) and 6.64P–O(b)).

text would be new and is based in part on proposed Rule 6.64P–O(d)(2)(B) for single-leg options, which describes when an option series could open without a trade.[25]

• Proposed Rule 6.91P–O(d)(4) would describe the ''ECO Order Processing during ECO Opening Auction Process.'' Because the Exchange would be using the same Pillar auction functionality for ECO trading that is used for its cash equity market and that the Exchange is proposing for single-leg options trading, the Exchange proposes to apply existing Pillar auction functionality regarding how to process ECOs that may be received during the period when an ECO Auction Process is ongoing.

Accordingly, as proposed, new ECOs and ECO Order Instructions (as defined in proposed Rule 6.91P–O(a)(2), described above) that are received when the Exchange is conducting the ECO Opening Auction Process for the complex strategy would be accepted but would not be processed until after the conclusion of this process. As further proposed, when the Exchange is conducting the ECO Opening Auction Process, ECO Order Instructions would be processed as follows:

○ Proposed Rule 6.91P–O(d)(4)(A) would provide that an ECO Order Instruction received during the ECO Opening Auction Process would not be processed until after this process concludes if it relates to an ECO that was received before the process begins and that any subsequent ECO Order Instructions relating to such ECO would be rejected.

○ Proposed Rule 6.91P–O(d)(4)(B) would provide that an ECO Order Instruction received during the ECO Opening Auction Process would be processed on arrival if it relates to an order that was received during this process.

Proposed Rule 6.91P–O(d)(4) and sub-paragraphs (A) and (B) are based on both current Rule 7.35–E(g) and its sub-paragraphs (1) and (2) and proposed Rule 6.64P–O(e) and its sub-paragraphs (1) and (2) (as described in the Single-Leg Pillar Filing) with differences only to reference the proposed defined term ECO Order Instruction and to refer to the ECO Opening Auction Process. The Exchange believes that the proposed rule text would provide transparency regarding how ECO Order Instructions that arrived during the ECO Opening Auction Process would be processed.

Proposed Rule 6.91P–O(d)(5) would describe the ''Transition to continuous trading'' after the ECO Opening Auction Process. As proposed, after the ECO Opening Auction, ECOs would be subject to ECO Price Protection, per proposed Rule 6.91P–O(g)(2) (as described below) and, if eligible to trade, would trade as follows:

○ Proposed Rule 6.91P–O(d)(5)(A) would provide that an ECO received before the complex strategy was opened that did not trade in whole in the ECO Opening Auction Process and that is locking or crossing other ECOs or leg markets in the Consolidated Book would trade pursuant to proposed Rule 6.91P–O(e) (discussed below) regarding the handling of ECOs during Core Trading Hours. This provision is based on the (last sentence) of current Rule 6.91–O(a)(2)(i)(B) and (C), with non-substantive differences to use Pillar terminology.

○ Proposed Rule 6.91P–O(d)(5)(B) would provide that any ECO received during the ECO Opening Auction Process would be processed in time sequence relative to one another based on original entry time. This proposed rule is based on both current functionality and how the Exchange proposes to process orders in an option series that were received during an Auction Processing Period, as described in the Single-Leg Pillar Filing for proposed Rule 6.64P–O(a)(5).

Execution of ECOs During Core Trading Hours. Proposed Rule 6.91P–O(e) would describe how ECOs would be processed during Core Trading Hours.

Proposed Rule 6.91P–O(e)(1) would provide that once a complex strategy is open for trading, an ECO received by the Exchange would trade with the best-priced contra-side interest as follows:

• Proposed Rule 6.91P–O(e)(1)(A) would provide that if, at a price, the incoming ECO would be eligible to trade with the leg markets (*e.g.,* not a Complex Only Order), the leg markets would have first priority at that price and would trade with the incoming ECO pursuant to proposed Rule 6.76AP–O before such incoming ECO would trade with contra-side ECOs resting in the Consolidated Book at that price. This proposed text is based on current Rule 6.91–O(a)(2)(ii) without any substantive differences.

• Proposed Rule 6.91P–O(e)(1)(B) would provide that an ECO would not trade with orders in the leg markets designated as AON or with an MTS modifier. This proposed text would be new and is based in part on existing functionality and reflects the Exchange's proposed new MTS modifier for orders in the leg markets.[26] The Exchange believes that this proposed rule would add clarity and transparency that ECOs would not trade with orders that have conditional instructions.

• Proposed Rule 6.91P–O(e)(1)(C) would provide that an ECO (that is not designated as a Complex Only Order) would be eligible to trade with the leg markets (in full or in a permissible ratio), subject to certain enumerated exceptions set forth in proposed Rule 6.91P–O(e)(1)(C)(i)–(iii). Specifically, ECOs with any one of the following complex strategies would be ineligible to trade with the leg markets and would be processed as a Complex Only Order:

○ A complex strategy with more than five legs;

○ a complex strategy with two legs and both legs are buying or both legs are selling, and both legs are calls or both legs are puts; or

○ a complex strategy with three or more legs and all legs are buying or all legs are selling.

The proposal to restrict ECOs with more than five legs from trading with the leg markets (and being treated as Complex Only Orders), per proposed Rule 6.91P–O(e)(1)(C)(i), would be new functionality under Pillar and is designed to help Market Makers manage risk. The Exchange currently requires Market Makers to utilize certain risk controls for quoting to help mitigate risk particularly during periods of market volatility, and would require Market Makers to continue to use risk controls on Pillar.[27] Because the execution of a multi-legged ECO is a single transaction, comprising discrete legs that must all trade simultaneously, allowing ECOs with more than five legs to trade with the leg markets may allow a multi-legged transaction to occur before a Market Maker's risk settings would be triggered. This proposed limitation is designed to prevent such multi-legged transactions, which would help ensure that Market Makers continue to provide liquidity and do not trade above their established risk tolerance levels. The Exchange notes that this restriction is consistent with similar limits

[25] *See* Single-Leg Pillar Filing (describing proposed Rule 6.64P–O(d)(2)(B).

[26] *See* Single-Leg Pillar Filing (describing Minimum Trade Size or MTS Modifier in proposed Rule 6.62P–O(i)(3)(B)).

[27] *See* Single-Leg Pillar Filing (describing the activity-based controls with updated functionality under Pillar that Market Makers would be required to use to manage risk in connection with their quotes, per proposed Rule 6.40P–O(a)(3) and (b)(2)). The proposed Pillar risk controls are substantively identical to the existing risk controls set forth in Rules 6.40–O(b)(2), (c)(2) and (d)(2) and Commentary .04 to Rule 6.40–O.

established on other options exchanges.[28]

Proposed Rule 6.91P–O(e)(1)(C)(ii)–(iii), which treats ECOs with certain complex strategies as Complex Only Orders, is based in part on current Rule 6.91–O(b)(4)(i)–(ii), with a difference that currently, such so-called ''directional strategies'' are rejected. The proposed handling under Pillar would be less restrictive than the current rule because such strategies would not be rejected and is consistent with the treatment of such complex strategies on other options exchanges.[29] As with the proposal to restrict ECOs with more than five legs trading with the leg markets, this proposed restriction is also designed to ensure that Market Maker risk settings would not be bypassed. Because ECOs with directional strategies are typically geared towards an aggressive directional capture of volatility, such ECOs can represent significantly more risk than trading any one of the legs in isolation. As such, because Market Maker risk settings are only triggered after the entire ECO package has traded, the Exchange believes this proposed rule change would help ensure fair and orderly markets by preventing such orders trading with the leg markets, which would minimize risk to Market Makers.

Proposed Rule 6.91P–O(e)(2) would provide that any ECO or portion thereof that does not trade immediately when it is received by the Exchange and that is designated either Day or GTC would be ranked in the Consolidated Book pursuant to proposed paragraph (c) of this Rule (regarding the priority of ECOs), which is based on current Rule 6.91–O(a)(2)(iii), except that it adds details regarding the time-in-force modifier of the ECO, which adds clarity and transparency to the proposed Rule. As further proposed, the Exchange would evaluate trading opportunities for a resting ECO when the leg markets comprising a complex strategy update, provided that during periods of high message volumes, such evaluation may be reduced to no less than ten times per one (1) second. The Exchange believes that this proposed rule promotes transparency of the frequency with which the Exchange would be evaluating the leg markets for updates.

Proposed Rule 6.91P–O(e)(3) would provide that ECOs that trade with the leg markets would be allocated pursuant to Rule 6.76AP–O. This proposed rule is based in part on current Rule 6.91–O(a)(2)(iii) without any substantive differences.

Execution of ECOs During a COA. Proposed Rule 6.91P–O(f) would describe how ECOs would trade during a COA. The COA Process is currently described in Rule 6.91–O(c). Under Pillar, the Exchange proposes to simplify the COA process, including by relying on the current DBBO for pricing, allowing a COA Order to initiate a COA only on arrival, and streamlining the rule text describing the circumstances that would cause an early end to a COA.

As proposed, a COA Order received when a complex strategy is open for trading would initiate a COA only on arrival, subject to proposed Rule 6.91P–O(f)(1) (described below). As further proposed, a COA Order would be rejected if entered during a pre-open state or if entered during Core Trading Hours with a time-in-force of FOK or GTX. This proposed order handling is based in part on current Rule 6.91–O(c)(1)(ii), which requires that COA Orders be submitted during Core Trading Hours. The proposed rejection of such orders during a pre-open state would be new under Pillar and is consistent with the Exchange's proposed functionality that a COA Order would initiate a COA only on arrival. In addition, the proposal would clarify that COA Orders designated as FOK or GTX would be rejected, even if submitted during Core Trading Hours, is based on current functionality and this addition would add further detail and clarification to the rule text. Finally, as further proposed, only one COA may be conducted at a time in a complex strategy, which is identical to text in current Rule 6.91–O(c)(3).

Proposed Rule 6.91P–O(f)(1) would describe the conditions required for the ''Initiation of a COA.'' As proposed, to initiate a COA, the limit price of the COA Order to buy (sell) must be higher (lower) than the best-priced, same-side ECOs resting on the Consolidated Book and equal to or higher (lower) than the midpoint of the DBBO. This proposed text is based in part on current Rule 6.91–O(c)(3)(i), with a difference to add a new ''midpoint of the DBBO'' requirement, which is designed to facilitate price improvement opportunities for the COA Order. As further proposed, a COA Order that does not satisfy these pricing parameters would not initiate a COA and would be processed as an ECO. This would be new under Pillar, as current Rule 6.91–O(c)(3) allows an order designated for COA to reside on the Consolidated Book unless or until such order meets the requisite pricing conditions to initiate a COA. The Exchange believes this proposed change would simplify the COA process.

Finally, as proposed, once a COA is initiated, the Exchange would disseminate a Request for Response message, the Response Time Interval would begin and, during such interval, the Exchange would accept RFR Responses, including GTX ECO Orders. This proposed text is based on current functionality set forth in Rule 6.91–O(c), with non-substantive differences to use Pillar terminology, including using the new Pillar term for GTX ECO Orders.

Proposed Rule 6.91P–O(f)(2) would describe the ''Pricing of a COA.'' As proposed, a COA Order to buy (sell) would initiate a COA at its limit price, unless its limit price locks or crosses the DBO (DBB), in which case it would initiate a COA at a price equal to one penny ($0.01) times the smallest leg ratio inside the DBO (DBB) (the ''COA initiation price''). This proposed functionality utilizes the new concept of a DBBO, is consistent with current functionality (that relies on substantively similar concept of Complex BBO), and ensures (consistent with current functionality) that interest on the leg markets maintain priority.

- Proposed Rule 6.91P–O(f)(2)(A) would provide that prior to initiating a COA, a COA Order to buy (sell) would trade with any ECO to sell (buy) that is priced equal to or below (above) one penny ($0.01) times the smallest leg ratio inside the DBO (DBB) (*i.e.,* priced better than the leg markets) and any unexecuted portion of such COA Order would initiate a COA. This proposed rule is based on current Rule 6.91–O(a)(2) with a difference to use the Pillar concept of DBBO rather than refer to the contra-side Complex BBO.
- Proposed Rule 6.91P–O(f)(2)(B) would provide that a COA Order would not be eligible to trade with the leg markets until after the COA ends, which added detail, while not explicitly stated in the current rule, is consistent with current functionality described in Rules 6.91–O(c)(7)(A) and (B) that only RFR Responses (*i.e.,* GTX orders) and ECOs will be allocated in a COA and that the COA Order would not trade with the leg markets until after the COA allocations.
- Proposed Rule 6.91P–O(f)(3) would set forth the conditions that would result in the ''Early End to a COA'' (*i.e.,* a COA ending prior to the expiration of the Response Time Interval). Currently, as described in Rule 6.91–O(c)(3), the Exchange takes a snapshot of the

[28] *See e.g.,* Cboe Rule 5.33(g) (providing the ECOs may be restricted from trading with the leg markets if such ECO has more than a maximum number of legs, which maximum the Exchange determines on a class-by-class basis and may be two, three, or four).

[29] *See, e.g.,* Nasdaq ISE Options 3, Section 14(d)(3)(A)–(B) (proving that ECOs with these complex strategies may trade only with other ECOs).

Complex BBO at the start of a COA and uses that snapshot as the basis for determining whether to end a COA early. Under Pillar, the Exchange would no longer use a snapshot of the Complex BBO as the basis for determining whether to end a COA early but would instead rely on the DBBO (not initial snapshot), which is updated as market conditions change (including during the Response Time Interval).[30] The Exchange proposes a COA would end early under the following conditions:

○ Proposed Rule 6.91P–O(f)(3)(A) would provide that a COA would end early if the Exchange receives an incoming ECO or COA Order to buy (sell) in the same complex strategy that is priced higher (lower) than the initiating COA Order to buy (sell), which proposed text is based on current Rule 6.91–O(c)(6)(B)(i) without any substantive differences.

○ Proposed Rule 6.91P–O(f)(3)(B) would provide that a COA would end early if the Exchange receives an RFR Response that crosses the same-side DBBO, which proposed text is based on current Rule 6.91–O(c)(6)(A)(i), except (as noted above) it refers to the DBBO rather than the ''initial Complex BBO.''

○ Proposed Rule 6.91P–O(f)(3)(C) would provide that a COA would end early if the leg markets update causing the same-side DBBO to lock or cross (i) any RFR Response(s) or (ii) if no RFR Responses have been received, the best-priced, contra-side ECOs. This proposed rule is based in part on current Rule 6.91–O(c)(6)(C)(i), with differences to use Pillar terminology.

○ Proposed Rule 6.91P–O(f)(3)(D) would provide that a COA would end early if the leg markets update causing the contra-side DBBO to lock or cross the COA initiation price. This proposed rule is based in part on current Rule 6.91–O(c)(6)(C)(ii), except that it would refer to the DBBO and the COA initiation price, which would be new concepts under Pillar.

• Proposed Rule 6.91P–O(f)(4) would set forth the ''Allocation of COA Orders'' after a COA either ends early or after the expiration of the Response Time Interval. Current Rule 6.91–O(c)(7)(A) sets forth that the COA-eligible orders are allocated against the best-priced interest received in the COA at each price on a ''Size Pro-Rata Basis,'' as that concept is defined in Rule 6.75–O(f)(6). Under Pillar, the allocation of the COA Order would be based on price-time priority, which would align the allocation of ECOs in a COA with standard processing of ECOs.

Proposed Rule 6.91P–O(f)(4)(A) would provide that RFR Responses to sell (buy) would trade in price-time priority with a COA Order to buy (sell); provided, however, that if there is displayed Customer interest on all legs of the DBB (DBO), RFR Responses to sell (buy) would not trade below (above) one penny ($0.01) times the smallest leg ratio inside the DBB (DBO). This proposed rule would ensure that the COA Order would not trade at a worse price than the leg markets and would price improve at least a portion of the interest in the leg markets. The proposed text is based in part on current Rule 6.91–O(c)(7)(A) insofar as it ensures that the COA Order would trade with the best-priced RFR Responses received in the COA and differs substantively because, as discussed above, the COA Order would trade with RFR Responses in price-time priority (and not Size Pro Rata).

Proposed Rule 6.91P–O(f)(4)(B) would provide that after COA allocations pursuant to paragraph (f)(4)(A) of this proposed Rule, any unexecuted balance of a COA Order (including COA Orders designated as IOC) would be eligible to trade with any contra-side interest, including the leg markets unless the COA Order is designated or treated as a Complex Only Order. This proposed text is based on existing functionality and makes explicit that a COA Order would trade solely with complex interest (and not the leg markets) during a COA. This proposed rule is designed to provide clarity and transparency that the remaining balance of a COA Order would be eligible to trade with the leg markets after the COA ends.

Proposed Rule 6.91P–O(f)(4)(C) would provide that after a COA Order trades pursuant to proposed Rule 6.91P–O(f)(4)(B), any unexecuted balance of a COA Order would be processed as an ECO pursuant to paragraph (e) of this Rule. The proposed text is based on current Rule 6.91–O(c)(7)(B) without any substantive differences.

Proposed Rule 6.91P–O(f)(5) would set forth ''Prohibited Conduct related to COAs,'' and is based on current Commentary .04 to Rule 6.91–O without any substantive differences, and would provide that a pattern or practice of submitting unrelated orders that cause a COA to conclude early would be deemed conduct inconsistent with just and equitable principles of trade and that dissemination of information related to COA Orders to third parties would also be deemed as conduct inconsistent with just and equitable principles of trade.

ECO Risk Checks. Proposed Rule 6.91P–O(g) would describe the ''ECO Risk Checks,'' which are designed to help OTP Holders and OTP Firms to effectively manage risk when trading ECOs. Current Commentaries .03, .05, and .06 of Rule 6.91–O set forth the existing risk checks for ECOs. With the transition to Pillar, the Exchange proposes to modify and enhance its existing risk checks for ECOs, as follows:

• Proposed Rule 6.91P–O(g)(1) would set forth the ''Complex Strategy Limit.'' As proposed, the Exchange would establish a limit on the maximum number of new complex strategies that may be requested to be created per MPID, which limit would be announced by Trader Update.[31] As further proposed, when an MPID reaches the limit on the maximum number of new complex strategies, the Exchange would reject all requests to create new complex strategies from that MPID for the rest of the trading day. In addition, and notwithstanding the established Complex Strategy Limit, the Exchange proposes that it may reject a request to create a new complex strategy from any MPID whenever the Exchange determines it is necessary in the interests of a fair and orderly market.

This is new functionality proposed under Pillar but is conceptually similar to the Complex Order Table Cap (the ''Cap''), set forth in Commentary .03 to Rule 6.91–O, which Cap (like the Complex Strategy Limit) is a system protection tool that enables the Exchange to limit the number of complex strategies available on the Exchange, which in turn improves the efficiency of the ECO process and helps maintain a fair and orderly market. The Exchange also notes that other options exchanges likewise impose a limit on new complex order strategies.[32]

[30] As discussed *infra* regarding proposed Rule 6.91P–O(a)(6) and the definition of the Derived BBO, ''the DBBO would be updated as the Exchange's calculation of the Exchange BBO or Away Market NBBO, as applicable, is likewise updated'').

[31] The Exchange has proposed to add the definition of MPID to proposed Rule 1.1, which would refer to ''the identification number(s) assigned to the orders and quotes of a single ETP Holder, OTP Holder, or OTP Firm for the execution and clearing of trades on the Exchange by that permit holder. An ETP Holder, OTP Holder, or OTP Firm may obtain multiple MPIDs and each such MPID may be associated with one or more sub-identifiers of that MPID.'' *See* Single-Leg Pillar Filing.

[32] *See, e.g.,* Cboe Rule 5.33 (providing, in its definition of ''complex strategy'' that Cboe ''may limit the number of new complex strategies that may be in the [Cboe] System at a particular time'') and MIAX Rule 518(a)(6) (providing, in its definition of ''complex strategy'' that MIAX ''may limit the number of new complex strategies that may be in the System at a particular time and will communicate this limitation to Members via Regulatory Circular'').

• Proposed Rule 6.91P–O(g)(2) would set forth the ECO Price Protection. The existing ECO ''Price Protection Filter'' is set forth in Commentary .05 to current Rule 6.91–O (the ''ECO Filter''). The proposed ''ECO Price Protection'' on Pillar would work similarly to how the current ECO price protection mechanism functions on the Exchange because an ECO would be rejected if it is priced a specified percentage away from the contra-side Complex NBB or NBO.[33] However, on Pillar, the Exchange proposes to use new thresholds and reference prices, which would not only simplify the existing price check, but it would also align the proposed functionality with the proposed ''Limit Order Price Protection'' for single-leg interest, thus adding uniformity to Exchange rules.[34]

Proposed Rule 6.91P–O(g)(2)(A) would provide that each trading day, an ECO to buy (sell) would be rejected or cancelled (if resting) if it is priced a Specified Threshold equal to or above (below) the Reference Price (as described below), rounded down to the nearest penny ($0.01), subject to proposed paragraphs (g)(2)(A)(i)–(v) of the Rule as described below. Because ECO Price Protection would be applied each trading day, an ECO designated GTC would be re-evaluated for ECO Price Protection on each day that it is eligible to trade and would be cancelled if the limit price is equal to or through the Specified Threshold. In addition, the rounding feature is based on how Limit Order Price Protection is calculated on the Exchange's cash equity market if it is not within the MPV for the security, as described in the last sentence of Rule 7.31–E(a)(2)(B), and is consistent with the proposed operation of the single-leg ''Limit Order Price Protection'' functionality for options.[35]

○ Proposed Rule 6.91P–O(g)(2)(A)(i) would provide that an ECO that arrives when a complex strategy is open for trading would be evaluated for ECO Price Protection on arrival. The Exchange has proposed similar functionality for single-leg options.[36]

○ Proposed Rule 6.91P–O(g)(2)(A)(ii) would provide that an ECO received during a pre-open state would be evaluated for ECO Price Protection after the ECO Opening Auction Process concludes.[37] The Exchange has proposed similar functionality for single-leg options.[38]

○ Proposed Rule 6.91P–O(g)(2)(A)(iii) would provide that an ECO resting on the Consolidated Book before a trading halt would be reevaluated for ECO Price Protection after the ECO Opening Auction Process concludes. The Exchange has proposed similar functionality for single-leg options.[39]

○ Proposed Rule 6.91P–O(g)(2)(A)(iv) would provide that Cross Orders (per proposed Rule 6.62P–O(g)) and ECOs entered on the Trading Floor would not be subject to ECO Price Protection. The Exchange has proposed similar functionality for single-leg options.[40]

○ Proposed Rule 6.91P–O(g)(2)(A)(v) would provide that ECO Price Protection would not be applied if there is no Reference Price for an ECO. The Exchange has proposed similar functionality for single-leg options.[41]

Proposed Rule 6.91P–O(g)(2)(B) would specify the ''Reference Price'' used in connection with the ECO Price Protection. As proposed, the Reference Price for calculating ECO Price Protection for an ECO to buy (sell) would be the Complex NBO (NBB), provided that, immediately following an ECO Opening Auction Process, the Reference Price would be the ECO Auction Price or, if none, the Complex NBO (NBB). The Exchange believes that adjusting the Reference Price for ECO Price Protection immediately following an ECO Opening Auction would ensure that the most up-to-date price would be used to assess whether to cancel an ECO that was received during a pre-open state, including during a Trading Halt. The Exchange notes this functionality is consistent with the proposed operation of the Limit Order Price Protection for single-leg options.[42]

As further proposed, there would be no Reference Price for an ECO if there is no NBBO for any leg of such ECO (*i.e.,* the Exchange would not calculate a Complex NBB (NBO)), which text is based on current Rule 6.91–O, Commentary .05(c), except that the proposed rule would not reference OPRA because, as further proposed, for purposes of determining a Reference Price, the Exchange would not use an adjusted NBBO (*i.e.,* such NBBO is implicitly reliant on information from OPRA).[43] The Exchange notes that using an unadjusted NBBO to calculate the Reference Price is based on how Limit Order Price Protection currently functions on the Exchange's cash equity market, as described in Rule 7.31–E(a)(2)(B) and is also consistent with the proposed operation of the Limit Order Price Protection for single-leg options.[44]

Proposed Rule 6.91P–O(g)(2)(C) would set forth the ''Specified Threshold'' used in connection with the ECO Price Protection. As proposed, the Specified Threshold for calculating ECO Price Protection would be $1.00, unless determined otherwise by the Exchange and announced to OTP Holders and OTP Firms by Trader Update.

The Exchange believes that the proposed Specified Threshold of $1.00 simplifies how the Reference Price would be calculated as compared to the calculations currently specified in Commentary .05 to Rule 6.91–O. In addition, consistent with Commentary .05(d), the Exchange proposes that the Specified Threshold could change, subject to announcing the changes by Trader Update. Providing flexibility in Exchange rules regarding how the Specified Threshold would be set is consistent with the rules of other options exchanges as well as the proposed functionality for the single-leg Limit Order Price Protection feature.[45]

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[33] As noted above, the Exchange proposes to define the Complex NBBO as the derived national best bid and derived national best offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy. *See* proposed Rule 6.91P–O(a)(4).

[34] *See* Single-Leg Pillar Filing (proposed Rule 6.62P(a)(3) sets forth the Limit Order Price Protection Filter applicable to Limit Orders and quotes).

[35] *See id.*

[36] *See* Single-Leg Pillar Filing (discussion regarding proposed Rule 6.62P–O(a)(3)(A)(i)).

[37] *See* discussion *infra* regarding proposed Rule 6.91P–O(d), which describes the ECO Opening Auction Process (or Reopening after a Trading Halt) as well as the concepts of ECO Auction Collars and ECO Auction Price.

[38] *See* Single-Leg Pillar Filing (discussion regarding proposed Rule 6.62P–O(a)(3)(A)(ii)).

[39] *See* Single-Leg Pillar Filing (discussion regarding proposed Rule 6.62P–O(a)(3)(A)(iii)).

[40] *See* Single-Leg Pillar Filing (discussion regarding proposed Rule 6.62P–O(a)(3)(A) excluding Cross Orders).

[41] *See* Single-Leg Pillar Filing (discussion regarding proposed Rule 6.62P–O(a)(3)(A)).

[42] *See* Single-Leg Pillar Filing (discussion regarding proposed Rule 6.62P–O(a)(3)(A) describing that the Reference Price for Limit Order Price Protection would be adjusted immediately following an Auction would ensure that the most up-to-date price would be used to assess whether to cancel a Limit Order that was received during a pre-open state or would be reevaluated after a Trading Halt Auction).

[43] *See* Single-Leg Pillar Filing (discussion regarding the proposed definition of ''NBBO'' in proposed Rule 1.1 describing that the ''NBBO'' for purposes of options trading would mean the national best bid or offer and that ''[u]nless otherwise specified, the Exchange may adjust its calculation of the NBBO based on information about orders it sends to Away Markets, execution reports received from those Away Markets, and certain orders received by the Exchange.'' The Exchange further proposes that the term ''Away Market NBBO'' refers to a calculation of the NBBO that excludes the Exchange's BBO'').

[44] References to the NBBO, NBB, and NBO in Rule 7.31–E refer to using a determination of the national best bid and offer that has not been adjusted. *See* Single-Leg Pillar Filing (describing use of unadjusted NBBO for single-leg Limit Order Price Protection in proposed Rule 6.62P–O(a)(3)(B)).

[45] *See, e.g.,* Cboe Rule 5.34(b)(6) (describing the ''Drill-Through Protection'' and that Cboe ''determines a default buffer amount on a class-by-class basis). *See* Single-Leg Pillar Filing (describing use of Trader Update to modify Specified Thresholds in proposed Rule 6.62P–O (a)(3)(C)).

• Proposed Rule 6.91P–O(g)(3) would set forth the ''Complex Strategy Protections.'' The proposed protections are based on current Rule 6.91–O, Commentary .06, which are referred to as the ''Debit/Credit Reasonability Checks.'' The Exchange believes this name change is appropriate because it more accurately conveys that the check applies solely to certain complex strategies and because (as discussed above), the Exchange proposes to refer simply to a ''net price'' as opposed to the ''total net debit or credit price.'' The proposed Pillar Complex Strategy Protections would function similarly to the current Debit/Credit Reasonability Checks because erroneously priced incoming ECOs would be rejected. However, rather than to refer to specified debit or credit amounts as a way to determine whether a given strategy is erroneously priced, the proposed rule would instead focus on the expectation of the order sender and what would result if the ECO were not rejected.

As proposed, to protect an OTP Holder or OTP Firm that sends an ECO (each an ''ECO sender'') with the expectation that it would receive (or pay) a net premium but has priced the ECO such that the ECO sender would instead pay (or receive) a net premium, the Exchange would reject any ECO that is comprised of the erroneously-priced complex strategies as set forth in proposed Rule 6.91P–O(g)(3)(A)–(C) and described below.

Proposed Rule 6.91P–O(g)(3)(A) would provide that '''All buy' or 'all sell' strategies'' would be rejected as erroneously-priced if it is an ECO for a complex strategy where all legs are to buy (sell) and it is entered at a price less than one penny ($0.01) times the sum of the number of options in the ratio of each leg of such strategy (*e.g.,* a complex strategy to buy (sell) 2 calls and buy (sell) 1 put with a price less than $0.03). The proposed text is based on Rule 6.91–O, Commentary .06(a)(1), with no substantive differences, except that the Exchange has streamlined the text and set forth the minimum price (*i.e.,* $0.03) for any ''all buy'' or ''all sell'' strategies.

Proposed Rule 6.91P–O(g)(3)(B) would provide for the rejection of erroneously-priced ''Vertical spreads,'' which are defined as complex strategies that consists of a leg to sell a call (put) option and a leg to buy a call (put) option in the same option class with the same expiration but at different strike prices. As proposed, the Exchange would reject as erroneously-priced: (i) An ECO for a vertical spread to buy a lower (higher) strike call and sell a higher (lower) strike call and the ECO sender would receive (pay) a net premium (proposed Rule 6.91P–O(g)(3)(B)(i)); and (ii) an ECO for a vertical spread to buy a higher (lower) strike put and sell a lower (higher) strike put and the ECO sender would receive (pay) a net premium (proposed Rule 6.91P–O(g)(3)(B)(ii)). The proposed strategy protections for vertical spreads are based on current Rule 6.91–O, Commentary .06(a)(2), except that, as noted above, the proposed Rule is written from the standpoint of the expectation of the ECO sender as opposed to reviewing total net debit or credit price of the strategy.

Proposed Rule 6.91P–O(g)(3)(C) would provide for the rejection of erroneously-priced ''Calendar spreads,'' which are defined as consisting of a leg to sell a call (put) option and a leg to buy a call (put) option in the same option class at the same strike price but with different expirations. As proposed, the Exchange would reject as erroneously-priced: (i) An ECO for a calendar spread to buy a call leg with a shorter (longer) expiration while selling a call leg with a longer (shorter) expiration and the ECO sender would pay (receive) a net premium (proposed Rule 6.91P–O(g)(3)(C)(i)); and (ii) an ECO for a calendar spread to buy a put leg with a shorter (longer) expiration while selling a put leg with a longer (shorter) expiration and the ECO sender would pay (receive) a net premium (proposed Rule 6.91P–O(g)(3)(C)(ii)). The proposed strategy protections for calendar spreads are based on current Rule 6.91–O, Commentary .06(a)(3), except that, as noted above, the proposed Rule is written from the standpoint of the expectation of the ECO sender as opposed to reviewing the total net debit or credit price of the strategy. The Exchange has also not retained discretion to disable the strategy protections for calendar spreads (as contained in Commentary .06(a)(3)(i) of the current Rule) because since adopting this provision in 2017, the Exchange has never exercised this discretion and therefore has determined that such discretion is no longer needed.

Proposed Rule 6.91P–O(g)(3)(D) would provide that any ECO that is not rejected by the complex strategy protections would still be subject to the Price Protection Filter, per paragraph (g)(2) of this Rule, which proposed text is based on Rule 6.91–O, Commentary .06(b) without any substantive difference.

Rule 6.47A–O: Order Exposure Requirements—OX

The Exchange also proposes conforming, non-substantive amendments to Rule 6.47A–O, regarding order exposure, to add a cross-reference to new Pillar Rule 6.91P–O. This proposed amendment would extend the exemption from the order exposure requirements to COAs on Pillar.[46] The Exchange also proposes to modify the reference to ''Complex Order Auction Process ('COA')'' to simply ''Complex Order Auction ('COA')'' (*i.e.,* removing the word Process) consistent with how this concept is defined in proposed Rule 6.91P–O(a)(7).

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As discussed above, because of the technology changes associated with the migration to the Pillar trading platform, subject to approval of the Single-Leg Pillar Filing as well as this proposed rule change, the Exchange will announce by Trader Update when rules with a ''P'' modifier will become operative and for which symbols. The Exchange believes that keeping existing rules on the rulebook pending the full migration of Pillar will reduce confusion because it will ensure that the rules governing trading on the Exchange's current system will continue to be available pending the full migration to Pillar.

2. Statutory Basis

The proposed rule change is consistent with Section 6(b) of the Securities Exchange Act of 1934 (the ''Act''),[47] in general, and furthers the objectives of Section 6(b)(5),[48] in particular, because it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments to, and perfect the mechanism of, a free and open market and a national market system and, in general, to protect investors and the public interest. The Exchange believes that proposed Rule 6.91P–O to support electronic complex trading on Pillar would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed rule would promote transparency in Exchange rules by using consistent terminology governing trading on both the Exchange's cash equity and options Pillar trading platforms, thereby ensuring that members, regulators, and

[46] *See* proposed Rule 6.47A–O(iii). Consistent with the Single-Leg Pillar Filing, the Exchange also proposes to replace reference to ''OX'' with ''the Exchange.'' *See id.* (preamble).

[47] 15 U.S.C. 78f(b).

[48] 15 U.S.C. 78f(b)(5).

the public can more easily navigate the Exchange's rulebook and better understand how options trading is conducted on the Exchange.

The Exchange believes that adding new Rule 6.91P–O with the modifier ''P'' to denote that this rule would be operative for the Pillar trading platform would remove impediments to and perfect the mechanism of a free and open market and a national market system by providing transparency of which rules would govern trading once a symbol has been migrated to the Pillar platform. The Exchange similarly believes that adding a preamble to current Rule 6.91–O stating that it would not be applicable to trading on Pillar would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote transparency regarding which rules would govern trading on the Exchange during and after the transition to Pillar.

The Exchange believes that incorporating Pillar functionality currently available on the Exchange's cash equity market (and recently proposed for single-leg options),[49] for trading of electronic complex orders on its options market in proposed Rule 6.91P–O would remove impediments to and perfect the mechanism of a free and open market and a national market system because the Exchange would be able to offer consistent functionality across both its options and cash equity trading platforms, adapted as applicable for trading of electronic complex orders. Accordingly, with the transition to Pillar, the Exchange will be able to offer additional features to its OTP Holders and OTP Firms that are currently available only on the Exchange's cash equity platform (and recently proposed to be available for single-leg options trading). For similar reasons, the Exchange believes that using Pillar terminology for the proposed new rule would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote consistency in the Exchange's rules across both its options and cash equity platforms.

Definitions, Types of ECOs and Priority and Pricing of ECOs

The Exchange believes that the proposed definitions in Rule 6.91P–O(a) would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed changes are designed to promote clarity and transparency by consolidating existing defined terms related to electronic complex trading into one section of the proposed rule. The Exchange believes that the proposed non-substantive amendments to those terms currently defined in Rule 6.91–O would promote clarity and transparency by using Pillar terminology. The Exchange further believes consolidating defined terms in proposed Rule 6.91P–O(a) would make the proposed rule more transparent and easier to navigate.

The Exchange believes that the proposed new definition of DBBO (and related terms of DBB and DBO) would further remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency to market participants regarding how the DBBO would be calculated under Pillar. The proposed definition is not novel and is based in part on similarly defined terms used on NYSE American and Cboe. In addition, the Exchange believes that setting forth additional definitions in proposed Rule 6.91P–O(a), including those that are used on other options exchanges (*e.g.,* ''complex strategy'') and clarifying terms (*e.g.,* ''leg'' and ''leg markets''), would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency to market participants regarding electronic complex trading under Pillar. Finally, the proposed definition of ''ECO Order Instruction'' would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would incorporate for ECOs existing Pillar order handling functionality in an auction that is currently available on the Exchange's cash equity platform, as described in Rule 7.35–E(g) and is proposed for options trading in proposed Rule 6.64P–O(e) and its sub-paragraphs (1) and (2) (as described in the Single-Leg Pillar Filing). The Exchange similarly proposes this functionality for the ECO Opening Auction Process, with non-substantive differences only to use an ECO-specific defined term and to refer to the ECO Opening Auction Process.

The Exchange believes that the proposed types of ECOs available per Rule 6.91P–O(b) would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would describe the ECOs and time-in-force modifiers that would be available on Pillar, as well as specifying additional ECO types. The Exchange is not proposing any new ECO order types or time-in-force modifiers on Pillar and believes that the non-substantive differences to use Pillar terminology to describe the available ECO order types would promote transparency and clarity in Exchange rules. The Exchange believes that the proposed Complex Only Order is not novel because it is based in part on the existing PNP Plus order functionality as both order types only interact with other ECOs. The proposed functionality on Pillar is also based on how such orders function on other options exchanges.[50] In addition, the proposed ECO GTX Order uses Pillar terminology to describe what is referred to as an ''RFR Response'' in the current rules, and therefore is not novel.

The Exchange believes that proposed new Rule 6.91P–O(c), and subparagraphs (2), (3), and (4), would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed rules would set forth a price-time priority model for Pillar and pricing requirements for ECO trading that are substantively the same as the Exchange's current price-time priority model and pricing requirements as set forth in Rule 6.91–O(a)(1) and Commentaries .01 and .02(i) to Rule 6.91–O. The Exchange believes that proposed Rule 6.91P–O(c)(1) and subparagraphs (A) and (B) would remove impediments to and perfect the mechanism of a free and open market and a national market system because they would promote transparency and clarity in Exchange rules regarding how ECOs would trade with the leg markets.

Execution of ECOs at the Open (or Reopening After a Trading Halt)

The Exchange believes that proposed Rule 6.91P–O(d) regarding the ECO Opening Auction Process would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed rule maintains the fundamentals of an auction process that the Exchange currently uses for ECOs, as described in Rule 6.91–O(a)(2)(i)(B), while at the same time enhancing the process by incorporating Pillar auction functionality that is currently available on the Exchange's cash equity platform, as described in Rule 7.35–E as well as proposed for single-leg options in proposed Rule 6.64P–O. For example, the Exchange proposes to use Pillar functionality to determine how to price an ECO Opening Auction Process, as described in proposed Rule 6.91P–

[49] *See generally* the Single-Leg Pillar Filing.

[50] *See supra* note 17 (citing Cboe Rule 5.33(a) regarding similar Complex Only order functionality).

O(d)(3), including using proposed ''ECO Auction Collars'' and an ''ECO Auction Price,'' which would promote transparency to market participants. The Exchange also proposes to process ECOs received during an ECO Opening Auction Process, as described in proposed Rule 6.91P–O(d)(4), and transition to continuous trading following an ECO Opening Auction Process, as described in proposed Rule 6.91P–O(d)(5), in a manner similar to how the Exchange's cash equity market processes orders that are received during an Auction Processing Period and transitions to continuous trading following a cash equity Trading Halt Auction, which the Exchange also proposes for single-leg options in proposed Rule 6.64P–O. The Exchange believes that using similar functionality for different types of auctions would promote consistency across the Exchange's options and cash equity trading platforms. Because the Exchange would be harnessing Pillar technology to support the ECO Opening Auction Process for electronic complex options trading, the Exchange believes that structuring proposed Rule 6.91P–O(d) based on Rule 7.35–E and proposed Rule 6.64P–O would promote transparency in the Exchange's trading rules.

The Exchange further believes that the proposed Rules 6.91P–O(d)(1) and (2), which describe when the Exchange would initiate an ECO Opening Auction Process and which ECOs would be eligible to trade in that process, would remove impediments to and perfect the mechanism of a free and open market and a national market system because they would provide clarity and transparency of the conditions required before the Exchange would initiate an ECO Opening Auction Process. The Exchange further believes that those conditions are not novel and are based on existing conditions specified in Rule 6.91–O(a)(2)(i)(A) and (B), with additional specificity designed to promote clarity and transparency. Accordingly, the Exchange believes that the ECO Opening Auction Process for ECOs trading on Pillar would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed process is based on the current opening process, including that orders would be matched based on price-time priority at a price at which the maximum volume can be traded.

Execution of ECOs During Core Trading Hours

The Exchange believes that proposed Rule 6.91P–O(e), setting forth the execution of ECOs during Core Trading Hours, would remove impediments to and perfect the mechanism of a free and open market and a national market system because the proposed functionality would incorporate the Exchange's existing price-time priority model for trading ECOs, including providing that the leg markets would have priority at a price. The Exchange believes that it would remove impediments to and perfect the mechanism of a free and open market and national market system for ECOs not to trade with orders in the leg markets designated AON or with an MTS modifier (as described in the Single-Leg Pillar Filing), because both orders types are conditional. The Exchange further believes that it would remove impediments to and perfect the mechanism of a free and open market and a national market system for ECOs to trade as Complex Only Orders (rather than be rejected as they would under current rules) if they have a complex strategy that could result in a Market Maker breaching their established risk settings.[51] This proposed process is also consistent with the treatment of similar ECOs on other options markets.[52] The Exchange further believes that it would remove impediments to and perfect the mechanism of a free and open market and a national market system to specify the frequency with which the Exchange would evaluate trading opportunities for an ECO with the leg markets update because it would promote clarity and transparency in Exchange rules.

Execution of ECOs During a COA

The Exchange believes that proposed Rule 6.91P–O(f), setting forth the execution of ECOs during a COA, would remove impediments to and perfect the mechanism of a free and open market and a national market system and promote just and equitable principles of trade because the proposed functionality would both incorporate existing functionality to provide that COA Orders would trade solely with other ECOs (and not the leg markets) during the auction and that a COA Auction would be allocated on price-time priority, which is consistent with the Exchange's priority scheme. The Exchange believes the proposed rule would add clarity and transparency to OTP Holders and OTP Firms utilizing the COA process.

In addition, the Exchange further believes that the proposed changes to the COA process on Pillar that either differ from current functionality or that would be new would remove impediments to and perfect the mechanism of a free and open market and national market system because:

- Requiring that a COA Order initiate a COA on arrival, else [sic] be treated as a standard ECO, is new under Pillar and would provide OTP Holders and OTP Firms with a higher level of transparency and determinism of when a COA Order could initiate a COA.
- Making explicit that COA Orders may only execute with ECOs (and not the leg markets) until after the COA ends is designed to make clear that ECOs have priority during a COA.
- Streamlining the rule text that would describe the market events that would cause an early end to a COA under Pillar would simplify the COA process and would provide OTP Holders and OTP Firms with a higher level of transparency and determinism regarding the handling of COA Orders.

ECO Risk Checks

The Exchange believes that proposed Rule 6.91P–O(g), setting forth ECO Risk Checks, would remove impediments to and perfect the mechanism of a free and open market and a national market system and promote just and equitable principles of trade because the proposed functionality would incorporate existing risk controls, without any substantive differences. The Exchange further believes that the proposed changes to ECO Risk Checks on Pillar that either differ from current functionality or would be new would remove impediments to and perfect the mechanism of a free and open market and national market system because:

- The Exchange believes that the new Complex Strategy Limit (which is conceptually similar to the Complex Order Table Cap under the current Rule) would operate as a system protection tool that enables the Exchange to limit the number of complex strategies available on the Exchange, which in turn would improve the efficiency of the ECO process and helps maintain a fair and orderly market. The proposed limits are not novel and are based on limits imposed by other options exchanges on new complex order strategies.[53]
- The proposed ECO Price Protection on Pillar would work similarly to how the current ECO price protection

[51] *See* discussion *infra* regarding rationale for proposed Rule 6.91P–O(e) to restrict certain ECOs from executing as a package and bypassing Market Maker risk settings.

[52] *See supra* notes 28 and 29 (citing to Cboe Rule 5.33(g) and Nasdaq ISE Options 3, Section 14(d)(3)(A)–(B) regarding similar functionality.

[53] *See supra* note 32 (citing Cboe Rule 5.33(a) and MIAX Rule 518(a)(6) regarding each exchange's ability to limit the number of new complex strategies in their systems at any particular time).

mechanism functions on the Exchange because an ECO would be rejected if it is priced a specified percentage away from the contra-side Complex NBB or NBO.[54] The Exchange believes that the proposed differences on Pillar, to use new thresholds and reference prices, would not only simplify the existing price check, but it would also align the proposed functionality with the proposed ''Limit Order Price Protection'' for single-leg interest, thus adding uniformity to Exchange rules.[55]

• The proposed Pillar Complex Strategy Protections would function similarly to the current Debit/Credit Reasonability Checks because erroneously priced incoming ECOs would be rejected. The Exchange believes that the non-substantive differences to focus on the expectation of the ECO sender and what would result if the ECO were not rejected rather than refer to specified debit or credit amounts as a way to determine whether a given strategy is erroneously priced would remove impediments to and perfect the mechanism of a free and open market system because it would promote clarity and transparency in Exchange rules.

Rule 6.47A–O

The Exchange believes that the proposed non-substantive change to Rule 6.47A–O to update references to ''COA'' (versus COA Process) and ''the Exchange,'' to delete reference to ''OX,'' and add the reference to Rule 6.91P–O would remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, protect investors and the public interest because the proposed conforming changes would add clarity, transparency and consistency to the Exchange's rules. The Exchange believes that market participants would benefit from the increased clarity, thereby reducing potential confusion. Similarly, the Exchange believes that adding a cross-reference to proposed Rule 6.91P–O would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote clarity and transparency of which Pillar rules would be eligible for the exception specified in that Rule.

[54] As noted above, the Exchange proposes to define the Complex NBBO as the derived national best bid and derived national best offer for a complex strategy calculated using the NBB and NBO for each component leg of a complex strategy. *See* proposed Rule 6.91P–O(a)(4).

[55] *See* Single-Leg Pillar Filing (proposed Rule 6.62P(a)(3) sets forth the Limit Order Price Protection Filter applicable to Limit Orders and quotes).

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 Exchange operates in a competitive market and regularly competes with other options exchanges for order flow. The Exchange believes that the transition to Pillar for trading of ECOs on its options trading platform would promote competition among options exchanges by offering a low-latency, deterministic trading platform. The proposed rule changes would support that inter-market competition by allowing the Exchange to offer additional functionality to its OTP Holders and OTP Firms, thereby potentially attracting additional order flow to the Exchange. Otherwise, the proposed changes are not designed to address any competitive issues, but rather to amend the Exchange's rules relating to trading of ECOs to support the transition to Pillar. As discussed in detail above, with this rule filing, the Exchange is not proposing to change its core functionality regarding the treatment of ECOs. Rather, the Exchange believes that the proposed rule changes would promote consistent use of terminology to support options (both single-leg and complex) and cash equity trading on the Exchange, making the Exchange's rules easier to navigate. The Exchange does not believe that the proposed rule changes would raise any intra-market competition as the proposed rule changes would be applicable to all OTP Holders and OTP Firms, and reflects the Exchange's existing treatment of ECOs, without proposing any material substantive changes.

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

Within 45 days of the date of publication of this notice in the **Federal Register** or *up to 90 days* (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) By order approve or disapprove the proposed rule change, or

(B) institute proceedings to determine whether the proposed rule change should be 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–2021–68 on the subject line.

Paper Comments

• Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSEARCA–2021–68. 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 website (*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 website 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. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEARCA–2021–68, and

should be submitted on or before August 31, 2021.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[56]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2021–16967 Filed 8–9–21; 8:45 am]

BILLING CODE 8011–01–P

DEPARTMENT OF STATE

[Public Notice: 11491]

Foreign Affairs Policy Board Charter Renewal

ACTION: Notice of renewal of the charter of the Foreign Affairs Policy Board.

SUMMARY: Pursuant to the Federal Advisory Committee Act, the Department of State hereby provides notice of the renewal of the charter of the Foreign Affairs Policy Board (''the Board''). The Foreign Affairs Policy Board provides the Secretary of State with advice, feedback, and perspectives from a diverse array of experts to advance the Department's mission and help root American foreign policy in the needs and aspirations of the American people. The Board's activities are advisory only.

FOR FURTHER INFORMATION CONTACT: Designated Federal Officer Jennifer R. Littlejohn in the Office of Policy Planning, U.S. Department of State, at email: *LittlejohnJR@state.gov.*

SUPPLEMENTARY INFORMATION: The Board is established under the general authority of the Secretary of State and the Department of State as set forth in Title 22 of the United States Code, in particular Section 2656 of that Title and consistent with the Federal Advisory Committee Act.

Authority: 5 U.S.C. Appendix, 41 CFR 102–3.65.

Salman Ahmed,

Director, Office of Policy Planning, Department of State.

[FR Doc. 2021–16987 Filed 8–9–21; 8:45 am]

BILLING CODE 4710–10–P

[56] 17 CFR 200.30–3(a)(12).

DEPARTMENT OF STATE

[Public Notice 11493]

Imposition of Nonproliferation Measures Against Foreign Persons, Including a Ban on U.S. Government Procurement

AGENCY: Bureau of International Security and Nonproliferation, Department of State.

ACTION: Notice.

SUMMARY: A determination has been made that a number of foreign persons have engaged in activities that warrant the imposition of measures pursuant to Section 3 of the Iran, North Korea, and Syria Nonproliferation Act. The Act provides for penalties on foreign entities and individuals for the transfer to or acquisition from Iran since January 1, 1999; the transfer to or acquisition from Syria since January 1, 2005; or the transfer to or acquisition from North Korea since January 1, 2006, of goods, services, or technology controlled under multilateral control lists (Missile Technology Control Regime, Australia Group, Chemical Weapons Convention, Nuclear Suppliers Group, Wassenaar Arrangement) or otherwise having the potential to make a material contribution to the development of weapons of mass destruction (WMD) or cruise or ballistic missile systems. The latter category includes (a) items of the same kind as those on multilateral lists but falling below the control list parameters when it is determined that such items have the potential of making a material contribution to WMD or cruise or ballistic missile systems, (b) items on U.S. national control lists for WMD/missile reasons that are not on multilateral lists, and (c) other items with the potential of making such a material contribution when added through case-by-case decisions.

DATES: July 29, 2021.

FOR FURTHER INFORMATION CONTACT: On general issues: Pam Durham, Office of Missile, Biological, and Chemical Nonproliferation, Bureau of International Security and Nonproliferation, Department of State, Telephone (202) 647–4930. For U.S. Government procurement ban issues: Eric Moore, Office of the Procurement Executive, Department of State, Telephone: (703) 875–4079.

SUPPLEMENTARY INFORMATION: On July 29, 2021, the U.S. Government applied the measures authorized in Section 3 of the Iran, North Korea, and Syria Nonproliferation Act (Pub. L. 109–353) against the following foreign persons identified in the report submitted pursuant to Section 2(a) of the Act:

Asa'ib Ahl al-Haq (AAH) (Iraq) and any successor, sub-unit, or subsidiary thereof;

Kata'ib Hezbollah (Iraq) and any successor, sub-unit, or subsidiary thereof;

Asia-Invest LLC (Russia) and any successor, sub-unit, or subsidiary thereof;

Charter Green Light Moscow (CGLM) (Russia) and any successor, sub-unit, or subsidiary thereof;

NPP Pulsar LLC (Russia) and any successor, sub-unit, or subsidiary thereof;

Ayman Al Sabbagh Trading (Syria) and any successor, sub-unit, or subsidiary thereof;

Lebanese Hizballah (Syria) and any successor, sub-unit, or subsidiary thereof;

Wael Issa Trading Establishment (Syria) and any successor, sub-unit, or subsidiary thereof.

Accordingly, pursuant to Section 3 of the Act, the following measures are imposed on these persons:

1. No department or agency of the U.S. government may procure or enter into any contract for the procurement of any goods, technology, or services from these foreign persons, except to the extent that the Secretary of State otherwise may determine;

2. No department or agency of the U.S. government may provide any assistance to these foreign persons, and these persons shall not be eligible to participate in any assistance program of the U.S. government, except to the extent that the Secretary of State otherwise may determine;

3. No U.S. government sales to these foreign persons of any item on the United States Munitions List are permitted, and all sales to these persons of any defense articles, defense services, or design and construction services under the Arms Export Control Act are terminated; and

4. No new individual licenses shall be granted for the transfer to these foreign persons of items the export of which is controlled under the Export Control Reform Act of 2018 or the Export Administration Regulations, and any existing such licenses are suspended.

These measures shall be implemented by the responsible departments and agencies of the U.S. government and will remain in place for two years from the effective date, except to the extent

that the Secretary of State may subsequently determine otherwise.

Choo S. Kang,

Acting Assistant Secretary for International Security and Nonproliferation.

[FR Doc. 2021–16971 Filed 8–9–21; 8:45 am]

BILLING CODE 4710–25–P

SURFACE TRANSPORTATION BOARD

Release of Waybill Data

The Surface Transportation Board has received a request from Neville Peterson LLP on behalf of Trinity Industries, Inc. (WB21–53—8/4/21) for permission to use select data from the Board's 2019 Masked Carload Waybill Sample. A copy of this request may be obtained from the Board's website under docket no. WB21–53.

The waybill sample contains confidential railroad and shipper data; therefore, if any parties object to these requests, they should file their objections with the Director of the Board's Office of Economics within 14 calendar days of the date of this notice. The rules for release of waybill data are codified at 49 CFR 1244.9.

Contact: Alexander Dusenberry, (202) 245–0319.

Jeffrey Herzig,

Clearance Clerk.

[FR Doc. 2021–17042 Filed 8–9–21; 8:45 am]

BILLING CODE 4915–01–P

SURFACE TRANSPORTATION BOARD

[Docket No. EP 519 (Sub-No. 4)]

Notice of National Grain Car Council Meeting

AGENCY: Surface Transportation Board.

ACTION: Notice of National Grain Car Council meeting.

SUMMARY: Notice is hereby given of a meeting of the National Grain Car Council (NGCC), pursuant to the Federal Advisory Committee Act.

DATES: The meeting will be held on Thursday, August 26, 2021, beginning at 1:00 p.m. (CDT), and is expected to conclude at 5:00 p.m. (CDT).

ADDRESSES: The meeting will be held virtually via Zoom. See Supplementary Information for registration details.

FOR FURTHER INFORMATION CONTACT: Michael Small at (202) 245–0381 or *michael.small@stb.gov.* Assistance for the hearing impaired is available through the Federal Relay Service at (800) 877–8339.

SUPPLEMENTARY INFORMATION: The NGCC was established by the Interstate Commerce Commission (ICC) as a working group to facilitate private-sector solutions and provide recommendations to the ICC (and now the Surface Transportation Board (Board)) on matters affecting rail grain car availability and transportation. *Nat'l Grain Car Supply—Conference of Interested Parties,* EP 519 (ICC served Jan. 7, 1994).

The general purpose of this meeting is to discuss rail carrier preparedness to transport the 2021 grain harvest. Agenda items include the following: Remarks by NGCC Chair Jarad Farmer, Board Chairman Martin J. Oberman, Board Vice Chairman and NGCC Co-Chair Robert E. Primus, and Board Members Ann D. Begeman, Patrick J. Fuchs, and Michelle A. Schultz; reports by member groups on expectations for the upcoming harvest, domestic and foreign markets, the supply of rail cars, and rail service; and market and industry updates. The full agenda will be posted on the Board's website at *https://prod.stb.gov/resources/stakeholder-committees/grain-car-council.*

The meeting will be conducted pursuant to the Federal Advisory Committee Act, 5 U.S.C. app. 2; Federal Advisory Committee Management, 41 CFR part 102–3; the NGCC charter; and Board procedures.

Public Attendance: This meeting is open to the public via Zoom, but members of the public who wish to attend this meeting must register in advance of the meeting. The registration link is provided on the Board's website at *https://prod.stb.gov/resources/stakeholder-committees/grain-car-council.* Registrations will be accepted on a space-available basis.

Public Comments: Members of the public may submit written comments to the NGCC at any time. Comments should be addressed to Michael Small, Designated Federal Officer for the NGCC, at *michael.small@stb.gov.* Any further communications about this meeting will be announced through the Board's website, *www.stb.gov.*

Decided: August 4, 2021.

By the Board, Scott M. Zimmerman, Acting Director, Office of Proceedings.

Kenyatta Clay,

Clearance Clerk.

[FR Doc. 2021–16983 Filed 8–9–21; 8:45 am]

BILLING CODE 4915–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Docket No. FAA–2021–0678]

Agency Information Collection Activities: Requests for Comments; Clearance of a Renewed Approval of Information Collection: Part 135—Operating Requirements: Commuter and On-Demand Operations and Rules Governing Persons on Board such Aircraft

AGENCY: Federal Aviation Administration (FAA), Transportation (DOT).

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, FAA invites public comments about our intention to request the Office of Management and Budget (OMB) approval to renew an information collection. The collection involves requirements for Air Carrier/Commercial Operators. This collection involves both recordkeeping and recording requirements for Air Carrier/Commercial Operators. The information to be collected shows compliance with the requirements of the Air Carrier's Certificate.

DATES: Written comments should be submitted by October 12, 2021.

ADDRESSES: Please send written comments:

By Electronic Docket: www.regulations.gov (Enter docket number into search field).

By mail: Sandra Ray, 1187 Thorn Run Road, Suite 200, Coraopolis, PA 15108.

By fax: 412–239–3063.

FOR FURTHER INFORMATION CONTACT: Sandra Ray by email at: *Sandra.ray@faa.gov;* phone: 412–329–3088.

SUPPLEMENTARY INFORMATION: Title 49 U.S.C., section 44702 authorizes issuance of air carrier operating certificates. 14 CFR part 135 prescribes requirement for Air Carrier/Commercial Operators. The information to be collected shows compliance and applicant eligibility.

Public Comments Invited: You are asked to comment on any aspect of this information collection, including (a) Whether the proposed collection of information is necessary for FAA's performance; (b) the accuracy of the estimated burden; (c) ways for FAA to enhance the quality, utility and clarity of the information collection; and (d) ways that the burden could be minimized without reducing the quality of the collected information. The agency

will summarize and/or include your comments in the request for OMB's clearance of this information collection.

OMB Control Number: 2120–0039.

Title: Part 135—Operating Requirements: Commuter and on-Demand Operations and Rules Governing Persons on Board such Aircraft.

Form Numbers: N/A.

Type of Review: Renewal of an information collection.

Background: Title 49 U.S.C., section 44702 authorizes issuance of air carrier operating certificates. 14 CFR part 135 prescribes requirement for Air Carrier/Commercial Operators. Each operator which seeks to obtain, or is in possession of, an air carrier or FAA operating certificate must comply with the requirements of 14 CFR part 135 in order to maintain data which is used to determine if the carrier is operating in accordance with minimum safety standards. Air carrier and commercial operator certification is completed in accordance with 14 CFR part 119. Part 135 contains operations and maintenance requirements.

Respondents: Approximately 1,903 operators.

Frequency: As required by regulation.

Estimated Average Burden per Response: Varies per requirement.

Estimated Total Annual Burden: 1,356,461 Hours.

Issued in Washington, DC on August 4, 2021.

Sandra L. Ray,

Aviation Safety Inspector, AFS–260.

[FR Doc. 2021–16958 Filed 8–9–21; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Rescheduling of Meeting of the Youth Access to American Jobs in Aviation Task Force

AGENCY: Federal Aviation Administration (FAA), Department of Transportation.

ACTION: Notice of new date and time for public meeting, previously scheduled for September 13, 2021, 9:00 a.m.–3:30 p.m. EDT.

SUMMARY: The Federal Aviation Administration has rescheduled the virtual meeting of the Youth Access to American Jobs in Aviation Task Force (YIATF) previously scheduled for September 13, 2021. The meeting notice, published in the **Federal Register** on July 7, 2021, is being reissued and will now be held on October 8, 2021. A detailed agenda will be posted on the Task Force's website, at *https://www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/committee/browse/committeeID/797,* 15 days in advance of the meeting.

DATES: The meeting will be held on October 8, 2021, from 9:00 a.m.–3:30 p.m. Eastern Daylight Time. Requests for accommodations to a disability must be received by September 29, 2021. Requests to submit written materials to be reviewed during the meeting must be received no later than September 29, 2021.

ADDRESSES: The meeting will be held virtually. Members of the public who wish to observe the virtual meeting may access the event live on the FAA's *Twitter, Facebook* and *YouTube* channels. For copies of meeting minutes along with all other information, please visit the YIATF internet website at *https://www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/committee/browse/committeeID/797.*

FOR FURTHER INFORMATION CONTACT: Ms. Aliah Duckett, Federal Aviation Administration, by email at *S602YouthTaskForce@faa.gov* or phone at 202–267–8361. Any committee-related request should be sent to the person listed in this section.

SUPPLEMENTARY INFORMATION:

I. Background

The FAA established the Task Force by charter on October 3, 2019, under Public Law 115–254. The Task Force is required by statute to develop and provide independent recommendations and strategies to the FAA Administrator to: (1) Facilitate and encourage high school students in the United States to enroll in and complete career and technical education courses, including science, technology, engineering, and mathematics (STEM), that will prepare them to pursue a course of study related to an aviation career at an institution of higher education, a community college, or trade school; (2) facilitate and encourage these students to enroll in a course of study related to an aviation career, including aviation manufacturing, engineering and maintenance, at an institution of higher education, including a community college or trade school; and (3) identify and develop pathways for students to secure registered apprenticeships, workforce development programs, or careers in the aviation industry of the United States.

II. Agenda

At the meeting, the agenda will cover the following topics:

- Welcome/Opening Remarks
- Approval of Previous Meeting Minutes
- Subcommittee Presentations
- Review of Action Items
- Closing Remarks

A detailed agenda will be posted on the YIATF internet website address listed in the **ADDRESSES** section at least 15 days in advance of the meeting. Copies of the meeting minutes will also be available on the YIATF internet website.

III. Public Participation

The meeting will be open to the public and livestreamed. Members of the public who wish to observe the virtual meeting can access the livestream on the FAA social media platforms listed in the **ADDRESSES** section on the day of the event.

The U.S. Department of Transportation is committed to providing equal access to this meeting for all participants. If you need alternative formats or services because of a disability, such as sign language, interpretation, or other ancillary aids, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

The FAA is not accepting oral presentations at this meeting due to time constraints. However, the public may present written statements to the Task Force by providing a copy to the Designated Federal Officer via the email listed in the **FOR FURTHER INFORMATION CONTACT** section.

Issued in Washington, DC.

Angela O. Anderson,

Director, Regulatory Support Division, Office of Rulemaking, Federal Aviation Administration.

[FR Doc. 2021–16989 Filed 8–9–21; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

[Docket No. PHMSA–2021–0055 (Notice No. 2021–06)]

Hazardous Materials: Information Collection Activities

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), Transportation (DOT).

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice announces that the Information Collection Requests (ICRs) discussed below will be forwarded to the Office of Management and Budget for renewal and extension. These ICRs describe the nature of the information collections and their expected burdens.

DATES: Interested persons are invited to submit comments on or before September 9, 2021.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function.

We invite comments on: (1) Whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; (2) the accuracy of the Department's estimate of the burden of the proposed information collection; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

Docket: For access to the dockets to read background documents or comments received, go to *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Steven Andrews or Shelby Geller, Standards and Rulemaking Division, (202) 366–8553, *ohmspra@dot.gov,* Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue SE, Washington, DC 20590–0001.

SUPPLEMENTARY INFORMATION: Section 1320.8(d), title 5, Code of Federal Regulations (CFR) requires PHMSA to provide interested members of the public and affected agencies an opportunity to comment on information collection and recordkeeping requests. This notice identifies information collection requests that PHMSA will be submitting to the Office of Management and Budget (OMB) for renewal and extension. These information collections are contained in 49 CFR 171.6 of the Hazardous Materials Regulations (HMR; 49 CFR parts 171–180). PHMSA has revised burden estimates where appropriate to reflect current reporting levels or adjustments based on changes in proposed or final rules published since the information collections were last approved. The following information is provided for each information collection: (1) Title of the information collection, including former title if a change is being made; (2) OMB control number; (3) summary of the information collection activity; (4) description of affected public; (5) estimate of total annual reporting and recordkeeping burden; and (6) frequency of collection. PHMSA will request a 3-year term of approval for each information collection activity and will publish a notice in the **Federal Register** upon OMB's approval.

A notice and request for comments with a 60-day comment period on these ICRs was published in the **Federal Register** on May 18, 2021, [86 FR 27009] under Docket No. PHMSA–2021–0055 (Notice No. 2021–04). PHMSA did not receive any comments in response to this notice.

PHMSA requests comments on the following information collections:

Title: Rulemaking, Special Permits, and Preemption Requirements.

OMB Control Number: 2137–0051.

Summary: This information collection applies to procedures for requesting changes, exceptions, and other determinations in relation to the HMR. Specific areas covered in this information collection include part 105, subparts A and B, ''Hazardous Materials Program Definitions and General Procedures''; part 106, subpart B, ''Participating in the Rulemaking Process''; part 107, subpart B, ''Special Permits''; and part 107, subpart C, ''Preemption.'' The Federal hazardous materials transportation law directs the Secretary of Transportation to prescribe regulations for the safe transportation of hazardous materials in commerce. PHMSA is authorized to accept petitions for rulemaking and appeals, as well as applications for special permits, preemption determinations, and waivers of preemption. The types of information collected include:

(1) *Petitions for Rulemaking:* Any person may petition PHMSA to add, amend, or delete a regulation in parts 110, 130, 171 through 180, or may petition the Office of the Chief Counsel to add, amend, or delete a regulation in parts 105, 106, or 107. Petitions submitted to PHMSA are required to contain information as specified in § 106.100 of the HMR.

(2) *Appeals:* Except as provided in § 106.40(e), any person may submit an appeal to our actions in accordance with the Appeals procedures found in §§ 106.110 through 106.130.

(3) *Applications for Special Permit:* Any person applying for a special permit must include the citation of the specific regulation from which the applicant seeks relief; specification of the proposed mode or modes of transportation; detailed description of the proposed special permit (*e.g.,* alternative packaging, test, procedure, or activity), including as appropriate, written descriptions, drawings, flow charts, plans and other supporting documents, etc. Under this OMB control number, applicants may apply for a new special permit, renew or modify an existing special permit, or request party status to a special permit. These procedures can be found in part 107, subpart B of the HMR.

(4) *Applications for Preemption Determination:* With the exception of highway routing matters covered under 49 U.S.C. 5125(c), any person directly affected by any requirement of a state, political subdivision, or Native American tribe may apply to the Chief Counsel for a determination whether that requirement is preempted by § 107.202(a), (b), or (c). The application must include the text of the state, political subdivision, or Native American tribe requirement for which the determination is sought; specify each requirement of the federal hazardous materials transportation law, regulations issued under the federal hazardous material transportation law, or hazardous material transportation security regulations or directives issued by the Secretary of Homeland Security with which the applicant seeks the state, political subdivision, or Native American tribe requirement to be compared; explain why the applicant believes the state, political subdivision, or Native American tribe requirement should or should not be preempted under the standards of § 107.202; and state how the applicant is affected by the state, political subdivision, or Native American tribe requirement.

(5) *Waivers of Preemption:* With the exception of requirements preempted under 49 U.S.C. 5125(c), any person may apply to the Chief Counsel for a waiver of preemption with respect to any requirement that: (1) The state, political subdivision thereof, or Native American tribe acknowledges to be preempted under the federal hazardous materials transportation law, or (2) has been determined by a court of competent jurisdiction to be so preempted. The Chief Counsel may waive preemption with respect to such requirement upon a determination that such requirement affords an equal or greater level of protection to the public than is afforded by the requirements of

the federal hazardous materials transportation law or the regulations issued thereunder, and does not unreasonably burden commerce.

The information collected under these application procedures is used in the review process by PHMSA in determining the merits of the petitions for rulemakings and for reconsideration of rulemakings, as well as applications for special permits, preemption determinations, and waivers of preemption to the HMR. The procedures governing these petitions for rulemaking and for reconsideration of rulemakings are covered in subpart B of part 106. Applications for special permits, preemption, determinations, and waivers of preemption are covered under subparts B and C of part 107. Rulemaking procedures help PHMSA determine whether a regulatory change is necessary, is consistent with public interest, and maintains a level of safety equal to or superior to that of current regulations. Special permit procedures provide the information required for analytical purposes to determine whether the requested relief provides for a comparable level of safety as provided by the HMR. Additionally, PHMSA uses information from preemption procedures to determine whether a requirement of a state, political subdivision, or Indian tribe is preempted under 49 U.S.C. 5125, or regulations issued thereunder, or whether a waiver of preemption should be issued. The following information collections and their burdens are associated with this OMB Control Number:

Information collection	Annual respondents	Annual responses	Time per response	Annual burden hours
Petition for Rulemaking	20	20	8 hours	160
New Special Permit Application	168	168	7 hours	1,176
Party Status Special Permit Application	576	576	1.5 hours	864
Renewal Special Permit Application	936	936	1.5 hours	1,404
Modification Special Permit Application	132	132	1 hour	132
Special Permit Application—Recordkeeping	1,852	1,852	6 minutes	185
Designated Agent for Special Permit Application	100	100	2 hours	200
Confidential Handling for Special Permit Application	31	31	15 minutes	7.75
Preemption	2	2	60 hours	120
Preemption Reconsideration	1	1	30 hours	30

Affected Public: Shippers, carriers, packaging manufacturers, and other affected entities.

Annual Reporting and Recordkeeping Burden:

Number of Respondents: 3,818.

Total Annual Responses: 3,818.

Total Annual Burden Hours: 4,278.75.

Frequency of Collection: On occasion.

Title: Flammable Cryogenic Liquids.

OMB Control Number: 2137–0542.

Summary: Provisions in § 177.840(a)(2) specify certain safety procedures and documentation requirements for drivers of motor vehicles transporting flammable cryogenic liquids. This information allows the driver to take appropriate remedial actions to prevent a catastrophic release of the flammable cryogenics should the temperature of the material begin to rise excessively or if the travel time will exceed the safe travel time. These requirements are intended to ensure a high level of safety when transporting flammable cryogenics due to their extreme flammability and high compression ratio when in a liquid state. The following information collections and their burdens are associated with this OMB Control Number:

Information collection	Annual respondents	Annual responses	Time per response	Annual burden hours
Flammable Cryogenic Liquids	175	18,200	3.5 minutes	1,062
Flammable Cryogenic Liquids—Recordkeeping	175	18,200	30 seconds	152

Affected Public: Carriers of cryogenic materials.

Annual Reporting and Recordkeeping Burden:

Number of Respondents: 350.

Total Annual Responses: 36,400.

Total Annual Burden Hours: 1,214.

Frequency of Collection: On occasion.

Title: Response Plans for Shipments of Oil.

OMB Control Number: 2137–0591.

Summary: In recent years, several major oil discharges damaged the marine environment of the United States. Under authority of the Federal Water Pollution Control Act, as amended by the Oil Pollution Act of 1990 (33 U.S.C. 1251 *et seq.*), PHMSA issued regulations in 49 CFR part 130 that require preparation of basic written spill response plans. The following information collections and their burdens are associated with this OMB Control Number:

Information collection	Annual respondents	Annual responses	Time per response	Annual burden hours
Basic Written Response Plan—New Plans	80	80	33 hours	2,640
Basic Written Response Plan—Updating Plans	7,920	7,920	1 hour	7,920

Affected Public: Carriers that transport oil in bulk, by motor vehicle or rail.

Annual Reporting and Recordkeeping Burden:

Number of Respondents: 8,000.

Total Annual Responses: 8,000.

Total Annual Burden Hours: 10,560.

Frequency of Collection: On occasion.

Title: Requirements for United Nations (UN) Cylinders.

OMB Control Number: 2137–0621.

Summary: This information collection and recordkeeping burden is the result

of efforts to amend the HMR to adopt standards for the design, construction, maintenance, and use of cylinders and multiple-element gas containers (MEGCs) based on the standards contained in the UN Recommendations on the Transport of Dangerous Goods. Aligning the HMR with the UN Recommendations promotes flexibility, permits the use of technological advances for the manufacture of the pressure receptacles, provides for a broader selection of pressure receptacles, reduces the need for special permits, and facilitates international commerce in the transportation of compressed gases. Information collection requirements address domestic and international manufacturers of cylinders that request approval by the approval agency for cylinder design types. The approval process for each cylinder design type includes review, filing, and recordkeeping of the approval application. The approval agency is required to maintain a set of the approved drawings and calculations for each design it reviews and a copy of each initial design type approval certificate approved by the Associate Administrator for the Office of Hazardous Materials Safety for not less than 20 years. The following information collections and their burdens are associated with this OMB Control Number:

Information collection	Total respondents	Total responses	Time per response	Total burden hours
UN Pressure Receptacle Approval—New Request	35	35	6 hours	210
UN Pressure Receptacle Approval—Modified Request	100	100	6 hours	600
UN Pressure Receptacle Approval—Recordkeeping	75	75	6 minutes	7.5

Affected Public: Fillers, owners, users, and retesters of UN cylinders.

Annual Reporting and Recordkeeping Burden:

Number of Respondents: 210.

Total Annual Responses: 210.

Total Annual Burden Hours: 817.5.

Frequency of Collection: On occasion.

Issued in Washington, DC, on August 4, 2021, under authority delegated in 49 CFR 1.97.

William A. Quade,

Deputy Associate Administrator of Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration.

[FR Doc. 2021–16994 Filed 8–9–21; 8:45 am]

BILLING CODE 4910–60–P

DEPARTMENT OF VETERANS AFFAIRS

Veterans' Family, Caregiver and Survivor Advisory Committee, Notice of Meeting

The Department of Veterans Affairs (VA) gives notice under the Federal Advisory Committee Act (FACA), 5 U.S.C. App. 2, that the Veterans' Family, Caregiver, and Survivor Advisory Committee will meet virtually on September 23, 2021. The meeting session will begin and end as follows:

Date	Time
September 23, 2021.	1:00 p.m. to 4:00 p.m. EST.

The meeting is open to the public and will be conducted using Microsoft Teams. Please email *VEOFACA@va.gov* for an invitation link prior to September 22, 2021 or dial-in by phone (for audio only) 1–872–701–0185, United States, Chicago (Toll), Conference ID: 864 046 788#.

The purpose of the Committee is to advise the Secretary of Veterans Affairs on matters related to: The need of Veterans' families, caregivers and survivors across all generations, relationships and Veterans status; the use of VA care, benefits and memorial services by Veterans' families, caregivers and survivors, and opportunities for improvements to the experience using such services; VA policies, regulations and administrative requirements related to the transition of Servicemembers from the Department of Defense (DoD) to enrollment in VA that impact Veterans' families, caregivers and survivors; and factors that influence access to, quality of and accountability for services, benefits and memorial services for Veterans' families, caregivers and survivors.

On September 23, 2021, the agenda will include opening remarks from the Committee Chair and the Chief Veterans Experience Officer. There will be presentations from the subcommittee chairs on proposed recommendations for the Secretary.

Individuals wishing to share information with the Committee should contact the VEO Federal Advisory Committee Team at *VEOFACA@va.gov* to submit a 1–2 page summary of their comments for inclusion in the official meeting record before September 22, 2021 at 5:00 pm (EST). Due to the time limitations of virtual meetings, public comments will be submitted prior to the meeting and distributed to the Committee before the designated meeting time on September 23, 2021.

Any member of the public seeking additional information should contact Betty Moseley Brown (Designated Federal Official) *Betty.MoseleyBrown@va.gov* or 210–392–2505.

Dated: August 5, 2021.

Jelessa M. Burney,

Federal Advisory Committee Management Officer.

[FR Doc. 2021–17005 Filed 8–9–21; 8:45 am]

BILLING CODE P

DEPARTMENT OF VETERANS AFFAIRS

Solicitation of Nomination for Appointment to the Advisory Committee on the Readjustment of Veterans

ACTION: Notice.

SUMMARY: The Department of Veterans Affairs (VA), Readjustment Counseling Service (RCS), is seeking nominations of qualified candidates to be considered for appointment as a member of the Advisory Committee on the Readjustment of Veterans (''the Committee'') for the 2022 membership cycle.

DATES: Nominations for membership on the Committee must be received by September 12, 2021, no later than 4:00 p.m., eastern standard time. Packages received after this time will not be considered for the current membership cycle.

ADDRESSES: All nomination packages should be sent to the VA Readjustment Counseling Service, by email (recommended) or mail. Please see contact information below: VA Readjustment Counseling Service (10RCS), Department of Veterans Affairs, 810 Vermont Ave. NW, Washington, DC 20420, *VHA10RCSAction@va.gov.*

FOR FURTHER INFORMATION CONTACT: Richard Barbato or Kevin Swallow, Readjustment Counseling Service

(10RCS), Department of Veterans Affairs, 810 Vermont Ave. NW, Washington, DC 20420, Telephone (734) 222–4319.

SUPPLEMENTARY INFORMATION: In carrying out the duties set forth, the Committee responsibilities include, but are not limited to providing a Congressionally-mandated report to the Secretary each year, which includes:

(1) An assessment of the needs of Veterans with respect to readjustment to civilian life;

(2) A review of the programs and activities of the Department designed to meet such needs; and

(3) Such recommendations (including recommendations for administrative and legislative action) as the Committee considers appropriate.

The Committee may also submit to the Secretary such other reports and recommendations as the Committee considers appropriate. Management and support services for the Committee are provided by the VA Readjustment Counseling Service (RCS).

Authority: The Committee was established in accordance with 38 U.S.C. 545 and operates under the provisions of the Federal Advisory Committee Act, as amended, 5 U.S.C. App. 2. In accordance with 38 U.S.C. 545, the Committee advises the Secretary on the provision by VA of benefits and services to assist Veterans in the readjustment to civilian life. In carrying out this duty, the Committee shall take into special account the needs of Veterans who served in combat theaters of operation. In accordance with the Statute and the Committee's current charter, the majority of the membership ship consist on non-Federal employees appointed by the Secretary from the general public, serving as special government employees.

The Secretary appoints Committee members and determines the length of terms in which the Committee members serve. A term of service for any member may not exceed 2 years. However, the Secretary can reappoint members for additional terms. Each year, there are several vacancies on the Committee, as members' terms expire.

Membership Criteria: The Committee is currently composed of 12 members. By statute, Committee consists of members appointed by the Secretary from the general public, including individuals who have demonstrated civic or professional achievement; and have experience with the provision of Veterans benefits and services by VA.

The membership will include: (1) Individuals from a wide variety of geographic areas and ethnic backgrounds; (2) individuals from Veterans service organizations; (3) individuals with combat experience; and (4) women.

In addition to the criteria above, VA seeks—

(1) diversity in professional and personal qualifications;

(2) experience in military service and military deployments (please identify Branch of Service and Rank);

(3) current work with Veterans;

(4) committee subject matter expertise; and

(5) experience working in large and complex organizations.

The Committee meets at least two times annually, which may include a site visit to a VA field location. In accordance with Federal Travel Regulation, VA will cover travel expenses—to include per diem—for all members of the Committee, for any travel associated with official Committee duties. A copy of the Committee's most resent charter and a list of the current membership can be found at *https://www.va.gov/ADVISORY/Advisory_Committee_on_the_Readjusment_of_Veterans_Statutory.asp.* An ethics review is conducted for each selected nominee.

In accordance with recently revised guidance regarding the ban on lobbyists serving as members of advisory boards and commissions, Federally-registered lobbyists are prohibited from serving on Federal advisory committees in an individual capacity. Additional information regarding this issue can be found at *www.federalregister.gov/articles/2014/08/13/2014-19140/revised-guidance-on-appointment-of-lobbyists-to-federal-advisory-committees-boardsand-commissions.*

Requirements for Nomination Submission: Nomination packages (one nomination per nominator) must be typed (12-point font) and include: (1) A cover letter from the nominee, and (2) a current resume that is *no more than four pages in length.* The cover letter must summarize: The nominees' interest in serving on the committee and contributions she/he can make to the work of the committee; any relevant Veterans service activities she/he is currently engaged in; the military branch affiliation and timeframe of military service (if applicable). To promote inclusion and demographic balance of membership, please include as much information related to the nominee's race, national origin, disability status, or any other factors that may give the individual a diverse perspective on Veteran readjustment Veterans. Finally, the cover letter *must* include the nominee's complete contact information (name, address, email address, and phone number); and a statement confirming that she/he is not a Federally-registered lobbyist. The resume should show professional and/or work experience, and Veterans service involvement—especially service that involves combat Veterans' and Active Duty service members' issues. Self-nominations are acceptable. Any letters of nomination from organizations or other individuals must accompany the package, when it is submitted. Letters of nomination submitted without a complete nomination package *will not* be considered. Do not submit a package, without the nominee's consent or awareness. Nominations must state that the nominee is willing to serve as a member of the Committee and appears to have no conflict of interest that would preclude membership.

The Department makes every effort to ensure that the membership of its advisory committees is fairly balanced, in terms of points of view represented. In the review process, consideration is given to nominees' potential to address the Committee's demographic needs (regional representation, race/ethnicity representation, professional expertise, war era service, gender, former enlisted or officer status, branch of service, etc.). Other considerations to promote a balanced membership include longevity of military service, significant deployment experience, ability to handle complex issues, experience running large organizations, and ability to contribute to the gender-specific health care and benefits needs of combat Veterans and Active Duty service members.

Dated: August 5, 2021.

Jelessa M. Burney,

Federal Advisory Committee Management Officer.

[FR Doc. 2021–17003 Filed 8–9–21; 8:45 am]

BILLING CODE 8320–01–P

FEDERAL REGISTER

Vol. 86 Tuesday,
No. 151 August 10, 2021

Part II

Environmental Protection Agency

40 CFR Parts 86 and 600
Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 86 and 600

[EPA–HQ–OAR–2021–0208; FRL 8469–02–OAR]

RIN 2060–AV13

Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to revise the greenhouse gas (GHG) emissions standards for light-duty vehicles for 2023 and later model years to make the standards more stringent. On January 20, 2021, President Biden issued Executive Order 13990 ''Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis'' directing EPA to consider whether to propose suspending, revising, or rescinding the standards previously revised under the ''The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks,'' promulgated in April 2020. The SAFE rule significantly weakened the standards established in 2012, which in part set GHG standards for model years 2021–25. EPA believes that in light of the significant contribution of light-duty vehicles to transportation sector GHG emissions, standards more stringent than those relaxed in the SAFE rule are appropriate under the Clean Air Act. EPA is proposing to revise the GHG standards to be more stringent than the SAFE rule standards in each model year from 2023 through 2026. EPA is also proposing to include several flexibilities to incentivize the production and sale of vehicles with zero and near-zero emissions technology to reduce compliance costs and to address the lead time of the proposed standards. In addition, EPA is proposing some technical amendments to clarify and streamline our regulations. Compliance with the proposed standards would be feasible at reasonable costs to manufacturers. The proposed revised standards would result in significant benefits for public health and welfare, primarily through substantial reductions in both GHG emissions and fuel consumption and associated fuel costs paid by drivers, and the benefits of the proposed standards would be far in excess of costs.

DATES:

Comments: Written comments must be received on or before September 27, 2021.

Public Hearing: EPA plans to hold a virtual public hearing on August 25, 2021. An additional session may be held on August 26th if necessary to accommodate the number of testifiers that sign-up to testify. Please refer to the separate **Federal Register** notice issued by EPA for public hearing details. The hearing notice is available at *https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-revise-existing-national-ghg-emissions.*

ADDRESSES: You may send comments, identified by Docket ID No. EPA–HQ–OAR–2021–0208, by any of the following methods:

- *Federal eRulemaking Portal: https://www.regulations.gov/* (our preferred method). Follow the online instructions for submitting comments.
- *Email: a-and-r-Docket@epa.gov.* Include Docket ID No. EPA–HQ–OAR–2021–0208 in the subject line of the message.
- *Mail:* U.S. Environmental Protection Agency, EPA Docket Center, OAR, Docket EPA–HQ–OAR–2021–0208, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.
- *Hand Delivery or Courier (by scheduled appointment only):* EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC 20004. The Docket Center's hours of operations are 8:30 a.m.–4:30 p.m., Monday–Friday (except Federal Holidays).

Instructions: All submissions received must include the Docket ID No. EPA–HQ–OAR–2021–0208 for this rulemaking. Comments received may be posted without change to *https://www.regulations.gov/,* including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the ''Public Participation'' heading of the **SUPPLEMENTARY INFORMATION** section of this document. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are closed to the public, with limited exceptions, to reduce the risk of transmitting COVID–19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform. We encourage the public to submit comments via *https://www.regulations.gov/* or email, as there may be a delay in processing mail. Hand deliveries and couriers may be received by scheduled appointment only. For further information on EPA Docket Center services and the current status, please visit us online at *https://www.epa.gov/dockets.*

EPA plans to hold a virtual public hearing for this rulemaking. Please refer to the separate **Federal Register** notice issued by EPA for public hearing details. The hearing notice is available at *https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-revise-existing-national-ghg-emissions.*

FOR FURTHER INFORMATION CONTACT: Tad Wysor, Office of Transportation and Air Quality, Assessment and Standards Division (ASD), Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105; telephone number: (734) 214–4332; email address: *wysor.tad@epa.gov.*

SUPPLEMENTARY INFORMATION:

A. Public Participation

Written Comments

EPA will keep the comment period open until September 27, 2021. All information will be available for inspection at the EPA Air Docket No. EPA–HQ–OAR–2021–0208. Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2021–0208, at *https://www.regulations.gov* (our preferred method), or the other methods identified in the **ADDRESSES** section. Once submitted, comments cannot be edited or removed from the docket. EPA may publish any comment received to its public docket. Do not submit to EPA's docket at *https://www.regulations.gov* any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.,* on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets.*

EPA is temporarily suspending its Docket Center and Reading Room for public visitors, with limited exceptions, to reduce the risk of transmitting COVID–19. Our Docket Center staff will continue to provide remote customer

service via email, phone, and webform. We encourage the public to submit comments via *https://www.regulations.gov/* as there may be a delay in processing mail. Hand deliveries or couriers will be received by scheduled appointment only. For further information and updates on EPA Docket Center services, please visit us online at *https://www.epa.gov/dockets.*

EPA continues to carefully and continuously monitor information from the Centers for Disease Control and Prevention (CDC), local area health departments, and our Federal partners so that we can respond rapidly as conditions change regarding COVID–19.

Virtual Public Hearing

EPA plans to hold a virtual public hearing on August 25, 2021. An additional session will be held on August 26th if necessary, to accommodate the number of testifiers that sign-up to testify. Please refer to the separate **Federal Register** notice issued by EPA for public hearing details. The hearing notice is available at *https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-revise-existing-national-ghg-emissions.* Please also refer to this website for any updates regarding the hearings. EPA does not intend to publish additional documents in the **Federal Register** announcing updates.

B. Does this action apply to me?

This action affects companies that manufacture or sell passenger automobiles (passenger cars) and non-passenger automobiles (light trucks) as defined in 49 CFR part 523. Regulated categories and entities include:

Category	NAICS codes [A]	Examples of potentially regulated entities
Industry	336111 336112	Motor Vehicle Manufacturers.
Industry	811111 811112 811198 423110	Commercial Importers of Vehicles and Vehicle Components.
Industry	335312 811198	Alternative Fuel Vehicle Converters.

[A] North American Industry Classification System (NAICS).

This list is not intended to be exhaustive, but rather provides a guide regarding entities likely to be regulated by this action. To determine whether particular activities may be regulated by this action, you should carefully examine the regulations. You may direct questions regarding the applicability of this action to the person listed in **FOR FURTHER INFORMATION CONTACT**.

Table of Contents

I. Executive Summary

A. Purpose of This Proposed Rule and Legal Authority

1. Proposal for Near-Term Standards Through Model Year 2026

The Environmental Protection Agency (EPA) is proposing to revise existing national greenhouse gas (GHG) emissions standards for passenger cars and light trucks under section 202(a) of the Clean Air Act (CAA), 42 U.S.C. 7521(a). Section 202(a) requires EPA to establish standards for emissions of air pollutants from new motor vehicles which, in the Administrator's judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare.

This proposal also responds to Executive Order (E.O.) 13990, ''Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis'' (Jan. 20, 2021), which directs EPA to consider taking the action proposed in this notice: [1]

''[T]he head of the relevant agency, as appropriate and consistent with applicable law, shall consider publishing for notice and comment a proposed rule suspending, revising, or rescinding the agency action[s set forth below] within the time frame specified.''

''Establishing Ambitious, Job-Creating Fuel Economy Standards: . . . 'The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks,' 85 FR 24174 (April 30, 2020), by July 2021. . . . In considering whether to propose suspending, revising, or rescinding the latter rule, the agency should consider the views of representatives from labor unions, States, and industry.''

The proposed program would revise the light-duty vehicle GHG standards previously revised by the SAFE rule and would build upon earlier EPA actions and supporting analyses that established or maintained stringent light-duty vehicle GHG emissions standards. For example, in 2012, EPA issued a final rule establishing light-duty vehicle GHG standards for model years (MYs) 2017–2025,[2] which were supported in analyses accounting for compliance costs, lead time and other relevant factors.[3] That rule and its analyses also accounted for the development and availability of advanced GHG emission-reducing technologies for gasoline-fueled vehicles, which demonstrated that the standards were appropriate under section 202(a) of the CAA.[4] This proposed rule provides additional analysis that takes into consideration updated data and recent developments. Auto manufacturers are currently implementing an increasing array of advanced gasoline vehicle GHG emission-reducing technologies at a rapid pace throughout their vehicle fleets. Vehicle electrification technologies are also advancing rapidly, as battery costs have continued to decline, and automakers have announced an increasing diversity and volume of zero-emission vehicle models. Meanwhile, in 2019, several auto manufacturers voluntarily entered into agreements with the State of California to comply with GHG emission reduction targets through MY 2026 across their national vehicle fleets (the ''California Framework Agreements'') that are more stringent than the EPA standards as revised by the SAFE rule. These developments further support EPA's decision to reconsider and propose revising the existing EPA standards to be more stringent, particularly in light of factors indicating that more stringent near-term standards are feasible at reasonable cost and would achieve significantly greater GHG emissions reductions and public health and welfare benefits than the existing program. In developing this proposal, EPA has conducted outreach with a wide range of interested stakeholders, including labor unions, States, and industry as provided in E.O. 13990, and we will continue to engage with these and other stakeholders as part of our regulatory development process.

This proposal is limited to MYs 2023–2026, given lead time considerations under the CAA, which is consistent with E.O. 13990's direction to review the SAFE rule standards. We have designed the proposed program based on our assessment that the proposed standards are reasonable and appropriate and will achieve a significant level of GHG reductions for MYs 2023–2026 vehicles, with the expectation that a future, longer-term program for MYs 2027 and later will build upon these near-term standards.

EPA has set previous light-duty vehicle GHG emission standards in joint rulemakings where NHTSA also established CAFE standards. EPA has concluded that it is not necessary at this time for this EPA proposal to be done in a joint action with NHTSA. EPA has coordinated with NHTSA, both on a bilateral level as well as through the interagency review of the EPA proposal led by the Office of Management and Budget.

2. Why does EPA believe the proposed standards are appropriate under the CAA?

EPA is proposing to revise GHG emissions standards for passenger cars and light trucks under its authority in section 202(a) of the CAA. Section 202(a) requires EPA to establish standards for emissions of pollutants from new motor vehicles which, in the Administrator's judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare. Standards under section 202(a) take effect ''after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period.'' Thus, in establishing or revising section 202(a) standards designed to reduce air pollution that endangers public health and welfare, EPA also must consider issues of technological feasibility, compliance cost, and lead time. EPA also may consider other factors and in previous light-duty vehicle GHG standards rulemakings has considered the impacts of potential GHG standards

[1] 86 FR 7037, January 25, 2021.

[2] EPA's model year emission standards also apply in subsequent model years, unless revised, *e.g.,* MY 2025 standards issued in the 2012 rule also applied to MY 2026 and beyond.

[3] 77 FR 62624, October 15, 2012.

[4] *Id.*

on the auto industry, fuel savings by consumers, oil conservation, energy security and other energy impacts, as well as other relevant considerations such as safety.

As we describe in greater detail below, EPA has carefully considered the technological feasibility and cost of the proposed standards and the available lead time for manufacturers to comply with them, including existing and proposed flexibilities designed to facilitate compliance during the MYs 2023–2026 timeframe. Based on our analysis, we believe that the proposed standards, combined with proposed flexibilities that address lead time considerations resulting from relaxations in standards revised in the SAFE rule, are appropriate and justified under section 202(a) of the CAA. Our updated analysis for this proposal, as well as our earlier analyses of similar standards, supports the conclusion that the proposed standards are technologically feasible for the model years covered (MYs 2023–2026) and that the costs of compliance for manufacturers would be reasonable. The proposed standards would result in greater reductions in GHG emissions, as well as reductions in emissions of some criteria pollutants and air toxics, resulting in significant benefits for public health and welfare. We also show that the proposal would result in reduced vehicle operating costs for consumers and that the benefits of the proposed program would significantly exceed the costs.

EPA has significantly updated its analysis for this rule. As discussed further below, we have updated a number of key inputs, such as, for example, certain technology costs and penetrations, to ensure they are up to date. Notably, the results of this updated analysis are generally in agreement with prior analyses, including those conducted for the SAFE rule. In particular, the costs that have been estimated for manufacturers to meet standards of a similar stringency to the proposed standards have been roughly consistent since EPA first estimated them in 2012. That is, although manufacturers have less lead time before these standards would be implemented than with previous rulemakings, the significant progress that has been made in implementing advanced gasoline technologies in the fleet (as well as advances in electric and hybrid vehicle technology) since 2012 means the proposed standards can be achieved at roughly the same cost as previous estimates, and additional lead time is unnecessary.

When considering similar cost estimates in the SAFE rule, EPA identified some factors, primarily costs to manufacturers and upfront costs to consumers, as favoring reductions in stringency of the then-existing standards, and other factors, such as reduced emissions that endanger public health and welfare and reduced operating costs for consumers, as favoring increased stringency (or a lower degree of reduced stringency). In balancing these factors in the SAFE rule, EPA placed greater weight on the former factors, and thereby decided to make EPA's GHG standards significantly less stringent. But the purpose of adopting standards under CAA section 202 is to address air pollution that may reasonably be anticipated to endanger public health and welfare. Indeed, reducing air pollution has traditionally been the focus of such standards. EPA has reconsidered how costs, lead time and other factors were weighed in the SAFE rule and is reaching a different conclusion as to the appropriate stringency of GHG standards. In light of the statutory purpose of section 202, the Administrator is placing greater weight on the emission reductions and resulting public health and welfare benefits, as well as the savings in vehicle operating costs for consumers, and proposing significantly more stringent standards for MYs 2023–2026 compared to the standards established by the SAFE rule. As discussed in Section III.A, the proposed standards take into consideration both the updated analysis for this rule and past EPA analyses conducted for similar GHG standards. We are revising decisions made in the SAFE final rule in accordance with Supreme Court decisions affirming that agencies are free to reconsider and revise their prior decisions where they provide a reasonable explanation for their revised decisions.[5] In this rulemaking, the agency is changing its 2020 position and restoring its previous approach by proposing to find, in light of the statutory purposes of the Clean Air Act and in particular of section 202(a), that it is more appropriate to place greater weight on the magnitude and benefits of reducing emissions that endanger public health and welfare, while continuing to consider compliance costs, lead time and other relevant factors.

[5] *See, e.g., Encino Motorcars, LLC* v. *Navarro,* 136 S. Ct. 2117, 2125 (2016); *FCC* v. *Fox Television Stations, Inc.,* 556 U.S. 502, 515 (2009).

3. Future Longer-Term Action To Further Reduce Light-Duty Vehicle Emissions in 2027 and Beyond

Addressing the climate crisis will require substantial reductions in GHG emissions from the transportation sector. The transportation sector is the largest U.S. source of GHG emissions, representing 29 percent of total GHG emissions.[6] Within the transportation sector, light-duty vehicles are the largest contributor, at 58 percent, and thus comprise 17 percent of total U.S. GHG emissions.[7] GHG emissions have significant impacts on public health and welfare as evidenced by the well-documented scientific record and as set forth in EPA's Endangerment and Cause or Contribute Findings under Section 202(a) of the CAA.[8] Additionally, major scientific assessments continue to be released that further advance our understanding of the climate system and the impacts that GHGs have on public health and welfare both for current and future generations, as discussed in Section IV.B, making it clear that continued emission reductions in the light-duty vehicle sector are needed beyond the model years covered by the standards proposed today.

This proposed action therefore serves as a critical building block for a comprehensive, multipollutant longer-term regulatory program implementing EPA's statutory authority under the CAA. We are at a pivotal moment in the history of the light-duty transportation sector—a shift to zero-emission vehicle technologies is already underway, and it presents a strong potential for dramatic reductions in GHG and criteria pollutant emissions over the longer term. Major automakers as well as many global jurisdictions and U.S. states have announced plans to shift the light-duty fleet toward zero-emissions technology, as detailed below. EPA anticipates that the design of a future, longer-term program beyond 2026 will incorporate accelerating advances in zero-emission technologies.

A proliferation of recent announcements from automakers signals a rapidly growing shift in investment away from internal-combustion technologies and toward high levels of electrification. These automaker announcements are supported by continued advances in automotive electrification technologies, and further driven by the need to

[6] *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019* (EPA–430–R–21–005, published April 2021).

[7] 7 *Ibid.*

[8] 74 FR 66496, December 15, 2009; 81 FR 54422, August 15, 2016.

compete in a global market as other countries implement aggressive zero-emission transportation policies. For example, in January 2021, General Motors announced plans to become carbon neutral by 2040, including an effort to shift its light-duty vehicles entirely to zero-emissions by 2035.[9] In March 2021, Volvo announced plans to make only electric cars by 2030,[10] and Volkswagen announced that it expects half of its U.S. sales will be all-electric by 2030.[11] In April 2021, Honda announced a full electrification plan to take effect by 2040, with 40 percent of North American sales expected to be fully electric or fuel cell vehicles by 2030, 80 percent by 2035 and 100 percent by 2040.[12] In May 2021, Ford announced that they expect 40 percent of their global sales will be all-electric by 2030.[13] In June 2021, Fiat announced a move to all electric vehicles by 2030, and in July 2021 its parent corporation Stellantis announced an intensified focus on electrification across all of its brands.[14] [15] Also in July 2021, Mercedes-Benz announced that all of its new architectures would be electric-only from 2025, with plans to become ready to go all-electric by 2030 where possible.[16]

These announcements and others like them continue a pattern over the past several years of many manufacturers taking steps to aggressively pursue zero-emission technologies, introduce a wide range of zero-emission vehicle models, and reduce their reliance on the internal-combustion engine in various markets around the globe.[17] [18] These goals and investments have been coupled with a rapidly increasing availability of plug-in vehicle models in the U.S.[19] For example, the number of all-electric vehicle (EV) and plug-in hybrid electric vehicle (PHEV) models available for sale in the U.S. more than doubled from about 24 in MY 2015 to about 60 in MY 2021, with offerings in a growing range of vehicle segments.[20] Recent model announcements indicate that this number will increase to more than 80 models by MY 2023, with many more expected to reach production before the end of the decade.[21] Many of the zero-emission vehicles already on the market today cost less to drive than conventional vehicles,[22] [23] offer improved performance and handling,[24] and can be charged at a growing network of public chargers [25] as well as at home.

At the same time, an increasing number of global jurisdictions and U.S. states plan to take actions to shift the light-duty fleet toward zero-emissions technology. In 2020, California announced an intention to require increasing volumes of zero-emission vehicles to meet the goal that, by 2035, all new light-duty vehicles sold in the state be zero-emission vehicles.[26] Massachusetts [27] and New York [28] are also poised to adopt similar targets and requirements to take effect by 2035. Several other states may adopt similar provisions by 2050 as members of the International Zero-Emission Vehicle Alliance.[29] Globally, at least 12 countries, as well as numerous local jurisdictions, have announced similar goals to shift all new passenger car sales to zero-emission vehicles in the coming years, including Norway (2025); the Netherlands, Denmark, Iceland, Ireland, Sweden, and Slovenia (2030); Canada and the United Kingdom (2035); France and Spain (2040); and Costa Rica (2050).[30] [31] Together, these countries represent approximately 13 percent of the global market for passenger cars,[32] in addition to that represented by the aforementioned U.S. states and other global jurisdictions.

EPA recognizes that in addition to substantially reducing GHG emissions, a longer-term rulemaking could also address criteria pollutant and air toxics emissions from the new light-duty vehicle fleet—especially important considerations during the transition to zero-emission vehicles. EPA expects that a future longer-term rulemaking will take critical steps to continue the trajectory of transportation emission reductions needed to protect public health and welfare. Achieving this trajectory with the help of increased fleet penetration of zero-emission vehicles would bring with it other advantages as well, such as potentially large reductions in roadway pollution and noise in overburdened communities, and potentially support for the future development of vehicle-to-grid services that could become a key enabler for increased utilization of

[9] General Motors, ''General Motors, the Largest U.S. Automaker, Plans to be Carbon Neutral by 2040,'' Press Release, January 28, 2021.

[10] Volvo Car Group, ''Volvo Cars to be fully electric by 2030,'' Press Release, March 2, 2021.

[11] Volkswagen Newsroom, ''Strategy update at Volkswagen: The transformation to electromobility was only the beginning,'' March 5, 2021. Accessed June 15, 2021 at *https://www.volkswagen-newsroom.com/en/stories/strategy-update-at-volkswagen-the-transformation-to-electromobility-was-only-the-beginning-6875.*

[12] Honda News Room, ''Summary of Honda Global CEO Inaugural Press Conference,'' April 23, 2021. Accessed June 15, 2021 at *https://global.honda/newsroom/news/2021/c210423eng.html.*

[13] Ford Motor Company, ''Superior Value From EVs, Commercial Business, Connected Services is Strategic Focus of Today's 'Delivering Ford+' Capital Markets Day,'' Press Release, May 26, 2021.

[14] Stellantis, ''World Environment Day 2021—Comparing Visions: Olivier Francois and Stefano Boeri, in Conversation to Rewrite the Future of Cities,'' Press Release, June 4, 2021.

[15] Stellantis, ''Stellantis Intensifies Electrification While Targeting Sustainable Double-Digit Adjusted Operating Income Margins in the Mid-Term,'' Press Release, July 8, 2021.

[16] Mercedes-Benz, ''Mercedes-Benz prepares to go all-electric,'' Press Release, July 22, 2021.

[17] Environmental Defense Fund and M.J. Bradley & Associates, ''Electric Vehicle Market Status—Update, Manufacturer Commitments to Future Electric Mobility in the U.S. and Worldwide,'' April 2021.

[18] International Council on Clean Transportation, ''The end of the road? An overview of combustion-engine car phase-out announcements across Europe,'' May 10, 2020.

[19] Muratori et al., ''The rise of electric vehicles—2020 status and future expectations,'' Progress in Energy v3n2 (2021), March 25, 2021. Accessed July 15, 2021 at *https://iopscience.iop.org/article/10.1088/2516–1083/abe0ad.*

[20] *Fueleconomy.gov,* 2015 Fuel Economy Guide and 2021 Fuel Economy Guide.

[21] Environmental Defense Fund and M.J. Bradley & Associates, ''Electric Vehicle Market Status—Update, Manufacturer Commitments to Future Electric Mobility in the U.S. and Worldwide,'' April 2021.

[22] Department of Energy Vehicle Technologies Office, Transportation Analysis Fact of the Week #1186, ''The National Average Cost of Fuel for an Electric Vehicle is about 60% Less than for a Gasoline Vehicle,'' May 17, 2021.

[23] Department of Energy Vehicle Technologies Office, Transportation Analysis Fact of the Week #1190, ''Battery-Electric Vehicles Have Lower Scheduled Maintenance Costs than Other Light-Duty Vehicles,'' June 14, 2021.

[24] Consumer Reports, ''Electric Cars 101: The Answers to All Your EV Questions,'' November 5, 2020. Accessed June 8, 2021 at *https://www.consumerreports.org/hybrids-evs/electric-cars-101-the-answers-to-all-your-ev-questions/.*

[25] Department of Energy Alternative Fuels Data Center, Electric Vehicle Charging Station Locations. Accessed on May 19, 2021 at *https://afdc.energy.gov/fuels/electricity_locations.html#/find/nearest?fuel=ELEC.*

[26] State of California Office of the Governor, ''Governor Newsom Announces California Will Phase Out Gasoline-Powered Cars & Drastically Reduce Demand for Fossil Fuel in California's Fight Against Climate Change,'' Press Release, September 23, 2020.

[27] Commonwealth of Massachusetts, ''Request for Comment on Clean Energy and Climate Plan for 2030,'' December 30, 2020.

[28] New York State Senate, Senate Bill S2758, 2021–2022 Legislative Session. January 25, 2021.

[29] ZEV Alliance, ''International ZEV Alliance Announcement,'' Dec. 3, 2015. Accessed on July 16, 2021 at *http://www.zevalliance.org/international-zev-alliance-announcement/.*

[30] International Council on Clean Transportation, ''Update on the global transition to electric vehicles through 2019,'' July 2020.

[31] Reuters, ''Canada to ban sale of new fuel-powered cars and light trucks from 2035,'' June 29, 2021. Accessed July 1, 2021 from *https://www.reuters.com/world/americas/canada-ban-sale-new-fuel-powered-cars-light-trucks-2035-2021-06-29/.*

[32] International Council on Clean Transportation, ''Growing momentum: Global overview of government targets for phasing out new internal combustion engine vehicles,'' posted 11 November 2020, accessed April 28, 2021 at *https://theicct.org/blog/staff/global-ice-phaseout-nov2020.*

variable renewable energy sources, such as wind and solar, across the grid.[33]

B. Summary of Proposed Light-Duty Vehicle GHG Program

EPA is proposing revised GHG standards that would begin in MY 2023 and increase in stringency year over year through MY 2026. EPA proposes to increase the stringency of the standards from the average roughly 1.5 percent year-over-year stringency increase of the relaxed SAFE standards to a nearly 10 percent proposed stringency increase in MY 2023, followed by a nearly 5 percent proposed stringency increase in each MY from 2024 through 2026. EPA believes the 10 percent proposed increase in stringency in MY 2023 is appropriate given the technological investments industry has continued to make beyond what would be required to meet the SAFE rule revised standards, such as improvements being made in response to the California Framework Agreements, as well as the compliance flexibilities built into the program. Also, as discussed in Section I.G below, EPA requests comment on standards for MY 2026 that would result in fleet average target levels that are in the range of 5–10 g/mile lower (i.e., more stringent) than the levels proposed. This request for comments is in keeping with the additional lead time available for this out-year compared to MYs 2023–2025, and because EPA may determine that it is appropriate, particularly in light of the accelerating transition to electrified vehicles, to require additional reductions in this time frame. The proposed standards would achieve significant GHG and other emission reductions and related public health and welfare benefits, while providing consumers with lower operating costs resulting from significant fuel savings. Our analysis described in this notice demonstrates that the proposed standards are appropriate under section 202(a) of the CAA, considering costs, technological feasibility, available lead time, and other factors. The proposed trajectory of increasing stringency from MYs 2023 to 2026 takes into account the credit-based emissions averaging, banking and trading flexibilities of the current program as well as additional flexibility provisions that we are proposing to ease the transition to more stringent standards. EPA also took into account manufacturers' ability to generate credits against the existing standards relaxed in the SAFE rule for MYs 2021 and 2022, which we are not proposing to revise.

In our design and analyses of the proposed program and our overall updated assessment of feasibility, EPA also took into account the decade-long light-duty vehicle GHG emission reduction program in which the auto industry has introduced a wide lineup of ever more fuel-efficient, GHG-reducing technologies. The technological achievements already developed and applied to vehicles within the current new vehicle fleet will enable the industry to achieve the proposed standards even without the development of new technologies beyond those already widely available. Furthermore, in light of the design cycle timing for vehicles, EPA has basis to expect that the vehicles that automakers will be selling during the first years of the proposed MY 2023–26 program were already designed before the less stringent SAFE standards were recently adopted. Further support that the technologies needed to meet the proposed standards do not need to be developed, but are already widely available and in use on vehicles, can be found in the fact that five vehicle manufacturers, representing about a third of U.S. auto sales, agreed in 2019 with the State of California that their nationwide fleets would meet GHG emission reduction targets more stringent than the applicable EPA standards beginning in model year 2021. The fact that five automakers voluntarily entered into the California Framework Agreements also supports the feasibility of meeting standards at least as stringent as the emission reduction targets under the California Framework, which we describe in detail later in this preamble. We describe additional details of the proposal below and in later sections of the preamble as well as in the Draft Regulatory Impact Analysis (DRIA). We also describe and analyze both less stringent and more stringent alternatives, consistent with OMB Circular A–4.

Although most automakers have launched ambitious plans to develop and produce increasing numbers of zero- and near-zero-emission vehicles, EPA recognizes that during the near-term timeframe of the proposed standards through MY 2026, the new vehicle fleet likely will continue to consist primarily of gasoline-fueled vehicles. In this preamble and in the DRIA, we provide our analyses supporting our assessment that the proposed standards for MYs 2023 through 2026 would be achievable primarily through the application of advanced gasoline vehicle technologies. We project that during the four-year ramping up of the stringency of the CO_2 standards, the proposed standards could be met with gradually increasing sales of plug-in electric vehicles in the U.S., up to about 8 percent market share (including both electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs)) by MY 2026. Given that EVs and PHEVs represented about 2 percent of the new vehicle market in MY 2019,[34] this would represent a significant increase in penetration of these vehicles but one that we believe is reasonable given automaker announcements on increasing EV and PHEV production. We note later in this preamble in the discussion of the alternative levels of stringency that EPA is considering, that there may be the potential for higher levels of EV penetration by MY 2026, which could enable EPA to consider a more stringent standard for MY 2026. As described elsewhere in this preamble, we believe that, in conjunction with the proposed standards, the limited but focused incentives and flexibilities that we are proposing would support automakers' acceleration of their introduction and sales of advanced technologies, including zero and near-zero-emission technologies.

1. Proposed Revised GHG Emissions Standards

i. Proposed Revised CO_2 Targets

As with EPA's previous light-duty GHG programs, EPA is proposing footprint-based standards curves for both passenger cars and trucks. Each manufacturer would have a unique standard for the passenger cars category and another for the truck category [35] for each MY based on the sales-weighted footprint-based CO_2 targets [36] of the vehicles produced in that MY. Figure 1 shows EPA's proposed standards, expressed as average fleetwide GHG emissions targets (cars and trucks combined), projected through MY 2026. For comparison, the figure also shows the corresponding targets for the SAFE final rulemaking (FRM) and the 2012 FRM. The projected fleet targets for this proposed rule increase in stringency in

[33] Department of Energy Electricity Advisory Committee, ''Enhancing Grid Resilience with Integrated Storage from Electric Vehicles: Recommendations for the U.S. Department of Energy,'' June 25, 2018.

[34] ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975,'' EPA–420–R–21–003, January 2021, p. 52.

[35] Passenger cars include cars and smaller cross-overs and SUVs, while the truck category includes larger cross-overs and SUVs, minivans, and pickup trucks.

[36] Because compliance is based on the full range of vehicles in a manufacturer's car and truck fleets, with lower-emitting vehicles compensating for higher-emitting vehicles, the emission levels of specific vehicles within the fleet are referred to as targets, rather than standards.

MY 2023 by about 10 percent (from the existing SAFE rule standards in MY 2022), followed by stringency increases thereafter of nearly 5 percent year over year from MY 2024 through MY 2026. Also, as discussed in Section I.G, EPA requests comment on standards for MY 2026 that would result in fleet average target levels that are in the range of 5–10 g/mile lower (*i.e.*, more stringent) than the levels proposed. As with all EPA vehicle emissions standards, the proposed MY 2026 standards would then remain in place for all subsequent MYs, unless and until they are revised in a subsequent rulemaking. Table 1 presents the estimates of EPA's proposed standards presented in Figure 1, again in terms of the projected overall industry fleetwide CO_2-equivalent emission compliance target levels. The industry fleet-wide estimates in Table 1 are projections based on modeling that EPA conducted for the proposed rule, taking into consideration projected fleet mix and footprints for each manufacturer's fleet in each model year. Table 2 presents projected industry fleet average year-over-year percent reductions comparing the existing standards under the SAFE rule and the proposed revised standards. See Section II.A below for a full discussion of the proposed standards and presentations of the footprint standards curves.

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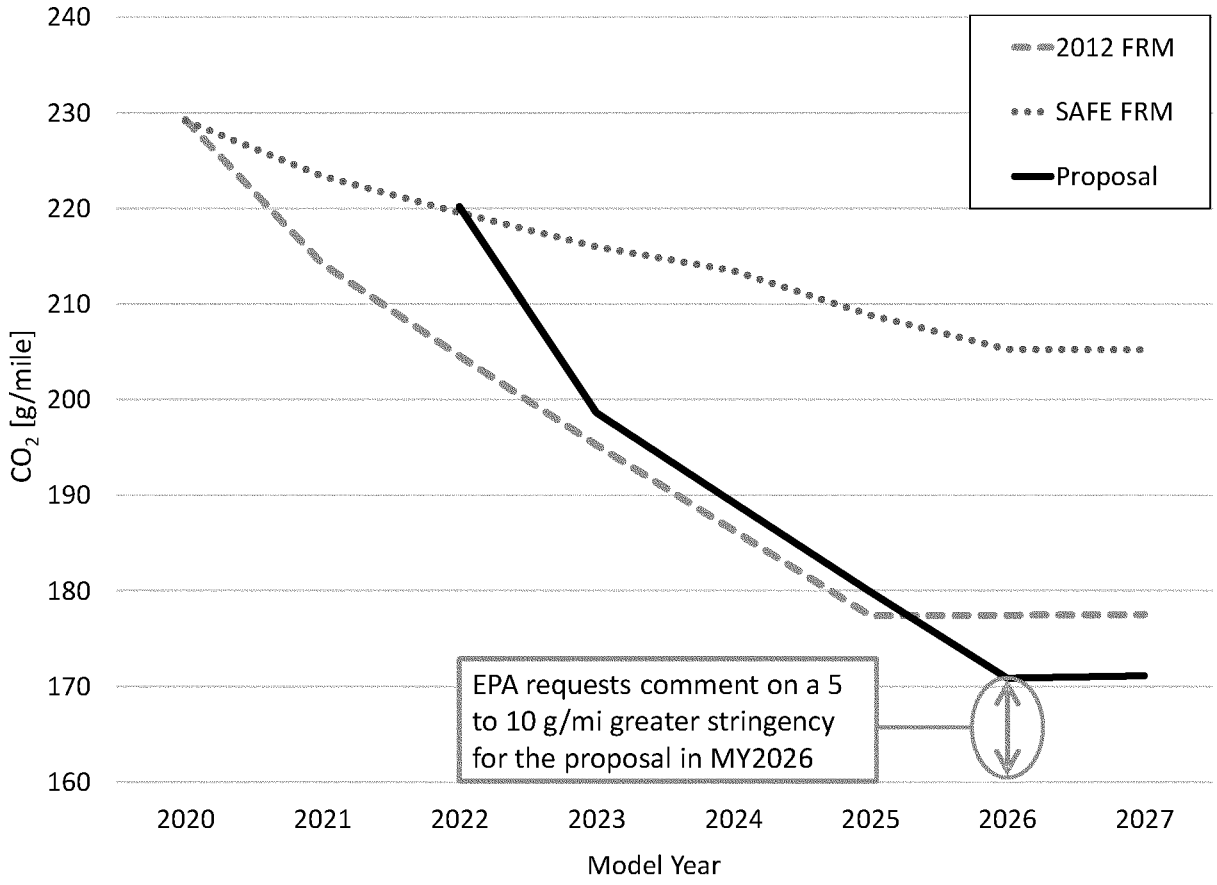

Figure 1 EPA Proposed Industry Fleet-Wide CO_2 Compliance Targets, Compared to 2012 and SAFE Rules, grams/mile, MYs 2021-2026

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TABLE 1—PROJECTED INDUSTRY FLEET-WIDE CO_2 COMPLIANCE TARGETS FOR MYS 2023–2026

[grams/mi]

	2022*	2023	2024	2025	2026**
Cars	180	165	157	149	142
Trucks	260	232	221	210	199
Combined Cars and Trucks	220	199	189	180	171

* SAFE rule targets included for reference.

** EPA is also requesting comment on MY 2026 standards that would result in fleet average levels that are 5–10 g/mile more stringent than the levels shown.

The combined car/truck CO2 targets are a function of assumed car/truck shares. For this illustration, we assume an approximately 50/50% split in MYs 2023–2026. See DRIA Chapter 2 for detail.

TABLE 2—PROJECTED INDUSTRY FLEET AVERAGE TARGET YEAR-OVER-YEAR PERCENT REDUCTIONS

	SAFE rule			Proposal		
	Cars %	Trucks %	Combined %	Cars %	Trucks %	Combined %
2023	1.7	1.5	1.6	8.3	10.8	9.8
2024	1.1	1.2	1.2	4.8	4.7	4.7
2025	2.3	2.0	2.2	5.1	5.0	4.9
2026*	1.8	1.6	1.7	4.7	5.2	5.0

*The percentages shown do not include EPA's request for comments on MY 2026 standards that are 5–10 g/mile more stringent than proposed.

2. Proposed Compliance Incentives and Flexibilities

The existing GHG program established in the 2010 and 2012 rules included several key flexibilities, such as credit programs and technology incentives that are discussed further in this proposal where EPA is requesting comment or proposing modifications.[37] These include:

- Credit Averaging, Banking, and Trading (ABT) including credit carry-forward, credit carry-back, transferring credits between a manufacturer's car and truck fleets, and credit trading between manufacturers (MY 2012 and later)
- Off-cycle credits for GHG emissions reductions not captured on the test procedures used for fleet average compliance with the footprint-based standards (MY 2012 and later)
- Air conditioning credits for system efficiency improvements and reduced refrigerant leakage or use of low global warming potential refrigerants (MY 2012 and later)
- Multiplier incentives for advanced technology vehicles including electric vehicles, fuel cell vehicles, plug-in hybrids (ending after MY 2021)
- Multiplier incentives for natural gas fueled vehicles (MY 2021–2026)
- Full-size pick-up incentives for hybridization or performance improvements equivalent to hybridization (ending after MY 2021)

EPA is proposing a targeted set of extended or additional compliance flexibilities and incentives that we believe are appropriate given the stringency and lead time of the proposed standards. We are proposing four types of flexibilities/incentives, in addition to flexibilities/incentives that already will be available for these MYs under EPA's existing regulations: (1) A limited extension of carry-forward credits generated in MYs 2016 through 2020; (2) an extension of the advanced technology vehicle multiplier credits for MYs 2022 through 2025 with a cumulative credit cap; (3) restoration of the 2012 rule's full-size pickup truck incentives for strong hybrids or similar performance-based credit for MYs 2022 through 2025 (provisions which were removed in the SAFE rule); and (4) an increase of the off-cycle credits menu cap from 10 g/mile to 15 g/mile. EPA is also proposing to remove the multiplier incentives for natural gas fueled vehicles for MYs 2023–2026. We summarize these proposals below and provide details in Sections II.B and II.C below.

The GHG program includes existing provisions initially established in the 2010 rule, which set the MY 2012–2016 GHG standards, for how credits may be used within the program. These averaging, banking, and trading (ABT) provisions include credit carry-forward, credit carry-back (also called deficit carry-forward), credit transfers (within a manufacturer), and credit trading (across manufacturers). These ABT provisions define how credits may be used and are integral to the program. The current program limits credit carry-forward to 5 years. EPA is proposing a limited extension of credit carry-forward for credits generated in MYs 2016 through 2020. The proposal would change the credit carry-forward time limitation for MY 2016 credits from five to seven years and the carry-forward limit for MYs 2017–2020 from 5 to 6 years, as shown in Table 3 below.

TABLE 3—EPA PROPOSED EXTENSION OF CREDIT CARRY-FORWARD PROVISIONS

MY credits are banked	MYs credits are valid under EPA's proposed extension										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2016	.....	x	x	x	x	x	+	+	.....	.....	.....
2017	.....	.....	x	x	x	x	x	+	.....	.....	.....
2018	.....	.....	.....	x	x	x	x	x	+	.....	.....
2019	.....	.....	.....	.....	x	x	x	x	x	+	.....
2020	.....	.....	.....	.....	.....	x	x	x	x	x	+
2021	.....	.....	.....	.....	.....	.....	x	x	x	x	x

x = Current program. + = Proposed additional years.

The existing GHG program also includes temporary incentives through MY 2021 that encourage the use of advanced technologies such as electric, hybrid, and fuel cell vehicles, as well as incentives for full-size pickups using strong hybridization or technologies providing similar emissions reductions to hybrid technology. The full-size pickup incentives originally were available through MY 2025, but the SAFE rule removed these incentives for MYs 2022 through 2025. When EPA established these incentives in the 2012 rule, EPA recognized that they would reduce the effective stringency of the standards, but believed that it was worthwhile to have a limited near-term

[37] See 75 FR 25324, May 7, 2010 and 77 FR 62624, Oct. 15, 2012.

loss of emissions reduction benefits to increase the potential for far greater emissions reduction and technology diffusion benefits in the longer term.[38] EPA believed that the temporary regulatory incentives would help bring low emission technologies to market more quickly than in the absence of incentives.[39] With these same goals in mind for this program, EPA is proposing multiplier incentives from MY 2022 though MY 2025 with a cap on multiplier credits and to reinstate the full-size pickup incentives removed from the program by the SAFE rule. These proposed incentives are intended as a temporary measure supporting the transition to zero-emission vehicles and to provide additional flexibility in meeting the MY 2023–2026 proposed standards, as further discussed in Section II.B.1.

EPA is also proposing to remove the extended multiplier incentives added by the SAFE rule from the GHG program after MY 2022. EPA is proposing to end multipliers for NGVs in this manner because NGVs are not a near-zero emissions technology and EPA believes multipliers are no longer necessary or appropriate for these vehicles. Any NGV multiplier credits generated in MY 2022 would be included under the proposed multiplier cap.

The current program also includes credits for real-world emissions reductions not reflected on the test cycles used for measuring CO_2 emissions for compliance with the fleet average standards. There are credits for using technologies that reduce GHG emissions that aren't captured on EPA tests (''off-cycle'' technologies) and improvements to air conditioning systems that increase efficiency and reduce refrigerant leakage. These credit opportunities do not sunset under the existing regulations, remaining a part of the program through MY 2026 and beyond unless the program is changed by regulatory action. EPA is proposing to modify an aspect of the off-cycle credits program to provide additional opportunities for manufacturers to generate credits by increasing the pre-defined menu credit cap from 10 to 15 g/mile. EPA is also proposing to modify some of the regulatory definitions that are used to determine whether a technology is eligible for the menu credits. EPA is not proposing changes to the air conditioning credits elements of the program.

[38] See Tables III–2 and III–3, 77 FR 62772, October 15, 2012.

[39] 77 FR 62812, October 15, 2012.

C. Analytical Support for the Proposed Revised Standards

1. Summary of Analyses for This Proposed Rule

All of EPA's analyses of the national light-duty vehicle GHG program over the past decade have been built on the same overall framework and produce the same types of results. Section III.A below explains this common EPA framework in more detail. In summary, it includes the following primary elements:

i. Analyzing Issues of Feasibility, Costs, and Lead Time

As with our earlier analyses, EPA used a model to simulate the decision process of auto manufacturers in choosing among the emission reduction technologies available to incorporate in vehicles across their fleets. The models take into account both the projected costs of established and newer technologies and the relative ability of each of these technologies to reduce GHG emissions. This process identifies potential pathways for manufacturers to comply with a given set of GHG standards. EPA then estimates projected average and total costs for manufacturers to produce these vehicles to meet the standards under evaluation during the model years covered by the analysis.

In addition to projecting the technological capabilities of the industry and estimating compliance costs for each of the four affected model years (MYs 2023–2026), EPA has considered the role of the averaging, banking, and trading system that has been available and extensively used by the industry since the beginning of the light-duty vehicle GHG program in model year 2012. Our analysis of the current and anticipated near-future usage of the GHG credit mechanisms (III.B.2 below) reinforces the trends we identified in our other analyses showing widespread technological advancement in the industry at reasonable per-vehicle costs. Together, these analyses support EPA's conclusion under section 202(a) of the CAA that technologically feasible pathways are available at reasonable costs for automakers to comply with the proposed standards during each of the four model years. We discuss these analyses and their results further in Section III below.

ii. Analyzing the Projected Impacts of the Proposed Program

We also estimate the GHG and non-GHG emission impacts (tailpipe and upstream) of the proposed standards. EPA then builds on the estimated changes in emissions and fuel consumption to calculate expected net economic impacts from these changes. Key economic inputs include: The social costs of GHGs; measures of health impacts from changes in criteria pollutant emissions; a value for the vehicle miles traveled ''rebound effect;'' estimates of energy security impacts of changes in fuel consumption; and costs associated with crashes, noise, and congestion from additional rebound driving.

Our overall analytical approach generates key results for the following metrics: Incremental costs per vehicle (industry-wide averages and by manufacturer); total vehicle technology costs for the auto industry; GHG emissions reductions and criteria pollutant emissions reductions; penetration of key GHG-reducing technologies across the fleet; consumer fuel savings; oil reductions; and net societal costs and benefits. We discuss these analyses in Sections III, IV, V, and VII below as well as in the DRIA.

2. History of Similar Analyses

At several points during the past decade, EPA has performed detailed analyses to evaluate the technological feasibility, as well as to project program costs and benefits, of the national light-duty vehicle GHG emissions control program. Although the purposes of these analyses varied, and EPA used somewhat different modeling approaches and tools, in each case these analyses included assessments of the program in the later years of the standards, *i.e.*, MYs 2022 through 2025 or 2026. As we describe in more detail in Chapter 1 of the DRIA, EPA performed similar analyses in support of the 2011 proposal and 2012 final rule establishing the original MY 2017–2025 light-duty vehicle GHG standards; in 2016–January 2017 in support of the Midterm Evaluation process and Determination concerning the MY 2022–2025 standards; and in 2018 during the development of the SAFE proposed rule.

It is notable that, although each analysis is based on projections from the then-available fleet data forward to model years 2025 or 2026, the results of each of these earlier analyses, as well as the updated analysis we have performed for our proposed standards, have all produced very similar results in several key metrics. For example, the estimated projected cost to manufacturers to implement similar standards in 2025–2026 has remained fairly consistent since 2012. Thus, while we believe the updated analysis presented in the DRIA provides strong support for the

feasibility and appropriateness of the proposed program, the consistent results from the earlier analyses further reinforce the robustness of our conclusions.

D. Summary of Costs and Benefits of the Proposed Program

EPA estimates that this proposal would result in significant present-value net benefits of $86 billion to $140 billion (annualized net benefits of $4.2 billion to $7.3 billion)—that is, the total benefits far exceed the total costs of the program. Table 4 below summarizes EPA's estimates of total discounted costs, fuel savings, and benefits. The results presented here project the monetized environmental and economic impacts associated with the proposed standards during each calendar year through 2050. The proposal also would have significant benefits for consumers, as the fuel savings for American drivers would total $120 to $250 billion through 2050. With these fuel savings, consumers would benefit from reduced operating costs over the vehicle lifetime.

The benefits include climate-related economic benefits from reducing emissions of GHGs that contribute to climate change, reductions in energy security externalities caused by U.S. petroleum consumption and imports, the value of certain particulate matter-related health benefits (including premature mortality), the value of additional driving attributed to the rebound effect, and the value of reduced refueling time needed to fill a more fuel-efficient vehicle. The analysis also includes estimates of economic impacts stemming from additional vehicle use, such as the economic damages caused by crashes, congestion, and noise (from increased rebound driving). See the DRIA for more information regarding these estimates.

TABLE 4—MONETIZED DISCOUNTED COSTS, BENEFITS, AND NET BENEFITS OF THE PROPOSED PROGRAM FOR CALENDAR YEARS THROUGH 2050

[Billions of 2018 dollars][a b c d e]

	Present value		Annualized value	
	3% Discount rate	7% Discount rate	3% Discount rate	7% Discount rate
Costs	$240	$150	$12	$12
Fuel Savings	250	120	13	9.9
Benefits	130	110	6.9	6.3
Net Benefits	140	86	7.3	4.2

Notes:

[a] Values rounded to two significant figures; totals may not sum due to rounding. Present and annualized values are based on the stream of annual calendar year costs and benefits included in the analysis (2021–2050) and discounted back to year 2021.

[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.

[c] The same discount rate used to discount the value of damages from future GHG emissions (SC–GHGs at 5, 3, and 2.5 percent) is used to calculate the present and annualized values of climate benefits for internal consistency, while all other costs and benefits are discounted at either 3% or 7%.

[d] Net benefits reflect the fuel savings plus benefits minus costs.

[e] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

A second way to present the net benefits of the proposal is using a vehicle MY lifetime basis. Table 5 and Table 6 summarize EPA's estimates of total discounted costs, fuel savings, and benefits through the full lifetime of vehicles projected to be sold in MYs 2023–2026. The estimated results presented here project the monetized environmental and economic impacts associated with the proposed standards. Note that standards continue at their MY2026 levels beyond MY2026 in any scenario. At both a 3% and 7% discount rate all model years show substantial fuel savings and net benefits.

TABLE 5—GHG ANALYSIS OF LIFETIME COSTS & BENEFITS TO MEET THE PROPOSED MYS 2023–2026 GHG STANDARDS, 3% DISCOUNT RATE

[For vehicles produced in MY 2023–2026][a b c d]

[Billions of 2018$]

MY	Costs	Fuel savings	Benefits	Net benefits
Present values				
2023	$4.8	$3.6	$1.9	$0.68
2024	5.9	7	3.6	4.7
2025	6.7	8.6	4.4	6.2
2026	8.1	13	7.2	12
Sum	26	33	17	24

TABLE 5—GHG ANALYSIS OF LIFETIME COSTS & BENEFITS TO MEET THE PROPOSED MYS 2023–2026 GHG STANDARDS, 3% DISCOUNT RATE—Continued

[For vehicles produced in MY 2023–2026][a b c d]

[Billions of 2018$]

MY	Costs	Fuel savings	Benefits	Net benefits
Annualized values				
2023	0.21	0.16	0.08	0.029
2024	0.26	0.3	0.16	0.2
2025	0.29	0.37	0.19	0.27
2026	0.35	0.58	0.31	0.54
Sum	1.1	1.4	0.74	1

Notes:

[a] The lifetime costs and benefits of each MY vehicle are discounted back to 2021.

[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate, but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.

[c] The same discount rate used to discount the value of damages from future GHG emissions is used to calculate the present and annualized value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at 3% in this table.

[d] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

TABLE 6—GHG ANALYSIS OF LIFETIME COSTS & BENEFITS TO MEET THE PROPOSED MYS 2023–2026 GHG STANDARDS, 7% DISCOUNT RATE

[For vehicles produced in MY 2023–2026][a b c d]

[Billions of 2018$]

MY	Costs	Fuel savings	Benefits	Net benefits
Present values				
2023	$4.4	$2.6	$1.7	−$0.14
2024	5.5	4.7	3.3	2.4
2025	6.1	5.5	3.9	3.4
2026	7.3	8.2	6.2	7.2
Sum	23	21	15	13
Annualized values				
2023	0.33	0.19	0.085	−0.053
2024	0.41	0.35	0.16	0.1
2025	0.45	0.41	0.19	0.15
2026	0.55	0.62	0.31	0.38
Sum	1.7	1.6	0.75	0.58

Notes:

[a] The lifetime costs and benefits of each MY vehicle are discounted back to 2021.

[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate, but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.

[c] The same discount rate used to discount the value of damages from future GHG emissions is used to calculate the present and annualized value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at 7% in this table.

[d] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

E. How has EPA considered environmental justice in this proposal?

Executive Orders 12898 (59 FR 7629, February 16, 1994) and 14008 (86 FR 7619, February 1, 2021) direct federal agencies, to the greatest extent practicable and permitted by law, to make achieving environmental justice (EJ) part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States. Chapter 8.3 discusses the potential environmental justice concerns associated with this proposal. EPA defines environmental justice as the fair treatment and meaningful

involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Executive Order 14008 also calls on federal agencies to make achieving environmental justice part of their missions ''by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts.'' It declares a policy ''to secure environmental justice and spur economic opportunity for disadvantaged communities that have been historically marginalized and overburdened by pollution and under-investment in housing, transportation, water and wastewater infrastructure and health care.'' Under Executive Order 13563 (76 FR 3821), federal agencies may consider equity, human dignity, fairness, and distributional considerations, where appropriate and permitted by law.

EPA's 2016 ''Technical Guidance for Assessing Environmental Justice in Regulatory Analysis'' provides recommendations on conducting the highest quality analysis feasible, recognizing that data limitations, time and resource constraints, and analytic challenges will vary by media and regulatory context. [40]

EPA's mobile source regulatory program has historically reduced significant amounts of both GHG and non-GHG pollutants to the benefit of all U.S. residents, including populations that live near roads and in communities with EJ concerns. EJ concerns may arise in the context of this rulemaking in two key areas.

First, minority populations and low-income populations may be especially vulnerable to the impacts of climate change. As discussed in Section IV.C, this proposed rulemaking would mitigate the impacts of climate change by achieving significant GHG emission reductions, which would benefit populations that may be especially vulnerable to various forms of damages associated with climate change.

Second, in addition to significant climate-change benefits, the proposed standards would also impact non-GHG emissions. As discussed in Section VII.L.2, numerous studies have found that environmental hazards such as air pollution are more prevalent in areas where minority populations and low-income populations represent a higher fraction of the population compared with the general population. There is substantial evidence, for example, that people who live or attend school near major roadways are more likely to be of a racial minority, Hispanic ethnicity, and/or low socioeconomic status (see Section VII.L.2).

We expect this proposed rule would result in both small reductions and small increases of non-GHG emissions. These effects could potentially impact communities with EJ concerns, though not necessarily immediately and not equally in all locations. For this proposal, the air quality information needed to perform a quantified analysis of the distribution of such impacts was not available. We therefore recommend caution when interpreting these broad, qualitative observations.

We note that EPA intends to develop a future rule to control emissions of GHGs as well as criteria and air toxic pollutants from light-duty vehicles for MYs beyond 2026. We are considering how to project air quality impacts from the changes in non-GHG emissions for that future rulemaking (see Section V.C).

F. Affordability and Equity

In addition to considering environmental justice impacts, we have examined the effects of the proposed standards on affordability of vehicles and transportation services for low-income households in Section VII.L of this Preamble and Chapter 8.4 of the DRIA. As with the effects of the proposed standards on vehicle sales discussed in Section VII.B, the effects of the proposed standards on affordability and equity depend in part on two countervailing effects: The increase in the up-front costs of new vehicles subject to more stringent standards, and the decrease in operating costs from reduced fuel consumption over time. The increase in up-front new vehicle costs has the potential to increase the prices of used vehicles, to make credit more difficult to obtain, and to make the least expensive new vehicles less desirable compared to used vehicles. The reduction in operating costs over time has the potential to mitigate or reverse all these effects. Lower operating costs on their own increase mobility (see DRIA Chapter 3.1 for a discussion of rebound driving).

While social equity involves issues beyond income and affordability, including race, ethnicity, gender, gender identification, and residential location, the potential effects of the proposed standards on lower-income households are of great importance for social equity and reflect these contrasting forces. The overall effects on vehicle ownership, including for lower-income households, depend heavily on the role of fuel consumption in vehicle sales decisions, as discussed in Section VII.M. At the same time, lower-income households own fewer vehicles per household, are more likely to buy used vehicles than new, and spend more on fuel than on vehicles on an annual basis than higher-income households. In addition, for lower-income households, fuel expenditures are a larger portion of household income, so the fuel savings that would result from this proposal may be more impactful to these consumers. Thus, the benefits of this proposal may be stronger for lower-income households even if they buy used vehicles: As vehicles meeting the proposed standards enter the used vehicle market, they will retain the fuel economy/GHG-reduction benefits, and associated fuel savings, while facing a smaller portion of the upfront vehicle costs. The reduction in operating costs may also increase access to transportation services, such as ride-hailing and ride-sharing, where the lower per-mile costs may play a larger role than up-front costs in pricing. As a result, lower-income consumers may be affected more from the reduction in operating costs than the increase in up-front costs.

New electric vehicles currently have higher up-front costs and lower operating costs than gasoline vehicles and require access to charging infrastructure that may not be readily available to many. EPA has heard from some environmental justice groups and Tribes that limited access to electric vehicles and charging infrastructure can be a barrier for purchasing EVs. This proposal projects that the vast majority of vehicles produced in the time frame of the proposed standards will be gasoline-fueled vehicles (with EVs and PHEVs gradually increasing to about 8 percent total market share by MY 2026 compared to about 4 percent in the No Action scenario, see DRIA Chapter 4.1.3, Table 4–30). However, EPA will monitor and study affordability issues related to electric vehicles as their prevalence in the vehicle fleet increases.

G. What alternatives is EPA considering?

1. Description of the Alternatives

Along with the proposed standards, EPA analyzed both a more stringent and a less stringent alternative. For the less stringent alternative, Alternative 1, EPA used the coefficients in the California

[40] ''Technical Guidance for Assessing Environmental Justice in Regulatory Analysis.'' Epa.gov, Environmental Protection Agency, *https://www.epa.gov/sites/production/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf*. (June 2016).

Framework for the 2.7 percent effective stringency level (as described in Section II.B.1) as the basis for the MY 2023 stringency level and the 2012 rule's MY 2025 standards as the basis for the MY 2026 stringency level, with linear year-over-year reductions between the two points for MYs 2024 and 2025. EPA views the California Framework as a reasonable basis for the least stringent alternative that EPA would consider finalizing, since it represents a level of stringency that five manufacturers have already committed to achieving. EPA did not include incentive multipliers for Alternative 1, as doing so would only further reduce the effective stringency of this Alternative, and EPA views Alternative 1 as the lower end of stringency that it believes is appropriate through 2026.

For the more stringent alternative, Alternative 2, EPA used the 2012 rule standards as the basis for MY 2023–2025 targets, with the standards continuing to increase in stringency in a linear fashion for MY 2026. Alternative 2 adopts the 2012 rule stringency levels in MY 2023 and follows the 2012 rule standard target levels through MY 2025. EPA extended the same linear average year-over-year trajectory for MYs 2023–2025 to MY 2026 for the final standards under Alternative 2. As noted in Section II.A.1, EPA believes that it is important to continue to make progress in MY 2026 beyond the MY 2025 standard levels in the 2012 rule. As with the proposal, Alternative 2 meets this objective. EPA did not include in Alternative 2 the proposed incentive multipliers with the proposed cumulative credit cap in MYs 2022–2025, which would have the effect of making Alternative 2 less stringent. As discussed in Section II.B.1, EPA is requesting comment on whether or not to include the proposed multipliers, and our request for comments extends to whether to include multipliers both for the proposal and for Alternative 2.[41]

As previously noted in Section I.B.2, EPA is proposing several modifications to program flexibilities. These proposed program changes, except for the advanced technology multipliers, would also apply to the alternatives. Table 7 below provides a list of the proposed flexibilities and their applicability to the proposed and alternative standards.

TABLE 7—APPLICABILITY OF REVISED FLEXIBILITY PROVISIONS TO THE PROPOSAL AND ALTERNATIVES

Provision	Proposal	Alternative 1	Alternative 2
Extension of credit carry-forward for MY 2016–2020 credits	Yes	Yes	Yes.
Advanced technology incentive multipliers for MYs 2022–2025 with cap	Yes	No	No.
Increase of off-cycle menu cap from 10 to 15 g/mile	Yes	Yes	Yes.
Reinstatement of full-size pickup incentives for strong hybrids or equivalent technologies for MYs 2022–2025.	Yes	Yes	Yes.

EPA's technical analysis, presented in Section III, consists of model runs using a model capable of reflecting some but not all of these provisions. The modeling includes consideration of advanced technology incentive multipliers for the proposal but not for the alternatives. The model runs also include the 15 grams per mile off-cycle menu cap as appropriate given the standards or targets to which a fleet being modeled is complying. Not included in the model runs are the full-size pickup truck technology incentive credit or the extension of the emissions credit carry-forward.

The fleet average targets for the two alternatives compared to the proposed standards are provided in Table 8 below. EPA also requests comment on the level of stringency for MY 2026 for the alternatives and the proposed standards. Specifically, EPA requests comment on standards for MY 2026 that would result in fleet average target levels that are in the range of 5–10 g/mile lower (*i.e.*, more stringent) than the levels shown for MY 2026 in Table 8. EPA is requesting specific comment on whether the level of stringency for MY 2026 should be greater in keeping with the additional lead time available for this out-year compared to MYs 2023–2025, and because EPA may determine that it is appropriate, particularly in light of the accelerating transition to electrified vehicles, to require additional reductions in this timeframe. As discussed in detail in Section A.3 of the Executive Summary, there has been a proliferation of recent announcements from automakers signaling a rapidly growing shift in investment away from internal-combustion technologies and toward high levels of electrification. EPA has also heard from a wide range of stakeholders over the past several months, including but not limited to the automotive manufacturers and the automotive suppliers, that the significant investments being made now to develop and launch new EV product offerings and in the expansion of EV charging infrastructure could enable higher levels of EV penetration to occur in the marketplace by the MY 2026 time frame than EPA has projected in this proposal for both the proposed MY 2026 standards and the Alternative 2 MY 2026 standards. The information concerning the investment landscape potentially accelerating to an even greater extent of market penetration of EV products helps inform EPA's request for comment on the potential for a more stringent MY 2026 standard that would reflect this information and related considerations, including any additional information provided by commenters. In light of these stakeholder views and other available information, EPA is soliciting comment on the appropriateness of more stringent MY 2026 standards.

TABLE 8—PROJECTED FLEET AVERAGE TARGET LEVELS FOR PROPOSED STANDARDS AND ALTERNATIVES

[CO_2 grams/mile]

Model year	Proposal projected targets	Alternative 1 projected targets	Alternative 2 projected targets
2021	*223	*223	*224
2022	*220	*220	*220

[41] 41 See ''Benefits and Costs of the EPA Light-duty Vehicle GHG Proposal with and without Advanced Technology Multipliers,'' memorandum to Docket.

TABLE 8—PROJECTED FLEET AVERAGE TARGET LEVELS FOR PROPOSED STANDARDS AND ALTERNATIVES—Continued
[CO_2 grams/mile]

Model year	Proposal projected targets	Alternative 1 projected targets	Alternative 2 projected targets
2023	199	203	195
2024	189	194	186
2025	180	185	177
2026**	171	177	169

* SAFE rule standards included here for reference.
** EPA is also requesting comment on MY 2026 standards that would result in fleet average levels that are 5–10 g/mile more stringent than the levels shown.

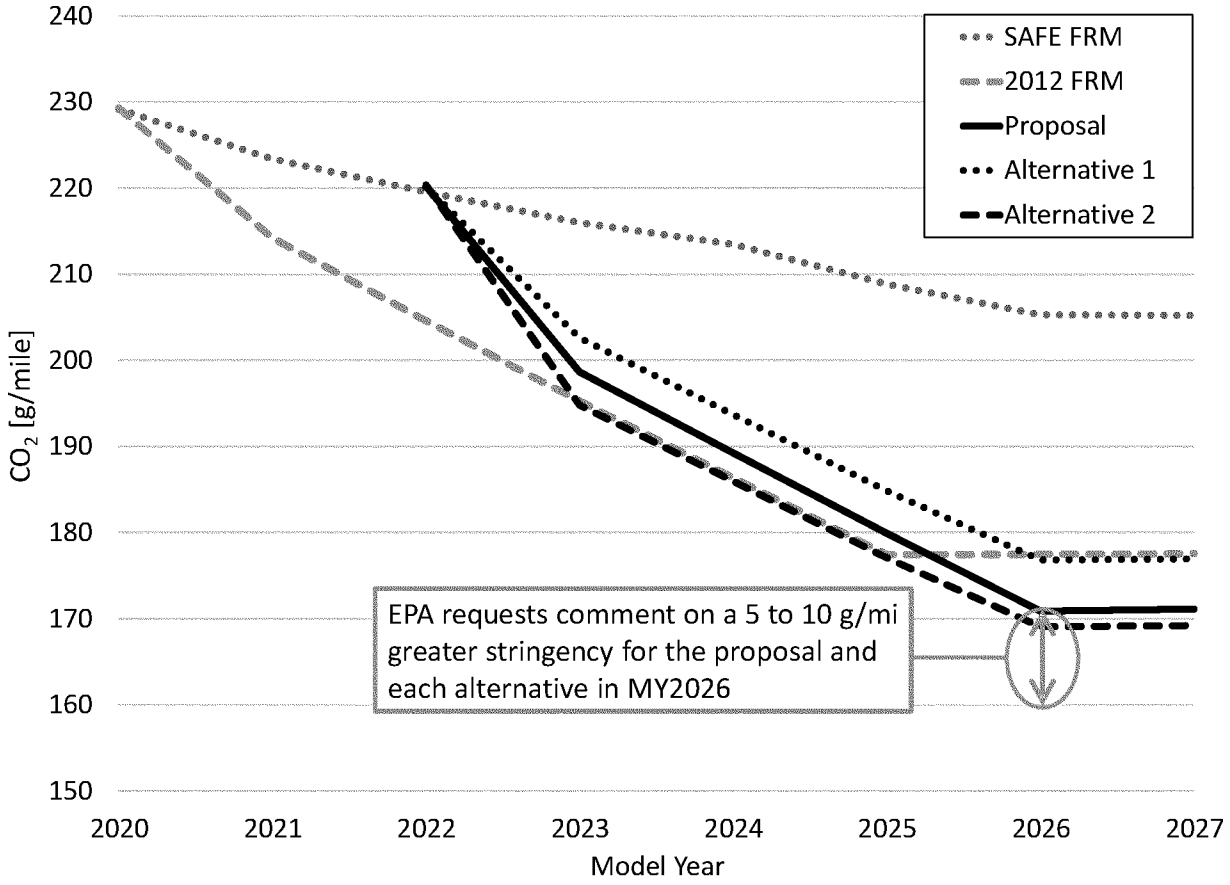

Figure 2 Proposed Standards Fleet Average Targets Compared to Alternatives

As shown in Figure 2, the range of alternatives that EPA has analyzed is fairly narrow, with the proposed standard targets differing from the alternatives in any given MY in MYs 2023–2026 by 2 to 6 g/mile, although EPA is requesting comment on a wider range of standards, particularly for MY 2026 as noted above. EPA believes this approach is reasonable and appropriate considering the relatively limited lead time for the proposed standards, especially for MYs 2023–2025, EPA's assessment of feasibility, the existing automaker commitments to meet the California Framework (representing about one-third of the auto market), the standards adopted in the 2012 rule; and the need to reduce GHG emissions. EPA provides a discussion of the feasibility of the proposed standard and alternatives and the selection of the proposed standards in Section III.D. The analysis of costs and benefits of Alternatives 1 and 2 is shown in the DRIA Chapters 4, 6, and 10. EPA requests comments on all aspects of Alternatives 1 and 2 or other alternatives roughly within the stringency range of the proposal and the Alternatives.

2. Summary of Costs and Benefits of the Alternatives

EPA estimates that Alternative 1 would result in significant present-value net benefits of $76 billion to $130 billion (annualized net benefits of $4.1 billion to $6.6 billion)—that is, the total benefits far exceed the total costs of the program. Table 9 below summarizes EPA's estimates of total discounted costs, fuel savings, and benefits for Alternative 1. The results presented here project the monetized

environmental and economic impacts associated with the proposed standards during each calendar year through 2050. Alternative 1 also would have significant benefits for consumers, as the fuel savings for American drivers would total $98 billion to $200 billion through 2050. With these fuel savings, consumers would benefit from reduced operating costs over the vehicle lifetime.

The benefits include climate-related economic benefits from reducing emissions of GHGs that contribute to climate change, reductions in energy security externalities caused by U.S. petroleum consumption and imports, the value of certain particulate matter-related health benefits (including premature mortality), the value of additional driving attributed to the rebound effect, and the value of reduced refueling time needed to fill a more fuel-efficient vehicle. The analysis also includes estimates of economic impacts stemming from additional vehicle use, such as the economic damages caused by crashes, congestion, and noise (from increased rebound driving). See the DRIA for more information regarding these estimates.

TABLE 9—MONETIZED DISCOUNTED COSTS, BENEFITS, AND NET BENEFITS OF ALTERNATIVE 1 FOR CALENDAR YEARS THROUGH 2050

[Billions of 2018 dollars] [a b c d e]

	Present value		Annualized value	
	3% Discount rate	7% Discount rate	3% Discount rate	7% Discount rate
Costs	$190	$110	$9.5	$9.2
Fuel savings	200	98	10	7.9
Benefits	120	93	6	5.4
Net benefits	130	76	6.6	4.1

Notes:

[a] Values rounded to two significant figures; totals may not sum due to rounding. Present and annualized values are based on the stream of annual calendar year costs and benefits included in the analysis (2021–2050) and discounted back to year 2021.

[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.

[c] The same discount rate used to discount the value of damages from future GHG emissions (SC–GHGs at 5, 3, and 2.5 percent) is used to calculate the present and annualized values of climate benefits for internal consistency, while all other costs and benefits are discounted at either 3% or 7%.

[d] Net benefits reflect the fuel savings plus benefits minus costs.

[e] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

A second way to present the net benefits of the proposal is using a vehicle MY lifetime basis. Table 10 and Table 11 summarize EPA's estimates of total discounted costs, fuel savings, and benefits through the full lifetime of vehicles projected to be sold in MYs 2023–2026 under Alternative 1. The estimated results presented here project the monetized environmental and economic impacts associated with the Alternative 1 standards. Note that standards continue at their MY2026 levels beyond MY2026 in any scenario. At both a 3% and 7% discount rate all model years show substantial fuel savings and net benefits.

TABLE 10—GHG ANALYSIS OF LIFETIME COSTS & BENEFITS TO MEET THE ALTERNATIVE 1 MYS 2023–2026 GHG STANDARDS, 3% DISCOUNT RATE

[For vehicles produced in MY 2023–2026] [a b c d]

[Billions of 2018$]

MY	Costs	Fuel savings	Benefits	Net benefits
Present values				
2023	$3.9	$3.4	$2	$1.5
2024	4.9	6.5	3.7	5.3
2025	5.6	7.7	4.5	6.5
2026	6.4	10	6	9.7
Sum	21	28	16	23
Annualized values				
2023	0.17	0.15	0.085	0.067
2024	0.21	0.28	0.16	0.23
2025	0.24	0.33	0.19	0.28
2026	0.28	0.44	0.26	0.42
Sum	0.9	1.2	0.7	1

Notes:

[a] The lifetime costs and benefits of each MY vehicle are discounted back to 2021.
[b] Climate benefits are based on reductions in CO_2, CH_4, and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate, but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.
[c] The same discount rate used to discount the value of damages from future GHG emissions is used to calculate the present and annualized value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at 3% in this table.
[d] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

TABLE 11—GHG ANALYSIS OF LIFETIME COSTS & BENEFITS TO MEET THE ALTERNATIVE 1 MYS 2023–2026 GHG STANDARDS, 7% DISCOUNT RATE

[For Vehicles Produced in MY 2023–2026] [a b c d]
[Billions of 2018$]

MY	Costs	Fuel savings	Benefits	Net benefits
Present values				
2023	$3.7	$2.4	$1.7	$0.4
2024	4.7	4.3	3.2	2.8
2025	5.1	4.9	3.8	3.6
2026	5.6	6.2	5	5.6
Sum	19	18	14	12
Annualized values				
2023	0.28	0.18	0.091	−0.0084
2024	0.35	0.32	0.17	0.14
2025	0.38	0.37	0.2	0.19
2026	0.42	0.47	0.26	0.31
Sum	1.4	1.3	0.72	0.63

Notes:
[a] The lifetime costs and benefits of each MY vehicle are discounted back to 2021.
[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate, but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.
[c] The same discount rate used to discount the value of damages from future GHG emissions is used to calculate the present and annualized value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at 7% in this table.
[d] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

EPA estimates that Alternative 2 would result in significant present value net benefits of $110 billion to $180 billion (annualized net benefits of $5.7 billion to $9.1 billion)—that is, the total benefits far exceed the total costs of the program. Table 12 below summarizes EPA's estimates of total discounted costs, fuel savings, and benefits for Alternative 2. The results presented here project the monetized environmental and economic impacts associated with the proposed standards during each calendar year through 2050. Alternative 2 also would have significant benefits for consumers, as the fuel savings for American drivers would total $150 billion to $290 billion through 2050. With these fuel savings, consumers would benefit from reduced operating costs over the vehicle lifetime.

The benefits include climate-related economic benefits from reducing emissions of GHGs that contribute to climate change, reductions in energy security externalities caused by U.S. petroleum consumption and imports, the value of certain particulate matter-related health benefits (including premature mortality), the value of additional driving attributed to the rebound effect, and the value of reduced time needed to refuel a more fuel efficient vehicle. The analysis also includes estimates of economic impacts stemming from additional vehicle use, such as the economic damages caused by crashes, congestion, and noise (from increased rebound driving). See the DRIA for more information regarding these estimates.

TABLE 12—MONETIZED DISCOUNTED COSTS, BENEFITS, AND NET BENEFITS OF ALTERNATIVE 2 FOR CALENDAR YEARS THROUGH 2050

[Billions of 2018 dollars] [a b c d e]

	Present value		Annualized value	
	3% Discount rate	7% Discount rate	3% Discount rate	7% Discount rate
Costs	$290	$180	$15	$14
Fuel Savings	290	150	15	12
Benefits	170	140	8.8	8
Net Benefits	180	110	9.1	5.7

Notes:

[a] Values rounded to two significant figures; totals may not sum due to rounding. Present and annualized values are based on the stream of annual calendar year costs and benefits included in the analysis (2021–2050) and discounted back to year 2021.

[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.

[c] The same discount rate used to discount the value of damages from future GHG emissions (SC–GHGs at 5, 3, and 2.5 percent) is used to calculate the present and annualized values of climate benefits for internal consistency, while all other costs and benefits are discounted at either 3% or 7%.

[d] Net benefits reflect the fuel savings plus benefits minus costs.

[e] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

A second way to present the net benefits of the proposal is using a vehicle MY lifetime basis. Table 13 and Table 14 summarize EPA's estimates of total discounted costs, fuel savings, and benefits through the full lifetime of vehicles projected to be sold in MYs 2023–2026 under Alternative 2. The estimated results presented here project the monetized environmental and economic impacts associated with the proposed standards. Note that standards continue at their MY2026 levels beyond MY2026 in any scenario. At both a 3% and 7% discount rate all model years show substantial fuel savings and net benefits.

TABLE 13—GHG ANALYSIS OF LIFETIME COSTS & BENEFITS TO MEET THE ALTERNATIVE 2 MY 2023–2026 GHG STANDARDS, 3% DISCOUNT RATE

[For vehicles produced in MY 2023–2026] [a b c d]

[Billions of 2018$]

MY	Costs	Fuel savings	Benefits	Net benefits
Present values				
2023	$6.8	$7.7	$4.6	$5.5
2024	7.7	9.8	5.7	7.8
2025	8.4	11	6.5	9.1
2026	9.2	13	7.8	12
Sum	32	42	25	34
Annualized values				
2023	$0.3	$0.33	$0.2	$0.24
2024	0.33	0.42	0.25	0.34
2025	0.37	0.48	0.28	0.39
2026	0.4	0.57	0.34	0.51
Sum	1.4	1.8	1.1	1.5

Notes:

[a] The lifetime costs and benefits of each MY vehicle are discounted back to 2021.

[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate, but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.

[c] The same discount rate used to discount the value of damages from future GHG emissions is used to calculate the present and annualized value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at 3% in this table.

[d] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

TABLE 14—GHG ANALYSIS OF LIFETIME COSTS & BENEFITS TO MEET THE ALTERNATIVE 2 MY 2023–2026 GHG STANDARDS, 7% DISCOUNT RATE

[For vehicles produced in MY 2023–2026] [a b c d]
[Billions of 2018$]

MY	Costs	Fuel savings	Benefits	Net benefits
Present values				
2023	$6.3	$5.4	$4	$3.1
2024	7	6.5	5	4.4
2025	7.4	7.1	5.5	5.2
2026	7.9	8.2	6.6	6.9
Sum	29	27	21	20
Annualized Values				
2023	0.48	0.4	0.21	0.14
2024	0.53	0.49	0.26	0.22
2025	0.56	0.54	0.29	0.27
2026	0.59	0.61	0.34	0.37
Sum	2.2	2	1.1	1

Notes:
[a] The lifetime costs and benefits of each MY vehicle are discounted back to 2021.
[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate, but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.
[c] The same discount rate used to discount the value of damages from future GHG emissions is used to calculate the present and annualized value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at 7% in this table.
[d] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

3. Summary of the Proposal's Costs and Benefits Compared to the Alternatives

Here we present the proposal's costs and benefits (as summarized previously in Section I.D) alongside the costs and benefits of the alternatives (as summarized previously in Section I.G.2).

Table 15 below summarizes EPA's estimates of present value total discounted costs, fuel savings, and benefits. Table 16 below summarizes EPA's estimates of annualized values of the total discounted costs, fuel savings, and benefits. The results presented in these tables project the monetized environmental and economic impacts associated with the proposed standards during each calendar year through 2050. The benefits include climate-related economic benefits from reducing emissions of GHGs that contribute to climate change, reductions in energy security externalities caused by U.S. petroleum consumption and imports, the value of certain particulate matter-related health benefits (including premature mortality), the value of additional driving attributed to the rebound effect, and the value of reduced refueling time needed to fill a more fuel efficient vehicle. The analysis also includes estimates of economic impacts stemming from additional vehicle use, such as the economic damages caused by crashes, congestion, and noise (from increased rebound driving). See the DRIA for more information regarding these estimates.

TABLE 15—PRESENT VALUE MONETIZED DISCOUNTED COSTS, BENEFITS, AND NET BENEFITS OF THE PROPOSED PROGRAM AND ALTERNATIVES FOR CALENDAR YEARS THROUGH 2050

[Billions of 2018 dollars] [a b c d e]

	3% Discount rate			7% Discount rate		
	Proposal	Alternative 1	Alternative 2	Proposal	Alternative 1	Alternative 2
Costs	$240	$190	$290	$150	$110	$180
Fuel Savings	250	200	290	120	98	150
Benefits	130	120	170	110	93	140
Net Benefits	140	130	180	86	76	110

Notes:
[a] Values rounded to two significant figures; totals may not sum due to rounding. Present and annualized values are based on the stream of annual calendar year costs and benefits included in the analysis (2021–2050) and discounted back to year 2021.
[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.

[c] The same discount rate used to discount the value of damages from future GHG emissions (SC–GHGs at 5, 3, and 2.5 percent) is used to calculate the present and annualized values of climate benefits for internal consistency, while all other costs and benefits are discounted at either 3% or 7%.
[d] Net benefits reflect the fuel savings plus benefits minus costs.
[e] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

TABLE 16—ANNUALIZED MONETIZED DISCOUNTED COSTS, BENEFITS, AND NET BENEFITS OF THE PROPOSED PROGRAM AND ALTERNATIVES FOR CALENDAR YEARS THROUGH 2050

[Billions of 2018 dollars] [a b c d e]

	3% Discount rate			7% Discount rate		
	Proposal	Alternative 1	Alternative 2	Proposal	Alternative 1	Alternative 2
Costs	$12	$9.5	$15	$12	$9.2	$14
Fuel Savings	13	10	15	9.9	7.9	12
Benefits	6.9	6	8.8	6.3	5.4	8
Net Benefits	7.3	6.6	9.1	4.2	4.1	5.7

Notes:
[a] Values rounded to two significant figures; totals may not sum due to rounding. Present and annualized values are based on the stream of annual calendar year costs and benefits included in the analysis (2021–2050) and discounted back to year 2021.
[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.
[c] The same discount rate used to discount the value of damages from future GHG emissions (SC–GHGs at 5, 3, and 2.5 percent) is used to calculate the present and annualized values of climate benefits for internal consistency, while all other costs and benefits are discounted at either 3% or 7%.
[d] Net benefits reflect the fuel savings plus benefits minus costs.
[e] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

A second way to present the net benefits is using a vehicle MY lifetime basis. Table 17 and Table 18 summarize EPA's estimates of total discounted costs, fuel savings, and benefits through the full lifetime of vehicles projected to be sold in MYs 2023–2026. The estimated results presented here project the monetized environmental and economic impacts associated with the proposed standards. Note that standards continue at their MY2026 levels beyond MY2026 in any scenario. At both a 3% and 7% discount rate all model years show substantial fuel savings and net benefits.

TABLE 17—PRESENT VALUE GHG ANALYSIS OF LIFETIME COSTS & BENEFITS FOR MY 2023–2026 GHG STANDARDS UNDER THE PROPOSAL AND ALTERNATIVES

[For vehicles produced in MY 2023–2026] [a b c d]
[Billions of 2018$]

MY	3% Discount rate				7% Discount rate			
	Costs	Fuel savings	Benefits	Net benefits	Costs	Fuel savings	Benefits	Net benefits
Proposal								
2023	$4.8	$3.6	$1.9	$0.68	$4.4	$2.6	$1.7	−$0.14
2024	5.9	7	3.6	4.7	5.5	4.7	3.3	2.4
2025	6.7	8.6	4.4	6.2	6.1	5.5	3.9	3.4
2026	8.1	13	7.2	12	7.3	8.2	6.2	7.2
Sum	26	33	17	24	23	21	15	13
Alternative 1								
2023	$3.9	$3.4	$2	$1.5	$3.7	$2.4	$1.7	$0.4
2024	4.9	6.5	3.7	5.3	4.7	4.3	3.2	2.8
2025	5.6	7.7	4.5	6.5	5.1	4.9	3.8	3.6
2026	6.4	10	6	9.7	5.6	6.2	5	5.6
Sum	21	28	16	23	19	18	14	12
Alternative 2								
2023	$6.8	$7.7	$4.6	$5.5	$6.3	$5.4	$4	$3.1

TABLE 17—PRESENT VALUE GHG ANALYSIS OF LIFETIME COSTS & BENEFITS FOR MY 2023–2026 GHG STANDARDS UNDER THE PROPOSAL AND ALTERNATIVES—Continued

[For vehicles produced in MY 2023–2026] [a b c d]
[Billions of 2018$]

	3% Discount rate				7% Discount rate			
MY	Costs	Fuel savings	Benefits	Net benefits	Costs	Fuel savings	Benefits	Net benefits
2024	7.7	9.8	5.7	7.8	7	6.5	5	4.4
2025	8.4	11	6.5	9.1	7.4	7.1	5.5	5.2
2026	9.2	13	7.8	12	7.9	8.2	6.6	6.9
Sum	32	42	25	34	29	27	21	20

Notes:
[a] The lifetime costs and benefits of each MY vehicle are discounted back to 2021.
[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. In this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate, but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the DRIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.
[c] The same discount rate used to discount the value of damages from future GHG emissions is used to calculate the present and annualized value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at 3% in this table.
[d] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

TABLE 18—ANNUALIZED GHG ANALYSIS OF LIFETIME COSTS & BENEFITS FOR MY 2023–2026 GHG STANDARDS UNDER THE PROPOSAL AND ALTERNATIVES

[For vehicles produced in MY 2023–2026] [a b c d]
[Billions of 2018$]

	3% Discount rate				7% Discount rate			
MY	Costs	Fuel savings	Benefits	Net benefits	Costs	Fuel savings	Benefits	Net benefits
Proposal								
2023	$0.21	$0.16	$0.08	$0.029	$0.33	$0.19	$0.085	−$0.053
2024	0.26	0.3	0.16	0.2	0.41	0.35	0.16	0.1
2025	0.29	0.37	0.19	0.27	0.45	0.41	0.19	0.15
2026	0.35	0.58	0.31	0.54	0.55	0.62	0.31	0.38
Sum	1.1	1.4	0.74	1	1.7	1.6	0.75	0.58
Alternative 1								
2023	$0.17	$0.15	$0.085	$0.067	$0.28	$0.18	$0.091	−$0.0084
2024	0.21	0.28	0.16	0.23	0.35	0.32	0.17	0.14
2025	0.24	0.33	0.19	0.28	0.38	0.37	0.2	0.19
2026	0.28	0.44	0.26	0.42	0.42	0.47	0.26	0.31
Sum	0.9	1.2	0.7	1	1.4	1.3	0.72	0.63
Alternative 2								
2023	$0.3	$0.33	$0.2	$0.24	$0.48	$0.4	$0.21	$0.14
2024	0.33	0.42	0.25	0.34	0.53	0.49	0.26	0.22
2025	0.37	0.48	0.28	0.39	0.56	0.54	0.29	0.27
2026	0.4	0.57	0.34	0.51	0.59	0.61	0.34	0.37
Sum	1.4	1.8	1.1	1.5	2.2	2	1.1	1

Notes:
[a] The lifetime costs and benefits of each MY vehicle are discounted back to 2021.
[b] Climate benefits are based on reductions in CO_2, CH_4 and N_2O emissions and are calculated using four different estimates of the social cost of each greenhouse gas (SC–GHG model average at 2.5%, 3%, and 5% discount rates; 95th percentile at 3% discount rate), which each increase over time. For the presentational purposes of this table, we show the benefits associated with the average SC–GHGs at a 3% discount rate, but the Agency does not have a single central SC–GHG point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC–GHG estimates and present them later in this preamble. As discussed in Chapter 3.3 of the RIA, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, are also warranted when discounting intergenerational impacts.
[c] The same discount rate used to discount the value of damages from future GHG emissions is used to calculate the present and annualized value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at 3% in this table.

[d] Non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

II. EPA Proposal for MY 2023–2026 Light-Duty Vehicle GHG Standards

A. Proposed Model Year 2023–2026 GHG Standards for Light-Duty Vehicles, Light-Duty Trucks, and Medium Duty Passenger Vehicles

As noted, the transportation sector is the largest U.S. source of GHG emissions, making up 29 percent of all emissions.[42] Within the transportation sector, light-duty vehicles are the largest contributor, 58 percent, to transportation GHG emissions in the U.S.[43] EPA has concluded that more stringent standards are appropriate in light of our reassessment of the need to reduce GHG emissions, technological feasibility, costs, lead time, and other factors. The program that EPA is proposing through MY 2026 in this notice does not represent the level of GHG reductions that will ultimately be achievable and appropriate for the light-duty sector, but it does serve as an important stepping off point for a longer-term program beyond 2026. The following section provides the details of EPA's proposed standards and related provisions, followed by a discussion of the alternatives EPA considered. EPA requests comments on all of the proposed provisions and alternatives.

EPA is proposing revised, more stringent standards to control the emissions of greenhouse gases (GHGs) from MY 2023 and later light-duty vehicles.[44] Carbon dioxide (CO_2) is the primary greenhouse gas resulting from the combustion of vehicular fuels. The standards regulate CO_2 on a gram per mile (g/mile) basis, which EPA defines by separate footprint curves for a manufacturer's car and truck fleets.[45] Based on complying with these proposed standards, the industry-wide average emissions target for new light-duty vehicles is projected to be 171 g/mile of CO_2 in MY 2026.[46] Also, as discussed in Section II.C below, EPA is requesting comment on standards for MY 2026 that are in the range of 5–10 g/mile lower (*i.e.,* more stringent) than the levels proposed, resulting in fleet average target levels that are in the range of 166–161 g/mile. EPA is not proposing to change existing averaging, banking, and trading program elements, except for a proposed limited extension of credit carry-forward for one or two years for credits generated in MYs 2016–2020, as discussed in Section II.B.4. The proposed standards would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles (MDPVs).[47] As an overall group, they are referred to in this preamble as light-duty vehicles or simply as vehicles. In this preamble, passenger cars may be referred to simply as ''cars,'' and light-duty trucks and MDPVs as ''light trucks'' or ''trucks.''

As discussed in section II.B, EPA is proposing several revised provisions that would allow manufacturers to generate credits or that provide additional incentives for use of advanced emission reduction technologies. These include ''off-cycle'' credits for technologies that reduce CO_2 emissions during off-cycle operation that are not reasonably accounted for by the 2-cycle tests used for compliance purposes. EPA is proposing to increase the existing credit cap for menu-based credits from 10 g/mile to 15 g/mile and is proposing a number of program revisions and clarifications to address issues that have been identified as EPA has implemented the program. In addition, EPA is proposing to extend multiplier incentives for EVs, PHEVs, and FCVs, with a cumulative cap on credits. Multiplier incentives allow these low-emitting vehicles to count as more than one vehicle in a manufacturer's compliance calculation. EPA is proposing to eliminate multiplier incentives for natural gas vehicles adopted in the SAFE rule after MY 2022. EPA is also proposing to reinstate full size pick-up truck incentives through MY 2025 for vehicles that meet efficiency performance criteria or include strong hybrid technology at a minimum level of production volumes. The SAFE rule removed the full-size pickup incentives for MYs 2022–2025.

The current program includes several program elements that will remain in place, without change. EPA is not proposing to change the fundamental structure of the standards, which are based on the footprint attribute with separate footprint curves for cars and trucks. EPA is not proposing to change the existing CH_4 and N_2O emissions standards. EPA is not proposing changes to the program structure in terms of vehicle certification, compliance, and enforcement. These aspects of the program continue to function as intended and EPA does not currently believe changes are needed. EPA is continuing to use tailpipe-only values to determine vehicle GHG emissions, without accounting for upstream emissions (EVs and PHEVs will continue to use 0 g/mile through MY 2026). EPA is also not proposing changes to current program opportunities to earn credits toward the fleet-wide average CO_2 standards for improvements to air conditioning systems. The current A/C credits program provides credits for improvements to address both hydrofluorocarbon (HFC) refrigerant direct losses (*i.e.,* system ''leakage'') and indirect CO_2 emissions related to the increased load on the engine (also referred to as ''A/C efficiency'' related emissions).

1. What fleet-wide emissions levels correspond to the CO_2 standards?

EPA is proposing revised more stringent standards for MYs 2023–2026 that are projected to result in an industry-wide average target for the light-duty fleet of 171 g/mile of CO_2 in MY 2026. The proposed standards are designed to reach the same level of stringency as the California Framework emission reduction targets in MY 2023, and then ramp down in a linear fashion with year over year average stringency increases of 4.7–5.0 percent. For MY 2026, the proposal goes beyond the 2012 rule level of stringency for MY 2025, by about 3 percent more stringent, making the proposed MY 2026 standard the most stringent vehicle GHG standard that EPA has proposed to date. EPA believes that is possible and worthwhile to make additional progress in MY 2026 by surpassing the level of stringency of the original MY 2025 standards established nine years ago in the 2012 rule. EPA is proposing an ambitious and reasonable approach that would take the initial steps towards making needed

[42] *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019* (EPA–430–R–21–005, published April 2021).

[43] *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019* (EPA–430–R–21–005, published April 2021).

[44] See Sections III and VI for a discussion of lead time.

[45] Footprint curves are graphical representations of the algebraic formulae defining the emission standards in the regulatory text.

[46] The reference to CO_2 here refers to CO_2 equivalent reductions, as this level includes some reductions in emissions of greenhouse gases other than CO_2, from refrigerant leakage, as one part of the A/C related reductions.

[47] As with the previous GHG emissions standards, EPA will continue to use the same vehicle category definitions as in the CAFE program. MDPVs are grouped with light trucks for fleet average compliance determinations.

reductions in GHG emissions. EPA does not propose any change to the approach of having separate standards for cars and light trucks under existing program definitions.

The industry fleet average and car/truck year-over-year percent reductions for the proposed standards compared to the existing SAFE rule standards are provided in Table 19 below. For passenger cars, the proposed footprint curves call for reducing CO_2 by 8.3 percent in MY 2023 followed by year over year reductions of 4.7 to 5.1 percent from the MY 2023 passenger car standard through MY 2026. For light-duty trucks, the proposed footprint curves standards would require reducing CO_2 by 10.8 percent in MY 2023 followed by year over year reductions of 4.7 to 5.2 percent on average from the MY 2023 light-duty truck standard through MY 2026.

TABLE 19—PROJECTED INDUSTRY FLEET AVERAGE TARGET YEAR-OVER-YEAR PERCENT REDUCTIONS

	SAFE rule			Proposal		
	Cars (%)	Trucks (%)	Combined (%)	Cars (%)	Trucks (%)	Combined (%)
2023	1.7	1.5	1.6	8.3	10.8	9.8
2024	1.1	1.2	1.2	4.8	4.7	4.7
2025	2.3	2.0	2.2	5.1	5.0	4.9
2026	1.8	1.6	1.7	*4.7	*5.2	*5.0

*The percentages shown do not include EPA's request for comments on MY 2026 standards that are 5–10 g/mile more stringent than proposed.

For light-trucks, EPA is proposing to change the upper right cutpoints of the CO_2-footprint curves (*i.e.*, the footprint sizes in sq. ft. at which the CO_2 standards level off as flat CO_2 target values for larger vehicle footprints. See Figure 5 below). The SAFE rule altered these cutpoints and EPA is now proposing to restore them to the original upper right cutpoints initially established in the 2012 rule, for MYs 2023–2026, essentially requiring increasingly more stringent CO_2 targets at the higher footprint range up to the revised cutpoint levels. The shapes of the curves and the cutpoints are discussed in Section II.A.2.

The 171 g/mile estimated industry-wide target for MY 2026 noted above is based on EPA's current fleet mix projections for MY 2026 (approximately 50 percent cars and 50 percent trucks, with only slight variations from MY 2023–2026). As discussed below, the final fleet average standards for each manufacturer ultimately will depend on each manufacturer's actual rather than projected production in each MY from MY 2023 to MY 2026 under the sales-weighted footprint-based standard curves for the car and truck regulatory classes. In the 2012 rule, EPA estimated that the fleet average target would be 163 g/mile in MY 2025 based on the projected fleet mix for MY 2025 (67 percent car and 33 percent trucks) based on information available at the time of the 2012 rulemaking. Primarily due to the historical and ongoing shift in fleet mix that included more crossover and small and mid-size SUVs and fewer passenger cars, EPA's projection in the Midterm Evaluation (MTE) January 2017 Final Determination for the original MY 2025 fleet average target level increased to 173 g/mile.[48] EPA has again updated its fleet mix projections and now projects that the original 2012 rule MY 2025 footprint curves standards would result in an industry-wide fleet average target level of 177 g/mile. The projected fleet average targets under the 2012 rule, using the updated fleet mix projections and the projected fleet average targets for the proposal are provided in Table 20 below. Figure 3 below, based on the values in Table 20, shows the proposed standards target levels along with estimated targets for the 2012 rule, SAFE rule, and California Framework for comparison.[49]

TABLE 20—FLEET AVERAGE TARGET PROJECTIONS FOR THE PROPOSED STANDARDS COMPARED TO UPDATED FLEET AVERAGE TARGET PROJECTIONS FOR THE 2012 RULE, SAFE RULE AND CALIFORNIA FRAMEWORK

[CO_2 grams/mile]

MY	Proposal projected targets	2012 Rule projected targets (updated)	SAFE rule projected targets (updated)	California framework projected targets
2021	*223	214	223	214
2022	*220	205	220	206
2023	199	195	216	199
2024	189	186	214	191
2025	180	177	209	184

[48] ''Final Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation,'' EPA–420–R–17–001, January 2017.

[49] For comparison purposes, the California Framework estimates are based on a scenario in which all manufacturers meet the California Framework in MYs 2021–2026 (not only the manufacturers that agreed to the California Framework).

TABLE 20—FLEET AVERAGE TARGET PROJECTIONS FOR THE PROPOSED STANDARDS COMPARED TO UPDATED FLEET AVERAGE TARGET PROJECTIONS FOR THE 2012 RULE, SAFE RULE AND CALIFORNIA FRAMEWORK—Continued

[CO_2 grams/mile]

MY	Proposal projected targets	2012 Rule projected targets (updated)	SAFE rule projected targets (updated)	California framework projected targets
2026	*171	177	205	177

*Projected targets under the SAFE rule standards.
**EPA is also requesting comment on MY 2026 standards that would result in fleet average levels that are 5–10 g/mile more stringent than the level shown.

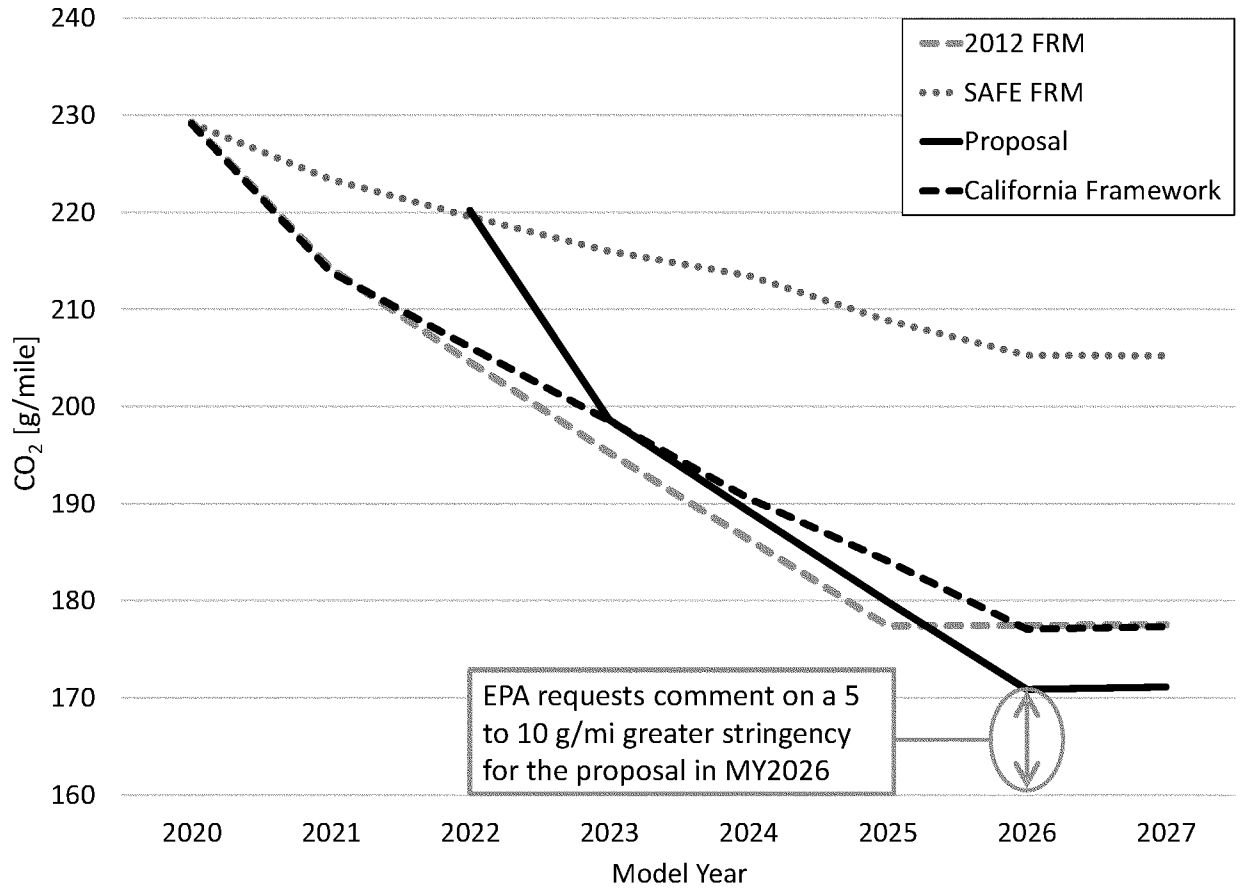

Figure 3 Proposed CO_2 Standard Target Levels Compared to Other Programs

EPA's standards are based in part on EPA's projection of average industry wide CO_2-equivalent emission reductions from A/C improvements, where the footprint curves are made numerically more stringent by an amount equivalent to this projection of A/C refrigerant leakage credits.[50] Including this projection of A/C credits for purposes of setting GHG standards levels is consistent with the 2012 rule and the SAFE rule.

Table 21 below shows overall fleet average target levels for both cars and light trucks that are projected over the implementation period of the proposed standards. A more detailed manufacturer by manufacturer break down of the projected target and achieved levels is provided in Section III.B.1 below. The actual fleet-wide average g/mile level that would be achieved in any year for cars and trucks will depend on the actual production of vehicles for that year, as well as the use of the various credit and averaging, banking, and trading provisions. For example, in any year, manufacturers would be able to generate credits from cars and use them for compliance with the truck standard, or vice versa. In Section V, EPA discusses the year-by-year estimate of emissions reductions that are projected to be achieved by the proposed standards.

In general, the schedule of the proposed standards allows an incremental phase-in to the MY 2026 level and reflects consideration of the appropriate lead time for manufacturers to take actions necessary to meet the

[50] The total A/C adjustment is 18.8 g/mile for cars and 24.4 g/mile for trucks.

proposed standards.[51] The technical feasibility of the standards is discussed in Section III below and in the DRIA. Note that MY 2026 is the final MY in which the proposed standards become more stringent. The MY 2026 CO_2 standards would remain in place for later MYs, unless and until revised by EPA in a future rulemaking for those MYs.

EPA has estimated the overall fleet-wide CO_2 emission levels that correspond with the attribute-based footprint standards, based on projections of the composition of each manufacturer's fleet in each year of the program. As noted above, EPA estimates that, on a combined fleet-wide national basis, the 2026 MY standards would result in a level of 171 g/mile CO_2. The derivation of the 171 g/mile estimate is described in Section III.A. EPA aggregated the estimates for individual manufacturers based on projected production volumes into the fleet-wide averages for cars, trucks, and the entire fleet, shown in Table 21.[52] As discussed above, the combined fleet estimates are based on projected fleet mix of cars and trucks that varies over the MY 2023–2026 timeframe. This fleet mix distribution can also be found in Section III.A.

TABLE 21—ESTIMATED FLEET-WIDE CO_2 TARGET LEVELS CORRESPONDING TO THE PROPOSED STANDARDS

Model year	Cars CO_2 (g/mile)	Trucks CO_2 (g/mile)	Fleet CO_2 (g/mile)
2023	165	232	199
2024	157	221	189
2025	149	210	180
2026 and later**	142	199	171

** EPA is also requesting comment on MY 2026 standards that would result in fleet average levels that are 5–10 g/mile more stringent than the levels shown.

As shown in Table 21, fleet-wide CO_2 emission target levels for cars under the proposed standards are projected to decrease from 165 to 142 g/mile between MY 2023 and MY 2026. Similarly, fleet-wide CO_2 target levels for trucks are projected to decrease from 232 to 199 g/mile. These numbers do not reflect the effects of flexibilities and credits in the program.[53] The estimated fleetwide achieved values can be found in Section V.

As noted above, EPA is proposing standards that set increasingly stringent levels of CO_2 control from MY 2023 though MY 2026. Applying the CO_2 footprint curves applicable in each MY to the vehicles (and their footprint distributions) expected to be sold in each MY produces progressively more stringent estimates of fleet-wide CO_2 emission standards. EPA believes manufacturers can achieve the proposed standards' important CO_2 emissions reductions through the application of available control technology at reasonable cost, as well as the use of program flexibilities.

The existing program includes several provisions that we are not proposing to change and so would continue during the implementation timeframe of this proposed rule. Consistent with the requirement of CAA section 202(a)(1) that standards be applicable to vehicles ''for their useful life,'' the proposed MY 2023–2026 vehicle standards will apply for the useful life of the vehicle.[54] Also, EPA is not proposing any changes to the test procedures over which emissions are measured and weighted to determine compliance with the GHG standards. These procedures are the Federal Test Procedure (FTP or ''city'' test) and the Highway Fuel Economy Test (HFET or ''highway'' test). While EPA may consider requiring the use of test procedures other than the 2-cycle test procedures in a future rulemaking, EPA is not considering any test procedure changes in this rulemaking.

EPA has analyzed the feasibility of achieving the proposed CO_2 standards through the application of currently available technologies, based on projections of the technology and technology penetration rates to reduce emissions of CO_2, during the normal redesign process for cars and trucks, taking into account the effectiveness and cost of the technology. The results of the analysis are discussed in detail in Section III below and in the DRIA. EPA also presents the overall estimated costs and benefits of the proposed car and truck CO_2 standards in Section VII.I.

2. What are the proposed CO_2 attribute-based standards?

As with the existing GHG standards, EPA is proposing separate car and truck standards—that is, vehicles defined as cars would have one set of footprint-based curves, and vehicles defined as trucks would have a different set.[55] In general, for a given footprint, the CO_2 g/mile target[56] for trucks is higher than the target for a car with the same footprint. The curves are described mathematically in EPA's regulations by a family of piecewise linear functions (with respect to vehicle footprint) that gradually and continually ramp down from the MY 2022 curves established in the SAFE rule. EPA's proposed minimum and maximum footprint targets and the corresponding cutpoints are provided below in Table 22 for MYs 2023–2026 along with the slope and intercept defining the linear function for footprints falling between the minimum and maximum footprint values. For footprints falling between the minimum and maximum, the targets are calculated as follows: Slope × Footprint + Intercept = Target. Figure 4 and Figure 5 provide the existing MY 2021–2022 and proposed MY 2023–2026 footprint curves graphically for both car and light trucks, respectively.

[51] As discussed in Section III, EPA has used the Corporate Average Fuel Economy (CAFE) Compliance and Effects Modeling System (CCEMS) to support the technical assessment. Among the ways EPA has considered lead time in the proposal is by using the constraints built into the CCEMS model which are designed to represent lead-time constraints, including the use of redesign and refresh cycles. See CCEMS Model Documentation on web page *https://www.nhtsa.gov/corporate-average-fuel-economy/compliance-and-effects-modeling-system* and contained in the docket for this rule.

[52] Due to rounding during calculations, the estimated fleet-wide CO_2 target levels may vary by plus or minus 1 gram.

[53] Nor do they reflect flexibilities under the ABT program.

[54] The GHG emission standards apply for a useful life of 10 years or 120,000 miles for LDVs and LLDTs and 11 years or 120,000 miles for HLDTs and MDPVs. See 40 CFR 86.1805–17.

[55] See 49 CFR part 523. Generally, passenger cars include cars and smaller cross-overs and SUVs, while the truck category includes larger cross-overs and SUVs, minivans, and pickup trucks.

[56] Because compliance is based on a sales-weighting of the full range of vehicles in a manufacturer's car and truck fleets, the foot-print based CO_2 emission levels of specific vehicles within the fleet are referred to as targets, rather than standards.

TABLE 22—PROPOSED FOOTPRINT-BASED CO_2 STANDARD CURVE COEFFICIENTS

	Car				Truck			
	2023	2024	2025	2026	2023	2024	2025	2026
MIN CO_2 (g/mi)	145.6	138.6	131.9	125.6	181.1	172.1	163.5	155.4
MAX CO_2 (g/mi)	199.1	189.5	180.3	171.6	312.1	296.5	281.8	267.8
Slope (g/mi/ft^2)	3.56	3.39	3.23	3.07	3.97	3.77	3.58	3.41
Intercept (g/mi)	−0.4	−0.4	−0.3	−0.3	18.4	17.4	16.6	15.8
MIN footprint (ft^2)	41	41	41	41	41	41	41	41
MAX footprint (ft^2)	56	56	56	56	74	74	74	74

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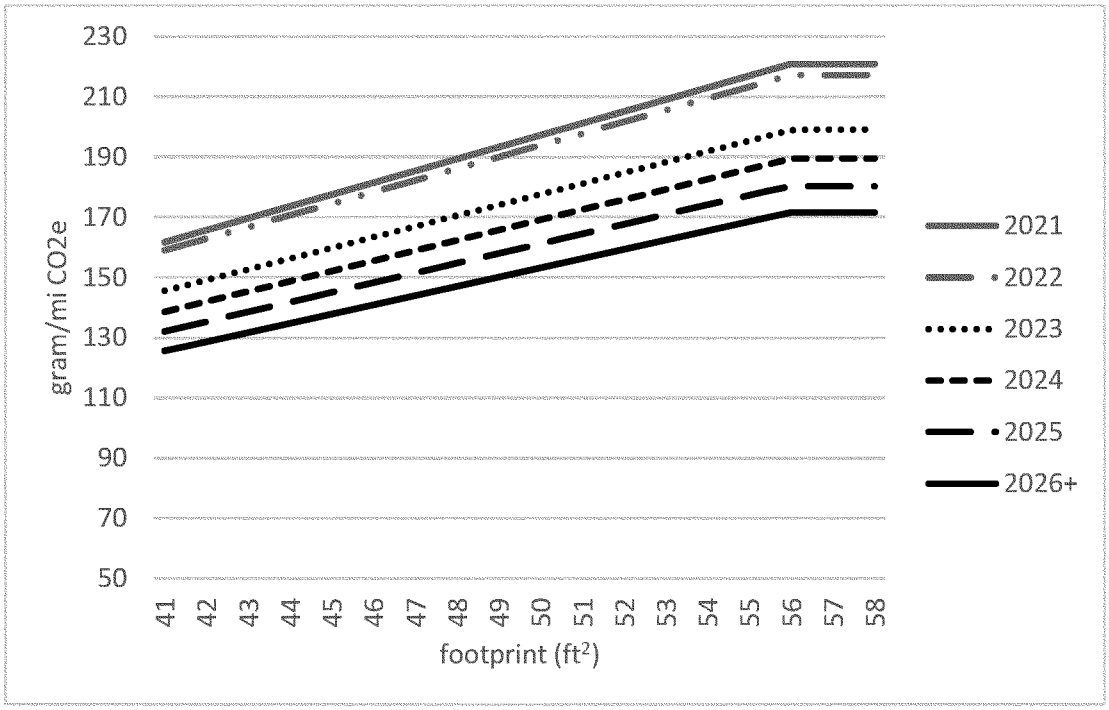

Figure 4 Car Curves

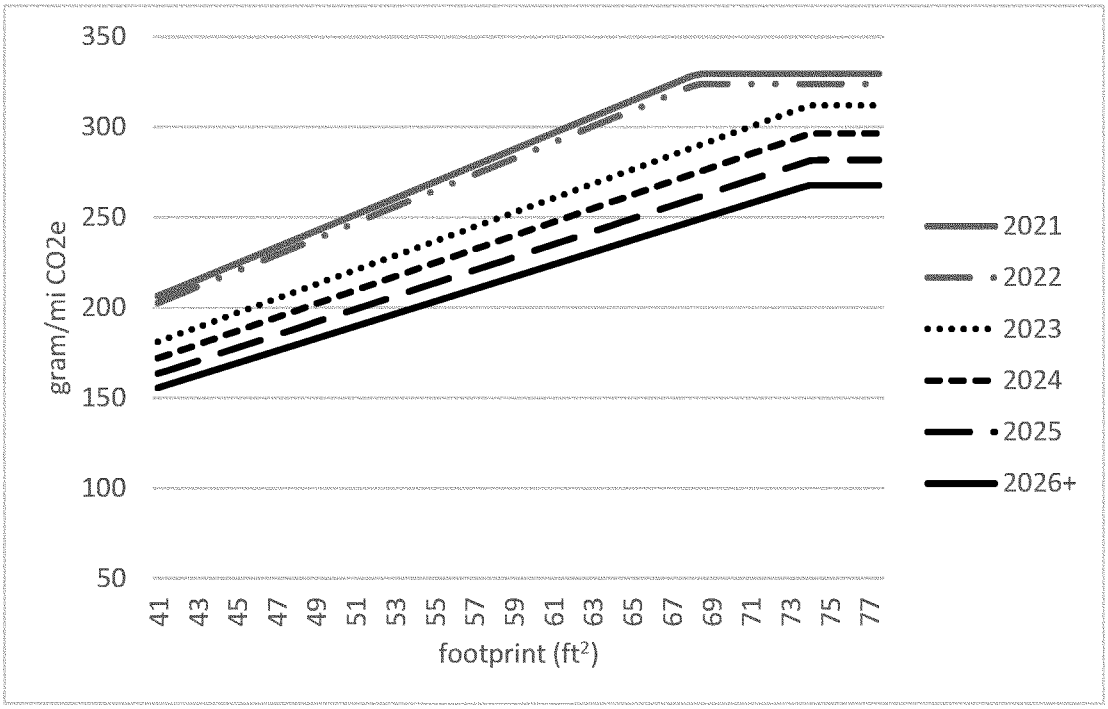

Figure 5 Truck Curves

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The shapes of the proposed MY 2023–2026 car curves are similar to the MY 2022 curve. By contrast, the proposed MY 2023–2026 truck curves return to the cutpoint of 74.0 sq ft originally established in the 2012 rule, but changed in the SAFE rule.[57] The gap between the 2022 curves and the 2023 curves is indicative of the design of the proposed standards as described earlier, where the gap between the MY 2022 and MY 2023 curves is roughly double the gap between the curves for MYs 2024–2026.

3. EPA's Statutory Authority Under the CAA

i. Standards-Setting Authority Under CAA Section 202(a)

Title II of the Clean Air Act (CAA) provides for comprehensive regulation of mobile sources, authorizing EPA to regulate emissions of air pollutants from all mobile source categories. Pursuant to these sweeping grants of authority, when setting GHG standards for light-duty vehicles, EPA considers such issues as technology effectiveness, technology cost (per vehicle, per manufacturer, and per consumer), the lead time necessary to implement the technology, and—based on these considerations—the feasibility and practicability of potential standards; as weel as the impacts of potential standards on emissions reductions of both GHGs and non-GHGs; the impacts of standards on oil conservation and energy security; the impacts of standards on fuel savings by consumers; the impacts of standards on the auto industry; other energy impacts; and other relevant factors such as impacts on safety.

Pursuant to Title II of the Clean Air Act, EPA has taken a comprehensive, integrated approach to mobile source emission control that has produced benefits well in excess of the costs of regulation. In developing the Title II program, the Agency's historic, initial focus was on personal vehicles since that category represented the largest source of mobile source emissions.

Title II emission standards have stimulated the development of a broad set of advanced automotive technologies, such as on-board computers and fuel injection systems, which have been the building blocks of automotive designs and have yielded not only lower pollutant emissions, but improved vehicle performance, reliability, and durability. In response to EPA's adoption of Title II emission standards for GHGs from light-duty vehicles in 2010 and later, manufacturers have continued to significantly ramp up their development and application of a wide range of new and improved technologies, including more fuel-efficient engine designs, transmissions, aerodynamics, and tires, air conditioning systems that contribute to lower GHG emissions, and various levels of electrified vehicle technologies.

This proposed rule implements a specific provision from Title II, section 202(a). Section 202(a)(1) of the CAA, 42 U.S.C. 7521(a)(1), states that ''the Administrator shall by regulation prescribe (and from time to time revise) . . . standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles . . . which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.'' Once EPA makes the appropriate endangerment and cause or contribute findings,[58] then section 202(a) authorizes EPA to issue standards applicable to emissions of those pollutants. Indeed, EPA's obligation to do so is mandatory. *See Coalition for Responsible Regulation* v.

[57] 77 FR 62781.

[58] EPA did so in 2009 for the group of six well-mixed greenhouse gases—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—which taken in combination endanger both the public health and the public welfare of current and future generations. EPA further found that the combined emissions of these greenhouse gases from new motor vehicles and new motor vehicle engines contribute to greenhouse gas air pollution that endangers public health and welfare. 74 FR 66496 (Dec. 15, 2009).

EPA, 684 F.3d 102, 126–27 (D.C. Cir. 2012); *Massachusetts* v. *EPA,* 549 U.S. 497, 533 (2007). Moreover, EPA's mandatory legal duty to promulgate these emission standards derives from ''a statutory obligation wholly independent of DOT's mandate to promote energy efficiency.'' *Massachusetts,* 549 U.S. at 532. Consequently, EPA has no discretion to decline to issue greenhouse gas standards under section 202(a), or to defer issuing such standards due to NHTSA's regulatory authority to establish fuel economy standards. Rather, ''[j]ust as EPA lacks authority to refuse to regulate on the grounds of NHTSA's regulatory authority, EPA cannot defer regulation on that basis.'' *Coalition for Responsible Regulation,* 684 F.3d at 127.

Any standards under CAA section 202(a)(1) ''shall be applicable to such vehicles . . . for their useful life.'' Emission standards set by EPA under CAA section 202(a)(1) are technology-based, as the levels chosen must be premised on a finding of technological feasibility. Thus, standards promulgated under CAA section 202(a) are to take effect only ''after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period.'' CAA section 202(a)(2); see also *NRDC* v. *EPA,* 655 F. 2d 318, 322 (D.C. Cir. 1981). EPA must consider costs to those entities which are directly subject to the standards. *Motor & Equipment Mfrs. Ass'n Inc.* v. *EPA,* 627 F. 2d 1095, 1118 (D.C. Cir. 1979). Thus, ''the [s]ection 202(a)(2) reference to compliance costs encompasses only the cost to the motor-vehicle industry to come into compliance with the new emission standards, and does not mandate consideration of costs to other entities not directly subject to the proposed standards.'' *See Coalition for Responsible Regulation,* 684 F.3d at 128.

EPA is afforded considerable discretion under section 202(a) when assessing issues of technical feasibility and availability of lead time to implement new technology. Such determinations are ''subject to the restraints of reasonableness,'' which ''does not open the door to 'crystal ball' inquiry.'' *NRDC,* 655 F. 2d at 328, quoting *International Harvester Co.* v. *Ruckelshaus,* 478 F. 2d 615, 629 (D.C. Cir. 1973). However, ''EPA is not obliged to provide detailed solutions to every engineering problem posed in the perfection of [a particular device]. In the absence of theoretical objections to the technology, the agency need only identify the major steps necessary for development of the device, and give plausible reasons for its belief that the industry will be able to solve those problems in the time remaining. The EPA is not required to rebut all speculation that unspecified factors may hinder 'real world' emission control.'' *NRDC,* 655 F. 2d at 333–34. In developing such technology-based standards, EPA has the discretion to consider different standards for appropriate groupings of vehicles (''class or classes of new motor vehicles''), or a single standard for a larger grouping of motor vehicles. *NRDC,* 655 F.2d at 338. Finally, with respect to regulation of vehicular greenhouse gas emissions, EPA is not ''required to treat NHTSA's . . . regulations as establishing the baseline for the [section 202(a) standards].'' *Coalition for Responsible Regulation,* 684 F.3d at 127 (noting that the section 202(a) standards provide ''benefits above and beyond those resulting from NHTSA's fuel-economy standards.'')

Although standards under CAA section 202(a)(1) are technology-based, they are not based exclusively on technological capability. EPA has the discretion to consider and weigh various factors along with technological feasibility, such as the cost of compliance (section 202(a)(2)), lead time necessary for compliance (section 202(a)(2)), safety (see *NRDC,* 655 F. 2d at 336 n. 31) [59] and other impacts on consumers, and energy impacts associated with use of the technology. See *George E. Warren Corp.* v. *EPA,* 159 F.3d 616, 623–624 (D.C. Cir. 1998) (ordinarily permissible for EPA to consider factors not specifically enumerated in the Act).

In addition, EPA has clear authority to set standards under CAA section 202(a) that are technology-forcing when EPA considers that to be appropriate, but EPA is not required to do so (as distinguished from standards under provisions such as section 202(a)(3) and section 213(a)(3)). Section 202(a) of the CAA does not specify the degree of weight to apply to each factor, and EPA accordingly has discretion in choosing an appropriate balance among factors. See *Sierra Club* v. *EPA,* 325 F.3d 374, 378 (D.C. Cir. 2003) (even where a provision is technology-forcing, the provision ''does not resolve how the Administrator should weigh all [the statutory] factors in the process of finding the 'greatest emission reduction achievable' ''); *NPRA* v. *EPA,* 287 F.3d 1130, 1135 (D.C. Cir. 2002) (EPA decisions, under CAA provision authorizing technology-forcing standards, based on complex scientific or technical analysis are accorded particularly great deference); see also *Husqvarna AB* v. *EPA,* 254 F. 3d 195, 200 (D.C. Cir. 2001) (great discretion to balance statutory factors in considering level of technology-based standard, and statutory requirement ''to [give appropriate] consideration to the cost of applying . . . technology'' does not mandate a specific method of cost analysis); *Hercules Inc.* v. *EPA,* 598 F. 2d 91, 106 (D.C. Cir. 1978) (''In reviewing a numerical standard we must ask whether the agency's numbers are within a zone of reasonableness, not whether its numbers are precisely right''); Permian Basin Area Rate Cases, 390 U.S. 747, 797 (1968) (same); *Federal Power Commission* v. *Conway Corp.,* 426 U.S. 271, 278 (1976) (same); *Exxon Mobil Gas Marketing Co.* v. *FERC,* 297 F. 3d 1071, 1084 (D.C. Cir. 2002) (same).

ii. Testing Authority

Under section 203 of the CAA, sales of vehicles are prohibited unless the vehicle is covered by a certificate of conformity. EPA issues certificates of conformity pursuant to section 206 of the CAA, based on (necessarily) pre-sale testing conducted either by EPA or by the manufacturer. The Federal Test Procedure (FTP or ''city'' test) and the Highway Fuel Economy Test (HFET or ''highway'' test) are used for this purpose. Compliance with standards is required not only at certification but throughout a vehicle's useful life, so that testing requirements may continue post-certification. Useful life standards may apply an adjustment factor to account for vehicle emission control deterioration or variability in use (section 206(a)).

EPA establishes the test procedures under which compliance with the CAA GHG standards is measured. EPA's testing authority under the CAA is broad and flexible. EPA has also developed tests with additional cycles (the so-called 5-cycle tests) which are used for purposes of fuel economy labeling and are also used in the EPA program for extending off-cycle credits under the light-duty vehicle GHG program.

[59] Since its earliest Title II regulations, EPA has considered the safety of pollution control technologies. See 45 FR 14496, 14503 (1980) (''EPA would not require a particulate control technology that was known to involve serious safety problems. If during the development of the trap-oxidizer safety problems are discovered, EPA would reconsider the control requirements implemented by this rulemaking'').

iii. Compliance and Enforcement Authority

EPA oversees testing, collects and processes test data, and performs calculations to determine compliance with CAA standards. CAA standards apply not only at certification but also throughout the vehicle's useful life. The CAA provides for penalties should manufacturers fail to comply with their fleet average standards, and there is no option for manufacturers to pay fines in lieu of compliance with the standards. Under the CAA, penalties for violation of a fleet average standard are typically determined on a vehicle-specific basis by determining the number of a manufacturer's highest emitting vehicles that cause the fleet average standard violation. Penalties for reporting requirements under Title II of the CAA apply per day of violation, and other violations apply on a per vehicle, or a per part or component basis. See CAA sections 203(a) and 205(a) and 40 CFR 19.4.

Section 207 of the CAA grants EPA broad authority to require manufacturers to remedy vehicles if EPA determines there are a substantial number of noncomplying vehicles. In addition, section 205 of the CAA authorizes EPA to assess penalties of up to $48,762 per vehicle for violations of various prohibited acts specified in the CAA. In determining the appropriate penalty, EPA must consider a variety of factors such as the gravity of the violation, the economic impact of the violation, the violator's history of compliance, and ''such other matters as justice may require.'' The CAA does not authorize vehicle manufacturers to pay fines in lieu of meeting emission standards.

4. Averaging, Banking, and Trading Provisions for CO_2 Standards

i. Background

Averaging, banking, and trading (ABT) is an important compliance flexibility and ABT has been built into various highway engine and vehicle programs (and nonroad engines and equipment programs) to support emissions standards that through the introduction of new technologies, result in reductions in air pollution. The light-duty ABT program for GHG standards includes existing provisions initially established in the 2010 rule for how credits may be generated and used within the program.[60] These provisions include credit carry-forward, credit carry-back (also called deficit carry-forward), credit transfers (within a manufacturer), and credit trading (across manufacturers).

Credit carry-forward refers to banking (saving) credits for future use, after satisfying any needs to offset prior MY debits within a vehicle category (car fleet or truck fleet). Credit carry-back refers to using credits to offset any deficit in meeting the fleet average standards that had accrued in a prior MY. A manufacturer may have a deficit at the end of a MY (after averaging across its fleet using credit transfers between cars and trucks)—that is, a manufacturer's fleet average level may fail to meet the required fleet average standard for the MY. The CAA does not expressly limit the duration of such credit provisions, and in the MY 2012–2016 and 2017–2025 programs, EPA chose to adopt 5-year credit carry-forward (generally, with an exception noted below) and 3-year credit carry-back provisions as a reasonable approach that maintained consistency between the EPA GHG and NHTSA's CAFE provisions.[61] While some stakeholders had suggested that light-duty GHG credits should have an unlimited credit life, EPA did not adopt that suggestion for the light-duty GHG program because it would pose enforcement challenges and could lead to some manufacturers accumulating large banks of credits that could interfere with the program's goal to develop and transition to progressively more advanced emissions control technologies in the future.

Although the credit carry-forward and carry-back provisions generally remained in place for MY 2017 and later standards, EPA finalized provisions allowing all unused (banked) credits generated in MY 2010–2016 (but not MY 2009 early credits) to be carried forward through MY 2021. See § 86.1865–12(k)(6)(ii); 77 FR 62788 October 15, 2012. This is the normal 5-year carry-forward for MY 2016 and later credits but provides additional carry-forward years for credits generated in MYs 2010–2015. Extending the life of MY 2010–2015 credits provided greater flexibility for manufacturers in using the credits. This provision was intended to facilitate the transition to increasingly stringent standards through MY 2021 by helping manufacturers resolve lead time issues they might face in the early MYs of the program. This extension of credit carry-forward also provided additional incentive for manufacturers to generate credits earlier, for example in MYs 2014 and 2015, thereby encouraging the earlier use of additional CO_2 reducing technologies.

Transferring credits in the EPA program refers to exchanging credits between the two averaging sets—passenger cars and light trucks—within a manufacturer. For example, credits accrued by overcompliance with a manufacturer's car fleet average standard can be used to offset debits accrued due to that manufacturer not meeting the truck fleet average standard in a given year. (Put another way, a manufacturer's car and truck fleets are, in essence, a single averaging set in the EPA program). Finally, accumulated credits may be traded to another manufacturer. Credit trading has occurred on a regular basis in EPA's vehicle program.[62] Manufacturers acquiring credits may offset credit shortfalls and bank credits for use toward future compliance within the carry-forward constraints of the program.

The ABT provisions are an integral part of the vehicle GHG program and the agency expects that manufacturers will continue to utilize these provisions into the future. EPA's annual Automotive Trends Report provides details on the use of these provisions in the GHG program.[63] ABT allows EPA to consider standards more stringent than we would otherwise consider by giving manufacturers an important tool to resolve lead time and feasibility issues. EPA believes the targeted extension of credit carry-forward that we are proposing, discussed below, is appropriate considering the stringency and implementation timeframe of the proposed standards.

ii. Extended Credit Carry-Forward Proposal

As in the transition to more stringent standards under the 2012 rule, EPA recognizes that auto manufacturers are again facing a transition to more stringent standards with our MY 2023–2026 standards proposal. We also recognize that the stringency increase from MY 2022 to MY 2023 is the steepest step in our proposed program with relatively limited lead time. Therefore, we believe it is again appropriate in the current context to provide a targeted, limited amount of additional flexibility to carry-forward

[60] 40 CFR 86.1865–12.

[61] The EPCA/EISA statutory framework for the CAFE program limits credit carry-forward to 5 years and credit carry-back to 3 years.

[62] EPA provides general information on credit trades annually as part of its annual Automotive Trends and GHG Compliance Report. The latest report is available at: *https://www.epa.gov/automotive-trends* and the docket for this rulemaking.

[63] ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975,'' EPA–420–R–21–003 January 2021.

credits into the 2023–2026 MYs, to ease the manufacturers' transition to these more stringent standards.

EPA is proposing to temporarily increase the number of years that MY 2016–2020 vintage credits that may be carried-forward to provide additional flexibility for manufacturers in the transition to more stringent standards. EPA proposes to increase credit carry-forward for MY 2016 credits by two years such that they would not expire until after MY 2023. For MY 2017–2020 credits, EPA proposes to extend the credit life by one year, so that those banked credits can be used through MYs 2023–2026, depending on the MY in which the credits are banked. For MY 2021 and later credits, EPA is not proposing any modification to credit carry-forward in this notice. Credit carry-forward would return to the normal 5 years in the existing ABT regulations. Table 23 below provides an illustration of the proposed credit carry-forward provisions.

TABLE 23—PROPOSED EXTENSION OF CREDIT CARRY-FORWARD FOR MY 2016–2020 CREDITS

MY credits are banked	MYs credits are valid under EPA's proposed extension										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2016	.....	x	x	x	x	x	+	+	.....	.....	.....
2017	.....	.....	x	x	x	x	x	+	.....	.....	.....
2018	.....	.....	.....	x	x	x	x	x	+	.....	.....
2019	.....	.....	.....	.....	x	x	x	x	x	+	.....
2020	.....	.....	.....	.....	.....	x	x	x	x	x	+
2021	.....	.....	.....	.....	.....	.....	x	x	x	x	x

x = Current program. + = Proposed additional years.

Extending the life for MY 2016–2020 credits provides greater flexibility for manufacturers in using the credits they have generated through overcompliance with the stringent standards in those MYs. These credits would help manufacturers to ease the transition to the more stringent proposed standards. Providing the extended credit carry-forward will help some manufacturers to lower overall costs and address any potential lead time issues they may face during these MYs, especially in the first year of the proposed standards (MY 2023).

EPA is proposing to extend credit life only for credits generated against standards established in the 2012 rule for MYs 2016–2020. EPA views these credits as a reflection of manufacturers' having achieved reductions beyond and earlier than those required by the standards. EPA is not proposing to extend credit life for credits generated in MYs 2021–2022 against the SAFE standards, as we view these credits as windfall credits, accumulated by manufacturers mostly because of the large reduction in the stringency of standards under the SAFE rule, as compared to the 2012 rule standards previously in effect, rather than for technology-based actions taken by a manufacturer to reduce fleet emissions.

As noted above, there is precedent for extending credit carry-forward temporarily beyond five years to help manufacturers transition to more stringent standards. In the 2012 rule, EPA extended carry-forward for MY 2010–2015 credits to MY 2021 for similar reasons, to provide more flexibility for a limited time during a transition to more stringent standards.[64] ABT is an important compliance flexibility and has been built into various highway engine and vehicle programs to support emissions standards programs that through the introduction of new technologies result in reductions in air pollution. While the normal five-year credit life in the light-duty GHG program is generally sufficient to address the need for manufacturer flexibility while considering the practical challenges of properly tracking credits over an extended period of time for compliance and enforcement purposes, there are occasions—such as when the industry is transitioning to significantly more stringent standards—where more flexibility is appropriate. As noted above, ABT allows EPA to consider standards more stringent than we would otherwise consider by giving manufacturers an important tool to resolve lead time and feasibility issues, and EPA believes the targeted extension of credit life that we are proposing is appropriate given the stringency and implementation timeframe of the proposed standards.

5. Certification, Compliance, and Enforcement

EPA established comprehensive vehicle certification, compliance, and enforcement provisions for the GHG standards as part of the rulemaking establishing the initial GHG standards for MY 2012–2016 vehicles.[65] Manufacturers have been using these provisions since MY 2012 and EPA is not proposing or seeking comment on changes in the areas of certification, compliance, or enforcement.

6. On-Board Diagnostics Program Updates

EPA regulations state that onboard diagnostics (OBD) systems must generally detect malfunctions in the emission control system, store trouble codes corresponding to detected malfunctions, and alert operators appropriately. EPA adopted (as a requirement for an EPA certificate) the 2013 California Air Resources Board (CARB) OBD regulation, with certain additional provisions, clarifications and exceptions, in the Tier 3 Motor Vehicle Emission and Fuel Standards final rulemaking (40 CFR 86.1806–17; 79 FR 23414, April 28, 2014). Since that time, CARB has made several updates to their OBD regulations and continues to consider changes periodically.[66] Manufacturers may find it difficult to meet both the 2013 OBD regulation adopted in the EPA regulations and the currently applicable CARB OBD regulation on the same vehicles. This may result in different calibrations being required for vehicles sold in states subject to Federal OBD (2013 CARB OBD) and vehicles sold in states subject to current CARB OBD.

To provide clarity and regulatory certainty to manufacturers, EPA is proposing a limited regulatory change to

[64] 77 FR 62788.

[65] See 75 FR 25468–25488 and 77 FR 62884–62887 for a description of these provisions. See also ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975,'' EPA–420–R–21–003 January 2021 for additional information regarding EPA compliance determinations.

[66] See *https://ww2.arb.ca.gov/our-work/programs/obd-board-diagnostic-program/obd-workshops.*

streamline OBD requirements. Under the proposed change, EPA could find that a manufacturer met OBD requirements for purposes of the EPA certification process if the manufacturer could show that the vehicles meet newer CARB OBD regulations than the 2013 CARB regulation which currently establishes the core OBD requirements for EPA certification and that the OBD system meets the intent of the EPA regulation, including provisions that are in addition to or different from the applicable CARB regulation. The intent of the proposed provision is to allow manufacturers to produce vehicles with one OBD system (software, calibration, and hardware) for all 50 states.

7. Stakeholder Engagement

In developing this proposal, EPA conducted outreach with a wide range of stakeholders, including auto manufacturers, automotive suppliers, labor groups, state/local governments, environmental and public interest groups, public health professionals, consumer groups, and other organizations. We also coordinated extensively with the California Air Resources Board as we considered this proposal. Consistent with Executive Order 13990, in developing this proposal EPA has considered the views from labor unions, states, and industry, as well as other stakeholders.

EPA looks forward to hearing from all stakeholders through comments on this proposal and during the public hearing. Looking ahead, we also plan to continue engagement with interested stakeholders as we embark on a future rulemaking to set standards beyond 2026, so diverse views can continue to be considered in our development of a longer-term program.

8. How do EPA's proposed standards relate to NHTSA's CAFE proposal and to California's GHG program?

i. EPA and NHTSA Rulemaking Coordination

In Executive Order 13990, President Biden directed NHTSA and EPA to consider whether to propose suspending, revising, or rescinding the SAFE Rule standards for MYs 2021–2026.[67] Both agencies have determined that it is appropriate to propose revisions to their respective standards; EPA is proposing to revise its GHG standards and, in a separate rulemaking action, NHTSA will propose to revise its CAFE standards. Since 2010, EPA and NHTSA have adopted fuel economy and greenhouse gas standards in joint rulemakings. In the 2010 joint rule, EPA and NHTSA explained the purpose of the joint rulemaking effort was to develop a coordinated and harmonized approach to implementing the two agencies' statutes. The joint rule approach was one appropriate mechanism for the agencies to coordinate closely, given the common technical issues both agencies needed to consider and the importance of avoiding inconsistency between the programs. However, in light of additional experience as the GHG and CAFE standards have co-existed since the 2010 rule and the agencies have engaged in several joint rulemakings, EPA has concluded that, while it remains committed to ensuring that GHG emissions standards for light duty vehicles are coordinated with fuel economy standards for those vehicles, it is unnecessary for EPA to do so specifically through a joint rulemaking.

In reaching this conclusion, EPA notes that the agencies have different statutory mandates and their respective programs have always reflected those differences. As the Supreme Court has noted ''EPA has been charged with protecting the public's 'health' and 'welfare,' a statutory obligation wholly independent of DOT's mandate to promote energy efficiency.'' [68] The agencies have recognized these different mandates, and the fact that they have produced different analytical approaches and standards. For example, since EPA's responsibility is to address air pollution, it sets standards not only for carbon dioxide (measured as grams per mile), but also for methane and nitrous oxide. Even more significantly, EPA regulates leakage of fluorocarbons from air conditioning units by providing a credit against the tailpipe CO_2 standard for leakage reduction and adjusting those standards numerically downwards to reflect the anticipated availability of those credits. NHTSA, given its responsibility for fuel economy (measured as miles per gallon), does not have these elements in the CAFE program. There have always been other differences between the programs as well, which generally can be traced back to differences in statutory mandates.

Finally, EPA notes that EPA may coordinate with NHTSA, and has done so, regardless of the formality of joint rulemaking. EPA has consulted significantly with NHTSA in the development of this proposal. Consultation is the usual approach Congress specifies when it recognizes that EPA and another agency share expertise and equities in an area. Indeed, the Clean Air Act does not require joint rulemaking for its many provisions that require EPA's consultation with other agencies on topics such as the impacts of ozone-depleting substances on the atmosphere, renewable fuels, the importance of visibility on public lands, regulation of aerospace coatings, and federal procurement. For example, for aircraft emissions standards, where EPA sets the standards in consultation with the Federal Aviation Administration (FAA), and FAA implements the standards, the two agencies may undertake, and have undertaken, separate rulemakings. Likewise, when EPA revises tests procedures for NHTSA's fuel economy standards, those rules are not done as joint rulemaking (unless they were included as part of a larger joint rulemaking on GHG and fuel economy standards). Thus, EPA concludes that joint rulemaking is unnecessary, particularly to the extent it was originally intended to ensure that the agencies work together and coordinate their rules.

ii. California GHG Program

California has long been a partner in reducing light-duty vehicle emissions, often leading the nation by setting more stringent standards before similar standards are adopted by EPA. This historically has been the case with GHG emissions standards in past federal rulemakings, where California provided technical support to EPA's nationwide programs. Prior to EPA's 2010 rule establishing the first nationwide GHG standards for MY 2012–2016 vehicles, California had adopted GHG standards for MYs 2009–2016.[69] After EPA adopted its standards in the 2012 rule for MYs 2017–2025, California also adopted similar standards for these MYs.[70] California also assisted and worked with EPA in the development of the 2016 Draft Technical Assessment Report for the Mid-term Evaluation,[71] issued jointly by EPA, CARB and NHTSA, that served as an important technical basis for EPA's original January 2017 Final Determination that the standards adopted in the 2012 rule

[67] 86 FR 7037, January 25, 2021.

[68] *Massachusetts* v. *EPA,* 549 U.S. at 532.

[69] *https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/lev-program/low-emission-vehicle-greenhouse-gas.*

[70] The California Air Resources Board (CARB) received a waiver of Clean Air Act preemption on January 9, 2013 (78 FR 2211) for its Advanced Clean Car (ACC) program. CARB's ACC program includes the MYs 2017–2025 greenhouse gas (GHG) standards as well as regulations for zero-emission vehicle (ZEV) sales requirements and California's low emission vehicle (LEV) III requirements.

[71] Draft Technical Assessment Report: Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards for Model Years 2022–2025, EPA–420–D–16–900 July 2016.

for MYs 2022–2025 remained appropriate. California also conducted its own Midterm Review that arrived at a similar conclusion.[72]

In August 2018, EPA and NHTSA jointly issued the SAFE rule proposal, which included an EPA proposal to withdraw CARB's Advanced Clean Car (ACC) waiver as it related to California GHG emission standards and ZEV sales requirements (that would preclude California from enforcing its own program) as well as a proposal to sharply reduce the stringency of the national standards.[73] In September 2019, EPA and NHTSA then jointly issued a final SAFE ''Part One'' rule, which included a final EPA action withdrawing CARB's ACC waiver as it related to California GHG emission standards and ZEV sales requirements.[74] In response to the SAFE rule proposal, California and five auto manufacturers entered into identical agreements commonly referred to as the California Framework Agreements. The Framework Agreements included GHG emission reduction targets for MYs 2021–2026 that in terms of stringency are about halfway between the original 2012 rule standards and those adopted in the final SAFE rule. The Framework Agreements also included additional flexibilities such as additional incentive multipliers for advanced technologies, off-cycle credits, and full-size pickup strong hybrid incentives. These flexibilities are discussed further in Section II.B, below.

EPA has considered California standards in past vehicle standards rules as we considered the factors of feasibility, costs of compliance and lead time. The California Framework Agreement provisions, and the fact that five automakers representing about a third of U.S. vehicle sales voluntarily committed to them, at a minimum provide a clear indication of manufacturers' capabilities to produce cleaner vehicles than required by the SAFE rule standards in the implementation timeframe of this proposed rule.[75] The Framework Agreements' emissions reduction targets therefore served as one starting point for EPA's assessment of potential standards and other provisions for the proposal. EPA conducted extensive outreach with the California Air Resources Board, Framework manufacturers, and manufacturers that have not entered into California Framework Agreements, along with numerous other stakeholders in developing this proposed rule, as further described in Section II.A.7. As discussed further below, EPA is proposing standards that are equivalent to the stringency of the California Framework Agreements emission reduction targets in MY 2023 and increasingly more stringent than the Framework Agreements from MY 2024 through 2026.

In a separate but related action, on April 28, 2021, EPA issued a Notice of Reconsideration for the previous withdrawal of the California ACC waiver, requesting comments on whether the withdrawal should be rescinded, which would reinstate the waiver.[76] EPA conducted a virtual public hearing on June 2, 2021 and the comment period closed on July 6, 2021. EPA is currently reviewing comments, after which EPA plans to take final action.

B. Additional Manufacturer Compliance Flexibilities

As discussed previously in Section II.A.4, the ABT provisions, including credit carry-forward and carry-back provisions, define how credits may be used and are an important part of the program. The program also includes several additional credit and incentive program elements that allow manufacturer flexibility in deciding how to comply with the standards laid out in Section II.A. This section provides an overview of those provisions as well as areas where EPA is proposing changes or is seeking comment.

The current GHG program includes temporary incentives through MY 2021 that encourage the use of advanced technologies such as all electric, plug-in hybrid, and fuel cell vehicles, as well as incentives for full-size pickups using either strong hybridization or technologies providing similar emissions reductions. When EPA established these incentives in the 2012 rule, EPA recognized that temporary regulatory incentives would reduce the overall emission reductions required by the standards, but the agency believed that it was worthwhile to have a limited short-term loss of emission reductions to increase the potential for far-greater emissions reductions in the longer run.[77] EPA understood that the temporary regulatory incentives may help bring some technologies to market more quickly than in the absence of incentives.[78] EPA continues to believe that temporary regulatory incentives will help accomplish those goals, which supported those incentives in the 2012 rule. As such, EPA is proposing to increase and extend multiplier incentives though MY 2025 and to reinstate the full-size pickup incentives that were removed from the program by the SAFE rule for MYs 2022–2025. Also, EPA is proposing to remove the multiplier incentives for natural gas vehicles for MYs 2023–2026 established by the SAFE rule. Multipliers and full-size pickup incentives are discussed in Sections II.B.1 and II.B.2, respectively.

The current program also includes credits for real-world emissions reductions not reflected on the test cycles used for measuring CO_2 emissions for compliance with the fleet average GHG standards. Credits for using technologies that reduce emissions that are not captured on EPA tests (''off-cycle'' technologies) and improvements to air conditioning (A/C) systems that increase efficiency and reduce refrigerant leakage (''A/C credits'') are discussed below in sections II.B.3 and II.B.1, respectively. These credit opportunities currently do not sunset, remaining a part of the program through MY 2026 and beyond unless the program is changed as part of a future regulatory action. EPA is not proposing any changes for the A/C credits but is proposing to modify the off-cycle credit program.

The use of the optional credit and incentive provisions has varied, and EPA continues to expect it to vary, from manufacturer to manufacturer. However, most manufacturers are currently using at least some of the flexibilities.[79] Although a manufacturer's use of the credit and incentive provisions is optional, EPA projects that the proposed standards would be met fleet-wide by using a combination of reductions in tailpipe CO_2 and some use of the optional credit and incentive provisions. These projections are discussed in Section III, below and in the Draft RIA.

[72] *https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-midterm-review.*

[73] EPA's waiver for CARB's Advanced Clean Car regulations is at 78 FR 2211 (January 9, 2013). The SAFE NPRM is at 83 FR 42986 (August 24, 2018).

[74] 84 FR 51310 (Sept. 27, 2019).

[75] The five California Framework Agreements may be found in the docket for this rulemaking and at: *https://ww2.arb.ca.gov/news/framework-agreements-clean-cars.*

[76] 80 FR 22421 (April 28, 2021).

[77] See Tables III–2 and III–3, 77 FR 62772, October 15, 2012.

[78] 77 FR 62812, October 15, 2012.

[79] See ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975,'' EPA–420–R–21–003 January 2021 for additional information regarding manufacturer use of program flexibilities.

1. Multiplier Incentives for Advanced Technology Vehicles

i. Background

In the 2012 rule, EPA included incentives for advanced technologies to promote the commercialization of technologies that have the potential to transform the light-duty vehicle sector by achieving zero or near-zero GHG emissions in the longer term, but which faced major near-term market barriers. EPA recognized that providing temporary regulatory incentives for certain advanced technologies would decrease the overall GHG emissions reductions associated with the program in the near term, by reducing the effective stringency of the standards in years in which the incentives were available, to the extent the incentives were used. However, in setting the 2017–2025 standards, EPA believed it was worthwhile to forego modest additional emissions reductions in the near term in order to lay the foundation for much larger GHG emissions reductions in the longer term. EPA also believed that the temporary regulatory incentives may help bring some technologies to market more quickly than in the absence of incentives.[80]

EPA established multiplier incentives for MYs 2017–2021 electric vehicles (EVs), plug-in hybrid electric vehicles (PHEVs), fuel cell vehicles (FCVs), and natural gas vehicles (NGVs).[81] The multiplier allows a vehicle to ''count'' as more than one vehicle in the manufacturer's compliance calculation. Table 24 provides the multipliers for the various vehicle technologies included in the 2012 final rule for MY 2017–2021 vehicles.[82] Since the GHG performance for these vehicle types is significantly better than that of conventional vehicles, the multiplier provides a significant benefit to the manufacturer. EPA chose the magnitude of the multiplier levels to be large enough to provide a meaningful incentive, but not be so large as to provide a windfall for vehicles that still would have been produced even at lower multiplier levels. The multipliers for EVs and FCVs were larger because these technologies faced greater market barriers.

TABLE 24—INCENTIVE MULTIPLIERS FOR EV, FCV, PHEVS, AND NGVS ESTABLISHED IN 2012 RULE

Model years	EVs and FCVs	PHEVs and NGVs
2017–2019	2.0	1.6
2020	1.75	1.45
2021	1.5	1.3

EPA requested comments in the SAFE rule proposal on increasing and/or extending CNG multiplier incentives. After considering comments, EPA adopted a multiplier of 2.0 for MYs 2022–2026 NGVs, noting that no NGVs were being sold by auto manufacturers at that time. EPA did not extend multipliers for other vehicle types in the SAFE rule, as the SAFE standards did not contemplate the extensive use of these technologies in the future so there was no need to continue the incentives.

ii. Proposed Multiplier Extension and Cap

EPA is proposing to extend multipliers for EVs, PHEVs, and FCVs for MYs 2022–2025, but with a cap to limit the magnitude of resulting emissions reduction losses and to provide a means to more definitively project the impact of the multipliers on the overall stringency of the program. Although EPA chose not to include additional multipliers in the SAFE rule except for natural gas vehicles, EPA is now proposing standards significantly more stringent than in the SAFE rule and therefore EPA believes limited additional multiplier incentives are appropriate for the purposes of encouraging manufacturers to accelerate the introduction of zero and near-zero emissions vehicles and maintaining momentum for that market transition. EPA requests comment on all aspects of the proposed extension of multipliers, including the proposed multiplier levels, model years when multipliers are available, and the size and structure of the multiplier credit cap.

Given that the previously established multipliers only run through MY 2021, EPA proposes to start the new multipliers in MY 2022 to provide continuity for the incentives over MYs 2021–2025. The multipliers would function in the same way as they have in the past, allowing manufacturers to count eligible vehicles as more than one vehicle in their fleet average calculations. The levels of the proposed multipliers, shown in Table 25 below, are the same as those contained in the California Framework Agreements for MY 2022–2025. EPA is proposing to sunset the multipliers after MY 2025, rather than extending them to MY 2026, because EPA has always intended them to be a temporary part of the program to incentivize technology in the near-term. Sunsetting the multipliers in MY 2025 helps signal that EPA does not intend to include multipliers in its proposal for standards for MY 2027 and later MYs, where these technologies are likely to be integral to the feasibility of the standards, as the goal of a long-term program would be to quickly transition the light-duty fleet to zero-emission technology, in which case ''incentives'' would no longer be appropriate. As zero-emissions technologies become more mainstream, EPA believes it is appropriate to transition away from multiplier incentives. EPA also believes sunsetting multipliers would simplify programmatically a transition to a more stringent program for MY 2027. The MY 2025 sunset date combined with the cap, discussed below, begins the process of transitioning away from auto manufacturers' ability to make use of the incentive multipliers. While EPA is proposing to end multipliers after MY 2025 for these reasons, EPA requests comments on whether it would be more appropriate to allow multiplier credits to be generated in MY 2026 without an increase in the cap. This may provide an additional incentive for manufacturers who have not yet produced advanced technology vehicles by MY 2026 to do so but could also potentially complicate transitioning to MY 2027 standards for some manufacturers.

TABLE 25—EPA PROPOSED MULTIPLIER INCENTIVES FOR MYS 2022–2025

Model years	EVs and FCVs	PHEVs
2022–2024	2.0	1.6.
2025	1.75	1.45.
2026+	1.0 (no multiplier credits)	1.0 (no multiplier credits).

[80] See 77 FR 62811 et seq.

[81] 77 FR 62810, October 15, 2012.

[82] 77 FR 62813–62816, October 15, 2012.

EPA believes that an important element of this incentive program is to limit the potential effect of the multipliers on reducing the effective stringency of the standards. Therefore, EPA proposes to cap the credits generated by a manufacturer's use of the multipliers to the Megagram (Mg) equivalent of 2.5 g/mile for their car and light truck fleets per MY for MYs 2022–2025 or 10.0 g/mile on a cumulative basis.[83] Above the cap, the multiplier is effectively a value of 1.0—in other words, after a manufacturer reaches the cap, the multiplier is no longer available and has no further effect on credit calculations. A manufacturer would sum the Mg values calculated for each of its car and light truck fleets at the end of a MY into a single cap value that would serve as the overall multiplier cap for the combined car and light truck fleets for that MY. This approach would limit the effect on stringency of the standards for manufacturers that use the multipliers to no greater than 2.5 g/mile less stringent each year on average over MYs 2022–2025. EPA proposes that manufacturers would be able to choose how to apply the cap within the four-year span of MYs 2022–2025 to best fit their product plans. Manufacturers may opt to use values other than 2.5 g/mile in the cap calculation as long as the sum of those values over MYs 2022–2025 does not exceed 10.0 g/mile (e.g., 0.0, 2.5, 2.5, 5.0 g/mile in MYs 2022–2025).

In the 2012 rule, EPA did not cap the use of multipliers. At that time, the advanced technologies incentivized by the multipliers were in their relative infancy and EPA believed it was appropriate to encourage manufacturers to continue to develop and introduce those vehicles for the long-term benefits of the program. We are now in a transitional period where manufacturers are actively increasing their zero-emission vehicle offerings. In MY 2019, almost all manufacturers made use of advanced technology credits.[84] EPA believes extending the multipliers is important to encourage manufacturers to accelerate bringing these technologies to the market to help sustain market momentum for the long-term. However, EPA also believes that if left uncapped, the multiplier credits have the potential to lead to stagnation or even backsliding for internal combustion engine vehicles for some manufacturers in the near-term as sales of advanced technology vehicles continue to increase. If EPA were to consider a significantly more generous cap or even uncapped credits, EPA would tighten the standards beyond the levels EPA is proposing to rebalance the overall stringency of the program. Therefore, as under the California Framework Agreements, EPA is proposing to extend multiplier credits but also to include a multiplier cap to balance these considerations.

The proposed cap differs from and limits the effective stringency loss more than the cap contained in the California Framework Agreements. The cumulative cap in the Framework Agreements is based on the area between the 2.7 percent and 3.7 percent year over year reduction in the standards from MY 2021 levels, as shown for an average fleet in Figure 6 below. This is equivalent to 27 percent (1%/3.7%) of the total increase in stringency from MY 2021 through MY 2026 in the Framework Agreements.

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[83] Proposed Multiplier Credit Cap [Mg] = (2.5 g/mile CO2 × VMT × Actual Annual Production)/1,000,000 calculated annually for each fleet and summed. Manufacturers may use values higher than 2.5 g/mile in the calculation as long as the sum of the cumulative values over MYs 2022–2025 does not exceed 10.0 g/mile. The vehicle miles traveled (VMT) used in credit calculations in the GHG program, as specified in the regulations, are 195,264 miles for cars and 225,865 for trucks. See 40 CFR 86.1866–12. See also 40 CFR 86.1866–12(c) for the calculation of multiplier credits to be compared to the cap.

[84] See ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975,'' EPA–420–R–21–003 January 2021.

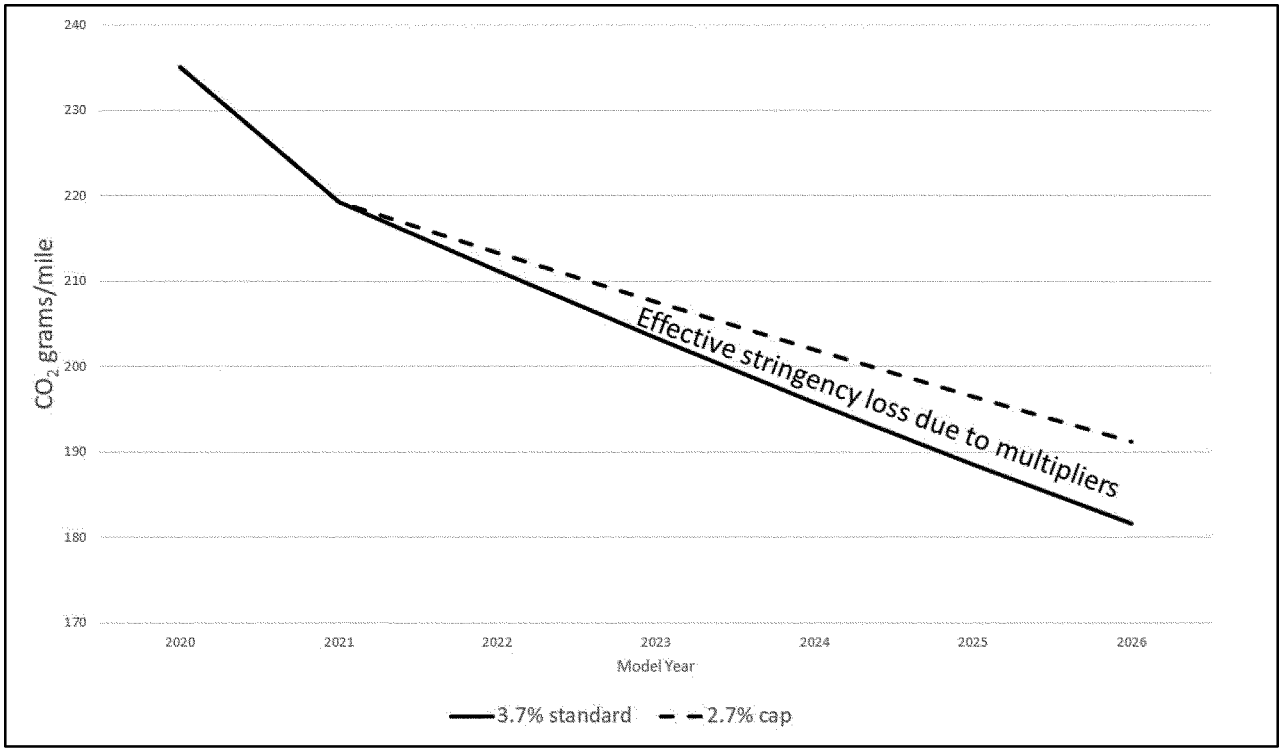

Figure 6 California Framework Standards Fleet Average Target Levels and Multiplier Cap

EPA is proposing a cap that extends over fewer MYs and is less generous than the cap in the California Framework Agreements. The EPA proposed cap would provide additional flexibility in the near term, as shown in Figure 7. This is equivalent to about 6 percent of the total increase in stringency relative to the MY 2021 level from MY 2021 through MY 2026.

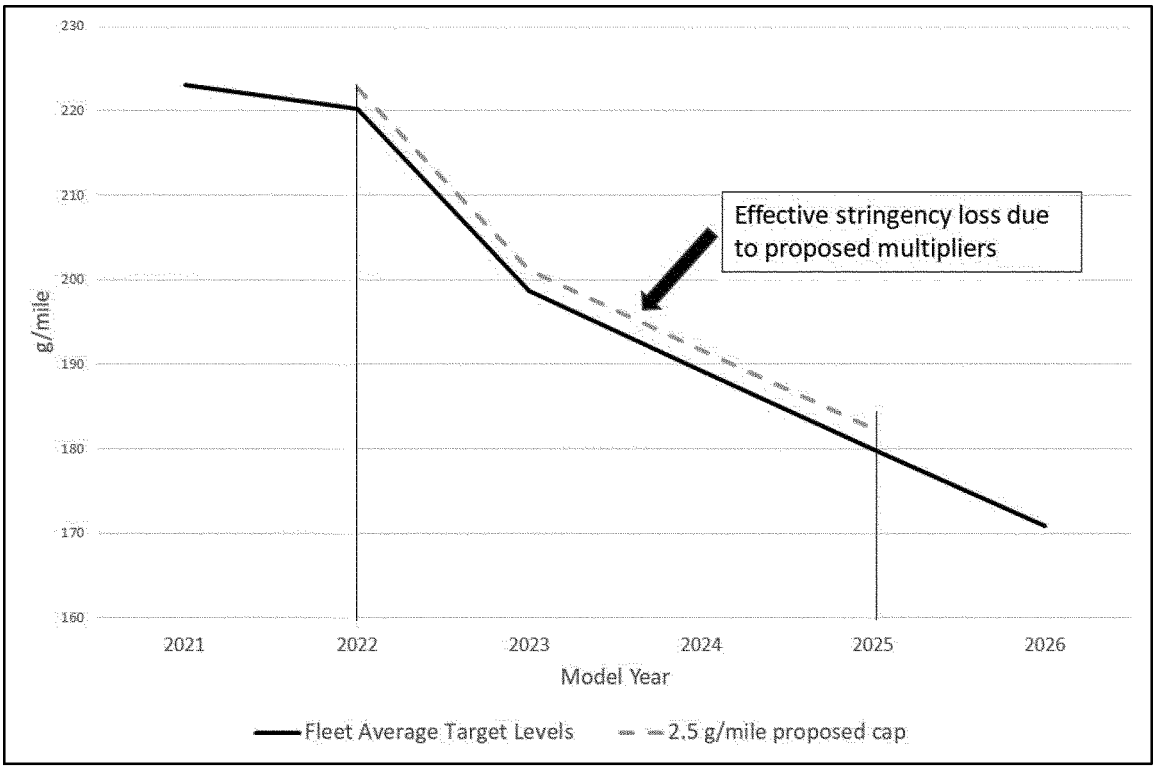

Figure 7 Proposed Multiplier Cap Compared to Fleet Average Target Levels

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To estimate the potential impact of multipliers on the tons of CO_2 reduction provided by the proposed program, EPA modeled scenarios with and without multipliers. As shown, EPA estimates that the proposed multipliers, if fully utilized by manufacturers, would result in roughly 46 MMT (596 minus 550 MMT) fewer tons of CO_2 reduced over the lifetimes of MY 2021–2026 vehicles.[85] We have also analyzed the impact of the advanced technology multipliers on BEV and PHEV penetration rates and have found that the impact on the fleet is less than 0.5 percent in any MY 2023 through 2026 (see RIA Chapter 4.1.3). EPA believes such an approach represents a reasonable balance of providing an incentive for advanced technology vehicles in the timeframe of the rulemaking while limiting the impact on effective stringency of the proposed program. EPA requests comment on the proposed extension of multipliers, including the proposed multiplier levels, model years when multipliers are available, size and structure of the multiplier credit cap. EPA also requests comments on whether the proposed extension of multipliers is appropriate in light of the stringency level of the proposed standards or whether there should be no multipliers beyond those in the current program that are scheduled to end after MY 2021.

iii. Natural Gas Vehicle Multipliers

As noted above, the SAFE rule did not extend multipliers for advanced technology vehicles but did extend and increase multiplier incentives for dual-fuel and dedicated natural gas vehicles (NGVs). The current regulations include a multiplier of 2.0, uncapped, for MY 2022–2026 NGVs. In the SAFE rule, EPA said it was extending the multipliers for NGVs because ''NGVs could be an important part of the overall light-duty vehicle fleet mix, and such offerings would enhance the diversity of potentially cleaner alternative fueled vehicles available to consumers.'' [86] After further considering the issue, EPA now proposes to remove the extended multiplier incentives added by the SAFE rule from the GHG program after MY 2022. EPA is proposing to end multipliers for NGVs in this manner because NGVs are not a near-zero emissions technology and EPA no longer believes it is appropriate to incentivize these vehicles to encourage manufacturers to introduce them in the light-duty vehicle market. EPA does not view NGVs as a pathway for significant vehicle GHG emissions reductions in the future. Any NGV multiplier credits generated in MY 2022 would be included under the proposed multiplier cap. There are no NGVs currently offered by manufacturers in the light-duty market and EPA is unaware of any plans to introduce NGVs, so EPA does not expect the removal of multipliers for NGVs to have an impact on manufacturers' ability to meet standards.[87] EPA requests comment on its proposed treatment of multipliers for NGVs including whether they should be eliminated altogether for MYs 2023–2026 as proposed or retained partially or at a lower level for MYs 2023–2025.

2. Advanced Technology Incentives for Full-Size Pickups

In the 2012 rule, EPA included a per-vehicle credit provision for manufacturers that hybridize a significant number of their full-size

[85] EPA analyzed the MY 2021–2026 timeframe to allow for a more direct comparison of the estimated emissions loss in tons of the proposed multipliers and cap with the impact of the California Framework multiplier cap.

[86] 85 FR 25211.

[87] The last vehicle to be offered, a CNG Honda Civic, was discontinued after MY 2015. It had approximately 20 percent lower CO_2 than the gasoline Civic. For more recent advanced internal combustion engines, the difference may be less than 20% due to lower emissions of the gasoline-fueled vehicles.

pickup trucks or use other technologies that comparably reduce CO_2 emissions. EPA's goal was to incentivize the penetration into the marketplace of low-emissions technologies for these pickups. The incentives were intended to provide an opportunity in the program's early years to begin penetration of advanced technologies into this category of vehicles, which face unique challenges in the costs of applying advanced technologies due to the need to maintain vehicle utility and meet consumer expectations. In turn, the introduction of low-emissions technologies in this market segment creates more opportunities for achieving the more stringent later year standards. Under the existing program, full-size pickup trucks using mild hybrid technology are eligible for a per-truck 10 g/mile CO_2 credit during MYs 2017–2021.[88] Full-size pickup trucks using strong hybrid technology are eligible for a per-truck 20 g/mile CO_2 credit during MYs 2017–2021, if certain minimum production thresholds are met.[89] EPA established definitions in the 2012 rule for full-size pickup and mild and strong hybrid for the program.[90]

Alternatively, manufacturers may generate performance-based credits for full-size pickups. This performance-based credit is 10 g/mile CO_2 or 20 g/mile CO_2 for full-size pickups achieving 15 percent or 20 percent, respectively, better CO_2 performance than their footprint-based targets in a given MY.[91] This second option incentivizes other, non-hybrid, advanced technologies that can reduce pickup truck GHG emissions and fuel consumption at rates comparable to strong and mild hybrid technology. These performance-based credits have no specific technology or design requirements; automakers can use any technology or set of technologies as long as the vehicle's CO_2 performance is at least 15 or 20 percent below the vehicle's footprint-based target. However, a vehicle cannot receive both hybrid and performance-based credits, since that would be double-counting.

Access to any of these large pickup credits requires that the technology be used on a minimum percentage of a manufacturer's full-size pickups. These minimum percentages, established in the 2012 final rule, are set to encourage significant penetration of these technologies, leading to long-term market acceptance. Meeting the penetration threshold in one MY does not ensure credits in subsequent years; if the production level in a MY drops below the required threshold, the credit is not earned for that MY. The required penetration levels are shown in Table 26 below.[92]

TABLE 26—PENETRATION RATE REQUIREMENTS BY MODEL YEAR FOR FULL-SIZE PICKUP CREDITS

[% of production]

	2017	2018	2019	2020	2021
Strong hybrid	10	10	10	10	10
Mild Hybrid	20	30	55	70	80
20% better performance	10	10	10	10	10
15% better performance	15	20	28	35	40

Under the 2012 rule, the strong hybrid/20% better performance incentives initially extended out through MY 2025, the same as the 10 percent production threshold. However, the SAFE rule removed these incentives after MY 2021. The mild hybrid/15% better performance incentive was not affected by the SAFE rule, as those provisions end after MY 2021. EPA proposes to reinstate the full-size pickup credits as they existed before the SAFE rule, for MYs 2022 through 2025. While no manufacturer has yet claimed these credits, the rationale for establishing them in the 2012 rule remains valid. At the time of the SAFE rule, EPA did not envision significantly more stringent standards in the future and so did not believe the incentives were useful. In the context of this proposal that includes significantly more stringent standards for MY 2023–2026, EPA believes these full-size pickup truck credits are appropriate to further incentivize advanced technologies penetrating this particularly challenging segment of the market. As with the original program, EPA is limiting this incentive to full-size pickups rather than broadening it to other vehicle types. Introducing advanced technologies with very low CO_2 emissions in the full-size pickup market segment remains a challenge due to the need to preserve the towing and hauling capabilities of the vehicles. The full-size pickup credits incentivize advanced technologies into the full-size pickup truck segment to help address cost, utility, and consumer acceptance challenges. EPA requests comments on whether or not to reinstate the previously existing full-size pickup strong hybrid/20% better performance incentives and the proposed approach for doing so. EPA notes for this proposal our analysis does not include the impacts of this incentive on the projected GHG emissions, costs, benefits and other program effects. EPA requests comment on the potential impacts of the full-size pickup incentive credit, and whether, and how, EPA should take the projected effects into account in the final rulemaking.

In the 2012 rule, EPA included a provision that prevents a manufacturer from using both the full-size pickup performance-based credit pathway and the multiplier credits for the same vehicles. This would prevent, for example, an EV full-size pickup from generating both credits. EPA did not include the same restriction for vehicles qualifying for the full-size pickup

[88] As with multiplier credits, full-size pickup credits are in Megagrams (Mg). Full-size pickup credits are derived by multiplying the number of full-size pickups produced with the eligible technology by the incentive credit (either 10 or 20 g/mile) and a vehicle miles traveled (VMT) value for trucks of 225,865, as specified in the regulations. The resulting value is divided by 1,000,000 to convert it from grams to Mg. EPA is not proposing a cap for these credits and they are only available for full-size pickups, rather than the entire fleet, so the calculation is simpler than that for multiplier credits.

[89] 77 FR 62825, October 15, 2012.

[90] 77 FR 62825, October 15, 2012. Mild and strong hybrid definitions as based on energy flow to the high-voltage battery during testing. Both types of vehicles must have start/stop and regenerative braking capability. Mild hybrid is a vehicle where the recovered energy over the Federal Test Procedure is at least 15 percent but less than 65 percent of the total braking energy. Strong hybrid means a hybrid vehicle where the recovered energy over the Federal Test Procedure is at least 65 percent of the total braking energy.

[91] 77 FR 62826, October 15, 2012. For additional discussion of the performance requirements, see Section 5.3.4 of the ''Joint Technical Support Document: Final Rulemaking for 2017–2025 Light-duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards'' for the Final Rule,'' EPA–420–R–12–901, August 2012.

[92] 40 CFR 86.1870–12.

hybrid credit pathway. For example, a PHEV could qualify for both the strong hybrid credit and the multiplier credits under the prior regulations as they were established in the 2012 rule. With our proposal to extend the multiplier credits and reinstate the full-size pickup credit, EPA believes allowing both credits would in a sense be double-counting and inappropriate. Therefore, EPA proposes to modify the regulations such that manufacturers may choose between the two credits in instances where full-size pickups qualify for both but may not use both credits for the same vehicles. A manufacturer may choose to use the full-size pickup strong hybrid credit, for example, if the manufacturer either has reached the multiplier credit cap or intends to do so with other qualifying vehicles. Or a manufacturer may instead decide to forego the strong hybrid credit in cases where the manufacturer does not expect to reach the multiplier cap and the multiplier provides more credits than the strong hybrid credit. EPA requests comments on this approach to avoid double-counting of credits, by restricting the use of the two types of credits for the same vehicles.

3. Off-Cycle Technology Credits

i. Background

Starting with MY 2008, EPA started employing a ''five-cycle'' test methodology to measure fuel economy for purposes of new car window stickers (labels) to give consumers better information on the fuel economy they could more reasonably expect under real-world driving conditions.[93] However, for GHG compliance, EPA continues to use the established ''two-cycle'' (city and highway test cycles, also known as the FTP and HFET) test methodology.[94] As learned through development of the ''five-cycle'' methodology and prior rulemakings, there are technologies that provide real-world GHG emissions improvements, but whose improvements are not fully reflected on the ''two-cycle'' test. EPA established the off-cycle credit program to provide an appropriate level of CO_2 credit for technologies that achieve CO_2 reductions, but may not otherwise be chosen as a GHG control strategy, as their GHG benefits are not measured on the specified 2-cycle test. For example: High efficiency lighting is not measured on the EPA 2-cycle tests because lighting is not turned on as part of the test procedure but reduces CO_2 emissions by decreasing the electrical load on the alternator and engine. The key difference between the credits discussed below and the incentives discussed in the previous two sections is that off-cycle credits—as well as A/C credits, discussed in the next section—represent real-world emissions reductions if appropriately sized and therefore their use should not result in deterioration of program benefits, and should not be viewed as cutting into the effective stringency of the program.

Under EPA's existing regulations, there are three pathways by which a manufacturer may accrue off-cycle technology credits.[95] The first pathway is a predetermined list or ''menu'' of credit values for specific off-cycle technologies that was effective starting in MY 2014.[96] This pathway allows manufacturers to use credit values established by EPA for a wide range of off-cycle technologies, with minimal or no data submittal or testing requirements. The menu includes a fleetwide cap on credits of 10 g/mile to address the uncertainty of a one-size-fits-all credit level for all vehicles and the limitations of the data and analysis used as the basis of the menu credits. A second pathway allows manufacturers to use 5-cycle testing to demonstrate and justify off-cycle CO_2 credits.[97] The additional emissions tests allow emission benefits to be demonstrated over some elements of real-world driving not captured by the GHG compliance tests, including high speeds, rapid accelerations, and cold temperatures. Under this pathway, manufacturers submit test data to EPA, and EPA determines whether there is sufficient technical basis to approve the off-cycle credits. The third pathway allows manufacturers to seek EPA approval, through a notice and comment process, to use an alternative methodology other than the menu or 5-cycle methodology for determining the off-cycle technology CO_2 credits.[98] This option is only available if the benefit of the technology cannot be adequately demonstrated using the 5-cycle methodology.

ii. EPA Proposal To Increase Menu Credit Cap

EPA has received comments from manufacturers on multiple occasions requesting that EPA increase the menu credit cap. Previously, EPA has opted not to increase the cap for several reasons.[99] First, the cap is necessary given the uncertainty in the menu values for any given vehicle. Menu credits are values EPA established to be used across the fleet rather than vehicle-specific values. When EPA established the menu credits in the 2012 rule, EPA included a cap because of the uncertainty inherent in using limited data and modeling as the basis of a single credit value for either cars or trucks. While off-cycle technologies should directionally provide an off-cycle emissions reduction, quantifying the reductions and setting an appropriate credit values based on limited data was difficult. Manufacturers wanting to generate credits beyond the cap may do so by bringing in their own test data as the basis for the credits. Credits established under the second and third pathways do not count against the menu cap. Also, until recently most manufacturers still had significant headroom under the cap allowing them to continue to introduce additional menu technologies.[100] Finally, during the implementation of the program, EPA has expended significantly more effort than anticipated on scrutinizing menu credits to determine if a manufacturer's technology approach was eligible under the technology definitions contained in the regulations. This further added to concerns about whether the technology could reasonably be expected to provide the real-world benefits that credits are meant to represent. For these reasons, EPA has been reluctant to consider increasing the cap.

EPA may make changes to the test procedures for the GHG program in the future that could change the need for an off-cycle credits program, but there are no such test procedure changes proposed in this rule. Off-cycle credits, therefore, will likely remain an important source of emissions reductions under the program, at least through MY 2026. Off-cycle technologies are often more cost effective than other available technologies that reduce vehicle GHG emissions over the 2-cycle tests and

[93] *https://www.epa.gov/vehicle-and-fuel-emissions-testing/dynamometer-drive-schedules.* See also 75 FR 25439 for a discussion of 5-cycle testing.

[94] The city and highway test cycles, commonly referred to together as the ''2-cycle tests'' are laboratory compliance tests are effectively required by law for CAFE, and also used for determining compliance with the GHG standards. 49 U.S.C. 32904(c).

[95] See ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975,'' EPA–420–R–21–003 January 2021 for information regarding the use of each pathway by manufacturers.

[96] See 40 CFR 86.1869–12(b).

[97] See 40 CFR 86.1869–12(c).

[98] See 40 CFR 86.1869–12(d).

[99] 85 FR 25237.

[100] See ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975,'' EPA–420–R–21–003 January 2021 for information on the use of menu credits.

manufacturer use of the program continues to grow. Off-cycle credits reduce program costs and provide additional flexibility in terms of technology choices to manufacturers which has resulted in many manufacturers using the program. Multiple manufacturers were at or approaching the 10 g/mile credit cap in MY 2019.[101] Also, in the SAFE rule, EPA added menu credits for high efficiency alternators but did not increase the credit cap for the reasons noted above.[102] While adding the technology to the menu has the potential to reduce the burden associated with the credits for both manufacturers and EPA, it further exacerbates the credit cap issue for some manufacturers.

After considering the above points further in the context of the proposed standards, EPA is proposing to increase the cap on menu-based credits from the current 10 g/mile to 15 g/mile beginning as early as MY 2020. As a companion to increasing the credit cap, though, EPA is also proposing modifications to some of the off-cycle technology definitions to improve program implementation and to better accomplish the goal of the off-cycle credits program: To ensure emissions reductions occur in the real-world from the use of the off-cycle technologies. Manufacturers wanting to claim menu credits between 10 and 15 g/mile in MYs 2020–2022 would need to meet all revised technology definitions across both the car and truck fleets. For MYs 2023 and later, the revised definitions would apply exclusively, and the current definitions would no longer be used in the program. EPA is proposing this approach as a reasonable transition to the new definitions.

EPA is proposing not to require the use of the revised definitions prior to MY 2023 for manufacturers not opting into the 15 g/mile credit cap. Requiring their use for MYs 2020 and earlier for all manufacturers would potentially affect credits already awarded to manufacturers, causing significant problems in program implementation and manufacturer plans to comply with the proposed MY 2023–2026 standards. Similarly, MY 2021 is underway, and some manufacturers are already producing MY 2022 vehicles. EPA believes credits that were generated in a manner consistent with the applicable regulatory definitions in place at the time the vehicles were produced should continue to be allowed in compliance determinations for the proposed MY 2023–2026 standards. The 10 g/mile cap EPA adopted to address uncertainties around the menu credits, including the definitions, is acting as intended and the proposed approach of allowing menu credits beyond the 10 g/mile cap only for manufacturers meeting the revised definitions is the appropriate approach until the 15 g/mile menu cap and revised definitions are fully implemented in MY 2023. EPA views the proposed definition updates as refinements to the ongoing off-cycle program to improve its implementation and help ensure that the program produces real-world benefits as intended and believes that it is reasonable to make these updates in parallel with the proposed cap increase. Manufacturers that utilized technologies in MY 2020 that meet the proposed revised definitions, in addition to the unchanged current definitions, would be able to claim menu credits up to the 15 g/mile cap.

EPA requests comment on whether the menu credit cap should be increased to 15 g/mile, EPA's proposed approach for implementing the increased credit cap, including the start date of MY 2020, as well as the proposed application of revised technology definitions, discussed below. EPA specifically requests comment on whether an increased credit cap, if finalized, should begin in MY 2020 as proposed or a later MY such as MY 2021, 2022, or 2023. Commenters supporting off-cycle provisions that differ from EPA's proposal are encouraged to address how such differences could be implemented to improve real-world emissions benefits and how such provisions could be effectively implemented.

iii. EPA Proposed Modifications to Menu Technology Definitions

Some stakeholders have previously raised concerns about whether the off-cycle credit program produces the real-world emissions reductions as intended, or results in a loss of emissions benefits.[103] EPA shares these concerns, as noted above, and believes it is important to address to the extent possible the issues that the agency has experienced in implementing the menu credits, alongside proposing to raise the menu cap. EPA believes that raising the menu cap is appropriate so long as the agency can improve the program and reasonably expect the use of menu technologies to provide real-world emissions reductions, consistent with the intent of the program. Providing additional opportunities for menu credits may allow for more emissions reductions sooner and at a lower cost than would otherwise be possible under a program without off-cycle credits. Indeed, the additional credits are fully incorporated as an element of the cost and feasibility analysis of the proposed standards. With that in mind, EPA proposes to modify the menu definitions discussed below to coincide with increasing the menu cap.

The existing menu technologies and associated credits are provided below in Table 27 and Table 28 for reference.[104]

TABLE 27—EXISTING OFF-CYCLE TECHNOLOGIES AND CREDITS FOR CARS AND LIGHT TRUCKS

Technology	Credit for cars g/mi	Credit for light trucks g/mi
High Efficiency Alternator (at 73%; scalable)	1.0	1.0.
High Efficiency Exterior Lighting (at 100W)	1.0	1.0.
Waste Heat Recovery (at 100W; scalable)	0.7	0.7.
Solar Roof Panels (for 75W, battery charging only)	3.3	3.3.
Solar Roof Panels (for 75W, active cabin ventilation plus battery charging)	2.5	2.5.
Active Aerodynamic Improvements (scalable)	0.6	1.0.
Engine Idle Start-Stop with heater circulation system	2.5	4.4.

[101] In MY 2019, Ford, FCA, and Jaguar Land Rover reached the 10 g/mile cap and three other manufacturers were within 3 g/mile of the cap. See ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975,'' EPA–420–R–21–003 January 2021.

[102] 85 FR 25236.

[103] 85 FR 25237.

[104] See 40 CFR 86.1869–12(b). See also ''Joint Technical Support Document: Final Rulemaking for 2017–2025 Light-duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards for the Final Rule,'' EPA–420–R–12–901, August 2012, for further information on the definitions and derivation of the credits values.

TABLE 27—EXISTING OFF-CYCLE TECHNOLOGIES AND CREDITS FOR CARS AND LIGHT TRUCKS—Continued

Technology	Credit for cars g/mi	Credit for light trucks g/mi
Engine Idle Start-Stop without heater circulation system	1.5	2.9.
Active Transmission Warm-Up	1.5	3.2.
Active Engine Warm-Up	1.5	3.2.
Solar/Thermal Control	Up to 3.0	Up to 4.3.

TABLE 28—OFF-CYCLE TECHNOLOGIES AND CREDITS FOR SOLAR/THERMAL CONTROL TECHNOLOGIES FOR CARS AND LIGHT TRUCKS

Thermal control technology	Car credit (g/mi)	Truck credit (g/mi)
Glass or Glazing	Up to 2.9	Up to 3.9.
Active Seat Ventilation	1.0	1.3.
Solar Reflective Paint	0.4	0.5.
Passive Cabin Ventilation	1.7	2.3.
Active Cabin Ventilation	2.1	2.8.

a. Passive Cabin Ventilation

Some manufacturers have claimed the passive cabin ventilation credits based on the addition of software logic to their HVAC system that sets the interior climate control outside air/recirculation vent to the open position when the power to vehicle is turned off at higher ambient temperatures. The manufacturers have claimed that the opening of the vent allows for the flow of ambient temperature air into the cabin. While opening the vent may ensure that the interior of the vehicle is open for flow into the cabin, no other action is taken to improve the flow of heated air out of the vehicle. This technology relies on the pressure in the cabin to reach a sufficient level for the heated air in the interior to flow out through body leaks or the body exhausters to open and vent heated air out of the cabin.

The credits for passive cabin ventilation were determined based on an NREL study that strategically opened a sunroof to allow for the unrestricted flow of heated air to exit the interior of the vehicle while combined with additional floor openings to provide a minimally restricted entry for cooler ambient air to enter the cabin. The modifications that NREL performed on the vehicle reduced the flow restrictions for both heated cabin air to exit the vehicle and cooler ambient air to enter the vehicle, creating a convective airflow path through the vehicle cabin.

Analytical studies performed by manufacturers to evaluate the performance of the open dash vent demonstrate that while the dash vent may allow for additional airflow of ambient temperature air entering the cabin, it does not reduce the existing restrictions on heated cabin air exiting the vehicle, particularly in the target areas of the occupant's upper torso. That hotter air generally must escape through restrictive (by design to prevent water and exhaust fumes from entering the cabin) body leaks and occasional venting of the heated cabin air through the body exhausters. While this may provide some minimal reduction in cabin temperatures, this open dash vent technology is not as effective as the combination of vents used by the NREL researchers to allow additional ambient temperature air to enter the cabin and also to reduce the restriction of heated air exiting the cabin.

As noted in the Joint Technical Support Document: Final Rulemaking for 2017–2025 Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, pg. 584, ''For passive ventilation technologies, such as opening of windows and/or sunroofs and use of floor vents to supply fresh air to the cabin (which enhances convective airflow), (1.7 grams/mile for LDVs and 2.3 grams/mile for LDTs) a cabin air temperature reduction of 5.7 °C can be realized.'' The passive cabin ventilation credit values were based on achieving the 5.7 °C cabin temperature reduction.

The Agency has decided to revise the passive cabin ventilation definition to make it consistent with the technology used to generate the credit value. The Agency continues to allow for innovation as the definition includes demonstrating equivalence to the methods described in the Joint TSD.

EPA proposes to revise the definition of passive cabin ventilation to only include methods that create and maintain convective airflow through the body's cabin by opening windows or a sunroof, or equivalent means of creating and maintaining convective airflow, when the vehicle is parked outside in direct sunlight.

Current systems claiming the passive ventilation credit by opening the dash vent would not meet the updated definition. Manufacturers seeking to claim credits for the open dash vent system will be eligible to petition the Agency for credits for this technology using the alternative EPA approved method outlined in § 86.1869–12(d).

b. Active Engine and Transmission Warm-Up

In the NPRM for the 2012 rule (76 FR 74854) EPA proposed capturing waste heat from the exhaust and using that heat to actively warm-up targeted parts of the engine and the transmission fluid. The exhaust waste heat from an internal combustion engine is heat that is not being used as it is exhausted to the atmosphere.

In the 2012 Final Rule (77 FR 62624), the Agency revised the definitions for active engine and transmission warm-up by replacing exhaust waste heat with the waste heat from the vehicle. As noted in the Joint TSD, pages 5–98 and 5–99, the Alliance of Automobile Manufacturers and Volkswagen recommended the definition be broadened to account for other methods of warm-up besides exhaust heat such as a secondary coolant loop.

EPA concluded that other methods, in addition to waste heat from the exhaust, that could provide similar performance—such as coolant loops or direct heating elements—may prove to be more effective alternative to direct exhaust heat. Therefore, the Agency

expanded the definition in the 2012 Final Rule.

In the 2012 Final Rule the Agency also required two unique heat exchanger loops—one for the engine and one for the transmission—for a manufacturer to claim both the Active Engine Warm-up and Active Transmission Warm-up credits. EPA stated in the Joint TSD that manufacturers utilizing a single heat exchanging loop would need to demonstrate that the performance of the single loop would be equivalent to two dedicated loops in order for the manufacturer to claim both credits, and that this test program would need to be performed using the alternative method off-cycle GHG credit application described in § 86.1869–12(d).

All Agency analysis regarding active engine and transmission warm-up through the 2012 Final Rule (77 FR 62624) was performed assuming the waste heat utilized for these technologies would be obtained directly from the exhaust prior to being released into the atmosphere and not from any engine-coolant-related loops. At this time no manufacturer has introduced an exhaust waste heat exchanger to be used to warm up the engine or transmission. The systems in use are engine-coolant-loop-based and are taking heat from the coolant to warm-up the engine oil and transmission fluid.

EPA provided additional clarification on the use of waste heat from the engine coolant in preamble to SAFE rule (85 FR 24174). EPA focused on systems using heat from the exhaust as a primary source of waste heat because that heat would be available quickly and also would be exhausted by the vehicle and otherwise unused (85 FR 25240). Heat from the engine coolant already may be used by design to warm up the internal engine oil and components. That heat is traditionally not considered ''waste heat'' until the engine reaches normal operating temperature and subsequently requires it to be cooled in the radiator or other heat exchanger.

EPA allowed for the possible use of other sources of heat such as engine coolant circuits, as the basis for the credits as long as those methods would ''provide similar performance'' as extracting the heat directly from the exhaust system and would not compromise how the engine systems would heat up normally absent the added heat source. However, the SAFE rule also allowed EPA to require manufacturers to demonstrate that the system is based on ''waste heat'' or heat that is not being preferentially used by the engine or other systems to warm up other areas like engine oil or the interior cabin. Systems using waste heat from the coolant do not qualify for credits if their operation depends on, and is delayed by, engine oil temperature or interior cabin temperature. As the engine and transmission components are warming up, the engine coolant and transmission oil typically do not have any ''waste'' heat available for warming up anything else on the vehicle since they are both absorbing any heat from combustion cylinder walls or from friction between moving parts in order to achieve normal operating temperatures. During engine and transmission warm-up, the only waste heat source in a vehicle with an internal combustion engine is the engine exhaust, as the transmission and coolant have not reached warmed-up operating temperature and therefore do not have any heat to share (85 FR 25240).

EPA proposes to revise the menu definitions of active engine and transmission warm-up to no longer allow systems that capture heat from the coolant circulating in the engine block to qualify for the Active Engine and Active Transmission warm-up menu credits. EPA would allow credit for coolant systems that capture heat from a liquid-cooled exhaust manifold if the system is segregated from the coolant loop in the engine block until the engine has reached fully warmed-up operation. The Agency would also allow system design that captures and routes waste heat from the exhaust to the engine or transmission, as this was the basis for these two credits as originally proposed in the proposal for the 2012 rule. EPA's proposed approach would help ensure that the level of menu credit is consistent with the technology design envisioned by EPA when it established the credit in the 2012 rule.

Manufacturers seeking to utilize their existing systems that capture coolant heat before the engine is fully warmed-up and transfer this heat to the engine oil and transmission fluid would remain eligible to seek credits through the alternative method application process outlined in § 86.1869–12(d). EPA expects that these technologies may provide some benefit. But, as noted above since these system designs remove heat that is needed to warm-up the engine the Agency expects that these technologies will be less effective than those that capture and utilize exhaust waste heat.

iv. Clarification Regarding Use of Menu Credits

Finally, EPA proposes to clarify that manufacturers claiming credits for a menu technology must use the menu pathway rather than claim credits through the public process or 5-cycle testing pathways. EPA views this as addressing a potential loophole around the menu cap. As is currently the case, a new technology that represents an advancement compared to the technology represented by the menu credit—that is, by providing significantly more emissions reductions than the menu credit technology—would be eligible for the other two pathways.

4. Air Conditioning System Credits

There are two mechanisms by which A/C systems contribute to the emissions of GHGs: Through leakage of hydrofluorocarbon refrigerants into the atmosphere (sometimes called ''direct emissions'') and through the consumption of fuel to provide mechanical power to the A/C system (sometimes called ''indirect emissions'').[105] The high global warming potential of the previously most common automotive refrigerant, HFC–134a, means that leakage of a small amount of refrigerant will have a far greater impact on global warming than emissions of a similar amount of CO_2. The impacts of refrigerant leakage can be reduced significantly by systems that incorporate leak-tight components, or, ultimately, by using a refrigerant with a lower global warming potential. The A/C system also contributes to increased tailpipe CO_2 emissions through the additional work required to operate the compressor, fans, and blowers. This additional power demand is ultimately met by using additional fuel, which is converted into CO_2 by the engine during combustion and exhausted through the tailpipe. These emissions can be reduced by increasing the overall efficiency of an A/C system, thus reducing the additional load on the engine from A/C operation, which in turn means a reduction in fuel consumption and a commensurate reduction in GHG emissions.

Manufacturers may generate credits for improved A/C systems to help them comply with the CO_2 fleet average standards since the MY 2012 and later MYs. Because A/C credits represent a low-cost and effective technology pathway, EPA expected manufacturers to generate both A/C refrigerant and efficiency credits, and EPA accounted for those credits in developing the final CO_2 standards for the 2012 and SAFE rules, by adjusting the standards to make them more stringent. EPA believes it is important to encourage manufacturers to continue to implement low GWP refrigerants or low leak systems. Thus, EPA is not proposing

[105] 40 CFR 1867–12 and 40 CFR 86.1868–12.

any changes for its A/C credit provisions and is taking the same approach in adjusting the level of the proposed standards to reflect the use of the A/C credits. However, if EPA were to remove the refrigerant credits from the program, the proposed standards would need to be adjusted or increased by the amount of the credit to reflect its elimination from the program.

5. Natural Gas Vehicles Technical Correction

In the SAFE proposal, EPA sought comment on whether it should adopt additional incentives for natural gas-fueled light-duty vehicles.[106] After considering comments, EPA finalized additional incentive multipliers for MYs 2022–2026 natural gas vehicles.[107] EPA also received comments recommending that EPA adopt an additional incentive for natural gas vehicles in the form of a 0.15 multiplicative factor that would be applied to the CO_2 emissions measured from the vehicle when tested on natural gas. Commenters recommended the 0.15 factor as an appropriate way to account for the potential use of renewable natural gas (RNG) in the vehicles.[108]

EPA decided not to adopt the additional 0.15 factor incentive, as discussed in the preamble to the SAFE Rule.[109] EPA provided a detailed rationale for its decision not to implement a 0.15 factor recommended by commenters in the SAFE Rule.[110] EPA is not revisiting or reopening its decision regarding the 0.15 factor. However, the regulatory text adopted in the SAFE rule contains an inadvertent clerical error that conflicts with EPA's decision and rationale in the final SAFE rule preamble and provides an option for manufacturers to use this additional incentive in MYs 2022–2026 by multiplying the measured CO_2 emissions measured during natural gas operation by the 0.15 factor.[111] EPA is proposing narrow technical amendments to its regulations to correct this clerical error by removing the option to use the 0.15 factor in MY 2022 (as discussed in Section II.B.1.iii, EPA is proposing to eliminate multipliers for NGVs after MY 2022). This will ensure the regulations are consistent with the decision and rationale in the SAFE final rule. EPA likely would not have granted credits under the erroneous regulatory text if such credits were sought by a manufacturer because the intent of the agency was clear in the preamble text. In addition, natural gas vehicles are not currently offered by any manufacturer and EPA is not aware of any plans to do so. Therefore, there are no significant impacts associated with the correction of this clerical error.

C. What alternatives is EPA considering?

Along with the proposed standards, EPA analyzed both a more stringent and a less stringent alternative. For the less stringent alternative, Alternative 1, EPA used the coefficients in the California Framework for the 2.7 percent effective stringency level (as described previously in Section II.B.1) as the basis for the MY 2023 stringency level and the 2012 rule MY 2025 standards as the basis for the MY 2026 stringency level, with linear year-over-year reductions between the two points for MYs 2024 and 2025. EPA views the California Framework as a reasonable basis for the least stringent alternative that EPA would consider finalizing, since it represents a level of stringency that five manufacturers have already committed to achieving. EPA did not include incentive multipliers for Alternative 1, as doing so would only further reduce the effective stringency of this Alternative, and EPA views Alternative 1 as the lower end of stringency that it believes is appropriate through MY 2026.

For the more stringent alternative, Alternative 2, EPA used the 2012 rule standards as the basis for MY 2023–2025 targets, with the standards continuing to increase in stringency in a linear fashion for MY 2026. Alternative 2 adopts the 2012 rule stringency levels in MY 2023 and follows the 2012 rule standard target levels through MY 2025. EPA extended the same linear average year-over-year trajectory for MYs 2023–2025 to MY 2026 for the final standards under Alternative 2. As noted in Section II.A.1, EPA believes it is important to continue to make progress in MY 2026 beyond the MY 2025 standard levels in the 2012 rule. As with the proposal, Alternative 2 meets this objective. EPA also did not include in Alternative 2 the proposed incentive multipliers with the proposed cumulative credit cap in MYs 2022–2025, which would have the effect of making Alternative 2 less stringent. As noted in Section II.B.1, EPA is requesting comment on whether or not to include the proposed multipliers, and our request for comments extends to whether to include multipliers both for the proposal and for Alternative 2.

The fleet average targets for the two alternatives compared to the proposed standards are provided in Table 29 below. EPA also requests comment on the level of stringency for MY 2026 for the alternatives and the proposed standards. Specifically, EPA requests comment on standards for MY 2026 that would result in fleet average target levels that are in the range of 5–10 g/mile lower (*i.e.,* more stringent) than the levels shown for MY 2026 in Table 29. EPA is requesting specific comment on whether the level of stringency for MY 2026 should be greater in keeping with the additional lead time available for this out-year compared to MYs 2023–2025, and because EPA may determine that it is appropriate, particularly in light of the accelerating transition to electrified vehicles, to require additional reductions in this time frame. As discussed in detail in Section A.3 of the Executive Summary, there has been a proliferation of recent announcements from automakers signaling a rapidly growing shift in investment away from internal-combustion technologies and toward high levels of electrification. EPA has also heard from a wide range of stakeholders over the past several months, including but not limited to the automotive manufacturers and the automotive suppliers, that the significant investments being made now to develop and launch new EV product offerings and in the expansion of EV charging infrastructure could enable higher levels of EV penetration to occur in the marketplace by the MY 2026 time frame than EPA has projected as the basis for both the proposed MY 2026 standards and the Alternative 2 MY 2026 standards. The information concerning the investment landscape potentially accelerating to an even greater extent of market penetration of EV products is the basis on which EPA is relying in soliciting comment on the potential for a more stringent MY 2026 standard that would reflect this information and related considerations, including any additional information provided by commenters.

[106] 83 FR 43464, August 24, 2018.

[107] 85 FR 25211, April 30, 2020.

[108] 85 FR 25210–25211.

[109] 85 FR 25211.

[110] *Ibid.*

[111] See 40 CFR 600.510–12(j)(2)(v) and (j)(2)(vii)(A).

TABLE 29—PROJECTED FLEET AVERAGE TARGET LEVELS FOR PROPOSED STANDARDS AND ALTERNATIVES

[CO_2 grams/mile]

Model year	Proposal projected targets	Alternative 1 projected targets	Alternative 2 projected targets
2021	*223	*223	*224
2022	*220	*220	*220
2023	199	203	195
2024	189	194	186
2025	180	185	177
2026**	171	177	169

*SAFE rule standards included here for reference.
**EPA is also requesting comment on MY 2026 standards and alternatives that would result in fleet average levels that are 5–10 g/mile more stringent than the levels shown.

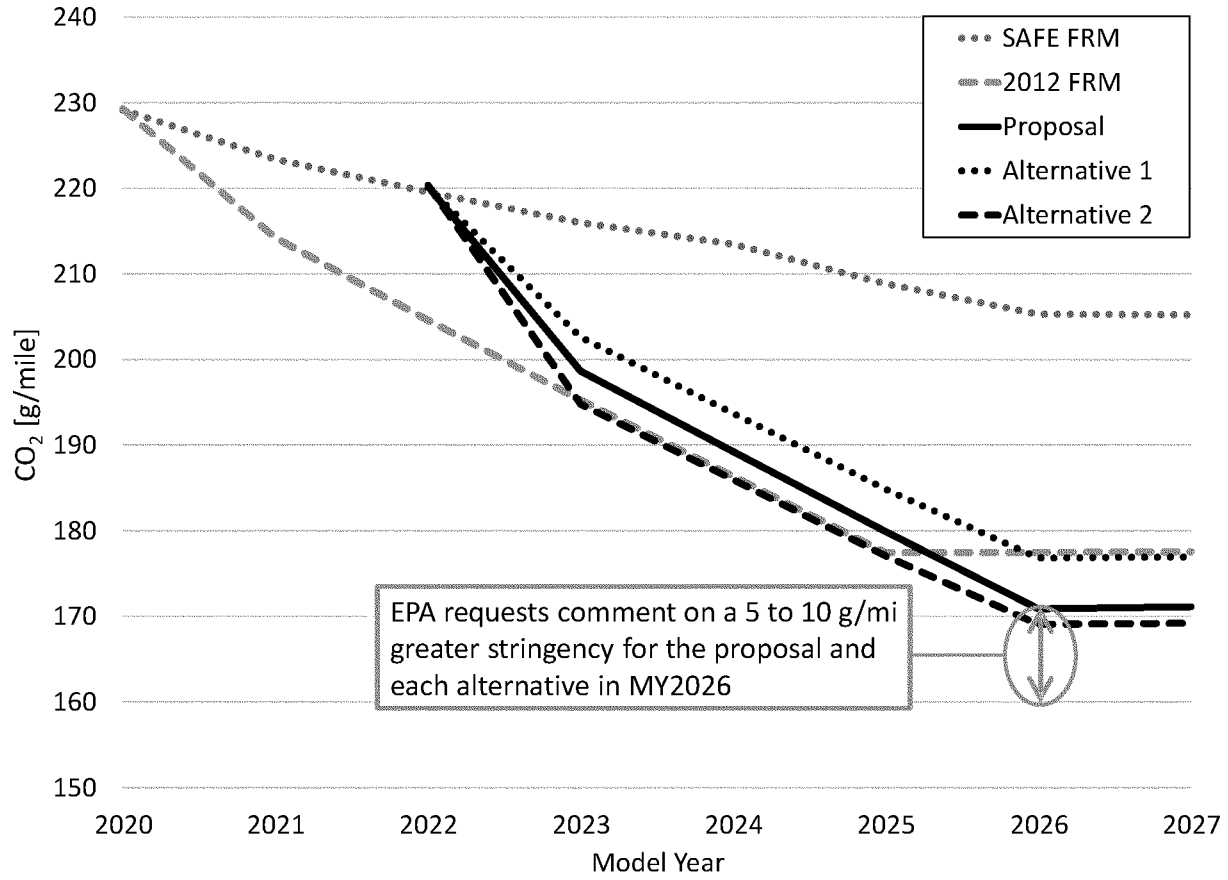

Figure 8 Proposed Standards Fleet Average Targets Compared to Alternatives

As shown in Figure 8, the range of alternatives that EPA is considering is fairly narrow, with the proposed standard targets differing from the alternatives in any given MY in MYs 2023–2026 by 2 to 6 g/mile, notwithstanding EPA's request for comment on more stringent standards for MY 2026 standards noted above. EPA believes this approach is reasonable and appropriate considering the relatively short lead time for the proposed standards, especially for MYs 2023–2025; our assessment of feasibility, the existing automaker commitments to meet the California Framework (representing about one-third of the auto market), the standards adopted in the 2012 rule; and the need to reduce GHG emissions. EPA provides a discussion of the feasibility of the proposed standard and alternatives and the selection of the proposed standards in Section III.D. The analysis of costs and benefits of Alternatives 1 and 2 is shown in the DRIA Chapters 4, 6, and 10. EPA requests comments on all aspects of Alternatives 1 and 2 or other alternatives roughly within the stringency range of the proposal and the Alternatives.

III. Technical Assessment of the Proposed CO_2 Standards

Section II provided a description of EPA's proposed standards and related program elements and industry-wide estimates of projected GHG emissions targets. This Section III provides an overview of EPA's technical assessment of the proposed standards including the approach EPA used for its analysis,

EPA's projected target levels by manufacturer, projected per vehicle cost for each manufacturer, EPA's projections of EV and PHEV technology penetration rates, and a discussion of why EPA believes the proposed standards are technologically feasible, drawing from these analyses. Finally, this section discusses the alternative standards EPA analyzed in developing the proposal. The DRIA presents further details of the analysis including a full assessment of technology penetration rate and cost projections. EPA discusses the basis for our proposed standards under CAA section 202(a) in Section VI, and Section VII presents aggregate cost and benefit projections as well as other program impacts.

a. What approach did EPA use in analyzing potential standards?

The proposed standards are based on the extensive light-duty GHG technical analytical record developed over the past dozen years, as represented by the EPA supporting analyses for the 2010 and 2012 final rules, the Mid-Term Evaluation (including the Draft TAR, Proposed Determination and Final Determinations), as well as the updated analysis for this proposed rule and the supporting analysis for the SAFE rule. The updated analysis for this proposed rule is intended to allow direct comparison to the analysis used in the SAFE FRM and is not intended to be the sole technical basis of the proposed standards. EPA's extensive record is consistent and makes clear that GHG standards at the level of stringency and in the time frame of this proposed rule are feasible at reasonable costs and result in significant GHG emission reductions and public health and welfare benefits. The updated analysis also shows that, consistent with past analyses, when modeling standards of similar stringency to those set forth in the 2012 rule, the results are similar to those results presented previously. In particular, the estimated costs for manufacturers to meet standards similar to those proposed have been roughly consistent since EPA first estimated them in 2012. The DRIA Chapter 1 further discusses and synthesizes EPA's record supporting stringent GHG standards through the MY 2025/2026 time frame.

To confirm that these past analyses continue to provide valid results for consideration by the Administrator in selecting the most appropriate level of stringency and other aspects of the proposed standards, we have conducted an updated analysis of the proposed standards. In the past, EPA has traditionally used its OMEGA (Optimization Model for reducing Emissions of Greenhouse gases from Automobiles) model as the basis for setting light-duty GHG emissions standards. EPA's OMEGA model was not used to support the analysis of the GHG standards for the SAFE FRM; instead, NHTSA's Corporate Average Fuel Economy (CAFE) Compliance and Effects Modeling System (CCEMS) model was used.

In considering modeling tools to support the analysis for today's proposed GHG standards, EPA has chosen to use the peer reviewed CCEMS model and to use the same version of that model used in support of the SAFE FRM. EPA has made this choice specific to this proposal for the purpose of enabling direct comparison to the SAFE FRM analysis, which addressed a model-year timespan consistent with this proposal.

Given that the SAFE FRM was published only a year ago, direct comparisons between the analysis presented here and the analysis presented in support of the SAFE FRM are made more direct if the same modeling tool is used. For example, CCEMS has categorizations of technologies and model output formats that are distinct to the model, so continuing use of CCEMS for this proposal facilitates comparisons to the SAFE FRM. Also, by using the same modeling tool as used in the SAFE rule, we can more clearly illustrate the influence of some of the key updates to the inputs used in the SAFE FRM. EPA believes that using that same tool, with changes to some of the critical inputs as discussed below (see Table 30), provides a better apples-to-apples comparison and serves to strengthen the basis for why we are proposing changes to the standards.

Some public comments received on the SAFE NPRM argued that EPA should use its own modeling tools to support the EPA action. In addition to the reasoning described above on the value of comparing results to the SAFE FRM, our decision here to utilize the CCEMS model as an appropriate tool for this analysis is informed by our consideration of the significant revisions made to the model between the SAFE proposal and the SAFE FRM and carried over here, and by the opportunity this analysis provides to incorporate additional updates to key inputs and assumptions.

Other commenters expressed concerns about technical issues with the NPRM analysis. During EPA's own review and after consideration of public comments, we concluded that a number of these concerns were well founded, and potentially significant enough to merit revisions to the analysis. Some key revisions made for the SAFE FRM version of the CCEMS model include changes to the decision logic for technology application by manufacturers and changes related to the SAFE NPRM's unrealistic changes in VMT associated with the scrappage modeling. Similarly, a number of revisions were also made to the model inputs for the SAFE FRM, including the adjustment of some technology effectiveness values.

In considering what revisions to the analysis were needed from the SAFE NRPM to the SAFE FRM, and from the SAFE FRM to this proposal, we are careful to make a distinction between the model and the inputs. As stated in the SAFE FRM preamble, ''[I]nputs do not define models; models use inputs. Therefore, disagreements about inputs do not logically extend to disagreements about models. Similarly, while models determine resulting outputs, they do so based on inputs.'' [112] To illustrate, while CCEMS and OMEGA are different models, they both provide comparable results when comparable inputs are used. For example, as discussed in Chapter 1.2.2 of the DRIA, EPA's OMEGA model runs conducted for the MTE show a MY2025 technology cost for the 2012 rule relative to the SAFE FRM of between $922 to $1,228 per vehicle, depending on the specific analysis. Thus, the MY2025 per vehicle costs of $942 (see RIA Chapter 4.1.2.1) from CCEMS modeling runs for this proposal relative to a full fleet meeting the SAFE FRM are comparable to our past analyses of standards for the similar level of stringency and are within the bounds of previous EPA analyses and sensitivity studies conducted for the MTE using OMEGA (see DRIA Chapter 1.2.2).

Throughout the development of the SAFE FRM, EPA had significant input on revisions to the analysis and EPA considered the FRM version of the CCEMS model, given changes made in response to public comments and our own input, to be an effective modeling tool for purposes of assessing standards through the MY 2026 timeframe.

While we believe the SAFE FRM model and inputs, together with the key changes that we have made since the SAFE FRM, are appropriate for the particular analysis at hand in assessing standards through MY2026, we welcome comments on other changes to the inputs that may be more appropriate for use in the final rule.

[112] See 85 FR 24218.

Finally, EPA recognizes that in the Revised Final Determination [113] and the SAFE rule, the agency expressed concerns that were based at least in part on comments from certain stakeholders about uncertainties, lack of rigor and certain technical issues in the analyses used for the 2016 Proposed Determination and 2017 Final Determination. However, EPA has reconsidered those criticisms, as well as the prior analyses, and concludes that the prior concerns expressed do not undermine the utility and relevance of the prior analyses for this rulemaking. Our consideration of such analyses is reasonable because EPA no longer agrees with those concerns and/or because the concerns raised technical issues that we believe do not significantly impact the analyses. Additionally, the updated modeling for this rulemaking addresses many of the concerns previously identified.

For use in future vehicle standards analyses, EPA is developing an updated version of its OMEGA model. This updated model, OMEGA2, is being developed to better account for the significant evolution over the past decade in vehicle markets, technologies, and mobility services. In particular, the recent advancements in battery electric vehicles (BEVs), and their introduction into the full range of market segments provides strong evidence that vehicle electrification can play a central role in achieving greater levels of emissions reduction in the future. In developing OMEGA2, EPA is exploring the interaction between consumer and producer decisions when modeling compliance pathways and the associated technology penetration into the vehicle fleet. OMEGA2 also is being designed to have expanded capability to model a wider range of GHG program options than are possible using existing tools, which will be especially important for the assessment of policies that are designed to address future GHG reduction goals. While the OMEGA2 model is not available for use in this proposal, we plan to begin peer review of the draft model in the fall of 2021.

As noted, to allow for direct comparison to the analytical results used to support the recent SAFE FRM, our updated analysis is based on the same version of the CCEMS model that was used for the SAFE FRM. The CCEMS model was extensively documented by NHTSA for the SAFE FRM and the documentation also applies to the updated analysis for this proposed rule.[114] While the CCEMS model itself remains unchanged from the version used in the SAFE rule, EPA has made the following changes (shown in Table 30) to the inputs for this analysis. Additional information concerning the changes in model inputs can be found in the sections of the preamble and DRIA cited in the table. EPA invites public comment on the input changes noted below, as well as on whether there are other input choices that EPA should consider making for the final rule. In offering comments on the modeling inputs, EPA encourages stakeholders to provide technical support for any suggestions in changes to modeling inputs.

TABLE 30—CHANGES MADE TO CCEMS MODEL INPUTS FOR THIS PROPOSAL, RELATIVE TO THE SAFE FRM ANALYSIS

Input file	Changes
parameters file	Global social cost of carbon $/ton values in place of domestic values (see DRIA Chapter 3.3). Inclusion of global social cost of methane (CH_4) and nitrous oxide (N_2O) $/ton values (see Section IV). Updated $PM_{2.5}$ cost factors (benefit per ton values, see Section VII.E). Rebound effect of −0.10 rather than −0.20 (see DRIA Chapter 3.1). AEO2021 fuel prices (expressed in 2018 dollars) rather than AEO2019. Updated energy security cost per gallon factors (see Section VII.F). Congestion cost factors of 6.34/6.34/5.66 (car/van-SUV/truck) cents/mile rather than 15.4/15/4/13.75 (see RIA Chapter 5). Discounting values to calendar year 2021 rather than calendar year 2019. The following fuel import and refining inputs have been changed based on AEO2021 (see DRIA Chapter 3.2): Share of fuel savings leading to lower fuel imports: Gasoline 7%; E85 19%; Diesel 7% rather than 50%; 7.5%; 50%. Share of fuel savings leading to reduced domestic fuel refining: Gasoline 93%; E85 25.1%; Diesel 93% rather than 50%; 7.5%; 50%. Share of reduced domestic refining from domestic crude: Gasoline 9%; E85 2.4%; Diesel 9% rather than 10%; 1.5%; 10%. Share of reduced domestic refining from imported crude: Gasoline 91%; E85 24.6%; Diesel 91% rather than 90%; 13.5%; 90%.
technology file	High compression ratio level 2 (HCR2, sometimes referred to as Atkinson cycle) technology allowance set to TRUE for all engines beginning in 2018 (see DRIA Chapter 2).
market file	On the Engines sheet, we allow high compression ratio level 1 (HCR1) and HCR2 technology on all 6-cyclinder and smaller engines rather than allowing it on no engines (see DRIA Chapter 2). Change the off-cycle credit values on the Credits and Adjustments sheet to 15 grams/mile for 2020 through 2026 (for the CA Framework) or to 15 gram/mile for 2023 through 2026 (for the proposed option) depending on the model run.

Consistent with the SAFE FRM, EPA is using the MY2017 base year fleet, which is projected to a future fleet based on the CCEMS model's sales, scrappage, and fleet mix responses to the standards being analyzed. When performing compliance analyses, EPA will often attempt to utilize the most recent base year data that is available as finalized compliance data, which at the time of this analysis was for MY2019. It is important to note that because the model applies technologies to future vehicles for all alternatives being analyzed, including the ''No Action'' scenario, the vintage of the base year normally will not have a significant impact on the model results for

[113] See 83 FR 16077.

[114] See CCEMS Model Documentation on web page *https://www.nhtsa.gov/corporate-average-fuel-economy/compliance-and-effects-modeling-system.*

projected fleets. There might be additional reason to update the base year fleet in cases where a broad shift has occurred in vehicle power-to-weight ratios, since that can impact the incremental cost effectiveness of emissions-reducing technologies. EPA's annual Automotive Trends Report [115] shows only a modest increase (approximately 3 percent) in the average vehicle power-to-weight ratio between MYs 2017 and 2019, and therefore we have concluded that the MY2017 base year remains a sound basis for this analysis. EPA requests comment on the use of the MY2017 base year fleet and whether it would be more appropriate to update the base year fleet for the final rule, for example by using a base year fleet reflecting the most recent final compliance data. Accordingly, we are using the data contained in the SAFE FRM market file (the base year fleet) except as described in Table 30 and splitting the market file into separate California Framework OEM (FW–OEM) and non-Framework OEM (NonFW–OEM) fleets for some model runs. Note that the scrappage model received many negative comments in response to the SAFE NPRM, but changes made for the FRM version of the CCEMS model were responsive to the identified issues involving sales and VMT results of the SAFE NPRM version of the CCEMS model.[116]

As mentioned, for some model runs we have split the fleet in two, one fleet consisting of California Framework OEMs (FW–OEMs) and the other consisting of the non-Framework OEMs (NonFW–OEMs). This was done because the FW–OEMs would be meeting more stringent emission reduction targets (as set in the scenarios file) and would have access to more (15 g/mi rather than 10 g/mi) off-cycle credits (as set in the market and scenarios file) and more advanced technology incentive multipliers, while the NonFW–OEMs would be meeting less stringent standards and would have access to 10 g/mi off-cycle credits and would not have access to any advanced technology multipliers. For such model runs, a post-processing step was necessary to properly sales-weight the two sets of model outputs into a single fleet of results. This post-processing tool is in the docket for this rule.[117]

Importantly, our primary model runs consist of a ''No Action'' scenario and an ''action'' scenario. The results, or impact of our proposed standards, are measured relative to the no action scenario. Our No Action scenario consists of the Framework OEMs (roughly 29 percent of fleet sales) meeting the Framework emission reduction targets and the Non-Framework OEMs (roughly 71 percent of fleet sales) meeting the SAFE FRM standards. Our action scenario consists of the whole fleet meeting our proposed standards for MYs 2023 and later. Throughout this preamble, our ''No Action scenario'' refers to this Framework-OEM/NonFramework-OEM compliance split. EPA may consider a different No Action scenario for the final rule. For example, currently the No Action baseline includes the California Framework Agreement emission targets for those automakers who have committed to them, but does not include California's GHG or ZEV standards, because California does not currently have a waiver to enforce those standards. If, after consideration of public comment, EPA were to rescind the withdrawal of California's Advanced Clean Car waiver, then it might be appropriate to update the No Action scenario to reflect California's GHG and ZEV standards. EPA seeks comment on potential adjustments to the No Action scenario.

In our updated analysis, as indicated in Table 18, we are using a vehicle-miles-traveled (VMT) rebound effect of 10 percent. The 10 percent value has been used in EPA supporting analyses for the 2010 and 2012 final rules as well as the MTE. The SAFE rule used a VMT rebound effect of 20 percent. Our assessment indicates that a rebound effect of 10 percent is appropriate and supported by the body of research on the rebound effect for light-duty vehicle driving, as described further in the DRIA Chapter 3.1. We are requesting comment on the use of the 10 percent VMT rebound value, or an alternative value such as 5 or 15 percent, for our analysis of the MY2023 through 2026 standards.

EPA has chosen to change a select number of the SAFE FRM model inputs, as listed in Table 30, largely because we concluded that other potential updates, regardless of their potential merit, such as the continued use of the MY2017 base year fleet, would not have a significant impact on the assessment of the proposed standards. In addition, while the technology effectiveness estimates used in the CCEMS model to support the SAFE FRM could have been updated with more recent engine maps, the incremental effectiveness values are of primary importance within the CCEMS model and, while the maps are somewhat dated, the incremental effectiveness values derived from them are in rough agreement with incremental values derived from more up-to-date engine maps (see DRIA Chapter 2). Likewise, while the electrified vehicle battery costs used in the SAFE FRM could have been lower based on EPA's latest assessment, we concluded that updating those costs for this proposal would not have a notable impact on overall cost estimates, although we may consider doing so for the final rule. The past EPA analyses described above generally have estimated EV penetrations of less than 5 percent, and electrification continues to play a relatively modest role in our projections of compliance paths for the proposed standards. In contrast to the model inputs unchanged from the SAFE rule as described above, the treatment of HCR1 and HCR2 technologies in the CCEMS model, specifically a broader availability of those technologies as a compliance choice within the model, was considered by EPA to be significant and we made an update to the model's inputs relative to the SAFE FRM. We made that choice because these are a very cost-effective ICE technology that is in-use today and ready for broader application. In short, there are many modeling inputs that EPA has chosen not to change out of the very large number of inputs required to run a model as complex as the CCEMS model, but there are others we have updated with most of those updated because of the way they value the effects of emissions on public health. EPA seeks comment on our choice of modeling inputs, including whether additional inputs should be modified for the final rule analysis.

B. Projected Compliance Costs and Technology Penetrations

1. GHG Targets and Compliance Levels

The proposed curve coefficients were presented in Table 22. Here we present the projected fleet targets for each manufacturer. These targets are projected based on each manufacturer's car/truck fleets and their sales weighted footprints. As such, each manufacturer has a set of targets unique to them. The projected targets are shown by manufacturer for MYs 2023 through 2026 in Table 31 for cars, Table 32 for trucks, and Table 33 for the combined fleets.[118]

[115] See Table 3.1, U.S. Environmental Protection Agency (2021). 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975. EPA–420–R–21–003.

[116] See 85 FR 24647.

[117] See EPA_CCEMS_PostProcessingTool, Release 0.3.1 July 21, 2021.

[118] Note that these targets are projected based on both projected future sales in applicable MYs and our proposed standards; after the standards are finalized the targets will change depending on each manufacturer's actual sales.

TABLE 31—CAR TARGETS

[CO_2 gram/mile]

	2023	2024	2025	2026
BMW	166	158	150	143
Daimler	173	165	157	149
FCA	169	161	153	146
Ford	167	159	151	144
General Motors	166	158	151	143
Honda	163	155	147	140
Hyundai Kia-H	165	157	149	142
Hyundai Kia-K	164	156	149	142
JLR	174	166	158	150
Mazda	163	155	147	140
Mitsubishi	151	143	136	130
Nissan	164	156	148	141
Subaru	160	152	145	138
Tesla	191	182	173	165
Toyota	162	154	147	140
Volvo	172	164	156	148
VWA	160	152	145	138
Total	165	157	149	142

TABLE 32—TRUCK TARGETS

[CO_2 gram/mile]

	2023	2024	2025	2026
BMW	219	208	198	188
Daimler	225	214	203	193
FCA	233	222	211	200
Ford	246	234	222	211
General Motors	252	239	228	216
Honda	215	205	195	185
Hyundai Kia-H	214	203	193	183
Hyundai Kia-K	217	206	196	186
JLR	221	210	199	190
Mazda	206	196	186	177
Mitsubishi	194	184	175	166
Nissan	225	214	203	193
Subaru	197	187	178	169
Tesla	.....	.....	.....	.....
Toyota	227	216	205	195
Volvo	222	211	200	190
VWA	218	207	196	187
Total	232	221	210	199

TABLE 33—COMBINED FLEET TARGETS

[CO_2 gram/mile]

	2023	2024	2025	2026
BMW	187	178	169	161
Daimler	195	186	177	168
FCA	221	210	200	190
Ford	215	205	195	185
General Motors	215	204	195	185
Honda	185	176	167	159
Hyundai Kia-H	168	160	152	145
Hyundai Kia-K	177	169	161	153
JLR	211	200	190	181
Mazda	176	167	159	151
Mitsubishi	168	160	152	145
Nissan	185	176	167	159
Subaru	187	178	169	161
Tesla	191	182	173	165
Toyota	194	185	176	167
Volvo	205	195	185	176
VWA	179	171	162	155

TABLE 33—COMBINED FLEET TARGETS—Continued

[CO_2 gram/mile]

	2023	2024	2025	2026
Total	198	189	180	171

The modeled achieved CO_2-equivalent (CO_2e) levels for the proposed standards are shown in Table 34 for cars, Table 35 for trucks, and Table 36 for the combined fleets. These values were produced by the modeling analysis and represent the projected certification emissions values for possible compliance approaches with the proposed standards for each manufacturer. These achieved values, shown as averages over the respective car, truck and combined fleets, include the 2-cycle tailpipe emissions based on the modeled application of emissions-reduction technologies minus the modeled application of off-cycle credit technologies and the full A/C efficiency credits. The values also reflect any application of the proposed advanced technology multipliers, up to the cap. Hybrid pickup truck incentive credits were not modeled (the CCEMS version used does not have this capability) and are therefore not included in the achieved values.

Comparing the target and achieved values, it can be seen that some manufacturers are projected to have achieved values that are over target (higher emissions) on trucks, and under target (lower emissions) on cars, and vice versa for other manufacturers. This is a feature of the unlimited credit transfer provision, which results in a compliance determination that is based on the combined car and truck fleet credits rather than a separate determination of each fleet's compliance. The application of technologies is influenced by the relative cost-effectiveness of technologies among each manufacturer's vehicles, which explains why different manufacturers exhibit different compliance approaches in the modeling results. For the combined fleet, the achieved values are typically close to, or slightly under the target values, which would represent the banking of credits that can be carried over into other model years. For all manufacturers, the total achieved values for MYs 2023 to 2026 are within −1 to +3 grams/mile of the total target values. This indicates that overall, the modeled fleet tracks the standards very closely from year-to-year. Note that an achieved value for a manufacturer's combined fleet that is above the target in a given model year does not indicate a likely failure to comply with the standards, since the model includes the GHG program credit banking provisions that allow credits from one year to be carried into another year.

TABLE 34—CAR ACHIEVED LEVELS

[CO_2e gram/mile]

	2023	2024	2025	2026
BMW	173	168	168	131
Daimler	184	169	166	168
FCA	183	178	178	171
Ford	168	160	159	151
General Motors	152	136	133	132
Honda	161	161	161	130
Hyundai Kia-H	162	147	146	145
Hyundai Kia-K	138	134	134	137
JLR	217	162	158	165
Mazda	156	156	156	146
Mitsubishi	136	136	129	129
Nissan	165	153	147	147
Subaru	193	193	193	174
Tesla	−20	−20	−20	−20
Toyota	161	143	135	133
Volvo	185	185	184	145
VWA	146	144	143	135
Total	161	150	147	141

TABLE 35—TRUCK ACHIEVED LEVELS

[CO_2e gram/mile]

	2023	2024	2025	2026
BMW	220	210	156	161
Daimler	206	206	151	126
FCA	218	217	217	207
Ford	245	234	234	216
General Motors	270	261	245	224
Honda	212	210	210	210
Hyundai Kia-H	222	129	129	140
Hyundai Kia-K	225	209	209	209
JLR	210	210	176	187
Mazda	177	177	177	176

TABLE 35—TRUCK ACHIEVED LEVELS—Continued

[CO_2e gram/mile]

	2023	2024	2025	2026
Mitsubishi	194	194	185	185
Nissan	220	218	198	192
Subaru	187	187	187	168
Tesla	.....	.....	.....	.....
Toyota	239	231	224	204
Volvo	181	180	176	183
VWA	240	200	173	122
Total	233	226	218	203

TABLE 36—COMBINED FLEET ACHIEVED LEVELS

[CO_2e gram/mile]

	2023	2024	2025	2026
BMW	192	184	163	143
Daimler	194	185	159	150
FCA	211	210	210	200
Ford	215	205	205	190
General Motors	220	208	197	185
Honda	183	181	182	164
Hyundai Kia-H	166	146	145	145
Hyundai Kia-K	160	153	153	156
JLR	212	200	172	182
Mazda	162	162	162	155
Mitsubishi	159	160	152	152
Nissan	184	175	164	163
Subaru	189	189	189	170
Tesla	−20	−20	−20	−20
Toyota	199	186	179	168
Volvo	182	182	179	170
VWA	178	163	153	131
Total	197	188	183	172

2. Projected Compliance Costs per Vehicle

EPA has performed an updated assessment of the estimated per vehicle costs for manufacturers to meet the proposed MY2023–2026 standards. The car costs per vehicle from this analysis are shown in Table 37, followed by truck costs in Table 38 and combined fleet costs in Table 39.[119]

As shown in these tables, the combined cost for car and truck fleets, averaged over all manufacturers, increases from MY 2023 to MY 2026 as the proposed standards become more stringent. The costs for trucks tend to be somewhat higher than for cars—many technology costs scale with engine and vehicle size—but it is important to note that the absolute emissions, and therefore emissions reductions, also tend to be higher for trucks. Projected costs for individual manufacturers vary based on the composition of vehicles produced. The estimated costs for California Framework Agreement manufacturers in MY 2026 range from approximately $500–$850 dollars per vehicle—because the proposed standards are more stringent than the Framework emission reduction targets—and fall within the wider cost range of non-Framework manufacturers. The estimated costs for Framework manufacturers are somewhat lower than the overall industry average costs of approximately $1,000 per vehicle in MY 2026.

TABLE 37—CAR COSTS PER VEHICLE RELATIVE TO THE NO ACTION SCENARIO

[2018 dollars]

	2023	2024	2025	2026
BMW*	$64	$40	$42	$254
Daimler	37	414	490	487
FCA	465	525	511	823
Ford*	22	234	228	458
General Motors	662	1,351	1,354	1,512
Honda*	39	44	43	766
Hyundai Kia-H	457	845	847	878

[119] As shown in Table 23, Tesla incurs nearly $400 in costs per vehicle despite being a pure electric vehicle maker (0 grams/mile) and despite there being no upstream emissions accounting under the proposal. The costs shown for Tesla represent the costs of 15 grams/mile of off-cycle credit.

TABLE 37—CAR COSTS PER VEHICLE RELATIVE TO THE NO ACTION SCENARIO—Continued

[2018 dollars]

	2023	2024	2025	2026
Hyundai Kia-K	395	406	396	416
JLR	−510	1,075	1,076	1,006
Mazda	510	522	517	745
Mitsubishi	870	860	993	985
Nissan	614	825	940	912
Subaru	403	397	392	710
Tesla	398	393	387	382
Toyota	470	822	958	979
Volvo *	212	210	222	211
VWA *	158	168	177	185
Total	383	643	682	846

* Framework Manufacturer.

TABLE 38—TRUCK COST PER VEHICLE RELATIVE TO THE NO ACTION SCENARIO

[2018 dollars]

	2023	2024	2025	2026
BMW *	$270	$264	$1,080	$1,037
Daimler	1,641	1,582	2,964	4,233
FCA	1,074	1,022	974	1,423
Ford *	34	279	267	500
General Motors	786	977	1,350	2,100
Honda *	25	64	63	62
Hyundai Kia-H	398	3,370	3,170	2,995
Hyundai Kia-K	435	482	475	468
JLR	752	740	2,140	2,007
Mazda	787	783	777	788
Mitsubishi	440	434	599	592
Nissan	556	590	978	1,178
Subaru	415	410	404	808
Tesla	0	0	0	0
Toyota	440	590	763	1,081
Volvo *	1,193	1,140	1,040	997
VWA *	35	1,028	1,595	2,148
Total	546	682	855	1,232

* Framework Manufacturer.

TABLE 39—FLEET AVERAGE COST PER VEHICLE RELATIVE TO THE NO ACTION SCENARIO

[2018 dollars]

	2023	2024	2025	2026
BMW *	$145	$129	$459	$566
Daimler	727	917	1,567	2,123
FCA	957	927	886	1,309
Ford *	29	261	252	485
General Motors	733	1,138	1,353	1,854
Honda *	33	52	52	467
Hyundai Kia-H	454	1,006	997	1,015
Hyundai Kia-K	404	424	413	426
JLR	471	813	1,904	1,784
Mazda	591	599	595	758
Mitsubishi	697	688	833	825
Nissan	595	746	954	1,005
Subaru	412	406	401	783
Tesla	398	393	387	382
Toyota	456	709	863	1,033
Volvo *	860	827	766	731
VWA *	116	456	656	853
Total	465	663	771	1,044

* Framework Manufacturer.

Overall, EPA estimates the average costs of today's proposal at $1,044 per vehicle in MY2026 relative to meeting the No Action scenario in MY2026. As discussed in Section VII, there are benefits resulting from these costs including savings to consumers in the form of lower fuel costs.

3. Technology Penetration Rates

In this section we discuss the projected new sales technology penetration rates from EPA's updated analysis for the proposed standards. Additional detail on this topic can be found in the DRIA. EPA's assessment for the proposal, consistent with past EPA assessments, shows that the proposed standards can largely be met with increased sales of advanced gasoline vehicle technologies, and relatively low penetration rates of electrified vehicle technology.

Table 40, Table 41, and Table 42 show the EPA projected penetration rates of BEV+PHEV technology under today's proposal with the remaining share being traditional or advanced ICE technology. Values shown reflect absolute values of fleet penetration and are not increments from the No Action scenario or other standards. It is important to note that this is a projection and represents one out of many possible compliance pathways for the industry. The proposed standards are performance-based and do not mandate any specific technology for any manufacturer or any vehicles. As the proposed standards become more stringent over MYs 2023 to 2026, the projected penetration of electrified vehicles increases by approximately 4 percent over this 4-year period (from 3.6 percent to 7.8 percent), reaching nearly 8 percent of overall vehicle production in MY2026. While this is not an insignificant change, it is notable that we estimate that over 92 percent of new light-duty vehicle sales will continue to utilize ICE technology under our updated analysis. This conclusion that ICE vehicles will continue to play an important role in meeting GHG standards is consistent with EPA's prior analyses for this timeframe.

TABLE 40—CAR BEV+PHEV PENETRATION RATES UNDER THE PROPOSED STANDARDS

	2023	2024	2025	2026
BMW	8.4%	8.4%	8.4%	19.5%
Daimler	7.2	8.0	8.0	8.0
FCA	4.3	6.3	6.2	6.2
Ford	7.7	9.3	9.6	9.6
General Motors	6.1	12.2	12.1	13.3
Honda	0.1	0.1	0.1	12.7
Hyundai Kia-H	0.3	3.4	3.8	3.8
Hyundai Kia-K	9.2	9.2	9.1	9.1
JLR	0.5	11.2	11.2	11.2
Mazda	0.0	0.0	0.0	0.0
Mitsubishi	0.0	0.0	0.0	0.0
Nissan	1.0	1.2	1.2	1.2
Subaru	0.0	0.0	0.0	0.0
Tesla	100.0	100.0	100.0	100.0
Toyota	2.6	4.0	4.4	4.4
Volvo	0.0	0.0	0.0	16.6
VWA	15.4	15.5	15.5	17.2
Total	4.6	6.3	6.4	8.4

TABLE 41—TRUCK BEV+PHEV PENETRATION RATES UNDER THE PROPOSED STANDARDS

	2023	2024	2025	2026
BMW	4.3%	4.3%	8.9%	8.9%
Daimler	28.8	28.8	38.3	39.6
FCA	5.6	5.6	5.6	5.6
Ford	1.8	4.8	4.8	7.3
General Motors	2.3	3.7	5.0	11.0
Honda	0.0	0.0	0.0	0.0
Hyundai Kia-H	0.0	20.6	20.6	20.6
Hyundai Kia-K	0.0	0.0	0.0	0.0
JLR	13.0	13.0	24.6	24.6
Mazda	0.0	0.0	0.0	0.0
Mitsubishi	0.0	0.0	0.0	0.0
Nissan	0.0	0.0	3.7	5.9
Subaru	0.0	0.0	0.0	0.0
Tesla	0.0	0.0	0.0	0.0
Toyota	0.0	0.0	1.9	1.9
Volvo	15.6	15.6	17.3	17.3
VWA	1.2	20.8	20.8	39.5
Total	2.6	4.0	5.1	7.2

TABLE 42—FLEET BEV+PHEV PENETRATION RATES UNDER THE PROPOSED STANDARDS

	2023	2024	2025	2026
BMW	6.8%	6.8%	8.6%	15.2%

TABLE 42—FLEET BEV+PHEV PENETRATION RATES UNDER THE PROPOSED STANDARDS—Continued

	2023	2024	2025	2026
Daimler	16.5	17.0	21.2	21.8
FCA	5.3	5.7	5.7	5.7
Ford	4.1	6.5	6.7	8.2
General Motors	3.9	7.4	8.0	12.0
Honda	0.1	0.1	0.1	7.3
Hyundai Kia-H	0.2	4.5	4.9	4.9
Hyundai Kia-K	6.9	6.9	6.8	6.8
JLR	10.2	12.6	21.7	21.7
Mazda	0.0	0.0	0.0	0.0
Mitsubishi	0.0	0.0	0.0	0.0
Nissan	0.6	0.8	2.1	2.8
Subaru	0.0	0.0	0.0	0.0
Tesla	100.0	100.0	100.0	100.0
Toyota	1.3	2.0	3.1	3.1
Volvo	10.3	10.3	11.5	17.0
VWA	10.7	17.3	17.3	24.7
Total	3.6	5.1	5.8	7.8

C. Are the proposed standards feasible?

The proposed standards are based on the extensive light-duty GHG technical analytical record developed over the past dozen years, as represented by the EPA supporting analyses for the 2010 and 2012 final rules, the Mid-Term Evaluation (including the Draft TAR, Proposed Determination and Final Determinations), as well as the updated analysis for this proposed rule and the supporting analysis for the SAFE rule.[120] Our conclusion that the proposed program is technologically feasible is based in part on a projection that the standards will be met using the same advances in light-duty vehicle engine technologies, transmission technologies, electric drive systems, aerodynamics, tires, and vehicle mass reduction that have gradually entered the light-duty vehicle fleet over the past decade and that are already in place in today's vehicles. This conclusion is also supported by the analysis performed by NHTSA that served as the basis for the SAFE final rule. In the SAFE final rule, the NHTSA analysis showed that the 2012 CO_2 standards could be met primarily with improvements in gasoline vehicle and hybrid technology and with only 6 percent penetration of EV+PHEV, which is very similar to today's projection.[121] The feasibility of the proposed standards does not rely on dramatically increased penetration of electric vehicles into the fleet during the 2023–2026 model years. Our updated analysis projects that the proposed standards can be met with a gradually increasing market share of EVs and PHEVs up to approximately 8 percent by MY 2026 (see Section III.B.3 of this preamble and the following paragraph).

The percentage share of specific MY2015 to MY2020 engine and transmission technologies are summarized from EPA Automotive Trends Report data within Chapter 2.2 of the DRIA. The introduction of GHG reducing technologies has been steadily increasing within the light-duty vehicle fleet. As of MY2020, more than half of light-duty gasoline spark ignition engines now use direct injection (GDI) engines and more than a third are turbocharged. Nearly half of all light-duty vehicles have planetary automatic transmissions with 8 or more gear ratios, and one-quarter are using continuously variable transmissions (CVT). The sales of vehicles with 12V start/stop systems has increased from approximately 7 percent to approximately 42 percent between MY2015 and MY2020. Significant levels of powertrain electrification of all types (HEV, PHEV, and EV) have increased more than 3-fold from MY2015 to MY2020. In MY2015, hybrid electric vehicles accounted for approximately 2.4 percent of vehicle sales, which increased to approximately 6.5 percent of vehicle sales in MY2020. Sales of plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (EVs) together comprised 0.7 percent of vehicle sales in MY2015 and increased to about 2 percent of sales for MY2019.[122] The pace of introduction of new EV and PHEV models is rapidly increasing. For example, the number of EV and PHEV models available for sale in the U.S. has more than doubled from about 24 in MY 2015 to about 60 in MY 2021.[123] Even in the absence of more stringent standards, manufacturers have indicated that the number of EV and PHEV models will increase to more than 80 by MY 2023, with many more expected to reach production before the end of the decade.[124] Although our analysis projects that approximately 8 percent of new vehicles meeting the MY 2026 proposed standards would be EVs or PHEVs, it is possible that an even higher percentage may be electrified during the time period of our proposed MY 2023–2026 standards, when taking into account the pace at which new EV and PHEV models are being announced for introduction by automakers, under

[120] Although the MTE 2018 Revised Final Determination ''withdrew'' the 2017 Final Determination, the D.C. Circuit Court has noted that EPA did ''not erase[ ] the Draft Technical Assessment Report, Technical Support Document, or any of the other prior evidence [EPA] collected.'' *California* v. *EPA,* 940 F.3d 1342, 1351 (D.C. Cir. 2019).

[121] See the SAFE Final Rule preamble: ''The levels of electrified vehicle technologies projected in this final rule to meet the baseline Alternative (the previous GHG standards) differ slightly from those projected in the 2017 Final Determination. In this final rule, EPA projects a combined strong and mild hybrid penetration of 16 percent (compared to 20 percent in the 2017 Final Determination), with the share of mild hybrids somewhat lower (7 percent compared to 18 percent in the 2017 Final Determination) and the share of strong hybrids higher (9 percent compared to 2 percent in the 2017 Final Determination). EPA projects a total level of plug-in vehicles of 6 percent, similar to the 5 percent total projected in the 2017 Final Determination, but with a slightly different mix of plug-in hybrid electric vehicles (0.4 percent compared to 2 percent in the 2017 Final Determination) and dedicated electric vehicles (5.7 percent compared to 3 percent in the 2017 Final Determination). 85 FR 25107, April 30, 2020.

[122] ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975,'' EPA–420–R–21–003, January 2021.

[123] *Fueleconomy.gov,* 2015 Fuel Economy Guide and 2021 Fuel Economy Guide.

[124] Environmental Defense Fund and M.J. Bradley & Associates, ''Electric Vehicle Market Status—Update, Manufacturer Commitments to Future Electric Mobility in the U.S. and Worldwide,'' April 2021.

current policy, over the next three to five years.[125]

EPA believes that the proposed program is technologically feasible based on our projection that the standards can be met largely with the kinds of advanced gasoline vehicle technologies already in place in vehicles within today's new vehicle fleet and relies on a penetration of plug-in electric vehicles into the fleet during the 2023–2026 model years that is commensurate with current trends in the industry. This conclusion, which is supported by EPA's updated analysis, is consistent with EPA's past analyses of standards similar to those proposed in this notice, see Section III.B and Chapter 2 of the DRIA. The analysis confirms EPA's previous conclusions that a wide variety of emission reducing technologies are already available at reasonable costs for manufacturers to incorporate into their vehicles within the timeframe of the proposed standards.

D. How did EPA consider the two alternatives in choosing the proposed program?

In Section II.C, we described two alternative stringency levels that we considered in developing the level of stringency of the proposed program—Alternative 1 (less stringent than the proposed program) and Alternative 2 (more stringent). All three potential programs would incorporate year-over-year increases in GHG stringency, with varying starting stringencies in MY2023, and varying ending stringencies in MY2026, and with fairly linear increases in stringency between MY2023 and 2026 that would essentially follow the same slope as the 2012 program. All three potential programs would also result, by MY2026, in standards at least as stringent as the last year (MY2025) of the 2012 program. See Figure 8 and Table 16 in Section II.C.

In determining the stringency of the proposed standards, our primary focus was on the first and last model years of the proposed program, 2023 and 2026. Some stakeholders have encouraged EPA to propose standards that would closely follow the stringency levels of the California Framework Agreements, or that would represent less stringent standards (between the California Framework emission reduction targets and the relaxed standards of the SAFE rule). In Section VI below, we discuss why we believe the auto industry's technological achievements over the past decade, and the availability of a range of existing and proposed compliance flexibilities, puts automakers in a strong position to meet the proposed revised standards for model years 2023 through 2026 on a year-by-year trajectory close to the standards in the 2012 program. Given our conclusion that standards more stringent than those in Alternative 1 are clearly feasible considering available technology and compliance costs, and in light of the critical national need to quickly and substantially reduce light-duty GHG emissions, we believe at this time that a program of the stringency of Alternative 1 (and any less stringent alternative) would not be appropriate given EPA's consideration of the public health and welfare benefits of potential standards. Nonetheless, we invite comment on Alternative 1 and may consider it in determining the standards for the final rule.

Similarly, we considered the implications of a more stringent program in Alternative 2. In this alternative program, the standards would more quickly return to the 2012 program's trajectory, in model year 2023. While we believe, given the combination of factors discussed in Section VI, reaching the 2012 program's levels in 2023 may be feasible industrywide, we are proposing a slightly less stringent standard for that first year to provide a more gradual transition to the 2012 trajectory.

All three alternative programs after MY2023 would essentially follow the same slope of increasing year-over-year stringency of the 2012 program. For Alternative 1, this would mean that the standards would reach the model year 2025 level of the 2012 rule (the final increase in stringency of the 2012 program) in model year 2026, resulting in a less stringent program compared to the 2012 rule until MY2026. Chapter 5.1.1.2 of the DRIA shows the associated lower amount of GHG reductions achieved under Alternative 1 compared to the proposal. Again, given the urgent need for GHG reductions to address the climate challenge, we believe Alternative 1 does not go far enough and would be inappropriate, as discussed above.

For Alternative 2, the standards by MY2025 would nearly match the stringency level of the MY2025 standards in the 2012 rule and would continue to increase in stringency for one additional year in MY2026. Consistent with EPA's previous discussions regarding feasibility, compliance costs, and lead time, we believe that Alternative 2 may be feasible. Several arguments can be made in support of Alternative 2 that are similar to those that support the proposed standards. In terms of technology penetrations, Alternative 2 projects that nearly 10 percent of the fleet would need to be made up of EV/PHEVs compared with about 8 percent for the proposed standards. See Table 4–23, and Table 4–28 of the DRIA. Several automakers have made public announcements regarding electrification of the light-duty fleet, particularly regarding the latter years of the proposed program. These electrified products will provide a significant contribution to the ability of these manufacturers to comply with more stringent standards. However, EPA recognizes that the additional penetration of electrification by 2026 could be challenging for any manufacturers that are not currently investing in advanced technologies, such as EVs, for this timeframe, although with additional investment and product development, or greater reliance on the emissions ABT program including credit trading, this level of stringency may be achievable. EPA also recognizes Alternative 2 is more stringent than the proposal in MY2023, and EPA believes a lower level of stringency increase for 2023 may be appropriate taking into consideration lead time.

Projected costs and technology penetrations associated with Alternatives 1 and 2 are available in Chapter 4 of the DRIA.

We invite comment on our assessment of Alternatives.

IV. How would this proposal reduce GHG emissions and their associated effects?

A. Impact on GHG Emissions

EPA used the CCEMS to estimate GHG emissions inventories including tailpipe emissions from light-duty cars and trucks and the upstream emissions associated with the fuels used to power those vehicles (both at the refinery and the electricity generating unit). The upstream emission factors used in the modeling are identical to those used for the SAFE FRM and were generated using the DOE/Argonne GREET model as described in the SAFE FRM (See DRIA Chapter 5.1.1, referencing the SAFE FRM).

The resultant annual GHG inventory estimates are shown in Table 43 for the calendar years 2023 through 2050. The table shows our proposed program would result in net GHG reductions compared to the No Action scenario. The CO_2, CH_4 and N_2O emissions

[125] Rhodium Group, ''Pathways to Build Back Better: Investing in Transportation Decarbonization,'' May 13, 2021.

reductions from the proposed program total 2,205 MMT, 2.7 MMT and 0.072 MMT, respectively, by 2050.

TABLE 43—ESTIMATED GHG IMPACTS OF THE PROPOSED STANDARDS RELATIVE TO THE NO ACTION SCENARIO

Year	Emission impacts relative to no action			Percent change from no action		
	CO_2 (million metric tons)	CH_4 (metric tons)	N_2O (metric tons)	CO_2 (%)	CH_4 (%)	N_2O (%)
2023	−4	−4,821	−105	0	0	0
2024	−7	−8,560	−200	0	0	0
2025	−11	−13,412	−330	−1	−1	−1
2026	−17	−21,154	−534	−1	−1	−1
2027	−25	−30,702	−785	−2	−2	−1
2028	−33	−41,019	−1,051	−2	−2	−2
2029	−42	−51,607	−1,325	−3	−3	−2
2030	−50	−62,014	−1,591	−4	−3	−3
2031	−58	−72,138	−1,847	−4	−4	−3
2032	−66	−81,872	−2,096	−5	−5	−4
2033	−74	−91,079	−2,332	−6	−5	−4
2034	−81	−99,597	−2,555	−6	−6	−5
2035	−86	−106,981	−2,739	−7	−6	−5
2036	−92	−113,813	−2,915	−7	−7	−6
2037	−97	−119,952	−3,090	−8	−7	−6
2038	−101	−125,292	−3,245	−8	−7	−6
2039	−105	−129,675	−3,368	−9	−8	−7
2040	−108	−133,346	−3,474	−9	−8	−7
2041	−110	−136,405	−3,564	−9	−8	−7
2042	−112	−138,441	−3,630	−9	−8	−7
2043	−113	−140,060	−3,693	−9	−9	−7
2044	−114	−141,230	−3,745	−10	−9	−8
2045	−115	−141,929	−3,790	−10	−9	−8
2046	−116	−142,314	−3,826	−10	−9	−8
2047	−116	−142,870	−3,872	−10	−9	−8
2048	−116	−142,942	−3,901	−10	−9	−8
2049	−117	−143,167	−3,938	−10	−9	−8
2050	−117	−143,681	−4,001	−10	−9	−8
Sum	−2,205	−2,720,073	−71,543	−6	−6	−5

B. Climate Change Impacts From GHG Emissions

Elevated concentrations of GHGs have been warming the planet, leading to changes in the Earth's climate including changes in the frequency and intensity of heat waves, precipitation, and extreme weather events, rising seas, and retreating snow and ice. The changes taking place in the atmosphere as a result of the well-documented buildup of GHGs due to human activities are changing the climate at a pace and in a way that threatens human health, society, and the natural environment. While EPA is not making any new scientific or factual findings with regard to the well-documented impact of GHG emissions on public health and welfare in support of this proposal, EPA is providing some scientific background on climate change to offer additional context for this rulemaking and to increase the public's understanding of the environmental impacts of GHGs.

Extensive additional information on climate change is available in the scientific assessments and the EPA documents that are briefly described in this section, as well as in the technical and scientific information supporting them. One of those documents is EPA's 2009 Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the CAA (74 FR 66496, December 15, 2009). In the 2009 Endangerment Finding, the Administrator found under section 202(a) of the CAA that elevated atmospheric concentrations of six key well-mixed GHGs—CO_2, methane (CH_4), nitrous oxide (N_2O), HFCs, perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—''may reasonably be anticipated to endanger the public health and welfare of current and future generations'' (74 FR 66523). The 2009 Endangerment Finding, together with the extensive scientific and technical evidence in the supporting record, documented that climate change caused by human emissions of GHGs (including HFCs) threatens the public health of the U.S. population. It explained that by raising average temperatures, climate change increases the likelihood of heat waves, which are associated with increased deaths and illnesses (74 FR 66497). While climate change also increases the likelihood of reductions in cold-related mortality, evidence indicates that the increases in heat mortality will be larger than the decreases in cold mortality in the United States (74 FR 66525). The 2009 Endangerment Finding further explained that compared with a future without climate change, climate change is expected to increase tropospheric ozone pollution over broad areas of the United States, including in the largest metropolitan areas with the worst tropospheric ozone problems, and thereby increase the risk of adverse effects on public health (74 FR 66525). Climate change is also expected to cause more intense hurricanes and more frequent and intense storms of other types and heavy precipitation, with impacts on other areas of public health, such as the potential for increased deaths, injuries, infectious and waterborne diseases, and stress-related disorders (74 FR 66525). Children, the elderly, and the poor are among the most vulnerable to these climate-related health effects (74 FR 66498).

The 2009 Endangerment Finding also documented, together with the extensive scientific and technical evidence in the supporting record, that climate change touches nearly every aspect of public welfare [126] in the United States with resulting economic costs, including: Changes in water supply and quality due to changes in drought and extreme rainfall events; increased risk of storm surge and flooding in coastal areas and land loss due to inundation; increases in peak electricity demand and risks to electricity infrastructure; and the potential for significant agricultural disruptions and crop failures (though offset to some extent by carbon fertilization). These impacts are also global and may exacerbate problems outside the United States that raise humanitarian, trade, and national security issues for the United States (74 FR 66530).

In 2016, the Administrator similarly issued Endangerment and Cause or Contribute Findings for greenhouse gas emissions from aircraft under section 231(a)(2)(A) of the CAA (81 FR 54422, August 15, 2016). In the 2016 Endangerment Finding, the Administrator found that the body of scientific evidence amassed in the record for the 2009 Endangerment Finding compellingly supported a similar endangerment finding under CAA section 231(a)(2)(A), and also found that the science assessments released between the 2009 and the 2016 Findings ''strengthen and further support the judgment that GHGs in the atmosphere may reasonably be anticipated to endanger the public health and welfare of current and future generations'' (81 FR 54424).

Since the 2016 Endangerment Finding, the climate has continued to change, with new observational records being set for several climate indicators such as global average surface temperatures, GHG concentrations, and sea level rise. Additionally, major scientific assessments continue to be released that further advance our understanding of the climate system and the impacts that GHGs have on public health and welfare both for current and future generations.

These updated observations and projections document the rapid rate of current and future climate change both globally and in the United States.[127] [128] [129] [130]

C. Global Climate Impacts and Benefits Associated With the Proposal's GHG Emissions Reductions

Transportation is the largest source of GHG emissions in the United States, making up 29 percent of all emissions. Within the transportation sector, light-duty vehicles are the largest contributor, 58 percent, to transportation GHG emissions in the U.S, and 17 percent of all emissions.[131] Reducing GHG emissions, including the four GHGs affected by the proposed program, will contribute toward the goal of holding the increase in the global average temperature to well below 2 °C above pre-industrial levels, and subsequently reducing the probability of severe climate change related impacts including heat waves, drought, sea level rise, extreme climate and weather events, coastal flooding, and wildfires. While EPA did not conduct modeling to specifically quantify changes in climate impacts resulting from this proposal in terms of avoided temperature change or sea-level rise, we did quantify the climate benefits by monetizing the emission reductions through the application of the social cost of greenhouse gases (SC–GHGs), as described in Section VII.D.

V. How would the proposal impact non-GHG emissions and their associated effects?

A. Impact on Non-GHG Emissions

The model runs that EPA conducted estimated the inventories of non-GHG air pollutants resulting from tailpipe emissions from light-duty cars and trucks, and the upstream emissions associated with the fuels used to power those vehicles (both at the refinery and the electricity generating unit). The tailpipe emissions of $PM_{2.5}$, NO_X, VOCs, CO and SO_2 are estimated using emission factors from EPA's Midterm model. The emission factors used are identical to those used in the SAFE FRM. The upstream emissions are then calculated using emission factors applied to the gallons of liquid fuels projected to be consumed and the kilowatt hours of electricity projected to be consumed. The upstream emission factors used in the modeling are identical to those used for the SAFE FRM and were generated using the DOE/Argonne GREET model as described in the SAFE FRM.

On the whole, the proposed standards reduce non-GHG emissions. Table 44 presents the annual tailpipe and upstream inventory impacts for years 2023 through 2050 and Table 45 presents the net annual inventory impacts for those same years. Specifically, we project reductions in emissions of non-GHG pollutants from upstream sources, except for SO_2. For tailpipe emissions we project initial increases from most non-GHG pollutants, except SO_2, followed by decreases in all non-GHG pollutants over time. The increases in non-GHG tailpipe emissions are due to increased driving, and the increases in upstream SO_2 are due to increased EGU emissions.

[126] The CAA states in section 302(h) that ''[a]ll language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants.'' 42 U.S.C. 7602(h).

[127] USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018. *https://nca2018.globalchange.gov*.

[128] Roy, J., P. Tschakert, H. Waisman, S. Abdul Halim, P. Antwi-Agyei, P. Dasgupta, B. Hayward, M. Kanninen, D. Liverman, C. Okereke, P.F. Pinho, K. Riahi, and A.G. Suarez Rodriguez, 2018: Sustainable Development, Poverty Eradication and Reducing Inequalities. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press. *https://www.ipcc.ch/sr15/chapter/chapter-5*.

[129] National Academies of Sciences, Engineering, and Medicine. 2019. Climate Change and Ecosystems. Washington, DC: The National Academies Press. *https://doi.org/10.17226/25504*.

[130] NOAA National Centers for Environmental Information, State of the Climate: Global Climate Report for Annual 2020, published online January 2021, retrieved on February 10, 2021, from *https://www.ncdc.noaa.gov/sotc/global/202013*.

[131] *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019* (EPA–430–R–21–005, published April 2021).

TABLE 44—ESTIMATED NON-GHG EMISSION IMPACTS OF THE PROPOSED STANDARDS RELATIVE TO THE NO ACTION SCENARIO

Year	Upstream (U.S. tons)					Tailpipe emissions (U.S. tons)				
	$PM_{2.5}$	NO_X	SO_2	VOC	CO	$PM_{2.5}$	NO_X	SO_2	VOC	CO
2023	−56	−628	−36	−1,211	−334	17	1,037	−24	1,345	12,884
2024	−97	−1,040	282	−2,245	−539	37	2,385	−45	3,255	29,814
2025	−150	−1,570	699	−3,595	−802	50	3,270	−72	4,501	41,380
2026	−236	−2,454	1,183	−5,699	−1,251	58	4,032	−114	5,583	50,655
2027	−342	−3,546	1,730	−8,279	−1,807	57	4,356	−166	6,183	52,764
2028	−457	−4,747	2,167	−11,023	−2,429	40	4,010	−220	5,817	43,400
2029	−575	−5,973	2,611	−13,840	−3,065	24	3,656	−276	5,491	34,336
2030	−690	−7,182	2,963	−16,588	−3,699	5	3,072	−331	4,889	21,673
2031	−806	−8,419	3,094	−19,228	−4,342	−16	2,359	−383	4,105	7,504
2032	−917	−9,601	3,248	−21,779	−4,952	−41	1,506	−433	3,137	−8,754
2033	−1,023	−10,726	3,340	−24,183	−5,533	−70	573	−480	2,048	−26,420
2034	−1,121	−11,756	3,468	−26,425	−6,058	−101	−401	−525	904	−44,195
2035	−1,207	−12,685	3,364	−28,315	−6,542	−128	−1,265	−561	−116	−59,229
2036	−1,286	−13,520	3,349	−30,084	−6,969	−156	−2,094	−596	−1,085	−74,202
2037	−1,355	−14,232	3,506	−31,727	−7,319	−188	−2,951	−629	−2,088	−90,292
2038	−1,416	−14,846	3,646	−33,163	−7,616	−219	−3,746	−657	−3,021	−105,517
2039	−1,466	−15,374	3,601	−34,301	−7,878	−246	−4,394	−679	−3,809	−117,461
2040	−1,508	−15,804	3,594	−35,264	−8,085	−272	−4,963	−699	−4,502	−127,860
2041	−1,544	−16,174	3,571	−36,067	−8,264	−295	−5,463	−714	−5,091	−138,174
2042	−1,569	−16,411	3,581	−36,619	−8,371	−316	−5,901	−726	−5,600	−147,394
2043	−1,588	−16,573	3,706	−37,098	−8,429	−336	−6,304	−735	−6,065	−156,119
2044	−1,602	−16,679	3,831	−37,464	−8,458	−356	−6,662	−743	−6,472	−164,134
2045	−1,610	−16,714	4,022	−37,729	−8,443	−374	−6,983	−749	−6,834	−171,092
2046	−1,615	−16,711	4,249	−37,913	−8,381	−390	−7,269	−753	−7,153	−177,417
2047	−1,622	−16,708	4,571	−38,172	−8,310	−408	−7,590	−759	−7,507	−185,213
2048	−1,624	−16,659	4,821	−38,284	−8,219	−424	−7,855	−762	−7,801	−191,667
2049	−1,627	−16,620	5,110	−38,450	−8,129	−440	−8,138	−766	−8,100	−198,645
2050	−1,632	−16,556	5,686	−38,781	−8,000	−460	−8,501	−774	−8,475	−207,606

TABLE 45—ESTIMATED NON-GHG EMISSION IMPACTS OF THE PROPOSED STANDARDS RELATIVE TO THE NO ACTION SCENARIO

Year	Upstream (U.S. tons)					Tailpipe emissions (U.S. tons)				
	$PM_{2.5}$	NO_X	SO_2	VOC	CO	$PM_{2.5}$ (%)	NO_X (%)	SO_2 (%)	VOC (%)	CO (%)
2023	−40	409	−59	134	12,550	0	0	0	0	0
2024	−60	1,345	237	1,010	29,275	0	0	0	0	0
2025	−101	1,700	627	907	40,578	0	0	0	0	0
2026	−179	1,578	1,068	−116	49,405	0	0	1	0	0
2027	−285	810	1,565	−2,096	50,956	−1	0	1	0	0
2028	−417	−737	1,947	−5,207	40,971	−1	0	1	0	0
2029	−550	−2,316	2,334	−8,349	31,271	−1	0	1	−1	0
2030	−685	−4,109	2,632	−11,699	17,974	−2	−1	1	−1	0
2031	−822	−6,060	2,711	−15,123	3,162	−2	−1	1	−2	0
2032	−959	−8,095	2,815	−18,642	−13,706	−3	−1	1	−2	0
2033	−1,093	−10,153	2,860	−22,136	−31,953	−3	−1	1	−3	0
2034	−1,222	−12,156	2,943	−25,522	−50,254	−3	−2	1	−3	−1
2035	−1,335	−13,949	2,802	−28,431	−65,771	−4	−2	1	−4	−1
2036	−1,442	−15,614	2,753	−31,169	−81,171	−4	−3	1	−4	−1
2037	−1,543	−17,183	2,877	−33,815	−97,611	−4	−3	1	−5	−1
2038	−1,635	−18,592	2,989	−36,184	−113,133	−5	−3	2	−5	−2
2039	−1,712	−19,769	2,921	−38,110	−125,338	−5	−4	1	−6	−2
2040	−1,779	−20,767	2,895	−39,766	−135,945	−5	−4	1	−6	−2
2041	−1,839	−21,637	2,857	−41,158	−146,438	−5	−4	1	−7	−2
2042	−1,885	−22,312	2,856	−42,219	−155,765	−6	−5	1	−7	−3
2043	−1,924	−22,877	2,971	−43,164	−164,548	−6	−5	2	−7	−3
2044	−1,958	−23,341	3,088	−43,935	−172,591	−6	−5	2	−8	−3
2045	−1,984	−23,697	3,273	−44,563	−179,535	−6	−5	2	−8	−3
2046	−2,005	−23,979	3,496	−45,066	−185,798	−6	−5	2	−8	−3
2047	−2,031	−24,298	3,812	−45,678	−193,523	−6	−5	2	−8	−4
2048	−2,047	−24,515	4,060	−46,086	−199,886	−6	−6	2	−9	−4
2049	−2,067	−24,758	4,344	−46,550	−206,774	−7	−6	2	−9	−4
2050	−2,093	−25,057	4,912	−47,256	−215,607	−7	−6	2	−9	−4

B. Health and Environmental Effects Associated With Exposure to Non-GHG Pollutants Impacted by the Proposed Standards

Along with reducing GHG emissions, these proposed standards would also have an impact on non-GHG (criteria and air toxic pollutant) emissions from vehicles and non-GHG emissions that occur during the extraction, transport, distribution and refining of fuel and from power plants. The non-GHG emissions that would be impacted by the proposed standards contribute, directly or via secondary formation, to concentrations of pollutants in the air which affect human and environmental health. These pollutants include particulate matter, ozone, nitrogen oxides, sulfur oxides, carbon monoxide and air toxics. Chapter 7 of the DRIA includes more detailed information about the health and environmental effects associated with exposure to these non-GHG pollutants. This includes pollutant specific health effect information, discussion of exposure to the mixture of traffic-related pollutants in the near road environment, and effects of particulate matter and gases on visibility, effects of ozone on ecosystems, and the effect of deposition of pollutants from the atmosphere to the surface.

C. Air Quality Impacts of Non-GHG Pollutants

Photochemical air quality modeling is necessary to accurately project levels of most criteria and air toxic pollutants, including ozone and PM. Air quality models use mathematical and numerical techniques to simulate the physical and chemical processes that affect air pollutants as they disperse and react in the atmosphere. Based on inputs of meteorological data and source information, these models are designed to characterize primary pollutants that are emitted directly into the atmosphere and secondary pollutants that are formed through complex chemical reactions within the atmosphere. Photochemical air quality models have become widely recognized and routinely utilized tools in regulatory analysis for assessing the impacts of control strategies.

Section V.A of the preamble presents projections of the changes in non-GHG emissions due to the proposed standards. Section VII.E describes the monetized non-GHG health impacts of this proposal which are estimated using a reduced-form benefit-per-ton approach. The atmospheric chemistry related to ambient concentrations of $PM_{2.5}$, ozone and air toxics is very complex, and making predictions based solely on emissions changes is extremely difficult. However, based on the magnitude of the emissions changes predicted to result from the proposed standards, we expect that there will be very small changes in ambient air quality in most places. The changes in tailpipe and upstream non-GHG emissions that were inputs to the air quality modeling analysis for the 2012 rule were larger than the changes in non-GHG emissions projected for this proposal. The air quality modeling for the 2012 rule projected very small impacts across most of the country, with the direction of the small impact (increase or decrease) dependent on location.[132] For the next phase of LD GHG standards to be considered in a separate, future rulemaking for model years 2027 and beyond, we expect that impacts may be considerably larger and are considering how best to project air quality impacts from changes in non-GHG emissions.

VI. Basis for the Proposed GHG Standards Under CAA Section 202(a)

In this section, EPA discusses the basis for our proposed standards under our authority in CAA section 202(a), how we are balancing the factors considered in our assessment that the proposed standards are appropriate, and how this balancing of factors differs from that used in the SAFE rule. This section draws from information presented elsewhere in this preamble, including EPA's statutory authority in Section II, our presentation of compliance costs and technology penetrations in Section III, GHG emissions impacts in Section IV, non-GHG emissions impacts in Section V, and the total costs and benefits of the proposal in Section VII.

EPA has considered the technological feasibility and cost of the proposed standards, available lead time for manufacturers, and other relevant factors under section 202(a) of the CAA. Based on our analyses, discussed in greater detail in other sections of this preamble and in Chapter 2 of the DRIA, we believe that the proposed standards are reasonable and appropriate. Greater reductions in GHG emissions from light duty vehicles over these model years are both feasible and warranted as a step to reduce the impacts of climate change on public health and welfare. In addition, the proposal would achieve reductions in emissions of some criteria pollutants and air toxics that would achieve benefits for public health and welfare. Our analysis for this proposed rule, as well as our earlier analyses of similar standards, supports the conclusion that the proposed model years 2023–2026 standards are technologically feasible and the costs of compliance for manufacturers are reasonable. In addition, we project that there would be a net savings to consumers over the lifetime of vehicles meeting the proposed standards, which we think is a more significant consideration, particularly for lower-income consumers, than the anticipated increase in cost for new vehicles. Importantly, the benefits of the proposed program would significantly exceed the costs.

A. Consideration of Technological Feasibility and Lead Time

1. Technological Readiness of the Auto Industry in Meeting Revised GHG Standards

The technological readiness of the auto industry to meet the proposed revised standards for model years 2023–2026 is best understood in the context of the decade-long light-duty vehicle GHG emission reduction program in which the auto industry has introduced a wide lineup of ever more fuel-efficient, GHG-reducing technologies. Over this time period, the industry has been planning for increasingly stringent GHG emissions requirements. The result has been the widespread and continual introduction of new and improved GHG-reducing technologies across the industry, many of which were in the early stages of development at the beginning of the EPA program in 2012. (See Section III.A of this preamble and Chapter 2 of the DRIA for a discussion of technological progression, status of technology penetration, and our assessment of continuing technology penetration across the fleet.)

The technological achievements already developed and applied to vehicles within the current new vehicle fleet will enable the industry to achieve the proposed standards even without the development of new technologies beyond those already widely available. Rather, in response to the increased stringency of the proposed standards compared to existing standards, automakers would be expected to adopt these technologies at an increasing pace across more of their vehicle fleets. In other words, the technologies needed to meet the proposed standards are already widely available and in use on vehicles—there is no need for development of new technologies for the time frame of these proposed standards. Instead, compliance with the proposed standards will necessitate

[132] Insert 2012 rule RIA ref, EPA–420–R–12–016.

greater implementation and pace of technology penetration through MY2026 using existing GHG reduction technologies. In addition, as we discuss further below, our assessment shows that a large portion of the current fleet (MY2021 vehicles), across a wide range of vehicle segments, already meets their proposed MY2023 footprint-based CO_2 targets.

The availability of current models across a range of vehicle segments meeting the standards is notable because EPA recognizes that auto design and development is a multi-year process, which imposes some constraints on the ability of manufacturers to immediately redesign vehicles with new technologies. However, EPA also understands that this multi-year process means that the industry's product plans developed in response to EPA's 2012 GHG standards rulemaking for MYs 2017–2025 has largely continued, notwithstanding the SAFE rule that was published on April 30, 2020 and that did not relax standards until MY 2021. In their past comments on EPA's light-duty GHG programs, some automakers broadly stated that they generally require about five years to design, develop, and produce a new vehicle model.[133] Under that schedule, it would follow that in most cases the vehicles that automakers will be selling during the first years of the proposed MY 2023–26 program were already designed under the original, more stringent GHG standards finalized in 2012 for those model years. At the time of this proposal, the relaxed GHG standards under the SAFE rule have been in place for little more than one year. During this time, the ability of the industry to commit to revised plans based on the SAFE rule's relaxed standards, especially for MYs 2023 and later, has been highly uncertain in light of pending litigation,[134] and concern was regularly expressed across the auto industry over the uncertain future of the SAFE standards. In fact, due in part to this uncertainty, five automakers voluntarily agreed to more stringent national emission reduction targets under the California Framework Agreements (discussed further below). Therefore, the automakers' own past comments regarding product plan development and the regulatory and litigation history of the GHG standards since 2012 support EPA's expectation that automakers remain largely on track in terms of technological readiness within their product plans to meet the approximate trajectory of increasingly stringent standards initially promulgated in 2012. Although we do not believe that automakers have significantly changed their product plans in response to the SAFE final rule issued in 2020, any that did would have done so relatively recently and there is reason to expect that, for any automakers that changed their plans after the SAFE rule, the automakers' earlier plans could be reinstated or adapted with little change. We also note that some automakers may have adopted product plans to overcomply with the prior, more stringent standards, with the intention of selling credits to other automakers. For these automakers, the proposed standards of this rule, if adopted, would reduce or eliminate the sudden disruption to product plans caused by the SAFE rule. EPA invites comment on the impact of EPA's current and recent rulemakings on automakers' product plans. It is important to note that we have considered the need for manufacturers to transition from the SAFE standards (or the California Framework emission reduction targets) to standards that are closer in stringency to the 2012 standards and we have structured the proposed standards (including the proposed footprint curves as well as the combination of flexibility and credit options) to be less stringent than the 2012 standards for model years 2023, 2024, and 2025.

EPA considers this an important aspect of its analysis that mitigates concerns about lead time for manufacturers to meet the proposed standards beginning with the 2023 model year. We see no reason to expect that the major GHG-reducing technologies that automakers have already developed and introduced, or have already been planning for near-term implementation, will not be available for model year 2023–2026 vehicles. Thus, in contrast to the situation that existed prior to EPA's adoption of the initial light-duty GHG standards in the 2012 rule, automakers now have had the benefit of at least 8 to 9 years of planning and development in preparation for meeting the proposed standards.

Another important factor in considering the feasibility of the proposed standards is the fact that five automakers voluntarily entered into the California Framework Agreements with the California Air Resources Board, first announced in July 2019, to meet more stringent GHG emission reduction targets nationwide than the relaxed standards in the SAFE rule.[135] These voluntary actions by automakers that collectively represent approximately one-third of the U.S. vehicle market speak directly to the feasibility of meeting standards at least as stringent as the emission reduction targets under the California Framework Agreements. As discussed in Section II.A.5, the California Framework Agreements were a key consideration in our development and assessment of the proposed EPA standards.

It is important to note that our conclusion that the proposed program is technologically feasible is based in part on a projection that the standards will be met largely with the kinds of advanced gasoline vehicle technologies already in place in vehicles within today's fleet and does not rely on a significant penetration of electric vehicles into the fleet during the 2023–2026 model years. As discussed above, EPA modeled auto manufacturers' decisions in choosing among available emission reduction technologies to incorporate in their vehicles, taking into account both the projected costs and effectiveness of the technologies. This updated analysis is consistent with EPA's past analyses of standards similar to those proposed in this notice, see Section III.B and Chapter 2 of the DRIA. The analysis demonstrates that a wide variety of emission reducing technologies are already available for manufacturers to incorporate into their gasoline vehicles within the time frame of the proposed standards.

We recognize that although the technology penetration rates that we project in this rulemaking are generally similar to the technology penetration rates that we projected in the SAFE rulemaking, in the SAFE rulemaking EPA concluded that the projected level of advanced technologies was ''too high from a consumer-choice perspective'' and ultimately could lead to automakers changing the vehicle types they offer.[136] EPA currently does not believe this is an accurate assessment or one that deserves weight that could overcome EPA's expert assessment of the appropriate standards under section 202 of the CAA. Rather, EPA's judgment is that the history of the significant developments in automotive offerings over the last ten years supports the conclusion that automakers are capable of deploying a

[133] For example, in its comments on the 2012 rule, Ford stated that manufacturers typically begin to firm up their product plans roughly five years in advance of actual production. (Docket OAR–2009–0472–7082.1, p. 10.)

[134] *Competitive Enterprise Institute* v. *NHTSA*, D.C. Cir. No. 20–1145 (and consolidated cases brought by several states, localities, environmental and public organizations, and others), filed on May 1, 2020 and later dates.

[135] *https://ww2.arb.ca.gov/resources/documents/framework-agreements-clean-cars* (last updated on May 22, 2021).

[136] 85 FR 25116.

wide range of advanced technologies across the entire vehicle fleet, and that consumers remain interested and willing to purchase vehicles with advanced technologies. Reinforcing this updated judgement, the recent announcements of BEV light-duty trucks and the introduction of hybrid minivans and pickups exemplify such a trend, and EPA sees no reason why the standards proposed in this rule would fundamentally alter it.

Our updated analysis projects that about 8 percent of vehicles meeting the MY 2026 proposed standards would be EV/PHEVs (See Section III.B.3). Given manufacturers' public announcements about their ambitious plans to transition fleets to electrified vehicles, we believe it is possible that an even higher percentage of the industry-wide fleet could be electrified during the time period of our proposed model year 2023–2026 standards. Moreover, EPA is committed to encouraging the rapid development and broad acceptance of zero-emission vehicles, and we are proposing incentives to support this transition (see Section II.B.2). Any acceleration in electric vehicle penetration would be beneficial and would further expand the technology choices available to manufacturers to meet the proposed standards.

2. Opportunities Provided Through Credits and Incentives Provisions

In considering feasibility of the proposed standards EPA also considers the impact of available compliance flexibilities on automakers' compliance options. As we discuss above, the advanced technologies that automakers are continuing to incorporate in vehicle models today directly contribute to each company's compliance plan (*i.e.,* these vehicle models have lower GHG emissions). In addition, automakers widely utilize the program's established ABT provisions which provide a variety of flexible paths to plan compliance (See more detail in Section II.A.4). EPA's annual Automotive Trends Report illustrates how different automakers have chosen to make use of the GHG program's various credit features.[137] It is clear that manufacturers are widely utilizing the various credit programs available, and we have every expectation that manufacturers will continue to take advantage of the compliance flexibilities and crediting programs to their fullest extent, thereby providing them with additional powerful tools in finding the lowest cost compliance solutions in light of the proposed revised standards.

The GHG credit program was designed to recognize that automakers typically have a multi-year redesign cycle and not every vehicle will be redesigned every year to add GHG-reducing technology. Moreover, when GHG-reducing technology is added, it will generally not achieve emissions reductions corresponding exactly to a single year-over-year change in stringency of the standards. Instead, in any given model year, some vehicles will be ''credit generators,'' over-performing compared to the footprint-based CO_2 target in that model year, while other vehicles will be ''debit generators'' and under-performing against their footprint-based targets. Together, an automaker's mix of credit-generator and debit-generator vehicles contribute to its sales-weighted fleet average CO_2 performance, compared to its standard, for that year. If a manufacturer's sales-weighted fleet CO_2 performance is better than its fleet average standard at the end of the model year, those credits can be banked for the automaker's future use in certain years (under the credit carry-forward provisions) or sold to other manufacturers (under the credit trading provisions). Likewise, if a manufacturer's sales-weighted fleet CO_2 performance falls short of its fleet average standard at the end of a model year, the automaker can use banked credits or purchase credits to meet the standard. Furthermore, in recognition of the possibility that a manufacturer might comply with a standard for a given model year with credits earned in a future model year (under the allowance for ''credit carryback''), a manufacturer may also choose to carry a deficit forward up to three years before showing compliance with that model year.

EPA has examined manufacturer certification data to assess the extent to which model year 2021 vehicles already being produced and sold today would be credit generators compared to the proposed model year 2023 targets (accounting for projected off-cycle and air conditioning credits). As detailed in Chapter 2.4 of the DRIA, automakers are selling approximately 216 vehicle models (60 percent of them are advanced gasoline technology vehicles) that would be credit generators compared to the proposed model year 2023 targets, and they appear in nearly all light-duty vehicle market segments. This information supports our conclusion about the feasibility of vehicles with existing technologies meeting the proposed MY2023 standards. We also considered the ability of MY2021 vehicles to generate credits based on the MY2021 and MY2022 standards relaxed in the SAFE rule. Of the 1370 distinct MY2021 vehicle models, EPA's analysis (DRIA, Chapter 2.4) indicates that 355 of these models are credit generators for MY2021, with most of those also generating credits for the MY2022 SAFE standards (25 percent of today's new vehicle fleet offerings). This represents an opportunity for manufacturers to build their credit banks for both MY 2021 and MY2022 and carry those credits forward to help meet the MY2023–2026 proposed standards. These data demonstrate the opportunities for manufacturers to sell more of the credit-generator vehicles as another available strategy to generate credits that will help them comply with the proposed model year 2023 and later standards. Our analysis clearly shows this could be done within vehicle segments to maintain consumer choice (we would not expect that overall car/truck fleet mix would shift), as credit-generating vehicles exist across vehicle segments, representing 95 percent of vehicle sales. Under the fleet-average based standards, manufacturers have multiple feasible paths to compliance, including varying sales volumes of credit generating vehicles,[138] adopting GHG-reducing technologies, and implementing other credit and incentive provisions including those proposed in this notice.

EPA further considered the issue of generating credits against the MY2021 and MY2022 SAFE standards in the context of lead time. In discussions during development of this proposed rule, some stakeholders suggested that EPA should limit automakers' ability to generate credits against the relaxed SAFE standards or discount the value of such credits. These stakeholders argue that the nominal 1.5 percent year-over-

[137] ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology issue 1975,'' EPA-420-R-21-003 January 2021.

[138] *E.g.,* When fuel economy standards were not footprint-based, less efficient vehicles were priced higher than more efficient vehicles to encourage sales of the latter. Austin, D., and T. Dinan (2004). ''Clearing the air: The costs and consequences of higher CAFE standards and increased gasoline taxes.'' Journal of Environmental Economics and Management 50: 562–582. Greene, D., P. Patterson, M. Singh, and J. Li (2005). ''Feebates, rebates, and gas-guzzler taxes: A study of incentives for increased fuel economy.'' Energy Policy 33: 757–775 found that automakers were more likely to add technology than use pricing mechanisms to achieve standards. Whitefoot, K., M. Fowlie, and S. Skerlos (2017). ''Compliance by Design: Influence of Acceleration Trade-offs on CO_2 Emissions and Costs of Fuel Economy and Greenhouse Gas Regulations.'' Environmental Science and Technology 51: 10307–10315 find evidence consistent with automakers using trade-offs with acceleration as yet another path to comply with fuel economy standards.

year stringency increase of the SAFE standards barely keeps up with a ''business as usual'' scenario of industry GHG emissions improvements.[139] EPA has considered that argument. EPA also considered the recent performance of the auto industry in meeting the GHG standards; in MY2019 the industry-wide average performance was 7 g/mi above the industry-wide average standard and compliance was achieved by many manufacturers through applying banked credits.[140] In light of the implementation timeframe of the proposed revised standards beginning in model year 2023, we are proposing to continue allowing manufacturers to generate credits against the SAFE standards in model years 2021 and 2022. We are not proposing to shorten the existing 5-year credit carry-forward provision for credits generated in model years 2021 and 2022, so those credits can be carried forward under the existing regulations to facilitate the transition from the SAFE standards to the proposed more stringent standards. However, EPA seeks comment on whether there should be any restrictions placed on credits generated in model years 2021 and 2022, for example, discounting of MY2021 and MY2022 credits, given the relaxed stringency of the SAFE standards in those model years.

In addition, EPA is proposing a targeted set of extended credit and compliance flexibility options for manufacturers, specifically designed to further address any potential concerns of manufacturers about stringency and lead time under the proposed standards (as explained in detail in Section II.B.3 and II.C). These proposals include a limited extension of credit carry-forward, such that credits from model years 2016–2020 would be available to carry forward for one (or two, in the case of 2016 credits) additional model year(s) for compliance in model years 2023–2026; an extension of the off-cycle credit menu cap from 10 grams/mile to 15 grams/mile to provide additional credit to manufacturers who install technologies that reduce GHG emissions that are not captured on EPA's GHG certification tests; and two forms of incentive credits for applying advanced technologies in the manufacturer's vehicle fleet (i.e., an extension of incentive multipliers for EV, PHEV and FCV vehicles, and extra credits for full-size pickup trucks that utilize strong hybrid technology or achieve similar performance-based GHG reductions). Collectively, these proposed flexibilities provide additional strategies manufacturers can use to smooth their path to compliance with the proposed revised standards. In fact, these additional credits and incentives provisions were an important factor in EPA's consideration of the appropriate level of stringency for this proposal, and they provide additional support for our consideration of revised standards even more stringent than if we were not including these provisions in the proposed program.

Just as the fleet average standard approach of the light duty vehicle GHG program allows manufacturers to design a compliance strategy relying on the sale of both credit-generating vehicles and debit generating vehicles in a single year, the credit banking and trading provisions of the program allow manufacturers to design a compliance strategy relying on overcompliance and undercompliance in different years, or even by different manufacturers. Credit trading is a compliance flexibility provision that allows one vehicle manufacturer to purchase credits from another, accommodating the ability of manufacturers to make strategic choices in planning for and reacting to normal fluctuations in an automotive business cycle. When credits are available for less than the marginal cost of compliance, EPA would anticipate that an automaker might choose to adopt a compliance strategy relying on credits.[141] As shown in the most recent EPA Trends Report, more than 10 vehicle firms collectively have participated in 70 credit trading transactions since the inception of the EPA program through Model Year 2019, including many of the largest automotive firms.[142] EPA does not believe that the fact that automakers have adopted a compliance strategy relying on credits (whether banked or purchased) is per se evidence that standards are not appropriate under section 202.

EPA recognizes that several industry stakeholders suggested in comments on the MTE and SAFE rule that underperformance compared to CO_2 targets indicated the standards were overly stringent, EPA previously stated that a declining credit balance indicated future compliance would be more difficult, and EPA was taking into consideration the unwillingness of manufacturers to design a compliance strategy around purchasing credits. However, as explained above, EPA does not believe a declining credit balance is evidence the standards are infeasible or less feasible than anticipated. EPA believes the more accurate view is that manufacturers are able and willing to purchase credits, as well as use banked credits, as part of their compliance strategies and that significant use of credits for compliance is indicative of EPA's flexibilities working as intended, to offer a wide array of compliance strategies which reduce overall costs of compliance.

In summary, there is ample evidence that, in addition to the demonstration of technological feasibility resulting from the ''head start'' that automakers have toward complying with the proposed standards, there are a wide range of credit and flexibility strategies, as well as fleet mix strategies, that manufacturers can marshal to enable them to comply with the proposed standards.

B. Consideration of Vehicle Costs of Compliance

In addition to technological feasibility and lead time, EPA has considered the cost for the auto industry to comply with the proposed revised standards. See section III.B and Chapter 2 of the DRIA for our analysis of compliance costs. As shown in Section III.B.2 and Chapter 4.1.2 of the DRIA, the average per-vehicle cost for a MY2026 vehicle is $1,044 compared to the No Action scenario. Average per-vehicle costs rise from $465 in MY2023 to $771 in MY2025. The $1,044 average per-vehicle cost is consistent with prior EPA analyses (see DRIA Chapter 1.2). EPA has also evaluated costs by manufacturer (see Section III.B.2) and finds the range of costs to be similarly consistent with findings from prior analyses.

The estimated costs to meet the proposed standards are lower than those projected in the 2012 rule, which EPA estimated at about $1,200 (see DRIA Table 1–4). EPA found in the 2012 rule that these (higher) costs were reasonable, even without considering

[139] We note that the 2020 SAFE FRM presented a 0 percent year-over-year alternative for MYs 2021–2026. In that scenario with no stringency change, the modeled fleet improved fuel economy by 0.9 percent per year from 38.3 mpg in 2021 to 40.0 mpg in 2026. (see 2020 SAFE FRIA, Table I–19, Alternative 1)

[140] Trends Report, Figure ES–8.

[141] ''FCA historically pursued compliance with fuel economy and greenhouse gas regulations in the markets where it operated through the most cost effective combination of developing, manufacturing and selling vehicles with better fuel economy and lower GHG emissions, purchasing compliance credits, and, as allowed by the U.S. federal Corporate Average Fuel Economy (''CAFE'') program, paying regulatory penalties. The cost of each of these components of FCA's strategy has increased and is expected to continue to increase in the future. The compliance strategy for the combined company is currently being assessed by Stellantis management.'' Stellantis N.V. (2020). ''Annual Report and Form 20–F for the year ended December 31, 2020.''

[142] EPA 2020 Trends Report, page 110 and Figure 5.15.

the fuel savings, which more than offsets these costs. See 77 FR 62663–62665, 62880, and 62922. This decrease in estimated per-vehicle cost since the 2012 rule is not surprising—technology to achieve environmental improvements has often proved to be less costly than EPA's initial estimates.[143]

As part of these cost estimates, we project significant increases in the use of advanced gasoline technologies (including mild and strong hybrids), comprising more than 92 percent of the fleet. (See Section III.B.3). EPA has considered the feasibility of the standards under several different assumptions about future fuel prices, technology application or credit trading (see DRIA Chapters 4 and 10), which shows very small variations in average per-vehicle cost or technology penetration mix. Our conclusion that there are multiple ways the MY2023–2026 standards can be met given the wide range of technologies at reasonable cost, and predominantly with advanced gasoline engine and vehicle technologies, holds true across all these scenarios.

These cost estimates are in the same range as EPA's earlier analyses of similarly stringent GHG standards including the model year 2023 and later timeframe. (See Chapter 1 of the DRIA). EPA concludes that the per-vehicle costs of the proposed standards are reasonable.

C. Consideration of Impacts on Consumers

Another important consideration for EPA is the impact of the proposed standards on consumers. EPA concludes that the proposed standards would be beneficial for consumers because the lower operating costs from significant fuel savings would offset the upfront vehicle costs. Total fuel savings for consumers through 2050 are estimated at $120 billion to $250 billion (7 percent and 3 percent discount rates, see Section VII.I, Table 40). Thus, the proposal would result in significant savings for consumers, as further described in Section VII.J.

The Administrator also carefully considered the affordability impacts of these proposed standards, especially considering Executive Order 14008 and EPA's increasing focus on environmental justice and equity. EPA examined the impacts of the proposed standards on the affordability of new and used cars and trucks in Section VII.M of this preamble and Chapter 8.3 of the DRIA. Because lower-income households spend more on gasoline than on vehicle purchases, the effects of reduced operating costs may be especially important for these households.

EPA recognizes that in the SAFE rulemaking we placed greater weight on the upfront costs of vehicles, and little weight on total cost of ownership. In part, that rulemaking explained that approach on the ground that ''[n]ew vehicle purchasers are not likely to place as much weight on fuel savings that will be realized by subsequent owners.'' [144] However, in light of changes in policy priorities (including concern about accounting for benefits to lower-income households), EPA now believes in assessing the benefits of these standards it is more appropriate to consider the total fuel savings of the vehicle, over its lifetime, including those fuel savings that may accrue to later owners. Disregarding those benefits, which often accrue to lower income households, who more often purchase used cars, would provide a less accurate picture of total benefits to society. Likewise, EPA has reconsidered the weight placed in the SAFE rulemaking on promoting fleet turnover as a standalone factor and is now considering the influence of turnover in the context of the full range effects of the proposed standards. While recognizing that standards can influence purchasing decisions, EPA currently believes that, for the range of appropriate emissions standards, the emissions reductions from more stringent standards far outweigh any temporary effect from delayed purchases.

D. Consideration of Emissions of GHGs and Other Air Pollutants

An essential factor that EPA considered in determining the appropriate level of the proposed standards is the reductions in emissions that would result from the program. This primarily includes reductions in vehicle GHG emissions, given the increased urgency of the climate crisis. We also considered the effects of the proposed standards on criteria pollutant and air toxics emissions and associated public health and welfare impacts.

The GHG emissions reductions from our proposed standards are projected to exceed 2,200 MMT of CO_2, 2.7 MMT of CH_4 and 71,000 metric tons of N_2O, as the fleet turns over year-by-year to new vehicles that meet the proposed standards, in an analysis through 2050. See Section IV.A, Table 29. The monetized benefit of these GHG reductions is estimated at $22 billion to $280 billion across a range of discount rates and values for the social cost of carbon (see Section VII.I). These GHG reductions are important to continued progress in addressing climate change. In fact, EPA believes that we will need to achieve far deeper GHG reductions from the light-duty sector in future years beyond the compliance timeframe for the proposed standards, which is why we will be initiating a rulemaking in the near future to establish more stringent standards after model year 2026.

The criteria pollutant emissions reductions expected to result from the proposed standards are also a factor considered by the Administrator. The proposed standards would result in emissions reductions of some criteria pollutants and air toxics and associated benefits for public health and welfare. Public health benefits are estimated to total $3.3 billion to $8 billion (7 percent and 3 percent discount rates, see Section VII.H, Table 38). EPA finds that this proposal is important in reducing the public health impacts of air pollution.

E. Consideration of Energy, Safety and Other Factors

EPA also evaluated the impacts of the proposed standards on energy, in terms of fuel consumption and energy security. This proposal is projected to reduce U.S. gasoline consumption by 291 million barrels through 2050 (see Section VII.C). EPA considered the impacts of this projected reduction in fuel consumption on energy security, specifically the avoided costs of macroeconomic disruption (See Section VII.F). We estimate the energy security benefits of the proposal in 2050 at $6.1 billion to $13 billion (7 percent and 3 percent discount rate, see Section VII.H. Table 37). EPA considers this proposal to be beneficial from an energy security perspective.

Section 202(a)(4)(A) of the CAA specifically prohibits the use of an emission control device, system or element of design that will cause or contribute to an unreasonable risk to public health, welfare, or safety. EPA has a long history of considering the safety implications of its emission standards,[145] up to and including the more recent light-duty GHG regulations: The 2010 rule which established the MY2012–2016 light-duty vehicle GHG

[143] *Anderson, John F and Sherwood, ''Comparison of EPA and Other Estimates of Mobile Source Rule Costs to Actual Price Changes,'' SAE paper 2003–1–1980.*

[144] 85 FR 25114.

[145] See, e.g., 45 FR 14496, 14503 (1980) (''EPA would not require a particulate control technology that was known to involve serious safety problems.'').

standards, the 2012 rule which first established MY2017–2025 light-duty vehicle GHG standards, the MTE 2016 Proposed Determination and the 2020 SAFE rule. The relationship between GHG emissions standards and safety is multi-faceted, and can be influenced not only by control technologies, but also by consumer decisions about vehicle ownership and use. EPA has estimated the impacts of this proposal on safety by accounting for changes in new vehicle purchase, changes in vehicle scrappage, fleet turnover, and VMT, and changes in vehicle weight as an emissions control strategy. EPA finds that under this proposal, the estimated risk of fatal and non-fatal injuries per distance traveled will remain virtually unchanged (see Section VII.H). This proposal also projects that as the costs of driving declines due to the improvement in fuel economy, consumers overall will choose to drive more miles (this is the ''VMT rebound'' effect). As a result of this personal decision by consumers to drive more due to the reduce cost of driving, EPA also projects this will result in an increase in accidents, injuries, and fatalities. EPA recognizes that in the SAFE rulemaking EPA placed emphasis on the estimated total number of fatal and non-fatal injuries. However, EPA currently believes it is more appropriate to consider the risk of injuries per mile traveled. EPA requests comment on what role these negative impacts due to consumers' decision to drive additional miles should play in EPA's standard-setting decision-making.

F. Balancing of Factors Under CAA 202(a)

Under section 202(a) EPA has statutory authority providing considerable discretion in setting or revising vehicle emission standards with adequate lead time for the development and application of technology to meet the standards. EPA's proposed standards properly implement this statutory provision, as discussed above. As discussed throughout this preamble, the emission reduction technologies needed to meet the proposed standards are already available at reasonable cost, and a significant fraction of new vehicles today already meets these standards. Moreover, the flexibilities already available under EPA's existing regulations, including fleet average standards and the ABT program—in effect enabling manufacturers to spread the compliance requirement for any particular model year across multiple model years—and the additional flexibilities being proposed in this notice further support EPA's conclusion that the proposed standards provide sufficient time for the development and application of technology, giving appropriate consideration to cost.

EPA recognizes that the cost and technology penetration estimates in this rule are similar to the estimates in the SAFE rulemaking and that the Administrator is balancing the factors considered differently than in the SAFE rule to reach his conclusion about what standards are appropriate to propose. In the SAFE rulemaking, EPA promulgated relaxed GHG standards that were projected to result in increases in GHG and criteria pollutant emissions and adverse public health impacts (e.g., increases in premature mortality and illnesses due to increased air pollution). The SAFE rulemaking was the most significant weakening of mobile source emissions standards in EPA's history. It is particularly notable that the rationale for the revision was not that the standards had turned out to be technologically infeasible or, even that they would impose unexpectedly high costs on society. As we have noted, the estimated costs for more stringent standards in the SAFE rulemaking were not significantly different from the costs estimated in 2012, or for this rulemaking. Rather, in balancing the factors under consideration for the SAFE rulemaking, EPA placed greatest weight on reducing the cost of compliance on the regulated industry and the upfront (but not total) cost to consumers, and placed little weight on reductions in GHGs and other pollutants, contrary to EPA's traditional approach to adopting standards under section 202.

Although EPA continues to believe that the Administrator has significant discretion to weigh various factors under Section 202, the Administrator now notes that the purpose of adopting standards under that provision of the Clean Air Act is to address air pollution that may reasonably be anticipated to endanger public health and welfare and that reducing air pollution has traditionally been the focus of such standards. In this action, the Administrator is proposing more stringent standards based on a balancing of the factors under consideration different from that in the SAFE rulemaking, a balancing that the Administrator believes is more consistent with Congressional intent and the goals of the Clean Air Act.[146] Taking into consideration the importance of reducing GHG emissions and the primary purpose of CAA section 202 to reduce the threat posed to human health and the environment by air pollution, the Administrator finds it is appropriate to place greater weight on reducing emissions and to adopt standards that, when implemented, would result in significant reductions of light duty vehicle emissions both the near term and over the longer term. As discussed above and the DRIA Chapter 1.2.2, EPA has updated the analyses for this rule. The updated analysis shows several key analytical results that are similar to those from the SAFE final rule. EPA concludes that the Administrator's current approach to considering the relevant factors would fully support the proposed standards even if they were based solely on the technical record and conclusions that were used to set standards in the final SAFE rule.

Finally, EPA estimates net benefits of this proposal in 2050 at $93 billion to $150 billion (7 percent and 3 percent discount rates, with 3 percent SC–GHG) (see Section VII.H). In comparison, the SAFE rule estimated net benefits at $16.1 billion to negative $13.1 billion (7 percent and 3 percent discount rates, respectively)—in other words, the SAFE rule estimated net costs to society under a 3 percent discount rate. Our conclusion that the estimated benefits considerably exceed the estimated costs of the proposed program reinforces our view that the proposed standards represent an appropriate weighing of the statutory factors and other relevant considerations.

In summary, after consideration of a number of relevant factors, given the technical feasibility of the proposed standards, the moderate costs per vehicle, the savings to consumers in fuel costs over the lifetime of the vehicle, the very significant reductions in GHG emissions and fuel consumption, and the significantly greater quantified benefits compared to quantified costs, EPA believes that the proposed standards are appropriate under EPA's section 202(a) authority.

VII. What are the estimated cost, economic, and other impacts of the proposal?

This Section VII discusses EPA's assessment of a variety of impacts related to the proposed standards, including impacts on vehicle sales, fuel

[146] See, e.g., CAA sections 101(a)(2) (finding that ''the increasing use of motor vehicles[ ] has resulted in mounting dangers to the public health and welfare''); 101(b)(1) (declaring one purpose of the CAA is ''to protect and enhance the quality of the Nation's air resources, so as to promote the public health and welfare''); 101(c) (''a primary goal of this chapter is to encourage or otherwise promote reasonable Federal . . . actions . . . for pollution prevention'').

consumption, energy security, additional driving, and safety. It presents an overview of EPA's estimates of GHG reduction benefits and non-GHG health impacts. This Section VII presents a summary of aggregate costs, drawing from the per-vehicle cost estimates presented in Section III, and estimated program benefits. Finally, the section discusses EPA's assessment of the potential impacts on consumers and employment impacts. The DRIA presents further details of the analyses presented in this Section VII.

A. Conceptual Framework for Evaluating Consumer Impacts

A significant question in analyzing consumer impacts from vehicle GHG standards has been why there have appeared to be existing technologies that, if adopted, would reduce fuel consumption enough to pay for themselves in short periods, but which were not widely adopted. If the benefits to vehicle buyers outweigh the costs to those buyers of the new technologies, conventional economic principles suggest that automakers would provide them, and people would buy them. Yet engineering analyses have identified a number of technologies whose costs are quickly covered by their fuel savings, such as downsized-turbocharged engines, gasoline direct injection, and improved aerodynamics, that were not widely adopted before the issuance of standards, but which were adopted rapidly afterwards.[147] Why did markets fail, on their own, to adopt these technologies? This question, termed the ''energy paradox'' or ''energy efficiency gap,'' [148] has been discussed in detail in previous rulemakings.[149] As discussed in more detail in DRIA Chapter 8.1.1, EPA has evaluated whether the efficiency gap exists, as well as potential explanations for why the gap might exist.

Whether the efficiency gap exists depends on the assessment of fuel savings relative to technology costs and ''hidden costs,'' i.e., any adverse effects on other vehicle attributes. In the Midterm Evaluation,[150] EPA evaluated both the costs and the effectiveness for reducing fuel consumption (and GHG emissions) of technologies used to meet the emissions standards to date; the agency found that the estimates used in the original rulemakings were generally correct.

EPA also examined the relationship between the presence of fuel-saving technologies and negative evaluations of vehicle operating characteristics, such as performance and noise, in auto reviews and found that the presence of the technologies was more often correlated with positive evaluations than negative ones.[151] Preliminary work with data from recent purchasers of new vehicles found similar results.[152] While these studies cannot prove that the technologies pose no problems to other vehicle attributes, they suggest that it is possible to implement the technologies without imposing hidden costs.

EPA has also evaluated the relationship between performance and fuel economy, in light of research arguing that fuel consumption must come at the expense of other vehicle attributes.[153] Research in progress from Watten et al. (2021) [154] distinguishes between technologies that improve, or do not adversely affect, both performance and fuel economy and technologies that reduce engine displacement, which does trade off improved fuel economy for performance. Following Moskalik et al. (2018),[155] Watten et al. observe that the ''marginal rate of attribute substitution'' between power and fuel economy has changed substantially over time. In particular, it has become relatively more costly to improve efficiency by reducing power, and relatively less costly to add technologies that improve efficiency. These technology improvements do not reduce power and in some cases may enhance it. It supports the concept that automakers take consumer preferences into account in identifying where to add technology.

EPA cannot reject the observation that the energy efficiency gap has existed for light-duty vehicles—that is, it appears that markets on their own have not led to adoption of a number of technologies whose fuel savings quickly outweigh the costs in the absence of standards. As discussed in DRIA Chapter 8.1.1.2, EPA has previously identified a number of hypotheses to explain this apparent market failure.[156] Some relate to consumer behavior, such as putting little emphasis on future fuel savings compared to up-front costs (a form of ''myopic loss aversion''), not having a full understanding of potential cost savings, or not prioritizing fuel consumption in the complex process of selecting a vehicle. Other potential explanations relate to automaker behaviors that grow out of the large fixed costs of investments involved with switching to new technologies, as well as the complex and uncertain processes involved in technological innovation and adoption.

It is challenging to identify which of these hypotheses for the efficiency gap explain its apparent existence. On the consumer side, EPA has explored the evidence on how consumers evaluate fuel economy in their vehicle purchase decisions.[157] As noted, there does not

[147] U.S. Environmental Protection Agency (2021). 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975, Chapter 4. EPA–420–R–21–003, *https://www.epa.gov/automotive-trends/download-automotive-trends-report#Full%20Report,* accessed 4/15/2021.

[148] Jaffe, A.B., and Stavins, R.N. (1994). ''The Energy Paradox and the Diffusion of Conservation Technology.'' Resource and Energy Economics 16(2): 91–122.

[149] 75 FR 25510–25513; 77 FR 62913–62917; U.S. Environmental Protection Agency (2016), Proposed Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation, EPA–420–R–16–020, Appendix B.1.2; 85 FR 24603–24613.

[150] *https://www.epa.gov/regulations-emissions-vehicles-and-engines/midterm-evaluation-light-duty-vehicle-greenhouse-gas.*

[151] Helfand, G., et al. (2016). ''Searching for Hidden Costs: A Technology-Based Approach to the Energy Efficiency Gap in Light-Duty Vehicles.'' Energy Policy 98: 590–606; Huang, H., et al. (2018). ''Re-Searching for Hidden Costs: Evidence from the Adoption of Fuel-Saving Technologies in Light-Duty Vehicles.'' Transportation Research Part D 65: 194–212.

[152] Huang, H., G. Helfand, and K. Bolon (2018a). ''Consumer Satisfaction with New Vehicles Subject to Greenhouse Gas and Fuel Economy Standards.'' Presentation at the Society for Benefit-Cost Analysis annual conference, March. *https://benefitcostanalysis.org/docs/G.4_Huang_Slides.pdf,* accessed 4/7/2021.

[153] Knittel, C.R. (2011). ''Automobiles on Steroids: Product Attribute Trade-Offs and Technological Progress in the Automobile Sector.'' American Economic Review 101(7): pp. 3368–3399; Klier, T. and Linn, J. (2016). ''The Effect of Vehicle Fuel Economy Standards on Technology Adoption.'' Journal of Public Economics 133: 41–63; McKenzie, D. and Heywood, J. B. (2015). ''Quantifying efficiency technology improvements in U.S. cars from 1975–2009.'' Applied Energy 157: 918–928.

[154] Watten, A., S. Anderson, and G. Helfand (2021). ''Attribute Production and Technical Change: Rethinking the Performance and Fuel Economy Trade-off for Light-duty Vehicles.'' Working paper.

[155] Moskalik, A., K. Bolon, K. Newman, and J. Cherry (2018). ''Representing GHG Reduction Technologies in the Future Fleet with Full Vehicle Simulation.'' SAE Technical Paper 2018–01–1273. doi:10.4271/2018–01–1273.

[156] 75 FR 25510–25513; 77 FR 62913–62917; U.S. Environmental Protection Agency (2016), Proposed Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation, EPA–420–R–16–020, Appendix B.1.2; 85 FR 24603–24613.

[157] U.S. Environmental Protection Agency (2010). ''How Consumers Value Fuel Economy: A Literature Review.'' EPA–420–R–10–008, *https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=499454&Lab=OTAQ* (accessed 4/15/2021); U.S. Environmental Protection Agency (2018). ''Consumer Willingness to Pay for Vehicle Attributes: What is the Current State of Knowledge?'' EPA–420–R–18–016, *https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=536423&Lab=OTAQ* (accessed 4/15/2021); Greene, D., A. Hossain, J. Hofmann, G.

Continued

appear to be consensus in that literature on that behavior; the variation in estimates is very large. Even less research has been conducted on producer-side behavior. The reason there continues to be limited adoption of cost-effective fuel-saving technologies before the implementation of more stringent standards remains an open question. Yet, more stringent standards have been adopted without apparent disruption to the vehicle market after they become effective.[158]

B. Vehicle Sales Impacts

As discussed in Section III.A EPA utilized the CCEMS model for this analysis. The FRIA for the SAFE rule (starting p. 871) describes the approach used in the model for estimating vehicle sales impacts. First, it projects future new vehicle sales in the reference case based on projections of macroeconomic variables. Second, it applies an elasticity of −1 (that is, a one percent increase in price produces a one percent decrease in the quantity sold) to the change in net price, where net price is the difference in technology costs less an estimate of the change in fuel costs over 2.5 years. This approach assumes that both automakers and vehicle buyers take into consideration the fuel savings that buyers might expect to accrue over the first 2.5 years of vehicle ownership.

As discussed in Section VII.C, and in more detail in DRIA Chapter 8.1.1.2, there does not yet appear to be consensus around the role of fuel consumption in vehicle purchase decisions, and the assumption that 2.5 years of fuel consumption is the right number for both automakers and vehicle buyers deserves further evaluation. As noted there, Greene et al. (2018) provides a reference value of $1,150 for the value of reducing fuel costs by $0.01/mile over the lifetime of an average vehicle; for comparison, 2.5 years of fuel savings is only about 30 percent of that value, or about $334.[159] This $334 is within the large standard deviation in Greene et al. (2018) for the willingness to pay to reduce fuel costs, but it is far lower than both the mean of $1,880 (160 percent of that value) and the median of $990 (85 percent of that value) per one cent per mile in the paper. On the other hand, the 2015 NAS report (cited in the 2021 NAS report) observed that automakers ''perceive that typical consumers would pay upfront for only one to four years of fuel savings'' (pp. 9–10),[160] a range of values within that identified in Greene et al. (2018) for consumer response, but well below the median or mean. Thus, it appears possible that automakers operate under a different perception of consumer willingness to pay for additional fuel economy than how consumers actually behave. The CCEMS model does not differentiate between automaker perception and consumer perception of the value of additional fuel economy in its sales modeling.

In addition, setting the elasticity of demand at −1 in the SAFE FRIA was based on literature more than 25 years old. EPA is currently working to review more recent estimates of the elasticity of demand for new vehicles. A smaller elasticity would not change the direction of sales effects, but it would reduce the magnitude of the effects.

The CCEMS model also makes use of a dynamic fleet share model (SAFE FRIA p. 877) that estimates, separately, the shares of passenger cars and light trucks based on vehicle characteristics, and then adjusts them so that the market shares sum to one. The model also includes the effects of the standards on vehicle scrappage based on a statistical analysis (FRIA starting p. 926). The model looks for associations between vehicle age, change in new vehicle prices, fuel prices, cost per mile of driving, and macroeconomic measures and the scrappage rate, with different equations for cars, SUVs/vans, and pickups. EPA's project to review new vehicle demand elasticities also includes a review of the literature on the relationship between new and used vehicle markets and scrappage.

For this proposal, EPA is maintaining these assumptions for its modeling. We also examine a sensitivity case using an elasticity of −0.4. We hope to complete our work on both the vehicle demand elasticity and scrappage in time to be able to consider it for use in analyses that will be developed for the final rule.

With the modeling assumptions that both automakers and vehicle buyers consider 2.5 years of future fuel consumption in the purchase decision and that the demand elasticity is −1, vehicle sales would decrease by roughly 2 percent compared to sales in the SAFE rule, as discussed in more detail in DRIA Chapter 8.1.4. In contrast, when modeled using a demand elasticity of −0.4, sales decrease by between 0.5 and 1 percent. If, however, automakers underestimate consumers' valuation of fuel economy, then sales may increase relative to the baseline under the proposed standards.

C. Changes in Fuel Consumption

The proposed standards will reduce not only GHG emissions but also fuel consumption. Reducing fuel consumption is a significant means of reducing GHG emissions from the transportation fleet. Table 46 shows the estimated fuel consumption changes under the proposed standards relative to the No Action scenario and include rebound effects, credit usage and advanced technology multiplier use.

The largest changes in fuel consumption come from gasoline, which follows from our projection that improvements to gasoline vehicles will be the primary way that manufacturers meet the proposed standards. By 2050, our proposal would reduce gasoline consumption by more than 290 million barrels—a nearly 10 percent reduction in U.S. gasoline consumption. Since only about 8 percent of the fleet is projected to be either EV or PHEV by MY2026 to meet the proposed standards, we project smaller changes in the electricity to fuel these vehicles.

Helfand, and R. Beach (2018). ''Consumer Willingness to Pay for Vehicle Attributes: What Do We Know?'' Transportation Research Part A 118: 258–279.

[158] ''The 2020 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975,'' EPA–420–R–21–003 January 2021. See Table 2–1 for total vehicle production by model year.

[159] See Greene et al. (2018), Footnote 157. Greene et al. (2018) cite a ballpark value of reducing driving costs by $0.01/mile as $1150, but does not provide enough detail to replicate their analysis perfectly. The 30% estimate is calculated by assuming, following assumptions in Greene et al. (2018), that a vehicle is driven 15,000 miles per year for 13.5 years, 10% discount rate. Those figures produce a ''present value of miles'' of 108,600; thus, a $0.01/mile change in the cost of driving would be worth $1086. In contrast, saving $0.01/mile for 2.5 years using these assumptions is worth about $318, or 29% of the value over 13.5 years. Multiplying Greene et al.'s 29 percent to $1150 = $334.

[160] National Research Council (2015). Cost, Effectiveness, and Deployment of Fuel Economy Technologies for Light-Duty Vehicles. Washington, DC: The National Academies Press. *https://doi.org/10.17226/21744,* p. 9–10.

TABLE 46—CHANGE IN FUEL CONSUMPTION FROM THE LIGHT-DUTY FLEET

	Gasoline (million barrels)	Percent of 2020 U.S. consumption	Electricity (gigawatt hours)	Percent of 2020 U.S. consumption
2023	−9	−0.3	929	0.0
2026	−43	−1.5	6,798	0.2
2030	−124	−4.2	19,017	0.5
2035	−211	−7.2	30,735	0.8
2040	−263	−8.9	38,228	1.0
2050	−291	−9.9	48,122	1.3

NOTES: One barrel (BBL) contains 42 gallons of gasoline; according to the Energy Information Administration (EIA), US gasoline consumption in 2020 was 123.49 billion gallons (see https://www.eia.gov/tools/faqs/faq.php?id=23&t=10, last accessed July 19, 2021), roughly 16 percent less (due to the coronavirus pandemic) than the highest consumption on record (2018). According to the Department of Energy, there are 0.031 kWh of electricity per gallon gasoline equivalent, the metric reported by the CCEMS model for electricity consumption and used here to convert to kWh. According to statista.com, the US consumed 3,802 terawatt hours of electricity in 2020.

With changes in fuel consumption come associated changes in the amount of time spent refueling vehicles. Consistent with the assumptions used in the SAFE FRM (and presented in Table 47), the costs of time spent refueling are calculated as the total amount of time the driver of a typical vehicle would spend refueling multiplied by the value of their time. If less time is spent refueling vehicles under the proposed standards, then a refueling time savings would be incurred.

TABLE 47—CCEMS INPUTS USED TO ESTIMATE REFUELING TIME COSTS

	Cars	Vans/SUVs	Pickups
Fixed Component of Average Refueling Time in Minutes (by Fuel Type)			
Gasoline	3.5	3.5	3.5
Ethanol − 85	3.5	3.5	3.5
Diesel	3.5	3.5	3.5
Electricity	3.5	3.5	3.5
Hydrogen	0	0	0
Compressed Natural Gas	0	0	0
Average Tank Volume Refueled	65	65	65
Value of Travel Time per Vehicle (2018 $/hour)	20.46	20.79	20.79

D. Greenhouse Gas Emission Reduction Benefits

EPA estimated the climate benefits for this proposed rulemaking using measures of the social cost of three GHGs: Carbon, methane, and nitrous oxide. While the program also accounts for reduction in HFCs through the AC credits program, EPA has not quantified the associated emission reductions. The social cost of each gas (i.e., the social cost of carbon (SC–CO2), methane (SC–CH4), and nitrous oxide (SC–N2O)) is the monetary value of the net harm to society associated with a marginal increase in emissions in a given year, or the benefit of avoiding that increase. Collectively, these values are referenced as the ''social cost of greenhouse gases'' (SC–GHG). In principle, SC–GHG includes the value of all climate change impacts, including (but not limited to) changes in net agricultural productivity, human health effects, property damage from increased flood risk and natural disasters, disruption of energy systems, risk of conflict, environmental migration, and the value of ecosystem services. The SC–GHG therefore, reflects the societal value of reducing emissions of the gas in question by one metric ton.

We estimate the global social benefits of CO2, CH4, and N2O emission reductions expected from this proposed rule using the SC–GHG estimates presented in the February 2021 Technical Support Document (TSD): Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under E.O. 13990 (IWG 2021). These SC–GHG estimates are interim values developed under E.O. 13990 for use in benefit-cost analyses until an improved estimate of the impacts of climate change can be developed based on the best available climate science and economics. As discussed in Section 3.3 of the RIA, these interim SC–GHG estimates have a number of limitations, including that the models used to produce them do not include all of the important physical, ecological, and economic impacts of climate change recognized in the climate-change literature and that several model input assumptions are outdated. As discussed in the February 2021 TSD, the Interagency Working Group on the Social Cost of Greenhouse Gases (IWG) finds that, taken together, the limitations suggest that these SC–GHG estimates likely underestimate the damages from GHG emissions. The IWG is currently working on a comprehensive update of the SC–GHG estimates (to be released by January 2022 under E.O. 13990) taking into consideration recommendations from the National Academies of Sciences, Engineering and Medicine, recent scientific literature, public comments received on the February 2021 TSD and other input from experts and diverse stakeholder groups. We request comment on this approach to estimating social benefits of GHG in this rulemaking in light of the ongoing interagency process. See Section VII.I for a summary of the monetized GHG benefits and Section 3.3 of the RIA for more on the application of SC–GHG estimates.

E. Non-Greenhouse Gas Health Impacts

It is important to quantify the health and environmental impacts associated with the proposed program because a failure to adequately consider ancillary impacts could lead to an incorrect assessment of a program's costs and

benefits. Moreover, the health and other impacts of exposure to criteria air pollutants and airborne toxics tend to occur in the near term, while most effects from reduced climate change are likely to occur over a time frame of several decades or longer. Ideally, human health benefits would be estimated based on changes in ambient $PM_{2.5}$ and ozone as determined by full-scale air quality modeling. However, the projected non-GHG emissions impacts associated with the proposal would be expected to contribute to very small changes in ambient air quality (see Preamble Section V.C for more detail).

In lieu of air quality modeling, we use a reduced-form benefit-per-ton (BPT) approach to inform our assessment of health impacts, which is conceptually consistent with EPA's use of BPT estimates in several previous RIAs.[161] [162] In this approach, the $PM_{2.5}$-related BPT values are the total monetized human health benefits (the sum of the economic value of the reduced risk of premature death and illness) that are expected from reducing one ton of directly-emitted $PM_{2.5}$ or $PM_{2.5}$ precursor such as NO_X or SO_2. We note, however, that the complex, non-linear photochemical processes that govern ozone formation prevent us from developing reduced-form ozone BPT values. This is an important limitation to recognize when using the BPT approach.

For tailpipe emissions, we apply national $PM_{2.5}$-related BPT values that were recently derived for the ''Onroad Light Duty Vehicle'' sector.[163] The onroad light-duty vehicle BPT values were derived using detailed mobile sector source-apportionment air quality modeling, and apply EPA's existing method for using reduced-form tools to estimate $PM_{2.5}$-related benefits.[164] [165] Compared to values that EPA has used in the past,[166] these BPT values provide better resolution by mobile sector and geographic area, two features that make them especially useful for quantifying the benefits of reducing emissions from the onroad light-duty sector.

To monetize the $PM_{2.5}$-related impacts of upstream emissions, we apply BPT values that were developed for the refinery sector.[167] While total upstream emissions also include electricity generating unit sources, petroleum extraction, storage and transport sources, as well as sources upstream from the refinery, the modeling tool used to support this analysis only provides estimates of upstream emissions impacts aggregated across all sources. Furthermore, we assume the majority of upstream emission reductions associated with the proposal would be related to domestic onsite refinery emissions and domestic crude production, because the fleet penetration of electric vehicles attributed to the proposed standards is relatively small (i.e., the change in electric vehicle penetration is projected to change from 4 percent in the No Action case to 8 percent under the proposed standards). We therefore believe for purposes of this proposed rule it is appropriate to apply the refinery values to all upstream emissions. We solicit comment on this approach and any alternative approaches that we should adopt for the final rule.

EPA bases its benefits analyses on peer-reviewed studies of air quality and health effects and peer-reviewed studies of the monetary values of public health and welfare improvements. Very recently, EPA updated its approach to estimating the benefits of changes in $PM_{2.5}$ and ozone.[168] [169] These updates were based on information drawn from the recent 2019 $PM_{2.5}$ and 2020 Ozone Integrated Science Assessments (ISAs), which were reviewed by the Clean Air Science Advisory Committee (CASAC) and the public.[170] [171] Unfortunately, EPA has not had an opportunity to update its BPT estimates to reflect these updates in time for this proposal. Instead, we use $PM_{2.5}$ BPT estimates that are based on the review of the 2009 PM ISA [172] and include a mortality risk estimate derived from the Krewski et al. (2009) [173] analysis of the American Cancer Society (ACS) cohort and nonfatal illnesses consistent with benefits analyses performed for the analysis of the final Tier 3 Vehicle Rule,[174] the final 2012 PM NAAQS Revision,[175] and the final 2017–2025 Light-duty Vehicle GHG Rule.[176] We expect this lag in updating our BPT

[161] U.S. Environmental Protection Agency (U.S. EPA). 2012. Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter. EPA452/R–12–003. Office of Air Quality Planning and Standards, Health and Environmental Impacts Division, Research Triangle Park, NC. December. Available at: *http://www.epa.gov/ttnecas1/regdata/RIAs/finalria.pdf.*

[162] U.S. Environmental Protection Agency (U.S. EPA). 2014. Regulatory Impact Analysis for the Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants. EPA–542/R–14–002. Office of Air Quality Planning and Standards, Research Triangle Park, NC. June. Available at *http://www.epa.gov/ttnecas1/regdata/RIAs/111dproposalRIAfinal0602.pdf.*

[163] Wolfe, P.; Davidson, K.; Fulcher, C.; Fann, N.; Zawacki, M.; Baker, K. R. 2019. Monetized Health Benefits Attributable to Mobile Source Emission Reductions across the United States in 2025. Sci. Total Environ. 650, 2490–2498. https://doi.org/10.1016/J.SCITOTENV.2018.09.273. Also see *https://www.epa.gov/benmap/mobile-sector-source-apportionment-air-quality-and-benefits-ton.*

[164] Zawacki, M.; Baker, K. R.; Phillips, S.; Davidson, K.; Wolfe, P. 2018. Mobile Source Contributions to Ambient Ozone and Particulate Matter in 2025. Atmos. Environ. 188, 129–141.

[165] Fann, N.; Fulcher, C. M.; Baker, K. 2013. The Recent and Future Health Burden of Air Pollution Apportioned across U.S. Sectors. Environ. Sci. Technol. 47 (8), 3580–3589. *https://doi.org/10.1021/es304831q.*

[166] US EPA, 2018. Technical Support Document: Estimating the Benefit per Ton of Reducing $PM_{2.5}$ Precursors from 17 Sectors. 2018. Office of Air Quality Planning and Standards. Research Triangle Park, NC.

[167] U.S. Environmental Protection Agency (U.S. EPA). 2018. Technical Support Document: Estimating the Benefit per Ton of Reducing $PM_{2.5}$ Precursors from 17 Sectors. 2018. Office of Air Quality Planning and Standards. Research Triangle Park, NC.

[168] U.S. Environmental Protection Agency (U.S. EPA). 2021. Regulatory Impact Analysis for the Final Revised Cross-State Air Pollution Rule (CSAPR) Update for the 2008 Ozone NAAQS. EPA–452/R–21–002. March.

[169] U.S. Environmental Protection Agency (U.S. EPA). 2021. Estimating $PM_{2.5}$- and Ozone-Attributable Health Benefits. Technical Support Document (TSD) for the Final Revised Cross-State Air Pollution Rule Update for the 2008 Ozone Season NAAQS. EPA–HQ–OAR–2020–0272. March.

[170] U.S. Environmental Protection Agency (U.S. EPA). 2019. Integrated Science Assessment (ISA) for Particulate Matter (Final Report, 2019). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R–19/188, 2019.

[171] U.S. Environmental Protection Agency (U.S. EPA). 2020. Integrated Science Assessment (ISA) for Ozone and Related Photochemical Oxidants (Final Report). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R–20/012, 2020.

[172] U.S. Environmental Protection Agency (U.S. EPA). 2009. Integrated Science Assessment for Particulate Matter (Final Report). EPA–600–R–08–139F. National Center for Environmental Assessment—RTP Division, Research Triangle Park, NC. December. Available at: *http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=216546.*

[173] Krewski D., M. Jerrett, R.T. Burnett, R. Ma, E. Hughes, Y. Shi, et al. 2009. Extended Follow-Up and Spatial Analysis of the American Cancer Society Study Linking Particulate Air Pollution and Mortality. HEI Research Report, 140, Health Effects Institute, Boston, MA.

[174] U.S. Environmental Protection Agency. (2014). Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards Final Rule: Regulatory Impact Analysis, Assessment and Standards Division, Office of Transportation and Air Quality, EPA–420–R–14–005, March 2014. Available on the internet: *http://www3.epa.gov/otaq/documents/tier3/420r14005.pdf.*

[175] U.S. Environmental Protection Agency. (2012). *Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter,* Health and Environmental Impacts Division, Office of Air Quality Planning and Standards, EPA–452–R–12–005, December 2012. Available on the internet: *http://www3.epa.gov/ttnecas1/regdata/RIAs/finalria.pdf.*

[176] U.S. Environmental Protection Agency (U.S. EPA). (2012). Regulatory Impact Analysis: Final Rulemaking for 2017–2025 Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, Assessment and Standards Division, Office of Transportation and Air Quality, EPA–420–R–12–016, August 2012. Available on the internet at: *http://www3.epa.gov/otaq/climate/documents/420r12016.pdf.*

estimates to have only a minimal impact on total PM benefits, since the underlying mortality risk estimate based on the Krewski study is identical to an updated $PM_{2.5}$ mortality risk estimate derived from an expanded analysis of the same ACS cohort.[177] The Agency is currently working to update its BPT estimates to reflect these recent updates for use in future rulemaking analyses. More information on the BPT approach to valuing PM-related benefits can be found in RIA Chapter 7.2 that accompanies this proposal.

The PM-related BPT estimates used in this analysis are provided in Table 48. We multiply these BPT values by projected national changes in NO_X, SO_2 and directly-emitted $PM_{2.5}$, in tons, to estimate the total $PM_{2.5}$-related monetized human health benefits associated with the proposed program. As the table indicates, these values differ among pollutants and depend on their original source, because emissions from different sources can result in different degrees of population exposure and resulting health impacts. The BPT values for emissions of non-GHG pollutants from both onroad light-duty vehicle use and upstream sources such as fuel refineries will increase over time. These projected increases reflect rising income levels, which increase affected individuals' willingness to pay for reduced exposure to health threats from air pollution. The BPT values also reflect future population growth and increased life expectancy, which expands the size of the population exposed to air pollution in both urban and rural areas, especially among older age groups with the highest mortality risk.[178]

TABLE 48—$PM_{2.5}$-RELATED BENEFIT-PER-TON VALUES

[2018$] [a]

Year	Onroad light duty vehicles [b]			Upstream Sources [c]		
	Direct $PM_{2.5}$	SO_2	NO_X	Direct $PM_{2.5}$	SO_2	NO_X
Estimated Using a 3 Percent Discount Rate						
2020	$600,000	$150,000	$6,400	$380,000	$81,000	$8,100
2025	660,000	170,000	6,900	420,000	90,000	8,800
2030	740,000	190,000	7,600	450,000	98,000	9,600
2035	830,000	210,000	8,400	.....	.....	.....
2040	920,000	230,000	9,000	.....	.....	.....
2045	1,000,000	250,000	9,600	.....	.....	.....
Estimated Using a 7 Percent Discount Rate						
2020	540,000	140,000	5,800	350,000	74,000	7,300
2025	600,000	150,000	6,200	380,000	80,000	7,900
2030	660,000	170,000	6,800	410,000	88,000	8,600
2035	750,000	190,000	7,500	.....	.....	.....
2040	830,000	210,000	8,200	.....	.....	.....
2045	900,000	230,000	8,600	.....	.....	.....

Notes:

[a] The benefit-per-ton estimates presented in this table are based on estimates derived from the American Cancer Society cohort study (Krewski et al., 2009). They also assume either a 3 percent or 7 percent discount rate in the valuation of premature mortality to account for a twenty-year segmented premature mortality cessation lag.

[b] Benefit-per-ton values for onroad light duty vehicles were estimated for the years 2020, 2025, 2030, 2035, 2040, and 2045. We hold values constant for intervening years (e.g., the 2020 values are assumed to apply to years 2021–2024; 2025 values for years 2026–2029; and 2045 values for years 2046 and beyond).

[c] Benefit-per-ton values for upstream sources were estimated only for the years 2020, 2025 and 2030. We hold values constant for intervening years and 2030 values are applied to years 2031 and beyond.

[d] We assume for the purpose of this analysis that total "upstream emissions" are most appropriately monetized using refinery sector benefit per-ton values.

The monetized $PM_{2.5}$ health impacts of the proposed standards are presented in Table 54. Using $PM_{2.5}$-related BPT estimates to monetize the non-GHG impacts of the proposed standards omits ozone-related impacts, unquantified PM-related health impacts, as well as other impacts associated with reductions in exposure to air toxics, ecosystem benefits, and visibility improvement. Section V of this preamble provides a qualitative description of both the health and environmental effects of the non-GHG pollutants impacted by the proposed program.

F. Energy Security Impacts

This proposal is designed to require reductions in the GHG emissions of light-duty vehicles (LDV) and thereby reduce fuel consumption. In turn, this proposed LDV GHG (2023–2026) proposal would help to reduce U.S. petroleum imports. A reduction of U.S. petroleum imports reduces both financial and strategic risks caused by potential sudden disruptions in the supply of imported petroleum to the U.S., thus increasing U.S. energy security.

In order to understand the energy security implications of reducing U.S. oil imports, EPA has worked with Oak Ridge National Laboratory (ORNL), which has developed approaches for evaluating the social costs and energy security implications of oil use. When conducting this analysis, ORNL considers the full cost of importing petroleum into the U.S. The full economic cost (*i.e.,* oil security premiums, as labeled below) is defined to include two components in addition

[177] Turner, MC, Jerrett, M, Pope, A, III, Krewski, D, Gapstur, SM, Diver, WR, Beckerman, BS, Marshall, JD, Su, J, Crouse, DL and Burnett, RT (2016). Long-term ozone exposure and mortality in a large prospective study. Am J Respir Crit Care Med 193(10): 1134–1142.

[178] For more information about income growth adjustment factors and EPA's population projections, please refer to the following: *https://www.epa.gov/sites/production/files/2015-04/documents/benmap-ce_user_manual_march_2015.pdf.*

to the purchase price of petroleum itself. These are: (1) The higher costs/benefits for oil imports resulting from the effect of changes in U.S. demand on the world oil price (*i.e.,* the ''demand'' or ''monopsony'' costs/benefits); and (2) the risk of reductions in U.S. economic output and disruption to the U.S. economy caused by sudden disruptions in the supply of imported oil to the U.S. (*i.e.,* the avoided macroeconomic disruption/adjustment costs).

For this proposed rule, EPA is using oil security premiums estimated using ORNL's methodology, which incorporates oil price projections and energy market and economic trends from the EIA's Annual Energy Outlook (AEO). For this analysis, we are using oil security premiums based on AEO 2018, but for the final rule we intend to update this analysis to AEO 2021. We only consider the avoided macroeconomic disruption/adjustment costs oil security premiums (*i.e.,* labeled macroeconomic oil security premiums below), since the monopsony impacts of this proposed rule are considered transfer payments. See previous EPA GHG vehicle rules for a discussion of the monopsony oil security premiums.[179] In addition, EPA and ORNL have worked together to revise the oil security premiums based upon recent energy security literature (see Chapter 3.2.5 of the DRIA accompanying this proposed rule for how the macroeconomic oil security premiums have been updated based upon a review of recent energy security literature on this topic). We do not consider military cost impacts from this proposed rule due to methodological issues in quantifying these impacts (see Chapter 3.2.3 of the DRIA for a review of the literature on the military costs impacts of U.S. oil import reductions).

To calculate the energy security benefits of this proposed rule, EPA is using the ORNL oil security premium methodology with: (1) Estimated oil savings calculated by EPA and (2) an oil import reduction factor of 91 percent, which shows how much U.S. oil imports are reduced from changes in U.S. oil consumption. Each of these assumptions is discussed in more detail in Chapter 3.2 of the accompanying DRIA. Below EPA presents the macroeconomic oil security premiums used for the proposed standards for selected years from 2023–2050 in Table 49.

TABLE 49—MACROECONOMIC OIL SECURITY PREMIUMS FOR SELECTED YEARS FROM 2023–2050

[2018$/Barrel] *

Year (range)	Macroeconomic oil security premiums (range)
2023	$3.63 ($1.22–$6.13)
2026	$3.78 ($1.17–$6.37)
2030	$3.99 ($1.13–$6.74)
2035	$4.30 ($1.14–$7.35)
2040	$4.66 ($1.26–$7.96)
2050	$5.57 ($1.89–$9.53)

* Top values in each cell are the midpoints, the values in parentheses are the 90 percent confidence intervals.

G. Impacts of Additional Driving

As discussed in Chapter 3.1 of the RIA, the assumed rebound effect might occur when an increase in vehicle fuel efficiency encourages people to drive more as a result of the lower cost per mile of driving. Along with the safety considerations associated with increased vehicle miles traveled (described in Section VII.H of this preamble), additional driving can lead to other costs and benefits that can be monetized.

The increase in travel associated with the rebound effect produces additional benefits to vehicle drivers, which reflect the value of the added (or more desirable) social and economic opportunities that become accessible with additional travel. Consistent with assumptions used in the SAFE FRM, this analysis estimates the economic benefits from increased rebound-effect driving as the owner/operator surplus from the additional accessibility it provides.

The equation for the calculation of the Drive Value:

$$Drive\ Value = (1/2)\ (VMTrebound)\ [(\$/mile)_{NoAction} - (\$/mile)_{Action}]$$

The economic value of the increased owner/operator surplus provided by added driving is one half of the product of the decline in vehicle operating costs per vehicle-mile and the resulting increase in the annual number of miles driven. Because it depends on the extent of improvement in fuel consumption, the value of benefits from increased vehicle use changes by model year and varies among alternative standards.

In contrast to the benefits of additional driving are the costs associated with that driving. If net operating costs of the vehicle decline, then we expect a positive rebound effect. Increased vehicle use associated with a positive rebound effect also contributes to increased traffic congestion and highway noise. Depending on how the additional travel is distributed throughout the day and where it takes place, additional vehicle use can contribute to traffic congestion and delays by increasing traffic volumes on facilities that are already heavily traveled during peak periods. These added delays impose higher costs on other road users in the form of increased travel time and operating expenses. Because drivers do not take these external costs into account in deciding when and where to travel, they must be accounted for separately as a cost of the added driving associated with the rebound effect.

EPA relies on estimates of congestion and noise costs developed by the Federal Highway Administration to estimate the increased external costs caused by added driving due to the rebound effect. EPA employed estimates from this source previously in the analysis accompanying the light-duty 2010 and 2012 vehicle rulemakings and the 2016 Draft TAR and Proposed Determination. We continue to find them appropriate for this analysis after reviewing the procedures used by FHWA to develop them and considering other available estimates of these values.

FHWA's congestion cost estimates focus on freeways because non-freeway effects are less serious due to lower traffic volumes and opportunities to re-route around the congestion. EPA, however, applied the congestion cost to the overall VMT. The results of this analysis potentially overestimate the congestions costs associated with increased vehicle use, and thus lead to a conservative estimate of net benefits.

EPA has used FHWA's ''Middle'' estimates for marginal congestion and noise costs caused by increased travel from vehicles. This approach is consistent with the methodology used in our prior analyses. The values used are shown in Table 50.

These congestion costs differ from those used in the SAFE FRM and, as stated, are consistent with those used in the 2016 Draft TAR and the 2016 Proposed Determination. For this proposal, EPA has chosen not to adopt the approach from the SAFE FRM where scaling factors were used to adjust the underlying FHWA congestion cost estimates. In particular, EPA now finds that scaling the marginal per-mile congestion costs by the change in VMT per lane-mile on U.S. highways from 1997 to 2017 does not account for changes in average speeds and improved road design, and may have the potential to over-estimate costs. We

[179] See Energy Security Impacts. Effect of Oil Use on the Long-Run Oil Price. Section 10. 5.2.1. pp.10–25. 2016. Draft Technical Assessment Report: Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards for Model Years 2022–2025. EPA–420–D–16–900.

are continuing to use the FHWA congestion estimates without scaling, consistent with the SAFE NPRM and prior EPA rulemakings, and adjusting to measure in 2018 dollars. EPA invites comments on the congestion cost values and methodology.

TABLE 50—COSTS ASSOCIATED WITH CONGESTION AND NOISE

[2018 Dollars per vehicle mile]

	Passenger cars	Van/SUVs	Pickups
Congestion	0.0634	0.0634	0.0566
Noise	0.0009	0.0009	0.0009

H. Safety Considerations in Establishing GHG Standards

Consistent with previous light-duty GHG analyses, EPA has assessed the potential of the proposed MY 2023–2026 standards to affect vehicle safety. EPA applied the same historical relationships between mass, size, and fatality risk that were established and documented in the SAFE rulemaking. These relationships are based on the statistical analysis of historical crash data, which included an analysis performed by using the most recently available crash studies based on data for model years 2007 to 2011. EPA used the findings of this analysis to estimate safety impacts of the modeled mass reductions over the lifetimes of new vehicles in response to MY 2023–2026 standards. As in initially promulgating the GHG standards, the MTE Proposed Determination and this proposal, EPA's assessment is that manufacturers can achieve the MY 2023–2026 standards while using modest levels of mass reduction as one technology option among many. On the whole, EPA considers safety impacts in the context of all projected health impacts from the proposal including public health benefits from the projected reductions in air pollution.

The projected change in risk of fatal and non-fatal injuries is influenced by changes in fleet mix (car/truck share), vehicle scrappage rates, distribution of VMT among vehicles in the fleet and vehicle mass. Because the empirical analysis described previously did not produce any mass-safety coefficients with a statistically significant difference from zero, we analyzed safety results over the range of coefficient values. We project that the effect of the proposed standards on annual fatalities per billion miles driven ranges from a decrease of 0.25 percent to an increase of 0.38 percent, with a central estimate of a 0.07 percent increase.[180]

In addition to changes in risk, EPA also considered the projected impact of the proposed standards on the absolute number of fatal and non-fatal injuries. The majority of the fatalities projected would result from the projected increased driving—*i.e.,* people choosing to drive more due to the lower operating costs of more efficient vehicles. Our cost-benefit analysis accounts for both the value of this additional driving and its associated risk, which we assume are considerations in the decision to drive. The risk valuation associated with this increase in driving partially offsets the associated increase in societal costs due to increased fatalities and non-fatal injuries.

This analysis projects that there will be an increase in vehicle miles traveled (VMT) under the proposed standards of 449 billion miles compared to the No Action scenario through 2050 (an increase of about 0.5 percent). EPA estimates that vehicle safety, in terms of risk measured as the total fatalities per the total distance traveled over this period, will remain almost unchanged at 4.642 fatalities per billion miles under the proposal, compared to 4.640 fatalities per billion miles for the no-action scenario. EPA has also estimated, over the same 30 year period, that total fatalities will increase by 2,288, with 1,952 deaths attributed to increased driving and 336 deaths attributed to the increase in fatality risk. In other words, approximately 85 percent of the change in fatalities under these proposed standards is due to projected increases in VMT and mobility (*i.e.,* people driving more). Our analysis also considered the increase in non-fatal injuries. Consistent with the SAFE FRM, EPA assumed that non-fatal injuries scale with fatal injuries.

EPA also estimated the societal costs of these safety impacts using assumptions consistent with the SAFE FRM (see Table 51.) Specifically, we are continuing to use the cost associated with each fatality of $10.4 million. We have also continued to use a scalar of approximately 1.6 applied to fatality costs to estimate non-fatal injury costs. In addition, we have accounted for the driver's inherent valuation of risk when making the decision to drive more due to rebound. This risk valuation partially offsets the fatal and non-fatal injury costs described previously, and, consistent with the SAFE FRM, is calculated as 90 percent of the fatal and non-fatal injury costs due to rebound to reflect the fact that consumers do not fully evaluate the risks associated with this additional driving.

I. Summary of Costs and Benefits

This section presents a summary of costs, benefits, and net benefits of the proposed program. Table 51 shows the estimated annual monetized costs of the proposed program for the indicated calendar years. The table also shows the present-values (PV) of those costs and the annualized costs for the calendar years 2021–2050 using both 3 percent and 7 percent discount rates.[181] The table includes an estimate of foregone consumer sales surplus, which measures the loss in benefits attributed to consumers who would have purchased a new vehicle in the absence of the proposed standards.

[180] These fatality risk values are the average of changes in annual risk through 2050. The range of values is based on the 5% to 95% confidence interval of mass-safety coefficients presented in the SAFE FRM.

[181] For the estimation of the stream of costs and benefits, we assume that after implementation of the proposed MY 2023–2026 standards, the 2026 standards apply to each year thereafter.

TABLE 51—COSTS ASSOCIATED WITH THE PROPOSED PROGRAM

[Billions of 2018 dollars]

Calendar year	Foregone consumer sales surplus [a] ($)	Technology costs ($)	Congestion ($)	Noise ($)	Fatality costs ($)	Non-fatal crash costs ($)	Total costs ($)
2023	0.26	6.7	0.046	0.00073	0.16	0.26	7.4
2026	0.64	15	0.19	0.003	0.61	1	18
2030	0.43	14	0.59	0.0095	0.58	0.96	17
2035	0.28	12	1	0.017	0.2	0.33	14
2040	0.21	11	1.3	0.021	−0.038	−0.062	12
2050	0.16	9.9	1.3	0.021	−0.0093	−0.015	11
PV, 3%	5.7	210	15	0.24	4.5	7.6	240
PV, 7%	3.7	130	7.3	0.12	3.4	5.6	150
Annualized, 3%	0.29	11	0.75	0.012	0.23	0.39	12
Annualized, 7%	0.3	10	0.59	0.0095	0.27	0.45	12

[a] "Foregone Consumer Sales Surplus" refers to the difference between a vehicle's price and the buyer's willingness to pay for the new vehicle; the impact reflects the reduction in new vehicle sales described in Section VII.B. See Section 8 of *CAFE_Model_Documentation_FR_2020.pdf* in the docket for more information.

Table 52 shows the undiscounted annual monetized fuel savings of the proposed program. The table also shows the present- and annualized-values of those fuel savings for the same calendar years using both 3 percent and 7 percent discount rates. The net benefits calculations use the aggregate value of fuel savings (calculated using pre-tax fuel prices) since savings in fuel taxes do not represent a reduction in the value of economic resources utilized in producing and consuming fuel. Note that the fuel savings shown in Table 52 result from reductions in fleet-wide fuel use and include rebound effects, credit usage and advanced technology multiplier use. Thus, fuel savings grow over time as an increasing fraction of the fleet is projected to meet the proposed standards.

TABLE 52—FUEL SAVINGS ASSOCIATED WITH THE PROPOSED PROGRAM

[Billions of 2018 dollars]

Calendar year	Retail fuel savings ($)	Fuel tax savings ($)	Pre-tax fuel savings ($)
2023	0.78	0.2	0.58
2026	3.5	0.95	2.6
2030	12	2.7	8.9
2035	21	4.4	17
2040	28	5.4	23
2050	32	5.6	26
PV, 3%	310	62	250
PV, 7%	150	32	120
Annualized, 3%	16	3.2	13
Annualized, 7%	12	2.5	9.9

Note: Electricity expenditure increases are included.

Table 53 presents estimated annual monetized benefits from non-emission sources for the indicated calendar years. The table also shows the present- and annualized-value of those benefits for the calendar years 2021–2050 using both 3 percent and 7 percent discount rates.

TABLE 53—BENEFITS FROM NON-EMISSION SOURCES

[Billions of 2018 dollars]

Calendar year	Drive value ($)	Refueling time savings ($)	Energy security benefits ($)	Total non-emission benefits ($)
2023	0.065	−0.019	0.03	0.076
2026	0.25	−0.12	0.15	0.28
2030	0.83	−0.15	0.46	1.1
2035	1.6	−0.1	0.83	2.3
2040	2.1	−0.017	1.1	3.2
2050	2.3	0.1	1.5	3.9
PV, 3%	23	−0.94	13	35
PV, 7%	11	−0.72	6.1	17
Annualized, 3%	1.2	−0.048	0.64	1.8

TABLE 53—BENEFITS FROM NON-EMISSION SOURCES—Continued

[Billions of 2018 dollars]

Calendar year	Drive value ($)	Refueling time savings ($)	Energy security benefits ($)	Total non-emission benefits ($)
Annualized, 7%	0.92	−0.058	0.49	1.4

* See Section VII.G, Section VII.C and Section VII.F for more on drive value, refueling time and energy security, respectively.

Table 54 presents estimated annual monetized benefits from non-GHG emission sources for the indicated calendar years. The table also shows the present- and annualized-values of those benefits for the calendar years 2021–2050 using both 3 percent and 7 percent discount rates.

TABLE 54—$PM_{2.5}$-RELATED EMISSION REDUCTION BENEFITS

[Billions of 2018 dollars] [a] [b]

Calendar year	Tailpipe benefits ($)		Upstream benefits ($)		Total $PM_{2.5}$-related benefits ($)	
	3% DR	7% DR	3% DR	7% DR	3% DR	7% DR
2023	−0.013	−0.012	0.029	0.027	0.016	0.015
2026	−0.047	−0.042	0.014	0.015	−0.033	−0.028
2030	0.035	0.032	0.089	0.084	0.12	0.12
2035	0.23	0.21	0.34	0.31	0.57	0.52
2040	0.46	0.41	0.48	0.44	0.94	0.85
2050	0.74	0.67	0.34	0.31	1.1	0.98
PV	4.3	1.6	4.5	2	8.8	3.6
Annualized	0.22	0.13	0.23	0.16	0.45	0.29

Notes:

[a] Note that the non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

[b] Calendar year non-GHG benefits presented in this table assume either a 3 percent or 7 percent discount rate in the valuation of PM-related premature mortality to account for a twenty-year segmented cessation lag. Note that annual benefits estimated using a 3 percent discount rate were used to calculate the present and annualized values using a 3 percent discount rate and the annual benefits estimated using a 7 percent discount rate were used to calculate the present and annualized values using a 7 percent discount rate.

Table 55 shows the benefits of reduced GHG emissions, and consequently the annual quantified benefits (*i.e.,* total GHG benefits), for each of the four interim social cost of GHG (SC–GHG) values estimated by the interagency working group. As discussed in the RIA Chapter 3.3, there are some limitations to the SC–GHG analysis, including the incomplete way in which the integrated assessment models capture catastrophic and non-catastrophic impacts, their incomplete treatment of adaptation and technological change, uncertainty in the extrapolation of damages to high temperatures, and assumptions regarding risk aversion.

TABLE 55—CLIMATE BENEFITS FROM REDUCTIONS IN GREENHOUSE GAS EMISSIONS

[Billions of 2018 dollars]

Calendar year	Discount rate and statistic			
	5% Average ($)	3% Average ($)	2.5% Average ($)	3% 95th percentile ($)
2023	0.063	0.21	0.31	0.63
2026	0.31	1	1.5	3
2030	1	3.2	4.6	9.5
2035	2	6	8.5	18
2040	2.8	8.1	11	25
2050	3.9	10	14	31
PV	22	91	140	280
Annualized	1.4	4.7	6.7	14

Notes:

The present value of reduced GHG emissions is calculated differently than other benefits. The same discount rate used to discount the value of damages from future emissions (SC–GHGs at 5, 3, 2.5 percent) is used to calculate the present value of SC–GHGs for internal consistency. Annual benefits shown are undiscounted values.

Table 56 presents estimated annual net benefits for the indicated calendar years. The table also shows the present and annualized value of those net benefits for the calendar years 2021–2050 using both 3 percent and 7 percent discount rates. The table includes the benefits of reduced GHG emissions (and consequently the annual net benefits) for each of the four SC–GHG values considered by EPA. We estimate that the total benefits of the proposed program far exceed the costs and would result in a net present value of benefits that ranges between $17–330 billion, depending on which SC–GHG and discount rate is assumed.

TABLE 56—NET BENEFITS (EMISSION BENEFITS + NON-EMISSION BENEFITS + FUEL SAVINGS − COSTS) ASSOCIATED WITH THE PROPOSED PROGRAM

[Billions of 2018 dollars] [a] [b]

Calendar year	Net benefits, with climate benefits based on 5% discount rate ($)	Net benefits, with climate benefits based on 3% discount rate ($)	Net benefits, with climate benefits based on 2.5% discount rate ($)	Net benefits, with climate benefits based on 3% discount rate, 95th percentile SC–GHG ($)
2023	−6.6	−6.5	−6.4	−6.1
2026	−14	−14	−13	−12
2030	−5.8	−3.7	−2.3	2.7
2035	7.6	12	14	24
2040	17	22	26	39
2050	23	30	34	51
PV, 3%	73	140	190	330
PV, 7%	17	86	140	270
Annualized, 3%	4.1	7.3	9.4	17
Annualized, 7%	1	4.2	6.3	14

Notes:

[a] The present value of reduced GHG emissions is calculated differently than other benefits. The same discount rate used to discount the value of damages from future emissions (SC–GHG at 5, 3, 2.5 percent) is used to calculate present value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at either 3% or 7%. Annual costs and benefits shown are undiscounted values.

[b] Note that the non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

EPA also conducted a separate analysis of the total benefits over the model year lifetimes of the 2023 through 2026 model year vehicles. In contrast to the calendar year analysis presented in Table 51 through Table 56 the model year lifetime analysis below shows the impacts of the proposed program on vehicles produced during each of the model years 2023 through 2026 over the course of their expected lifetimes. The net societal benefits over the full lifetimes of vehicles produced during each of the four model years are shown in Table 57 and Table 58 at both 3 percent and 7 percent discount rates, respectively. Similar to the calendar year analysis, the net benefits would exceed the costs of the program.

TABLE 57—MONETIZED VEHICLE PROGRAM COSTS, FUEL SAVINGS, BENEFITS, AND NET BENEFITS ASSOCIATED WITH THE LIFETIMES OF 2023–2026 MODEL YEAR LIGHT-DUTY VEHICLES

[Billions, 2018$; 3% discount rate] [a] [b] [c]

MY	Costs ($)	Fuel savings ($)	Benefits ($)	Net benefits ($)
Present-Values				
2023	4.8	3.6	0.89 to 4.5	−0.29 to 3.3
2024	5.9	7	1.8 to 8.8	2.8 to 9.8
2025	6.7	8.6	2 to 11	3.9 to 13
2026	8.1	13	3.6 to 17	8.8 to 22
Sum	26	33	8.2 to 41	15 to 48
Annualized-Values				
2023	0.21	0.16	0.044 to 0.19	−0.0072 to 0.14
2024	0.26	0.3	0.086 to 0.38	0.13 to 0.43
2025	0.29	0.37	0.1 to 0.46	0.18 to 0.55
2026	0.35	0.58	0.17 to 0.73	0.4 to 0.96
Sum	1.1	1.4	0.4 to 1.8	0.71 to 2.1

Notes:

[a] Model year values are discounted to 2021; the ''Sum'' represents those discounted values summed across model years.
[b] The range of benefits and net benefits reflects the low to high range of SC–GHG values. The same discount rate used to discount the value of damages from future GHG emissions is used to calculate net present value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at 3 percent in this table.
[c] Note that the non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

TABLE 58—MONETIZED COSTS, FUEL SAVINGS, BENEFITS, AND NET BENEFITS ASSOCIATED WITH THE LIFETIMES OF 2023–2026 MODEL YEAR LIGHT-DUTY VEHICLES

[Billions, 2018$; 7% discount rate] [a b c]

MY	Costs ($)	Fuel savings ($)	Benefits ($)	Net benefits ($)
Present-Values				
2023	4.4	2.6	0.72 to 4.3	−1.1 to 2.5
2024	5.5	4.7	1.4 to 8.4	0.54 to 7.6
2025	6.1	5.5	1.6 to 10	1 to 9.7
2026	7.3	8.2	2.6 to 16	3.6 to 17
Sum	23	21	6.3 to 39	4 to 37
Annualized-Values				
2023	0.33	0.19	0.048 to 0.2	−0.089 to 0.061
2024	0.41	0.35	0.092 to 0.39	0.029 to 0.32
2025	0.45	0.41	0.1 to 0.47	0.064 to 0.43
2026	0.55	0.62	0.18 to 0.74	0.25 to 0.81
Sum	1.7	1.6	0.42 to 1.8	0.25 to 1.6

Notes:
[a] Model year values are discounted to 2021; the ''Sum'' represents those discounted values summed across model years.
[b] The range of benefits and net benefits reflects the low to high range of SC–GHG values. The same discount rate used to discount the value of damages from future GHG emissions is used to calculate net present value of SC–GHGs for internal consistency, while all other costs and benefits are discounted at 7 percent in this table.
[c] Note that the non-GHG impacts associated with the standards presented here do not include the full complement of health and environmental effects that, if quantified and monetized, would increase the total monetized benefits. Instead, the non-GHG benefits are based on benefit-per-ton values that reflect only human health impacts associated with reductions in $PM_{2.5}$ exposure.

J. Impacts on Consumers of Vehicle Costs and Fuel Savings

Although the primary purpose of this regulatory action is to reduce GHG emissions, the impact of the proposed EPA standards on consumers is an important consideration for EPA. This chapter discusses the impact of the proposed standards on consumer net costs for purchasing and fueling vehicles. For further discussion of impacts on vehicle sales, see Section VII.B; for impacts on affordability, see Section VII.M.

EPA estimates that the average cost of a new MY 2026 vehicle will increase by $1,044 due to the proposed standards, while we estimate that the average per-mile fuel cost in the first year will decrease by 0.59 cents.[182] Over time, reductions in fuel consumption will offset the increase in upfront costs. For instance, EPA estimates that, over the lifetime of a MY 2026 vehicle,[183] the reduction in fuel costs will exceed the increase in vehicle costs by $883, using a 3 percent discount rate.[184]

Another way to look at the effects on vehicle buyers is to examine how the costs are distributed among new and used vehicle owners. Because depreciation occurs over the lifetime of the vehicle, the net purchase cost to an owner will depend on the vehicle age when it was bought, and, if sold, the length of time that the vehicle was owned. A study from Argonne National Laboratory provides estimates for the depreciation of light-duty vehicles by age, as summarized in Table 59.[185] If the additional cost of fuel-saving technology depreciates at the same rates, then a person who buys a new vehicle and sells it after 5 years would incur 60 percent of the upfront costs (100 percent of the original value, less 40 percent paid back). Analogously, the person who buys the vehicle at age 5 would incur 20 percent of those costs (40 percent, less 20 percent paid back), and the purchaser of the 10-year-old vehicle would face a net 10 percent of the cost of the technology after it is sold five

[182] See U.S. Environmental Protection Agency, ''Fuel Savings Offset to Vehicle Costs_20210610.xlsx,'' in the docket for this and the other calculations in this section. Fuel prices are based on AEO2021 and change over time; for the Reference Case, the average retail fuel price for years 2026–2036 ranged from $2.53 to $2.98/gallon (2020$) for gasoline and $0.118 to $0.119/kWh of electricity (2020$). U.S. Energy Information Administration (EIA), U.S. Department of Energy (DOE), Annual Energy Outlook, 2021. For the analysis involving 5-year ownership periods, we use the fuel costs associated with the initial year of purchase for each owner, *i.e.,* 2026, 2031, 2036. The analysis includes the program flexibilities of credit banking, fleet averaging, advanced technology multipliers, and air conditioning and off-cycle credits.

[183] The CCEMS models vehicles over a 40 year lifetime; however, it includes scrappage rates such that fewer and fewer vehicles of any vintage remain on the road year after year, and those vehicles that remain are driven fewer and fewer miles year after year.

[184] The EPA Guidelines for Preparing Economic Analysis, Chapter 6.4, suggests that a 3 percent discount rate is appropriate for calculations involving consumption, instead of the opportunity cost of capital. Here, the discount rate is applied, beginning in 2026 when the vehicle is purchased new, to the stream of fuel costs over the vehicle lifetime. U.S. Environmental Protection Agency (2010). ''Guidelines for Preparing Economic Analysis,'' Chapter 6. *https://www.epa.gov/sites/production/files/2017-09/documents/ee-0568-06.pdf,* accessed 6/14/2021.

[185] Argonne National Laboratory (2021). ''Comprehensive Total Cost of Ownership Quantification for Vehicles with Different Size Classes and Powertrains.'' ANL/ESD–21/4, Figure ES–2. *https://publications.anl.gov/anlpubs/2021/05/167399.pdf,* accessed 6/8/2021.

years later at vehicle age 15. A person purchasing a new vehicle, driving the average fleetwide VMT for the given age and facing the fuel prices used in this analysis, would face an estimated net cost of $204, shown in Table 60, which reflects fuel savings that offset 70 percent of the depreciation cost. The buyer of that 5-year-old used vehicle would see an estimated reduction in net cost—that is, a net saving—of $230, while the buyer of that same 10-year-old used vehicle would see an estimated reduction of net cost of $314. In general, the purchasers of older vehicles will see a greater portion of their depreciation costs offset by fuel savings.

TABLE 59—DEPRECIATION ESTIMATES FOR LIGHT DUTY VEHICLES

Vehicle age	1	2	3	4	5	10	15
Fraction of original value retained	0.70	0.61	0.53	0.475	0.40	0.20	0.10

Estimated by Argonne National Laboratory using Edmunds data for MY2013–2019 vehicles (see figure ES–2).[185]

TABLE 60—IMPACT OF PROPOSED STANDARDS ON DEPRECIATION AND FUEL COSTS FOR MY 2026 VEHICLE OVER 5 YEARS OF OWNERSHIP

	Vehicle depreciation plus fuel costs ($)	Portion of depreciation costs offset by fuel savings (%)
Vehicle Purchased New	204	70
Vehicle Purchased at Age 5	(230)	197
Vehicle Purchased at Age 10	(314)	365

Calculated using analysis VMT assumptions for proposed standards, using a 3% discount rate from year of purchase.

Because the use of vehicles varies widely across vehicle owners, another way to estimate the effects of the standards is to examine the ''break even'' number of miles—that is, the number of miles driven that would result in fuel savings matching the increase in up-front costs. For example, if operating costs of a MY 2026 vehicle decrease by 0.59 cents per mile due to reduced fuel consumption, the upfront costs (when purchased new) would be recovered after 177,000 miles of driving, excluding discounting.[186] As this measure makes clear, the financial effect on a new vehicle owner depends on the amount that the vehicle is driven. Mobility service providers, such as taxis or ride-sharing services, are likely to accumulate miles more quickly than most people who use their vehicles for personal use. As discussed in Section VII.M, the lower per-mile cost for these vehicles may reduce the importance of up-front costs in the charge for mobility as a service, and thus further enable use of that service.

Table 61 shows, for purchasers of different-age MY 2026 vehicles, how the degree to which fuel savings offset depreciation costs will depend on vehicle use levels.[187] Cost recovery is again higher for older vehicles, and faster for vehicles that accumulate VMT more quickly. For example, a consumer who purchases a 5-year old used MY2026 vehicle would recover their vehicle costs through fuel savings after only 31,000 miles of driving.

TABLE 61—PROPORTION OF DEPRECIATION COSTS OFFSET BY FUEL SAVINGS, FOR NEW AND USED VEHICLE PURCHASERS, FOR A MY2026 VEHICLE

		When vehicle purchased new (%)	When vehicle purchased at 5 years old (%)	When vehicle purchased at 10 years old (%)
Portion of vehicle depreciation cost offset by fuel savings (own vehicle for 5 years).	At 10,000 miles	9	32	69
	At 50,000 miles	47	161	347
	At 100,000 miles	94	322	693
Miles where fuel savings fully offset the vehicle owner's depreciation cost.	Owned vehicle for 5 years	106,000	31,000	14,000
	Owned vehicle for full remaining lifetime.	177,000	62,000	28,000

Thus, the financial effects on a vehicle buyer depend on how much that person drives, as well as whether the vehicle is bought new or used. Importantly, all people receive the

[186] This estimate is calculated as the increase in cost, $1044, divided by the reduced per-mile cost, $0.0059, to get miles until cost is recovered.

[187] The up-front costs for each purchaser are based on the cost to the owner based on the depreciated price for the vehicle's age, with recovery of some further depreciated cost after 5 years of ownership. Cost recovery per mile is $0.0059, and is multiplied by the number of miles in the second column. The remaining columns are cost recovery divided by the relevant cost. Discounting is not used to abstract from the VMT occurring during a specified timeframe.

benefits of reduced GHG emissions, the primary focus of this rule.

K. Employment Impacts

If the U.S. economy is at full employment, even a large-scale environmental regulation is unlikely to have a noticeable impact on aggregate net employment.[188] Instead, labor would primarily be reallocated from one productive use to another, and net national employment effects from environmental regulation would be small and transitory (*e.g.,* as workers move from one job to another).[189] Affected sectors may nevertheless experience transitory effects as workers change jobs. Some workers may retrain or relocate in anticipation of new requirements or require time to search for new jobs, while shortages in some sectors or regions could bid up wages to attract workers. These adjustment costs can lead to local labor disruptions. Even if the net change in the national workforce is small, localized reductions in employment may adversely impact individuals and communities just as localized increases may have positive impacts.

If the economy is operating at less than full employment, economic theory does not clearly indicate the direction or magnitude of the net impact of environmental regulation on employment; it could cause either a short-run net increase or short-run net decrease.[190] At the level of individual companies, employers affected by environmental regulation may increase their demand for some types of labor, decrease demand for other types of labor, or for still other types, not change it at all. The uncertain direction of labor impacts is due to the different channels by which regulations affect labor demand.

Morgenstern et al. (2002) [191] decompose the labor consequences in a regulated industry facing increased abatement costs into three separate components. First, there is a demand effect caused by higher production costs raising market prices. Higher prices reduce consumption (and production), reducing demand for labor within the regulated industry. Second, there is a cost effect where, as production costs increase, plants use more of all inputs, including labor, to produce the same level of output. Third, there is a factor-shift effect where post-regulation production technologies may have different labor intensities. Other researchers use different frameworks along a similar vein.[192]

DRIA Chapter 8.2 discusses the calculation of employment impacts in the model used for this analysis. The estimates include effects on three sectors: Automotive dealers, final assembly labor and parts production, and fuel economy technology labor. The first two of these are examples of Morgenstern et al.'s (2002) demand-effect employment, while the third reflects cost-effect employment. For automotive dealers, the model estimates the hours involved in each new vehicle sale. To estimate the labor involved in final assembly, the model used average labor hours per vehicle at a sample of U.S. assembly plants, adjusted by the ratio of vehicle assembly manufacturing employment to employment for total vehicle and equipment manufacturing for new vehicles. Finally, for fuel economy technology labor, DOT calculated the average revenue per job-year for automakers.

EPA's assessment of employment impacts, in DRIA Chapter 8.2.3, using the sales assumptions of both automakers and consumers using 2.5 years of fuel consumption in vehicle decisions and a demand elasticity of −1, shows initial very small decreases in employment of 0.1 percent, followed by small positive gains (less than 1 percent) in employment due to the labor involved in producing the technologies needed to meet the proposed standards. If, instead, we use the sensitivity analysis with a demand elasticity of −0.4, employment is higher for both the no-action alternative and the proposed standards. Between the no-action alternative and the proposal, with an elasticity of −0.4, the employment impacts are positive, rising to about a 2 percent increase. If automakers underestimate consumers' valuation of fuel economy, as noted in Section VII.B, then demand-effect employment is likely to be higher, and employment impacts are likely to be more positive.

Note that these are employment impacts in the directly regulated sector, plus the impacts for automotive dealers. These do not include economy-wide labor impacts. As discussed earlier, economy-wide impacts on employment are generally driven by broad macroeconomic effects. It also does not reflect employment effects due to reduced spending on fuel consumption. Those changes may lead to some reductions in employment in gas stations, and some increases in other sectors to which people reallocate those expenditures.

Electrification of the vehicle fleet is likely to affect both the number and the nature of employment in the auto and parts sectors and related sectors, such as providers of charging infrastructure. Because this proposal projects relatively minor increases in penetration of plug-in electric vehicles, from 4.6 percent in MY 2023 to 8.4 percent in MY 2026 (see Table 42), we do not predict major changes in the composition of employment in these sectors for MYs 2023–2026. EPA will continue to assess changes in employment as electrification of the auto industry proceeds.

L. Environmental Justice

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. It directs federal agencies, to the greatest extent practicable and permitted by law, to make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States. EPA defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.[193]

[188] Full employment is a conceptual target for the economy where everyone who wants to work and is available to do so at prevailing wages is actively employed. The unemployment rate at full employment is not zero.

[189] Arrow et al. (1996). ''Benefit-Cost Analysis in Environmental, Health, and Safety Regulation: A Statement of Principles.'' American Enterprise Institute, The Annapolis Center, and Resources for the Future. See discussion on bottom of p. 6. In practice, distributional impacts on individual workers can be important, as discussed later in this section.

[190] Schmalensee, Richard, and Stavins, Robert N. ''A Guide to Economic and Policy Analysis of EPA's Transport Rule.'' White paper commissioned by Excelon Corporation, March 2011.

[191] Morgenstern, R.D.; Pizer, W.A.; and Shih, J.-S. (2002). ''Jobs Versus the Environment: An Industry-Level Perspective.'' Journal of Environmental Economics and Management 43: 412–436. 2002.

[192] Berman, E. and Bui, L. T. M. (2001). ''Environmental Regulation and Labor Demand: Evidence from the South Coast Air Basin.'' Journal of Public Economics 79(2): 265–295; Deschênes, O. (2018). ''Balancing the Benefits of Environmental Regulations for Everyone and the Costs to Workers and Firms.'' IZA World of Labor 22v2. *https://wol.iza.org/uploads/articles/458/pdfs/environmental-regulations-and-labor-markets.pdf,* accessed 4/19/2021.

[193] Fair treatment means that ''no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental and commercial operations or programs and policies.'' Meaningful involvement occurs when ''(1) potentially affected populations have an

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Executive Order 14008 (86 FR 7619, February 1, 2021) also calls on Agencies to make achieving environmental justice part of their missions ''by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts.'' It also declares a policy ''to secure environmental justice and spur economic opportunity for disadvantaged communities that have been historically marginalized and overburdened by pollution and under-investment in housing, transportation, water and wastewater infrastructure and health care.'' Under Executive Order 13563 (76 FR 3821), federal agencies may consider equity, human dignity, fairness, and distributional considerations, where appropriate and permitted by law.

EPA's 2016 ''Technical Guidance for Assessing Environmental Justice in Regulatory Analysis'' provides recommendations on conducting the highest quality analysis feasible, recognizing that data limitations, time and resource constraints, and analytic challenges will vary by media and regulatory context.[194]

When assessing the potential for disproportionately high and adverse health or environmental impacts of regulatory actions on minority populations, low-income populations, tribes, and/or indigenous peoples, EPA strives to answer three broad questions: (1) Is there evidence of potential EJ concerns in the baseline (the state of the world absent the regulatory action)? Assessing the baseline will allow EPA to determine whether pre-existing disparities are associated with the pollutant(s) under consideration (*e.g.,* if the effects of the pollutant(s) are more concentrated in some population groups). (2) Is there evidence of potential EJ concerns for the regulatory option(s) under consideration? Specifically, how are the pollutant(s) and its effects distributed for the regulatory options under consideration? And, (3) Do the regulatory option(s) under consideration exacerbate or mitigate EJ concerns relative to the baseline? It is not always possible to quantitatively assess these questions.

EPA's 2016 Technical Guidance does not prescribe or recommend a specific approach or methodology for conducting an environmental justice analysis, though a key consideration is consistency with the assumptions underlying other parts of the regulatory analysis when evaluating the baseline and regulatory options. Where applicable and practicable, the Agency endeavors to conduct such an analysis. Going forward, EPA is committed to conducting environmental justice analysis for rulemakings based on a framework similar to what is outlined in EPA's Technical Guidance, in addition to investigating ways to further weave environmental justice into the fabric of the rulemaking process. EPA greatly values input from EJ stakeholders and communities and looks forward to engagement as we consider the impacts of light-duty vehicle emissions.

1. GHG Impacts

In 2009, under the *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act* (''Endangerment Finding''), the Administrator considered how climate change threatens the health and welfare of the U.S. population. As part of that consideration, she also considered risks to minority and low-income individuals and communities, finding that certain parts of the U.S. population may be especially vulnerable based on their characteristics or circumstances. These groups include economically and socially disadvantaged communities; individuals at vulnerable lifestages, such as the elderly, the very young, and pregnant or nursing women; those already in poor health or with comorbidities; the disabled; those experiencing homelessness, mental illness, or substance abuse; and/or Indigenous or minority populations dependent on one or limited resources for subsistence due to factors including but not limited to geography, access, and mobility.

Scientific assessment reports produced over the past decade by the U.S. Global Change Research Program (USGCRP),[195] [196] the Intergovernmental Panel on Climate Change (IPCC),[197] [198] [199] [200] and the National Academies of Science, Engineering, and Medicine [201] [202] add more evidence that

appropriate opportunity to participate in decisions about a proposed activity [*e.g.,* rulemaking] that will affect their environment and/or health; (2) the public's contribution can influence [the EPA's rulemaking] decision; (3) the concerns of all participants involved will be considered in the decision-making process; and (4) [the EPA will] seek out and facilitate the involvement of those potentially affected'' A potential EJ concern is defined as ''the actual or potential lack of fair treatment or meaningful involvement of minority populations, low-income populations, tribes, and indigenous peoples in the development, implementation and enforcement of environmental laws, regulations and policies.'' See ''Guidance on Considering Environmental Justice During the Development of an Action.'' Environmental Protection Agency, *www.epa.gov/environmentaljustice/guidanceconsidering-environmental-justice-duringdevelopment-action.* See also *https://www.epa.gov/environmentaljustice.*

[194] ''Technical Guidance for Assessing Environmental Justice in Regulatory Analysis.'' Epa.gov, Environmental Protection Agency, *https://www.epa.gov/sites/production/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf.*

[195] USGCRP, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018.

[196] USGCRP, 2016: The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Crimmins, A., J. Balbus, J.L. Gamble, C.B. Beard, J.E. Bell, D. Dodgen, R.J. Eisen, N. Fann, M.D. Hawkins, S.C. Herring, L. Jantarasami, D.M. Mills, S. Saha, M.C. Sarofim, J. Trtanj, and L. Ziska, Eds. U.S. Global Change Research Program, Washington, DC, 312 pp. *http://dx.doi.org/10.7930/J0R49NQX.*

[197] Oppenheimer, M., M. Campos, R. Warren, J. Birkmann, G. Luber, B. O'Neill, and K. Takahashi, 2014: Emergent risks and key vulnerabilities. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1039–1099.

[198] Porter, J.R., L. Xie, A.J. Challinor, K. Cochrane, S.M. Howden, M.M. Iqbal, D.B. Lobell, and M.I. Travasso, 2014: Food security and food production systems. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 485–533.

[199] Smith, K.R., A. Woodward, D. Campbell-Lendrum, D.D. Chadee, Y. Honda, Q. Liu, J.M. Olwoch, B. Revich, and R. Sauerborn, 2014: Human health: Impacts, adaptation, and co-benefits. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 709–754.

[200] IPCC, 2018: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press.

[201] National Research Council. 2011. America's Climate Choices. Washington, DC: The National Academies Press. *https://doi.org/10.17226/12781.*

[202] National Academies of Sciences, Engineering, and Medicine. 2017. Communities in Action:

the impacts of climate change raise potential environmental justice concerns. These reports conclude that poorer or predominantly non-White communities can be especially vulnerable to climate change impacts because they tend to have limited adaptive capacities and are more dependent on climate-sensitive resources such as local water and food supplies, or have less access to social and information resources. Some communities of color, specifically populations defined jointly by ethnic/racial characteristics and geographic location, may be uniquely vulnerable to climate change health impacts in the United States. In particular, the 2016 scientific assessment on the *Impacts of Climate Change on Human Health* [203] found with high confidence that vulnerabilities are place- and time-specific, lifestages and ages are linked to immediate and future health impacts, and social determinants of health are linked to greater extent and severity of climate change-related health impacts.

i. Effects on Specific Populations of Concern

Individuals living in socially and economically disadvantaged communities, such as those living at or below the poverty line or who are experiencing homelessness or social isolation, are at greater risk of health effects from climate change. This is also true with respect to people at vulnerable lifestages, specifically women who are pre- and perinatal, or are nursing; *in utero* fetuses; children at all stages of development; and the elderly. Per the Fourth National Climate Assessment, ''Climate change affects human health by altering exposures to heat waves, floods, droughts, and other extreme events; vector-, food- and waterborne infectious diseases; changes in the quality and safety of air, food, and water; and stresses to mental health and well-being.'' [204] Many health conditions such as cardiopulmonary or respiratory illness and other health impacts are associated with and exacerbated by an increase in GHGs and climate change outcomes, which is problematic as these diseases occur at higher rates within vulnerable communities. Importantly, negative public health outcomes include those that are physical in nature, as well as mental, emotional, social, and economic.

To this end, the scientific assessment literature, including the aforementioned reports, demonstrates that there are myriad ways in which these populations may be affected at the individual and community levels. Individuals face differential exposure to criteria pollutants, in part due to the proximities of highways, trains, factories, and other major sources of pollutant-emitting sources to less-affluent residential areas. Outdoor workers, such as construction or utility crews and agricultural laborers, who frequently are comprised of already at-risk groups, are exposed to poor air quality and extreme temperatures without relief. Furthermore, individuals within EJ populations of concern face greater housing and clean water insecurity and bear disproportionate economic impacts and health burdens associated with climate change effects. They have less or limited access to healthcare and affordable, adequate health or homeowner insurance. Finally, resiliency and adaptation are more difficult for economically disadvantaged communities: They have less liquidity, individually and collectively, to move or to make the types of infrastructure or policy changes to limit or reduce the hazards they face. They frequently are less able to self-advocate for resources that would otherwise aid in resiliency and hazard reduction and mitigation.

The assessment literature cited in EPA's 2009 and 2016 Endangerment Findings, as well as *Impacts of Climate Change on Human Health,* also concluded that certain populations and life stages, including children, are most vulnerable to climate-related health effects. The assessment literature produced from 2016 to the present strengthens these conclusions by providing more detailed findings regarding related vulnerabilities and the projected impacts youth may experience. These assessments—including the Fourth National Climate Assessment (2018) and *The Impacts of Climate Change on Human Health in the United States* (2016)—describe how children's unique physiological and developmental factors contribute to making them particularly vulnerable to climate change. Impacts to children are expected from heat waves, air pollution, infectious and waterborne illnesses, and mental health effects resulting from extreme weather events. In addition, children are among those especially susceptible to allergens, as well as health effects associated with heat waves, storms, and floods. Additional health concerns may arise in low-income households, especially those with children, if climate change reduces food availability and increases prices, leading to food insecurity within households.

The Impacts of Climate Change on Human Health [203] also found that some communities of color, low-income groups, people with limited English proficiency, and certain immigrant groups (especially those who are undocumented) live with many of the factors that contribute to their vulnerability to the health impacts of climate change. While difficult to isolate from related socioeconomic factors, race appears to be an important factor in vulnerability to climate-related stress, with elevated risks for mortality from high temperatures reported for Black or African American individuals compared to White individuals after controlling for factors such as air conditioning use. Moreover, people of color are disproportionately exposed to air pollution based on where they live, and disproportionately vulnerable due to higher baseline prevalence of underlying diseases such as asthma, so climate exacerbations of air pollution are expected to have disproportionate effects on these communities.

Native American Tribal communities possess unique vulnerabilities to climate change, particularly those impacted by degradation of natural and cultural resources within established reservation boundaries and threats to traditional subsistence lifestyles. Tribal communities whose health, economic well-being, and cultural traditions depend upon the natural environment will likely be affected by the degradation of ecosystem goods and services associated with climate change. The IPCC indicates that losses of customs and historical knowledge may cause communities to be less resilient or adaptable.[205] The Fourth National Climate Assessment (2018) noted that while Indigenous peoples are diverse and will be impacted by the climate changes universal to all Americans, there are several ways in which climate change uniquely threatens Indigenous peoples' livelihoods and economies.[206]

Pathways to Health Equity. Washington, DC: The National Academies Press. *https://doi.org/10.17226/24624.*

[203] USGCRP, 2016: The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment.

[204] Ebi, K.L., J.M. Balbus, G. Luber, A. Bole, A. Crimmins, G. Glass, S. Saha, M.M. Shimamoto, J. Trtanj, and J.L. White-Newsome, 2018: Human Health. In Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, pp. 539–571. doi: 10.7930/NCA4.2018.CH14.

[205] Porter et al., 2014: Food security and food production systems.

[206] Jantarasami, L.C., R. Novak, R. Delgado, E. Marino, S. McNeeley, C. Narducci, J. Raymond-Yakoubian, L. Singletary, and K. Powys Whyte, 2018: Tribes and Indigenous Peoples. In Impacts,

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In addition, there can institutional barriers to their management of water, land, and other natural resources that could impede adaptive measures.

For example, Indigenous agriculture in the Southwest is already being adversely affected by changing patterns of flooding, drought, dust storms, and rising temperatures leading to increased soil erosion, irrigation water demand, and decreased crop quality and herd sizes. The Confederated Tribes of the Umatilla Indian Reservation in the Northwest have identified climate risks to salmon, elk, deer, roots, and huckleberry habitat. Housing and sanitary water supply infrastructure are vulnerable to disruption from extreme precipitation events.

NCA4 noted that Indigenous peoples often have disproportionately higher rates of asthma, cardiovascular disease, Alzheimer's, diabetes, and obesity, which can all contribute to increased vulnerability to climate-driven extreme heat and air pollution events. These factors also may be exacerbated by stressful situations, such as extreme weather events, wildfires, and other circumstances.

NCA4 and IPCC AR5 [207] also highlighted several impacts specific to Alaskan Indigenous Peoples. Coastal erosion and permafrost thaw will lead to more coastal erosion, exacerbated risks of winter travel, and damage to buildings, roads, and other infrastructure—these impacts on archaeological sites, structures, and objects that will lead to a loss of cultural heritage for Alaska's Indigenous people. In terms of food security, the NCA discussed reductions in suitable ice conditions for hunting, warmer temperatures impairing the use of traditional ice cellars for food storage, and declining shellfish populations due to warming and acidification. While the NCA also noted that climate change provided more opportunity to hunt from boats later in the fall season or earlier in the spring, the assessment found that the net impact was an overall decrease in food security.

2. Non-GHG Impacts

In addition to significant climate change benefits, the proposed standards would also impact non-GHG emissions. In general, we expect small non-GHG emissions reductions from the combination of ''upstream'' emissions sources related to extracting, refining, transporting, and storing petroleum fuels. We also expect small increases in emissions from upstream electricity generating units (EGUs). A possible increase in emissions from coal- and NG-fired electricity generation to meet increased EV electricity demand could result in adverse EJ impacts. For on-road light duty vehicles, the proposed standards would reduce total non-GHG emissions, though we expect small increases in some non-GHG emissions in the years immediately following implementation of the proposal, followed by growing decreases in emissions in later years. This is due to our assumptions about increased ''rebound'' driving. See Table 44 for more detail on the estimated non-GHG emissions impacts of the proposal.[208] As discussed in Section I.A.3 of the Executive Summary, future EPA regulatory actions that would result in increased zero-emission vehicles and cleaner energy generation would more significantly change the non-GHG impacts of transportation and electricity generation, and those impacts will be analyzed in more detail in those future actions.

There is evidence that communities with EJ concerns are disproportionately impacted by the non-GHG emissions associated with this proposal.[209] Numerous studies have found that environmental hazards such as air pollution are more prevalent in areas where minority populations and low-income populations represent a higher fraction of the population compared with the general population.[210] [211] [212] Consistent with this evidence, a recent study found that most anthropogenic sources of $PM_{2.5}$, including industrial sources, and light- and heavy-duty vehicle sources, disproportionately affect people of color.[213]

Analyses of communities in close proximity to upstream sources, such as EGUs, have found that a higher percentage of communities of color and low-income communities live near these sources when compared to national averages.[214] Vulnerable populations near upstream refineries may experience potential disparities in pollution-related health risk from that source.[215] We expect that small increases in non-GHG emissions from EGUs and small reductions in petroleum-sector emissions would lead to small changes in exposure to these non-GHG pollutants for people living in the communities near these facilities.

There is also substantial evidence that people who live or attend school near major roadways are more likely to be of a racial minority, Hispanic ethnicity, and/or low socioeconomic status.[216] [217] We would expect that communities near roads will benefit from reductions of non-GHG pollutants as fuel efficiency improves and the use of zero-emission vehicles (such as full battery electric vehicles) increases, though increased rebound driving may offset some of these emission reductions, especially in the years immediately after finalization of the proposed standards.

Although proximity to an emissions source is a useful indicator of potential exposure, it is important to note that the impacts of emissions from both upstream and tailpipe sources are not limited to communities in close proximity to these sources. The effects of potential increases and decreases in emissions from the sources affected by this proposal might also be felt many miles away, including in communities with EJ concerns. The spatial extent of these impacts from upstream and tailpipe sources depend on a range of interacting and complex factors including the amount of pollutant emitted, atmospheric chemistry and meteorology.

Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, pp. 572–603. doi: 10.7930/NCA4.2018.CH15.

[207] Porter et al., 2014: Food security and food production systems.

[209] Mohai, P.; Pellow, D.; Roberts Timmons, J. (2009) Environmental justice. Annual Reviews 34: 405–430. *https://doi.org/10.1146/annurev-environ-082508-094348.*

[210] Rowangould, G.M. (2013) A census of the near-roadway population: public health and environmental justice considerations. Trans Res D 25: 59–67. *http://dx.doi.org/10.1016/j.trd.2013.08.003.*

[211] Marshall, J.D., Swor, K.R.; Nguyen, N.P (2014) Prioritizing environmental justice and equality: diesel emissions in Southern California. Environ Sci Technol 48: 4063–4068. *https://doi.org/10.1021/es405167f.*

[212] Marshall, J.D. (2000) Environmental inequality: air pollution exposures in California's South Coast Air Basin. Atmos Environ 21: 5499–5503. *https://doi.org/10.1016/j.atmosenv.2008.02.005.*

[213] C.W. Tessum, D.A. Paolella, S.E. Chambliss, J.S. Apte, J.D. Hill, J.D. Marshall, $PM_{2.5}$ polluters disproportionately and systemically affect people of color in the United States. Sci. Adv. 7, eabf4491 (2021).

[214] See 80 FR 64662, 64915–64916 (October 23, 2015).

[215] U.S. EPA (2014). Risk and Technology Review—Analysis of Socio-Economic Factors for Populations Living Near Petroleum Refineries. Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. January.

[216] Tian, N.; Xue, J.; Barzyk. T.M. (2013) Evaluating socioeconomic and racial differences in traffic-related metrics in the United States using a GIS approach. J Exposure Sci Environ Epidemiol 23: 215–222.

[217] Boehmer, T.K.; Foster, S.L.; Henry, J.R.; Woghiren-Akinnifesi, E.L.; Yip, F.Y. (2013) Residential proximity to major highways—United States, 2010. Morbidity and Mortality Weekly Report 62(3): 46–50.

In summary, we expect this proposed rule would result in both small reductions and small increases of non-GHG emissions. These effects could potentially impact communities with EJ concerns, though not necessarily immediately and not equally in all locations. For this proposal, the air quality information needed to perform a quantified analysis of the distribution of such impacts was not available. We therefore recommend caution when interpreting these broad, qualitative observations. We note that EPA intends to develop a future rule to control emissions of GHGs as well as criteria and air toxic pollutants from light-duty vehicles for model years beyond 2026. We are considering how to project air quality impacts from the changes in non-GHG emissions for that future rulemaking (see Section V.C). EPA is also seeking comment on how to conduct an EJ analysis of the non-GHG impacts associated with mobile source rulemakings, including how EV penetration in the future fleet would affect these impacts.

M. Affordability and Equity Impacts

The impacts of the proposed standards on social equity depend in part on their effects on the affordability of vehicles and transportation services, especially for lower-income households. Access to transportation improves the ability of people, including those with low income, to pursue jobs, education, health care, and necessities of daily life such as food and housing. This section discusses how these standards might affect affordability of vehicles. We acknowledge that vehicles, especially household ownership of vehicles, are only a portion of the larger issues concerning access to transportation and mobility services, which also takes into consideration public transportation and land use design. Though these issues are inextricably linked, the following discussion focuses on effects related to private vehicle ownership and use. We also acknowledge that the emissions of vehicles, both local pollutants and GHGs, can have disproportionate impacts on lower-income and minority communities; see Preamble Section I.E for further discussion of these topics. Finally, we note that social equity involves issues beyond income and affordability, including race, ethnicity, gender, gender identification, and residential location; EPA will continue to examine such impacts and seeks comment on the impact of this proposal on additional dimensions of equity.

Affordability is not a well-defined concept in academic literature. As discussed in Cassidy et al. (2016),[218] researchers have generally applied the term to necessities such as food, housing, or energy, and have identified some themes related to:

> Instead of focusing on the traditional economic concept of willingness to pay, any consideration of affordability must also consider the ability to pay for a socially defined minimum level of a good, especially of a necessity.
>
> Although the ability to pay is often based on the proportion of income devoted to expenditures on a particular good, this ratio approach is widely criticized for not considering expenditures on other possibly necessary goods, quality differences in the good, and heterogeneity of consumer preferences for the good.
>
> Assessing affordability should take into account both the short-term costs and long-term costs associated with consumption of a particular good.

As noted in Cassidy et al. (2016), there is very little literature applying the concept of affordability to transportation, much less to vehicle ownership. It is not clear how to identify a socially acceptable minimum level of transportation service. However, it seems reasonable that some minimum level of transportation services is necessary to enable households access to employment, education, and basic services such as buying food. It also seems reasonable to assume that transportation requirements vary substantially across populations and geographic locations, and it is not clear when consumption of transportation moves from being a necessity to optional. Normatively defining the minimum adequate level of transportation consumption is difficult given the heterogeneity of consumer preferences and living situations. As a result, it is challenging to define how much residual income should remain with each household after transportation expenditures. It is therefore not surprising that academic and policy literature have largely avoided attempting to define transportation affordability.

We are following the approach in the 2016 EPA Proposed Determination for the Midterm Evaluation [219] of considering four questions that relate to the effects of the LDV GHG standards on new vehicle affordability: How the standards affect lower-income households; how the standards affect the used vehicle market; how the standards affect access to credit; and how the standards affect the low-priced vehicle segment. See DRIA Chapter 8.3 for further detail.

The effects of the standards on lower-income households depend on the responses not just to up-front costs but also to the reduction in fuel and operating costs associated with the standards. These responses will affect not only the sales of new vehicles, as discussed in Sections 0 and VII.B, but also the prices of used vehicles as well as the costs associated with ride-hailing and ride-sharing services. A recent study notes that lower-income households spend more on gasoline as a proportion of their income than higher-income households.[220] In addition, the Proposed Determination, Appendix B.1.6, observed that lower-income households spend more on gasoline than on either new or used vehicles, and more on used vehicles than new ones, suggesting the importance of operating costs for these households. If the per-mile costs of services such as ride hailing and ride sharing decrease to reflect lower operating costs, those who do not own vehicles may benefit.

If sales of new vehicles decrease, then prices of used vehicles, which are disproportionately purchased by lower-income households, would be expected to increase; the reverse would happen if new vehicle sales increase. These effects in the used vehicle market also affect how long people hold onto their used vehicles. This effect, sometimes termed the ''Gruenspecht effect'' after Gruenspecht (1982),[221] would lead to both slower adoption of vehicles subject to the new standards, and more use of older vehicles not subject to the new standards, with associated higher emissions, if new vehicle sales decrease. The Gruenspecht effect, therefore, may have the additional consequence of increased concentrations of older vehicles in some communities in the short term, and may delay benefits associated with advanced vehicle technologies for those communities. As discussed in Section VII.B, new vehicle

[218] Cassidy, A., G. Burmeister, and G. Helfand. ''Impacts of the Model Year 2017–2025 Light-Duty Vehicle Greenhouse Gas Emission Standards on Vehicle Affordability.'' Working paper.

[219] U.S. Environmental Protection Agency (2016). Proposed Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation, Chapter 4.3.3. EPA–420–R–16–020. *https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100Q3DO.pdf*, accessed 4/26/2021.

[220] Vaidyanathan, S., P. Huether, and B. Jennings (2021). ''Understanding Transportation Energy Burdens.'' Washington, DC: American Council for an Energy-Efficient White Paper. *https://www.aceee.org/white-paper/2021-05/understanding-transportation-energy-burdens,* accessed 5/24/2021.

[221] Gruenspecht, H. (1982). ''Differentiated Regulation: The Case of Auto Emissions Standards.'' American Economic Review 72: 328–331.

sales are projected to show a roughly 2 percent decrease from sales under the SAFE rule; that value depends on the uncertain assumption that vehicle buyers consider just a small share of future fuel consumption in the purchase decision. EPA is working with RTI International to understand better the connections between the new and the used vehicle market. Changes in the new vehicle market are expected not only to have immediate effects on the prices of used vehicles, but also to affect the market over time, as the supply of used vehicles in the future depends on how many new vehicles are sold.

Access to credit is a potential barrier to purchase of vehicles whose up-front costs have increased; access may also be affected by race, ethnicity, gender, gender identity, residential location, religion, or other factors. If lenders are not willing to provide financing for buyers who face higher prices, perhaps because the potential buyers are hitting a maximum on the debt-to-income ratio (DTI) that lenders are willing to accept, then those buyers may not be able to purchase new vehicles. On the other hand, some lenders give discounts on loans to purchase more fuel-efficient vehicles.[222] Subsidies exist from the federal government, and some state governments, for plug-in electric vehicles.[223] In addition, as documented in the Midterm Evaluation,[224] the DTI does not appear to be a fixed obstacle for access to finance; from 2007 to 2015, 28 percent of lower-income households and 7 percent of higher-income households who both had a DTI of over 36 percent and purchased at least one new vehicle financed their vehicle purchases.

Low-priced vehicles may be considered an entry point for people into buying new vehicles instead of used ones; automakers may seek to entice people to buy new vehicles through a low price point. It is possible that higher costs associated with proposed standards could affect the ability of automakers to maintain vehicles in this value segment. At the same time, this segment historically tended to include more fuel-efficient vehicles that assisted automakers in achieving CAFE standards.[225] The footprint-based standards, by encouraging improvements in GHG emissions and fuel economy across the vehicle fleet, reduce the need for low-priced vehicles to be a primary means of compliance with the standards. This change in incentives for the marketing of this segment may contribute to the increases in the prices of vehicles previously in this category. Low-priced vehicles still exist; the Chevrolet Spark, for example, is listed as starting at $13,400.[226] At the same time, this segment is gaining more content, such as improved entertainment systems and electric windows; they may be developing an identity as a desirable market segment without regard to their previous purpose in enabling the sales of less efficient vehicles and compliance with CAFE standards.[227] Whether this segment continues to exist, and in what form, may depend on the marketing plans of manufacturers: Whether benefits are greater from offering basic new vehicles to first-time new-vehicle buyers, or from making small vehicles more attractive by adding more desirable features to them.

New electric vehicles currently have higher up-front costs and lower operating costs than gasoline vehicles and require access to charging infrastructure that may not be readily available to many. This proposal does not project major penetration of electric vehicles in response to the proposed standards, from 3.6 percent in MY 2023 to 7.8 percent in MY 2026 (see Table 42). EPA will monitor and study affordability issues related to electric vehicles as their prevalence in the vehicle fleet increases.

In sum, as with the effects of the proposed standards on vehicle sales discussed in Section VII.B, the effects of the standards on affordability depend on two countervailing effects: The increase in the up-front costs of the vehicles, and the decrease in operating costs. The increase in up-front costs has the potential to increase the prices of used vehicles, to make credit more difficult to obtain, and to make the least expensive new vehicles less desirable compared to used vehicles. The reduction in operating costs has the potential to mitigate or reverse all these effects. Lower operating costs on their own increase mobility (see DRIA Chapter 3.1 for a discussion of rebound driving). It is possible that lower-income households may benefit more from the reduction in operating costs than the increase in up-front costs, because they own fewer vehicles per household, spend more on fuel than on vehicles on an annual basis, and those fuel expenditures represent a higher fraction of their household income.

See DRIA Chapter 8.3 for more detailed discussion of these issues.

VIII. Statutory and Executive Order Reviews

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

This action is an economically significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. Any changes made in response to OMB recommendations have been documented in the docket. EPA prepared an analysis of the potential costs and benefits associated with this action. This analysis is in the Draft Regulatory Impact Analysis, which can be found in the docket for this rule, and is briefly summarized in Section VII of this preamble.

B. Paperwork Reduction Act

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2127–0019. This proposed rule changes the level of the existing emission standards and revises several existing credit provisions, but imposes no new information collection requirements.

C. Regulatory Flexibility Act

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. EPA's existing regulations exempt from the GHG standards any manufacturer, domestic or foreign, meeting Small Business Administration's size definitions of small business in 13 CFR 121.201. EPA is not proposing any changes to the provisions for small businesses under this proposal, and thus they would

[222] Helfand, Gloria (2021). ''Memorandum: Lending Institutions that Provide Discounts for more Fuel Efficient Vehicles.'' U.S. EPA Office of Transportation and Air Quality, Memorandum to the Docket.

[223] U.S. Department of Energy and U.S. Environmental Protection Agency. ''Federal Tax Credits for New All-Electric and Plug-in Hybrid Vehicles.'' *https://www.fueleconomy.gov/feg/taxevb.shtml*, accessed 4/28/2021.

[224] See Note 219, Chapter 4.3.3.4.

[225] Austin, D., and T. Dinan (2005). ''Clearing the Air: The Costs and Consequences of Higher CAFE Standards and Increased Gasoline.'' Journal of Environmental Economics and Management 50(3): 562–82; Kleit, A. (2004). ''Impacts of Long-Range Increases in the Fuel Economy (CAFE) Standard.'' Economic Inquiry 42(2): 279–294.

[226] Motortrend (2021). ''These Are the 10 Cheapest Cars You Can Buy in 2021.'' *https://www.motortrend.com/features-collections/top-10-cheapest-new-cars/*, accessed 4/28/2021; Chevrolet Spark, *https://www.chevrolet.com/cars/spark*, accessed 5/27/2021.

[227] See Note 218.

remain exempt. For additional discussion see chapter 9 of the DRIA.

D. Unfunded Mandates Reform Act

This proposed rule contains no federal mandates under UMRA, 2 U.S.C. 1531–1538, for State, local, or tribal governments. The proposed rule would impose no enforceable duty on any State, local or tribal government. This proposed rule would contain a federal mandate under UMRA that may result in expenditures of $100 million or more for the private sector in any one year. Accordingly, the costs and benefits associated with the proposed rule are discussed in Section VII and in the DRIA, which are in the docket for this rule.

This action is not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

E. Executive Order 13132: ''Federalism''

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

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

This action does not have tribal implications as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action. However, EPA plans to continue engaging with our tribal stakeholders in the development of this rulemaking by offering a tribal workshop and offering government-to-government consultation upon request.

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

With respect to GHG emissions, EPA has determined that this rule will not have disproportionate impacts on children (62 FR 19885, April 23, 1997). This rule will reduce emissions of potent GHGs, which as noted earlier in Section I.E of this preamble, will reduce the effects of climate change, including the public health and welfare effects on children.

GHGs contribute to climate change and the GHG emissions reductions resulting from implementation of this proposal would further improve children's health. The assessment literature cited in EPA's 2009 and 2016 Endangerment Findings concluded that certain populations and life stages, including children, the elderly, and the poor, are most vulnerable to climate-related health effects. The assessment literature since 2016 strengthens these conclusions by providing more detailed findings regarding these groups' vulnerabilities and the projected impacts they may experience. These assessments describe how children's unique physiological and developmental factors contribute to making them particularly vulnerable to climate change. Impacts to children are expected from heat waves, air pollution, infectious and waterborne illnesses, and mental health effects resulting from extreme weather events. In addition, children are among those especially susceptible to most allergic diseases, as well as health effects associated with heat waves, storms, and floods. Additional health concerns may arise in low-income households, especially those with children, if climate change reduces food availability and increases prices, leading to food insecurity within households. More detailed information on the impacts of climate change to human health and welfare is provided in Section IV.B of this preamble.

We expect this proposed rule would, on net, result in both small reductions and small increases in non-GHG emissions that could impact children, though not necessarily immediately and not equally in all locations. However, with respect to non-GHG emissions, EPA has concluded that it is not practicable to determine whether there would be disproportionate impacts on children. EPA intends to develop another rule to further reduce emissions of GHGs from light-duty vehicles for model years beyond 2026. We are considering how to project air quality and health impacts from the changes in non-GHG emissions for that future rulemaking (see Section V.C).

H. Executive Order 13211: ''Energy Effects''

This action is not a ''significant energy action'' because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. EPA has outlined the energy effects in Table 5–7 of the Regulatory Impact Analysis (RIA), which is available in the docket for this action and is briefly summarized here.

This action proposes to reduce CO2 for passenger cars and light trucks under revised GHG standards, which will result in significant reductions of the consumption of petroleum, will achieve energy security benefits, and have no adverse energy effects. Because the GHG emission standards result in significant fuel savings, this rule encourages more efficient use of fuels. Table 5–7 in the RIA shows 291 million barrels of gasoline per year will be saved in 2050, which can be summarized as a net reduction of 797,260 barrels of gasoline per day in 2050.

I. National Technology Transfer and Advancement Act

Section 12(d) of the NTTAA, 15 U.S.C. 272 note, directs federal agencies to use voluntary consensus standards (VCSs) in their regulatory activities unless to do so would be ''inconsistent with applicable law or otherwise impractical.'' VCSs are technical standards, which include materials specifications, test methods, sampling protocols, business practices and management systems developed or adopted by voluntary consensus standards bodies (VCSBs), both domestic and international. These bodies plan, develop, establish or coordinate voluntary consensus standards using agreed-upon procedures.

In addition, the statute encourages agencies to consult with VCSBs and participate in the development of such standards when compatible with agency missions, authorities, priorities and budget resources. The use of VCSs, whenever practicable and appropriate, is intended to achieve the following goals:

- To eliminate the cost to the government of developing its own standards and decrease the cost of goods procured and the burden of complying with agency regulation;
- To provide incentives and opportunities to establish standards that serve national needs;
- To encourage long-term growth for U.S. enterprises and promote efficiency and economic competition through harmonization of standards; and
- To further the policy of reliance upon the private sector to supply government needs for goods and services.

The requirements apply to the use of VCSs in ''regulatory and procurement activities.'' Regulations that do not establish or involve technical standards do not trigger the NTTAA requirements, but it is recommended that agencies provide a brief explanation for why the NTTAA does not apply.

Note that agencies retain broad discretion in deciding when to use VCSs; however, agencies are required to justify the use of government-unique standards when potentially applicable VCSs are available. The NTTAA also does not affect the agency's authority to determine substantive standards as

opposed to technical standards (see guidance from the Office of Management and Budget (OMB) at *http://www.whitehouse.gov/omb/circulars_a119.*

This rulemaking involves technical standards. The Agency conducted a search to identify potentially applicable voluntary consensus standards. For CO_2, emissions, we identified no such standards. For CO_2 emissions, EPA is therefore collecting data over the same tests that are used for the current CO_2 standards and for the CAFE program. This will minimize the amount of testing done by manufacturers, since manufacturers are already required to run these tests. For A/C credits, EPA is using the test specified in 40 CFR 1066.845. EPA knows of no voluntary consensus standard for the A/C test.

We are proposing to amend 40 CFR 86.1 to reference SAE J1711, *Recommended Practice for Measuring the Exhaust Emissions and Fuel Economy of Hybrid-Electric Vehicles, Including Plug-in Hybrid Vehicles*, Revised June 2010. The regulation already has rulemaking provisions at 40 CFR 86.1866–12(b) that include references to SAE J1711. We rely on the published procedure to describe test methods related to measuring exhaust emissions from hybrid-electric vehicles. The proposed amendment would complete the administrative steps needed to properly accomplish this incorporation by reference. The referenced recommended practice may be obtained from SAE International on the internet at *www.sae.org,* by email at *CustomerService@sae.org,* or by calling 877–606–7323 or 724–776–4970.

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

For this proposed action, EPA is only able to qualitatively evaluate the extent to which this action may result in disproportionately high and adverse human health or environmental effects on minority populations, low income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). With respect to GHG emissions, EPA has determined that this rule will benefit all U.S. populations, including minority populations, low-income populations and/or indigenous peoples. While this proposed rule would substantially reduce GHG emissions, future impacts of climate change are still expected in the baseline and will likely be unevenly distributed in ways that uniquely impact these communities. EPA has not quantitatively assessed these effects.

For non-GHG pollutants EPA has concluded that it is not practicable given the timing of this proposed action to determine the extent to which effects on minority populations, low-income populations and/or indigenous peoples are differentially distributed. We expect this proposed rule would result in both small reductions and small increases of non-GHG emissions that could impact communities with EJ concerns, though not necessarily immediately and not equally in all locations. It was not practicable to develop the air quality information needed to perform a quantified analysis of the distribution of such non-GHG impacts. EPA intends to develop a future rule to further reduce emissions of GHGs from light-duty vehicles for model years beyond 2026. We are considering how to project air quality impacts from the changes in non-GHG emissions for that future rulemaking (see Section V.C). EPA is taking comment on the types of effects that are important to consider from an EJ perspective as well as ways in which such effects could be quantitatively evaluated for future rulemakings. Section VII.L describes how we considered environmental justice in this action.

IX. Statutory Provisions and Legal Authority

Statutory authority for this proposed rule is found in section 202(a) (which authorizes standards for emissions of pollutants from new motor vehicles which emissions cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare), 202(d), 203–209, 216, and 301 of the Clean Air Act, 42 U.S.C. 7521(a), 7521(d), 7522–7525, 7541–7543, 7550, and 7601.

List of Subjects

40 CFR Part 86

Environmental protection, Administrative practice and procedure, Confidential business information, Incorporation by reference, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements.

40 CFR Part 600

Environmental protection, Administrative practice and procedure, Electric power, Fuel economy, Labeling, Reporting and recordkeeping requirements.

Michael S. Regan,

Administrator.

For the reasons set out in the preamble, we propose to amend title 40, chapter I of the Code of Federal Regulations as set forth below.

PART 86—CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES

■ 1. The authority citation for part 86 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 2. Amend § 86.1 by redesignating paragraphs (g)(3) through (27) as (g)(4) through (28) and adding new paragraph (g)(3) to read as follows:

§ 86.1 Incorporation by reference.

* * * * *

(g) * * *

(3) SAE J1711, Recommended Practice for Measuring the Exhaust Emissions and Fuel Economy of Hybrid-Electric Vehicles, Including Plug-in Hybrid Vehicles, Revised June 2010, IBR approved for § 86.1866–12(b).

* * * * *

■ 3. Amend § 86.1806–17 by revising paragraph (a) introductory text to read as follows:

§ 86.1806–17 Onboard diagnostics.

* * * * *

(a) Vehicles must comply with the 2013 OBD requirements adopted for California as described in this paragraph (a). California's 2013 OBD–II requirements are part of Title 13, § 1968.2 of the California Code of Regulations, approved on July 31, 2013 (incorporated by reference in § 86.1). We may approve your request to certify an OBD system meeting a later version of California's OBD requirements if you demonstrate that it complies with the intent of this section. The following clarifications and exceptions apply for vehicles certified under this subpart:

* * * * *

■ 4. Amend § 86.1818–12 by revising paragraph (c)(2)(i) and (3)(i) to read as follows:

§ 86.1818–12 Greenhouse gas emission standards for light-duty vehicles, light-duty trucks, and medium-duty passenger vehicles.

* * * * *

(c) * * *

(2) * * *

(i) *Calculation of CO_2 target values for passenger automobiles.* A CO_2 target value shall be determined for each passenger automobile as follows:

(A) For passenger automobiles with a footprint of less than or equal to 41 square feet, the gram/mile CO_2 target value shall be selected for the appropriate model year from the following table:

TABLE 1 TO § 86.1818–12(c)(2)(i)(A)

Model year	CO_2 target value (grams/mile)
2012	244.0
2013	237.0
2014	228.0
2015	217.0
2016	206.0
2017	195.0
2018	185.0
2019	175.0
2020	166.0
2021	161.8
2022	159.0
2023	145.6
2024	138.6
2025	131.9
2026 and later	125.6

(B) For passenger automobiles with a footprint of greater than 56 square feet, the gram/mile CO_2 target value shall be selected for the appropriate model year from the following table:

TABLE 2 TO § 86.1818–12(c)(2)(i)(B)

Model year	CO_2 target value (grams/mile)
2012	315.0
2013	307.0
2014	299.0
2015	288.0
2016	277.0
2017	263.0
2018	250.0
2019	238.0
2020	226.0
2021	220.9
2022	217.3
2023	199.1
2024	189.5
2025	180.3
2026 and later	171.6

(C) For passenger automobiles with a footprint that is greater than 41 square feet and less than or equal to 56 square feet, the gram/mile CO_2 target value shall be calculated using the following equation and rounded to the nearest 0.1 grams/mile, except that for any vehicle footprint the maximum CO_2 target value shall be the value specified for the same model year in paragraph (c)(2)(i)(B) of this section:

Target $CO_2 = [a \times f] + b$

Where:

f is the vehicle footprint, as defined in § 86.1803; and a and b are selected from the following table for the appropriate model year:

TABLE 3 TO § 86.1818–12(c)(2)(i)(C)

Model year	a	b
2012	4.72	50.5
2013	4.72	43.3
2014	4.72	34.8
2015	4.72	23.4
2016	4.72	12.7
2017	4.53	8.9
2018	4.35	6.5
2019	4.17	4.2
2020	4.01	1.9
2021	3.94	0.2
2022	3.88	−0.1
2023	3.56	−0.4
2024	3.39	−0.4
2025	3.23	−0.3
2026 and later	3.07	−0.3

* * * * *

(3) * * *

(i) *Calculation of CO_2 target values for light trucks.* A CO_2 target value shall be determined for each light truck as follows:

(A) For light trucks with a footprint of less than or equal to 41 square feet, the gram/mile CO_2 target value shall be selected for the appropriate model year from the following table:

TABLE 4 TO § 86.1818–12(c)(3)(i)(A)

Model year	CO_2 target value (grams/mile)
2012	294.0
2013	284.0
2014	275.0
2015	261.0
2016	247.0
2017	238.0
2018	227.0
2019	220.0
2020	212.0
2021	206.5
2022	203.0
2023	181.1
2024	172.1
2025	163.5
2026 and later	155.4

(B) For light trucks with a footprint that is greater than 41 square feet and less than or equal to the maximum footprint value specified in the table below for each model year, the gram/mile CO_2 target value shall be calculated using the following equation and rounded to the nearest 0.1 grams/mile, except that for any vehicle footprint the maximum CO_2 target value shall be the value specified for the same model year in paragraph (c)(3)(i)(D) of this section:

Target $CO_2 = (a \times f) + b$

Where:

f is the footprint, as defined in § 86.1803; and *a and b* are selected from the following table for the appropriate model year:

TABLE 5 TO § 86.1818–12(c)(3)(i)(B)

Model year	Maximum footprint	a	b
2012	66.0	4.04	128.6
2013	66.0	4.04	118.7
2014	66.0	4.04	109.4
2015	66.0	4.04	95.1
2016	66.0	4.04	81.1
2017	50.7	4.87	38.3
2018	60.2	4.76	31.6
2019	66.4	4.68	27.7
2020	68.3	4.57	24.6
2021	68.3	4.51	21.5
2022	68.3	4.44	20.6
2023	74.0	3.97	18.4
2024	74.0	3.77	17.4
2025	74.0	3.58	16.6
2026 and later	74.0	3.41	15.8

(C) For light trucks with a footprint that is greater than the minimum footprint value specified in the table below and less than or equal to the maximum footprint value specified in the table below for each model year, the

gram/mile CO_2 target value shall be calculated using the following equation and rounded to the nearest 0.1 grams/mile, except that for any vehicle footprint the maximum CO_2 target value shall be the value specified for the same model year in paragraph (c)(3)(i)(D) of this section:

Target $CO_2 = (a \times f) + b$

Where:

f is the footprint, as defined in § 86.1803; and *a and b* are selected from the following table for the appropriate model year:

TABLE 6 TO § 86.1818–12(c)(3)(i)(C)

Model year	Minimum footprint	Maximum footprint	a	b
2017	50.7	66.0	4.04	80.5
2018	60.2	66.0	4.04	75.0

(D) For light trucks with a footprint greater than the minimum value specified in the table below for each model year, the gram/mile CO_2 target value shall be selected for the appropriate model year from the following table:

TABLE 7 TO § 86.1818–12(c)(3)(i)(D)

Model year	Minimum footprint	CO_2 targetvalue (grams/mile)
2012	66.0	395.0
2013	66.0	385.0
2014	66.0	376.0
2015	66.0	362.0
2016	66.0	348.0
2017	66.0	347.0
2018	66.0	342.0
2019	66.4	339.0
2020	68.3	337.0
2021	68.3	329.4
2022	68.3	324.1
2023	74.0	312.1
2024	74.0	296.5
2025	74.0	281.8
2026 and later	74.0	267.8

* * * * *

■ 5. Amend § 86.1865–12 by revising paragraphs (k)(2), (3), and (6) to read as follows:

§ 86.1865–12 How to comply with the fleet average CO_2 standards.

* * * * *

(k) * * *

(2) There are no property rights associated with CO_2 credits generated under this subpart. Credits are a limited authorization to emit the designated amount of emissions. Nothing in this part or any other provision of law shall be construed to limit EPA's authority to terminate or limit this authorization through a rulemaking.

(3) Each manufacturer must comply with the reporting and recordkeeping requirements of paragraph (l) of this section for CO_2 credits, including early credits. The averaging, banking and trading program is enforceable as provided in paragraphs (k)(7)(ii), (k)(9)(iii), and (l)(1)(vi) of this section through the certificate of conformity that allows the manufacturer to introduce any regulated vehicles into U.S. commerce.

* * * * *

(6) Unused CO_2 credits generally retain their full value through five model years after the model year in which they were generated. Credits remaining at the end of the fifth model year after the model year in which they were generated may not be used to demonstrate compliance for later model years. The following particular provisions apply for passenger cars and light trucks:

(i) Unused CO_2 credits from the 2016 model year shall retain their full value through the 2023 model year. Credits from the 2016 model year that remain at the end of the 2023 model year may not be used to demonstrate compliance for later model years.

(ii) Unused CO_2 credits from the 2017 through 2020 model years shall retain their full value through six model years after the model year in which they were generated. Credits remaining from these model years after six model years may not be used to demonstrate compliance for later model years.

* * * * *

■ 6. Amend § 86.1866–12 by—

■ a. Revising paragraphs (b) introductory text and (b)(1).

■ b. Removing paragraph (b)(2)(i).

■ c. Redesignating paragraph (b)(2)(ii) as paragraph (b)(2).

■ d. Adding paragraph (c)(3).

The addition reads as follows:

§ 86.1866–12 CO_2 credits for advanced technology vehicles.

* * * * *

(b) For electric vehicles, plug-in hybrid electric vehicles, fuel cell vehicles, dedicated natural gas vehicles, and dual-fuel natural gas vehicles as those terms are defined in § 86.1803–01, that are certified and produced for U.S. sale in the specified model years and that meet the additional specifications in this section, the manufacturer may use the production multipliers in this paragraph (b) when determining additional credits for advanced technology vehicles. Full size pickup trucks eligible for and using a

production multiplier are not eligible for the strong hybrid-based credits described in § 86.1870–12(a)(2) or the performance-based credits described in § 86.1870–12(b).

(1) The following production multipliers apply for model year 2017 through 2025 vehicles:

TABLE 1 TO § 86.1866–12(b)(1)

Model year	Electric vehicles and fuel cell vehicles	Plug-in hybrid electric vehicles	Dedicated and dual-fuel natural gas vehicles
2017	2.0	1.6	1.6
2018	2.0	1.6	1.6
2019	2.0	1.6	1.6
2020	1.75	1.45	1.45
2021	1.5	1.3	1.3
2022	2.0	1.6	2.0
2023–2024	2.0	1.6	1.0
2025	1.75	1.45	1.0

* (No multiplier credits)

* * * * *

(c) * * *

(3) Multiplier-based credits for model years 2022 through 2025 may not exceed credit caps, as follows:

(i) Calculate a nominal annual credit cap in Mg using the following equation, rounded to the nearest whole number:

$$CAP_{annual} = 2.5\frac{\text{g}}{\text{mile}} \cdot \left[195{,}264\ \text{miles} \cdot P_{auto} + 225{,}865 \cdot P_{truck}\right] \cdot 10^{-6}\ \frac{\text{tonne}}{\text{g}}$$

Where:

P_{auto} = total number of certified passenger automobiles the manufacturer produced in a given model year for sale in any state or territory of the United States.

P_{truck} = total number of certified light trucks (including MDPV) the manufacturer produced in a given model year for sale in any state or territory of the United States.

(ii) Calculate an annual g/mile equivalent value for the multiplier-based credits using the following equation, rounded to the nearest 0.1 g/mile:

$$annual\ g\ per\ mile\ equivalent\ value\ = 2.5 \cdot \frac{annual\ credits}{CAP_{annual}}$$

Where:

annual credits = a manufacturer's total multiplier-based credits in a given model year from all passenger automobiles and light trucks as calculated under this paragraph (c).

(iii) Calculate a cumulative g/mile equivalent value for the multiplier-based credits in 2022 through 2025 by adding the annual g/mile equivalent values calculated under paragraph (c)(3)(ii) of this section.

(iv) The cumulative g/mile equivalent value may not exceed 10.0 in any year.

(v) The annual credit report must include for every model year from 2022 through 2025, as applicable, the calculated values for the nominal annual credit cap in Mg and the cumulative g/mile equivalent value.

■ 7. Revise the section heading for § 86.1868–12 to read as follows:

§ 86.1868–12 CO_2 credits for improving the efficiency of air conditioning systems.

* * * * *

■ 8. Amend § 86.1869–12 by revising the section heading and paragraphs (b)(2), (4)(v), (vi), and (x), and (d)(2)(ii)(A) to read as follows:

§ 86.1869–12 CO_2 credits for off-cycle CO_2 reducing technologies.

* * * * *

(b) * * *

(2) The maximum allowable decrease in the manufacturer's combined passenger automobile and light truck fleet average CO_2 emissions attributable to use of the default credit values in paragraph (b)(1) of this section is 10 g/mi through model year 2022, and 15 g/mi for model years 2023 and later, except that manufacturers may use 15 g/mi in model years 2020 through 2022 if they meet the definitions in paragraphs (b)(4)(v)(B), (vi)(B), and (x)(B) of this section. If the total of the CO_2 g/mi credit values from paragraph (b)(1) of this section does not exceed 10 or 15 g/mi (as applicable) for any passenger automobile or light truck in a manufacturer's fleet, then the total off-cycle credits may be calculated according to paragraph (f) of this section. If the total of the CO_2 g/mi credit values from paragraph (b)(1) of this section exceeds 10 or 15 g/mi (as applicable) for any passenger automobile or light truck in a manufacturer's fleet, then the gram per mile decrease for the combined passenger automobile and light truck fleet must be determined according to paragraph (b)(2)(ii) of this section to determine whether the applicable limitation has been exceeded.

(i) Determine the gram per mile decrease for the combined passenger automobile and light truck fleet using the following formula:

$$\text{Decrease} = \frac{Credits \times 1{,}000{,}000}{\left[\left(\text{Prod}_{\text{C}} \times 195{,}264\right) + \left(\text{Prod}_{\text{T}} \times 225{,}865\right)\right]}$$

Where:

Credits = The total of passenger automobile and light truck credits, in Megagrams, determined according to paragraph (f) of this section and limited to those credits accrued by using the default gram per mile values in paragraph (b)(1) of this section.

$Prod_C$ = The number of passenger automobiles produced by the manufacturer and delivered for sale in the U.S.

$Prod_T$ = The number of light trucks produced by the manufacturer and delivered for sale in the U.S.

(ii) If the value determined in paragraph (b)(2)(i) of this section is greater than 10 or 15 grams per mile (as applicable), the total credits, in Megagrams, that may be accrued by a manufacturer using the default gram per mile values in paragraph (b)(1) of this section shall be determined using the following formula:

$$\text{Credit (Megagrams)} = \frac{\left[10 \times \left((\text{Prod}_C \times 195{,}264) + (\text{Prod}_T \times 225{,}865)\right)\right]}{1{,}000{,}000}$$

Where:

$Prod_C$ = The number of passenger automobiles produced by the manufacturer and delivered for sale in the U.S.

$Prod_T$ = The number of light trucks produced by the manufacturer and delivered for sale in the U.S.

(iii) If the value determined in paragraph (b)(2)(i) of this section is not greater than 10 or 15 grams per mile (as applicable), then the credits that may be accrued by a manufacturer using the default gram per mile values in paragraph (b)(1) of this section do not exceed the allowable limit, and total credits may be determined for each category of vehicles according to paragraph (f) of this section.

(iv) If the value determined in paragraph (b)(2)(i) of this section is greater than 10 or 15 grams per mile (as applicable), then the combined passenger automobile and light truck credits, in Megagrams, that may be accrued using the calculations in paragraph (f) of this section must not exceed the value determined in paragraph (b)(2)(ii) of this section. This limitation should generally be done by reducing the amount of credits attributable to the vehicle category that caused the limit to be exceeded such that the total value does not exceed the value determined in paragraph (b)(2)(ii) of this section.

* * * * *

(4) * * *

(v) *Active transmission warm-up* means one of the following:

(A) Through model year 2019, and optionally for model years 2020–2022, *active transmission warm-up* means a system that uses waste heat from the vehicle to quickly warm the transmission fluid to an operating temperature range using a heat exchanger, increasing the overall transmission efficiency by reducing parasitic losses associated with the transmission fluid, such as losses related to friction and fluid viscosity.

(B) Starting in model year 2023, and optionally for model years 2020–2022, *active transmission warm-up* means a system that uses waste heat from the vehicle's exhaust to warm the transmission fluid to an operating temperature range using a dedicated heat exchanger. *Active transmission warm-up* may also include coolant systems that capture heat from a liquid-cooled exhaust manifold if the system is segregated from the coolant loop in the engine block.

(vi) *Active engine warm-up* means one of the following:

(A) Through model year 2019, and optionally for model years 2020–2022, *active engine warm-up* means a system that uses waste heat from the vehicle to warm up targeted parts of the engine so that it reduces engine friction losses and enables closed-loop fuel control more quickly.

(B) Starting in model year 2023, and optionally for model years 2020–2022, *active engine warm-up* means a system that uses waste heat from the vehicle's exhaust to warm up targeted parts of the engine so that it reduces engine friction losses and enables closed-loop fuel control more quickly. *Active engine warm-up* may also include coolant systems that capture heat from a liquid-cooled exhaust manifold if the system is segregated from the coolant loop in the engine block.

* * * * *

(x) Passive *cabin ventilation* means one of the following:

(A) Through model year 2019, and optionally for model years 2020–2022, *passive cabin ventilation* means ducts, devices, or methods that utilize convective airflow to move heated air from the cabin interior to the exterior of the vehicle.

(B) Starting in model year 2023, and optionally for model years 2020–2022, *passive cabin ventilation* means methods that create and maintain convective airflow through the body's cabin by opening windows or sunroof when the vehicle is parked outside in direct sunlight.

* * * * *

(d) * * *

(2) * * *

(ii) * * *

(A) A citation to the appropriate previously approved methodology, including the appropriate **Federal Register** Notice and any subsequent EPA documentation of the Administrator's decision;

* * * * *

■ 9. Amend § 86.1870–12 by revising the section heading and paragraphs (a)(2) and (b)(2) to read as follows:

§ 86.1870–12 CO_2 credits for qualifying full-size light pickup trucks.

* * * * *

(a) * * *

(2) Full size pickup trucks that are strong hybrid electric vehicles and that are produced in the 2017 through 2025 model years are eligible for a credit of 20 grams/mile. To receive this credit in a model year, the manufacturer must produce a quantity of strong hybrid electric full size pickup trucks such that the proportion of production of such vehicles, when compared to the manufacturer's total production of full size pickup trucks, is not less than 10 percent in that model year. Full size pickup trucks earning credits under this paragraph (a)(2) may not earn credits based on the production multipliers described in § 86.1866–12(b).

* * * * *

(b) * * *

(2) Full size pickup trucks that are produced in the 2017 through 2025 model years and that achieve carbon-related exhaust emissions less than or equal to the applicable target value determined in § 86.1818–12(c)(3) multiplied by 0.80 (rounded to the nearest gram/mile) in a model year are eligible for a credit of 20 grams/mile. A pickup truck that qualifies for this credit in a model year may claim this credit for a maximum of four subsequent model years (a total of five consecutive model years) if the carbon-related exhaust emissions of that pickup truck do not increase relative to the emissions in the model year in which the pickup truck

first qualified for the credit. This credit may not be claimed in any model year after 2025. To qualify for this credit in a model year, the manufacturer must produce a quantity of full size pickup trucks that meet the emission requirements of this paragraph (b)(2) such that the proportion of production of such vehicles, when compared to the manufacturer's total production of full size pickup trucks, is not less than 10 percent in that model year. A pickup truck that qualifies for this credit in a model year and is subject to a major redesign in a subsequent model year such that it qualifies for the credit in the model year of the redesign may be allowed to qualify for an additional five years (not to go beyond the 2025 model year) with EPA approval. Use good engineering judgment to determine whether a pickup truck has been subject to a major redesign.

* * * * *

■ 10. Revise the section heading of § 86.1871–12 to read as follows:

§ 86.1871–12 Optional early CO_2 credit programs.

* * * * *

PART 600—FUEL ECONOMY AND GREENHOUSE GAS EXHAUST EMISSIONS OF MOTOR VEHICLES

■ 11. The authority citation for part 600 continues to read as follows:

Authority: 49 U.S.C. 32901–23919q, Pub. L. 109–58.

■ 12. Amend § 600.510–12 by revising paragraphs (j)(2)(v) introductory text and (vii)(A) introductory text to read as follows:

§ 600.510–12 Calculation of average fuel economy and average carbon-related exhaust emissions.

* * * * *

(j) * * *

(2) * * *

(v) For natural gas dual fuel model types, for model years 2012 through 2015, the arithmetic average of the following two terms; the result rounded to the nearest gram per mile:

* * * * *

(vii)(A) This paragraph (j)(2)(vii) applies to model year 2016 and later natural gas dual fuel model types. Model year 2021 and later natural gas dual fuel model types may use a utility factor of 0.5 or the utility factor prescribed in this paragraph (j)(2)(vii).

* * * * *

[FR Doc. 2021–16582 Filed 8–9–21; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL REGISTER

Vol. 86 Tuesday,
No. 151 August 10, 2021

Part III

Department of Transportation

Federal Motor Carrier Safety Administration

49 CFR Parts 371 and 375
Implementation of Household Goods Working Group Recommendations; Proposed Rule

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

49 CFR Parts 371 and 375

[Docket No. FMCSA–2020–0205]

RIN 2126–AC35

Implementation of Household Goods Working Group Recommendations

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: FMCSA proposes to update the Transportation of Household Goods regulations to incorporate recommendations from the Household Goods Consumer Protection Working Group (Working Group) contained in the *Recommendations to the U.S. Department of Transportation to Improve Household Goods Consumer Education, Simplify and Reduce Paperwork, and Condense FMCSA Publication ESA 03005* (Recommendations Report). The Agency proposes to update the regulations to reflect those aspects of the Recommendations Report which require a rulemaking to implement and are within the Agency's authority. The proposed updates based on these recommendations would result in an aggregate reduction in costs for household goods motor carriers and provide clarity for individual shippers.

DATES: Comments must be received on or before October 12, 2021. Comments on the information collection must be received on or before October 12, 2021.

ADDRESSES: You may submit comments identified by Docket Number FMCSA–2020–0205 using any of the following methods:

- Go to *https://www.regulations.gov/docket/FMCSA-2020-0205/document.* Follow the online instructions for submitting comments.
- *Mail:* Dockets Operations, 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:* Dockets Operations, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Ground Floor, Room W12–140, Washington, DC 20590–0001, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. To be sure someone is there to help you, please call (202) 366–9317 or (202) 366–9826 before visiting Dockets Operations.
- *Fax:* (202) 493–2251.

FOR FURTHER INFORMATION CONTACT: Ms. Monique Riddick, Commercial Enforcement and Investigations Division, Office of Enforcement and Compliance, Federal Motor Carrier Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590–0001; (202) 366–0073; *Monique.riddick@dot.gov.* If you have questions on viewing or submitting material to the docket, contact Dockets Operations, (202) 366–9826.

SUPPLEMENTARY INFORMATION: This notice of proposed rulemaking (NPRM) is organized as follows:

I. Public Participation and Request for Comments

A. Submitting Comments

If you submit a comment, please include the docket number for this NPRM (Docket No. FMCSA–2020–0205), indicate the specific section of this document to which your comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online or by fax, mail, or hand delivery, but please use only one of these means. FMCSA recommends that you include your name and a mailing address, an email address, or a phone number in the body of your document so that FMCSA can contact you if there are questions regarding your submission.

To submit your comment online, go to *https://www.regulations.gov/docket/FMCSA-2020-0205/document,* click on this NPRM, click ''Comment,'' and type your comment into the text box on the following screen.

If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the facility, please enclose a stamped, self-addressed postcard or envelope.

FMCSA will consider all comments and material received during the comment period and may make changes based on your comments.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA, 5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to the NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission that constitutes CBI as ''PROPIN'' to indicate it contains proprietary information. FMCSA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of the NPRM. Submissions containing CBI should be sent to Mr. Brian Dahlin, Chief, Regulatory Analysis Division, Office of Policy, Federal Motor Carrier Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590–0001. Any comments FMCSA receives which are not specifically designated as CBI will be placed in the public docket for this rulemaking.

FMCSA will consider all comments and material received during the comment period.

B. Viewing Comments and Documents

To view any documents mentioned as being available in the docket, go to *https://www.regulations.gov/docket/FMCSA-2020-0205/document* and choose the document to review. To view comments, click this NPRM, and click ''Browse Comments.'' If you do not have access to the internet, you may view the docket online by visiting Dockets Operations in Room W12–140 on the ground floor of the DOT West Building, 1200 New Jersey Avenue SE, Washington, DC 20590–0001, between 9

a.m. and 5 p.m., Monday through Friday, except Federal holidays. To be sure someone is there to help you, please call (202) 366–9317 or (202) 366–9826 before visiting Dockets Operations.

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.transportation.gov/privacy.*

D. Advance Notice of Proposed Rulemaking Not Required

This rulemaking is under the authority of several provisions in title 49 U.S.C., subtitle IV, part B and is not a safety rule under title 49 U.S.C., subtitle VI, part B. This rulemaking is therefore not subject to the requirement under 49 U.S.C. 31136(g) to publish an advance notice of proposed rulemaking or proceed with a negotiated rulemaking.

E. Comments on the Information Collection

Written comments and recommendations for the information collection discussed in this NPRM should be sent to FMCSA within 60 days of publication using any of the methods described in ''Public Participation and Request for Comments'' above.

II. Executive Summary

A. Purpose of the Amendments

FMCSA proposes to incorporate certain recommendations from the Working Group's Recommendations Report into the regulations at 49 CFR part 375. These recommendations, when implemented, would offer streamlined documentation requirements and provide opportunity for increased efficiency for the transportation of household goods for individual shippers by interstate household goods motor carriers and service by household goods brokers, improve consumer education and protection for individual shippers in need of their services, and combat fraud. The Working Group was established and provided recommendations pursuant to section 5503 of the Fixing America's Surface Transportation Act (FAST Act), Public Law 114–94, 129 Stat. 1312, 1551 (Dec. 4, 2015).

B. Summary of the Major Provisions

The proposed rule would implement the majority of the Working Group's recommendations that require a rulemaking. These recommendations would update a variety of regulatory requirements under 49 CFR part 375.

The first recommendation from the Working Group that is being proposed in this NPRM is to revise Appendix A to part 375 with an updated version of the *Your Rights and Responsibilities When You Move* booklet (Rights and Responsibilities). The updated Rights and Responsibilities booklet would contain the same information as the 2013 version of the booklet with some modifications to conform with the other proposed changes in this NPRM, which are discussed below, and to increase clarity of the information contained in the booklet. Additionally, FMCSA is proposing to implement the Working Group's recommendation to require motor carriers to provide the Rights and Responsibilities booklet at the same time as the estimate instead of at the time of the order for service as currently required. These changes to Appendix A and the Rights and Responsibilities booklet would ensure that the appendix matches the information contained in the booklet and that the booklet presents individual shippers with clear and accurate information earlier in the moving process. FMCSA is also proposing to remove the requirement in section 375.213(e) for a waiver if the individual shipper accesses either *Ready to Move?* or the Rights and Responsibilities booklet via a hyperlink.

The next recommendation from the Working Group that is being proposed in this NPRM is to remove the ability of the motor carrier or individual shipper to revise a binding estimate or a non-binding estimate. Instead, FMCSA would require the preparation of a new binding estimate or new non-binding estimate when the individual shipper tenders additional items or requests additional services. This would incorporate into the regulations certain provisions from the FMCSA guidance titled *Regulatory Guidance Concerning Household Goods Carriers Requiring Shippers To Sign Blank or Incomplete Documents* (76 FR 50537, Aug. 15, 2011) (2011 guidance). FMCSA is also proposing to incorporate other provisions from the 2011 guidance that clarify that an individual shipper may never be required to sign a blank document, and that the shipper may be required to sign an incomplete document only when it is missing certain information that cannot be determined before the document must be signed. These proposed changes would increase protection of individual shippers by ensuring that any documents they are required to sign be as accurate as possible at the time those documents are signed.

This proposal would also implement the Working Group's recommendation to allow for virtual surveys of household goods. By updating the definition of *physical survey* to include virtual surveys, this proposed change would allow an option for motor carriers and individual shippers to use live video to conduct surveys, rather than requiring motor carriers to survey the household goods to be moved in-person. A related recommendation to require motor carriers to conduct surveys beyond a 50-mile radius is also being proposed. Based on the availability of virtual surveys, this would ensure that every individual shipper has the option of a survey of their goods prior to the preparation of an estimate. The implementation of these two recommendations, as proposed, would reduce the burden on motor carriers for moves originating within 50 miles of the motor carrier agent's location by allowing them to conduct surveys remotely, while enhancing protection of individual shippers who are beyond 50 miles from the motor carrier agent's location by offering the option for a survey regardless of where the household goods are located.

This proposal would also implement the Working Group's recommendations to remove the requirement for an order for service, update the requirements in the bill of lading, and require the bill of lading to be provided earlier in the moving process. This proposal incorporates all of the requirements that are currently part of the order for service into the bill of lading. FMCSA also proposes to require the bill of lading to be signed at least 3 days before the scheduled date of the move in order to ensure that the bill of lading is provided earlier in the moving process. This would reduce the paperwork burden on motor carriers while ensuring that individual shippers would be given the same level of protection as they are under the current regulations.

FMCSA is also proposing to implement the Working Group's recommendation to replace the requirement for a freight bill with an invoice. This proposed change would increase clarity for individual shippers regarding any outstanding balances that must be paid while reducing repetitive paperwork for motor carriers.

This proposal would implement the Working Group's recommendation to require all motor carriers who have a

website to display prominently, at their option, a link to either *Ready to Move?* on the FMCSA website or to a true and accurate copy of *Ready to Move?* on their own websites. This would increase the opportunity for individual shippers to become aware of the information contained in *Ready to Move?* earlier in the moving process.

In addition to proposing to implement the Working Group's recommendations, FMCSA is proposing additional minor changes to the regulations which are intended to increase clarity and consistency.

C. Benefits and Costs

This proposed rule would affect household goods motor carriers and individual shippers. Some provisions in this rule would result in costs for motor carriers (*i.e.,* providing the Rights and Responsibilities booklet earlier in the process, and providing either in-person or virtual surveys at locations beyond 50 miles from the motor carrier agent's location), and some provisions would result in negative costs, or cost savings (*i.e.,* allowing virtual surveys in place of in-person surveys, and eliminating the order for service document and including its information in the bill of lading). The motor carrier efficiencies discussed would not negatively impact shippers, as the services and information received today would not change under the proposed rule. FMCSA does not anticipate that shippers would incur costs as a result of this proposed rule. FMCSA estimates the total 10-year costs of this rule, if finalized as proposed, at −$1.6 million (or $1.6 million in cost savings) discounted at 3 percent, and −$1.3 million (or $1.3 million in cost savings) discounted at 7 percent. Expressed on an annualized basis, this equates to −$188,000 in costs (or $188,000 in cost savings) at both a 3 and 7 percent discount rate.

FMCSA does not expect this rule to impact safety. FMCSA does expect that it would result in benefits related to consumer protection and potentially motor carrier fuel savings. The proposal would result in shippers receiving accurate and clear information earlier in the process, enabling them to make more informed and better decisions regarding which household goods motor carrier to hire. Additionally, the proposal would aid in obtaining more accurate estimates of moving fees based on physical surveys for those interstate moves that are beyond 50 miles from a motor carrier agent's location.

III. Abbreviations

AMSA American Moving and Storage Association
ATA American Trucking Associations
ATRI American Transportation Research Institute
CAGR Compound Average Growth rate
CE Categorical Exclusion
CFR Code of Federal Regulations
DOT Department of Transportation
E.O. Executive Order
FAST Act Fixing America's Surface Transportation Act
FMCSA Federal Motor Carrier Safety Administration
FOIA Freedom of Information Act
FR Federal Register
HHG Household goods
ICC Interstate Commerce Commission
MAP–21 Moving Ahead for Progress in the 21st Century Act
MCMIS Motor Carrier Management Information System
MCSAP Motor Carrier Safety Assistance Program
NAICS North American Industry Classification System
OMB Office of Management and Budget
PIA Privacy Impact Assessment
PII Personally Identifiable Information
PTA Privacy Threshold Assessment
SAFETEA–LU Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
Secretary Secretary of Transportation
STB Surface Transportation Board
U.S.C. United States Code

IV. Legal Basis for the Rulemaking

The purpose of this rulemaking is to propose changes in the regulations in 49 CFR part 375 applicable to the transportation of household goods for individual shippers in interstate commerce. Most of the proposed changes involve FMCSA's implementation of the recommendations of the Working Group, which was established pursuant to section 5503 of the Fixing America's Surface Transportation Act (FAST Act), Public Law 114–94, 129 Stat. 1312, 1551 (Dec. 4, 2015). Additional changes are being proposed by FMCSA to update provisions in part 375 and its appendix A.

FMCSA's authority to provide protection for individual shippers of household goods is found in several sections of 49 U.S.C. subtitle IV, part B. The sections primarily involved in this rulemaking are 49 U.S.C. 13704, 13707, and 14104. They govern guaranteed service and charges for transportation, payment of rates, and surveys, estimates, and weighing of shipments, respectively. The Secretary of Transportation (the Secretary) has specific authority to issue regulations, including regulations protecting individual shippers, in order to carry out 49 U.S.C. subtitle IV, part B with respect to the transportation of household goods by motor carriers (49 U.S.C. 14104(a)). The Secretary also has broad authority to prescribe regulations to carry out 49 U.S.C. subtitle IV, part B. 49 U.S.C. 13301(a). This authority has been delegated by the Secretary to FMCSA (49 CFR 1.87(a)).

V. Background

FMCSA is an operating administration of the United States Department of Transportation (USDOT). FMCSA's primary mission is to reduce crashes, injuries, and fatalities involving large trucks and buses.

In addition to its primary safety mission, FMCSA is responsible for a national household goods transportation and consumer protection program that promotes increased compliance through data analysis, investigations, enforcement, and public education and outreach activities, and is responsible for licensing and regulating more than 5,000 interstate household goods motor carriers, freight forwarders, and brokers.

Historically, the Interstate Commerce Commission (ICC) regulated all aspects of the interstate moving process from assessing the need to permit entities to participate in the industry, to pricing, to establishing how claims would be handled. When Congress terminated the ICC in 1995 (ICC Termination Act of 1995, Pub. L. 104–88, 109 Stat. 803 (Dec. 29, 1995)), it transferred household goods regulation to the USDOT. Congress established FMCSA in 2000 to carry out the regulation of commercial motor vehicles, specifically large trucks and buses. Congress also granted the Agency authority over consumer protection of individual household goods shippers.

Since FMCSA's inception, Congress has addressed the regulation of household goods movers through legislation to improve consumer protection and regulatory authority to ensure compliance by motor carriers, brokers, and freight forwarders. The legislation is briefly outlined below:

- Sections 4201–4216 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU), Public Law 109–59, passed in 2005. These sections of SAFETEA–LU are also referred to as the ''Household Goods Mover Oversight Enforcement and Reform Act of 2005;''
- Sections 32921–32923 of the Moving Ahead for Progress in the 21st Century Act (MAP–21), Public Law 112–141, passed in 2012. MAP–21 brought about significant updates to licensing requirements for household goods motor carriers; and

• Section 5503 of the FAST Act, Public Law 114–94, passed in 2015. The FAST Act called for the formation of the Working Group to develop recommendations on how best to convey relevant information to consumers with respect to Federal laws that pertain to the interstate transportation of household goods by motor carriers.

The rationale for this rulemaking to update 49 CFR part 375 is that the rules contained therein are outdated. Additionally, Appendix A: *Your Rights and Responsibilities When You Move* is outdated. The Protect Your Move website (*http://www.protectyourmove.gov*) displays the 2013 version of the Rights and Responsibilities booklet, which did not undergo change through the rulemaking process. The booklet was instead approved by the FMCSA Administrator for distribution to the household goods industry and their customers. The booklet was shortened in 2013 to enhance readability and contained new regulatory language from the Surface Transportation Board (STB) regarding valuation and insurance and the placement of this language on FMCSA-required transportation documents.

As stated above, the FAST Act required FMCSA to establish a working group to provide specific recommendations as outlined below. The Working Group was comprised of representatives of the Agency, consumer affairs experts, educators with expertise in how people learn most effectively, and representatives of the household goods moving industry. These members represented all facets of the household goods industry and worked vigorously to produce the Recommendations Report.

Specifically, the FAST Act directed the Working Group to develop recommendations for FMCSA in the following areas:

1. Condense FMCSA publication ESA 03005 (*Ready to Move?*) into a format more easily used by consumers;

2. Use state-of-the-art education techniques and technologies, including optimizing the use of the internet as an educational tool; and

3. Reduce and simplify the paperwork required of motor carriers and shippers in interstate transportation.

The Working Group produced a Recommendations Report [1] with 19 recommendations for FMCSA, stating:

1. Develop and maintain modern communications tools, platforms, and partnerships to educate consumers.

2. Develop online (and other) education modules that are short and easily understood, and aligned with the different phases of the moving process.

3. Develop and maintain modern tools to assist the moving industry with its efforts to educate consumers.

4. Provide additional funding for staff and resources dedicated to household goods consumer education. This funding would allow FMCSA to:

• Procure full time, year-round, dedicated resources and personnel (either Federal or contracted) with the expertise needed to implement state-of-the-art education utilizing the internet as a tool for the purpose of consumer protection education and outreach efforts.

• Collect data (such as intake interviews) to ensure that education and outreach efforts are effective and continuously improving.

• Collaborate and build partnerships with industry, the public, and other organizations.

• Develop content delivery and messaging tactics for consumer protection education and outreach.

5. This Working Group recommends the following with regard to FMCSA–ESA–03–006, *Your Rights and Responsibilities When You Move:*

• The 2013 version should be formally adopted by rulemaking to officially replace the pre-2013 version which FMCSA currently permits movers to choose to use in lieu of the formally approved wording.

• FMCSA should look for opportunities to further condense and streamline this document.

• If applicable, and as other recommendations are adopted in the future, the contents of this document should be updated to reflect the changes that are implemented as a result of this Working Group's efforts.

• It should be acceptable for movers to provide this document electronically without requiring the shipper to provide written consent to waive their right to a hard copy.

• Movers should be required to provide this document earlier in the move process (along with the estimate instead of before the order for service).

6. FMCSA's guidance should be formally adopted that if a consumer tenders additional items or requests additional services prior to load, and the mover agrees to such additions, the mover should prepare a completely new estimate (instead of amending the existing one). Additionally, the mover should maintain a record of the date, time, and manner that the new estimate was accepted by the shipper.

7. Change the requirement for a ''physical'' survey to a ''visual'' survey. The term ''visual survey'' should include both physical and virtual surveys.

8. Movers should be required to offer visual surveys for all household goods shipments, including those that are located over 50-miles from the mover's location. Consumers should continue to have the option to waive in writing the visual survey if they choose, but movers must offer them the option of a visual survey regardless of distance.

9. The requirement for an order for service should be eliminated, and the unique, critical items from the order for service should be moved to the bill of lading. (Note: The Working Group is recommending eliminating the order for service as a requirement of all movers, but movers that prefer to use an order for service should still be allowed to do so.)

10. The following changes should be made to the bill of lading requirements:

• The carrier's physical address, telephone number, and DOT number should be added to the bill of lading requirements.

• The bill of lading should continue to require the carrier's name, and either the legal or trade name registered with FMCSA should be acceptable.

• The requirement to provide names, addresses, and telephone numbers of additional motor carriers involved in the move should be eliminated. (However, movers should still be allowed to provide this information if they choose to.)

• Any reference to the order for service should be removed from the bill of lading.

• Add ''Any identification or registration number you assign to the shipment'' to the bill of lading requirements (carried over from the current order for service requirements).

• A statement should be added that the bill of lading incorporates by reference all of the services and charges printed on the estimate.

11. The bill of lading should be made available to consumers prior to the date of load, at least as early as the time when the order for service was previously provided (before a mover receives a shipment from an individual shipper).

12. Remove the requirement for a freight bill, and the written notices for a freight bill should be transferred to an invoice.

13. Finalize the proposed rulemaking published at 79 FR 23306 (4/28/14) to

[1] Available at *https://www.fmcsa.dot.gov/fastact/fast-act-hhg-working-group-report-recommendations*. The Recommendations Report is also in the docket for this rulemaking.

allow for electronic delivery of all required documents.

14. Eliminate the current requirement for consumers to sign a written waiver in order to receive their documents electronically.

15. Movers should be required to provide FMCSA publication ESA 03005 (*Ready to Move?*) when the visual survey is either scheduled or waived by the consumer.

16. The title of FMCSA publication ESA 03005 should be changed from *Ready to Move?* to *Choose Your Mover.*

17. ESA 03005 should be made available electronically and should be printable. It should fit on a standard desktop or laptop screen without requiring scrolling, and it should also be mobile-friendly. Consideration should be given to how the brochure can be both visually appealing and also direct consumers' attention to the right places.

18. All movers who have a website should be required to prominently display, at their option, either a link to the brochure (ESA 03005) on the FMCSA website or a true and accurate copy of ESA 03005 on their own websites.

19. ESA 03005 should be condensed to include only the content found in Appendix H.

The Recommendations Report includes a discussion of potential benefits to both motor carriers and consumers, which are attributed to the reduction in paperwork motor carriers are required to issue. The recommendations of the Working Group seek to provide clarity for consumers, allowing them to move with confidence and make their moves more successful. Finally, the Recommendations Report states that these updates would provide the opportunity for motor carriers to create a smooth moving experience for consumers.

VI. Discussion of Proposed Rulemaking

FMCSA has reviewed the recommendations contained in the Recommendations Report and is now proposing changes to 49 CFR part 375 to implement those recommendations that FMCSA believes require a rulemaking. After considering the recommendations, FMCSA found that recommendations 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, and 18 would require a change to the regulations at 49 CFR part 375 to implement.[2] Those 11 recommendations are therefore considered in this proposed rule, including recommendation 15 discussed below, which FMCSA lacks statutory authority to implement. The Agency will address the remaining recommendations separate from this rulemaking.

The specific proposed changes based on the Recommendations Report are described below.

A. Recommendations 5 and 14—Appendix A and Electronic Documents

Recommendation 5 suggests that FMCSA incorporate the 2013 version of the Rights and Responsibilities booklet into appendix A to part 375. Recommendation 5 also suggests that FMCSA look for ways to further condense and streamline the 2013 booklet, update the document with any changes to part 375 from the Recommendations Report, and require movers to provide this booklet earlier in the moving process.

Under current guidance titled *Guidance on FMCSA's Publication: Your Rights and Responsibilities When You Move,* FMCSA permits distribution of both the 2013 and the pre-2013 version of the Rights and Responsibilities booklet (78 FR 25782, May 2, 2013). The Working Group noted that the 2013 version is much more streamlined than the pre-2013 version, which the Working Group stated is long, cumbersome, and less helpful to consumers. The Working Group also determined that the 2013 version can be further condensed and would need to be updated to conform with any changes to the regulations in 49 CFR part 375.

FMCSA proposes to revise appendix A to part 375 to formally adopt an updated version of the Rights and Responsibilities booklet. Appendix A currently contains the contents of the pre-2013 version of the Rights and Responsibilities booklet. The updated version of the Rights and Responsibilities booklet that would be incorporated into appendix A would contain the same information as the 2013 version of the booklet, with further updates to reflect the changes to 49 CFR part 375 proposed by this rulemaking, as discussed below. These edits would ensure that the content of the booklet conforms with the updated regulations. The updated Rights and Responsibilities booklet, and therefore appendix A, would also include various minor changes intended to increase the clarity of the information in the booklet for individual shippers. These changes would ensure that the Rights and Responsibilities booklet and appendix A are consistent and contain the most up-to-date information for individual shippers.

The updated Rights and Responsibilities booklet would contain the same information provided in the proposed contents of appendix A in this rulemaking. Any comments received on the proposed appendix A below which result in changes in a final rule would therefore be reflected in the final version of the updated Rights and Responsibilities booklet. If this NPRM is finalized, motor carriers would be required to provide the updated Rights and Responsibilities booklet in order to satisfy the requirements under 49 CFR 375.213. Accordingly, the Agency would rescind the guidance titled *Guidance on FMCSA's Publication: Your Rights and Responsibilities When You Move* (78 FR 25782, May 2, 2013) because the pre-2013 and 2013 versions of the Rights and Responsibilities booklet would be inaccurate due to the changes to 49 CFR part 375 in this rulemaking, resulting in individual shipper being misinformed about their regulatory rights and responsibilities under 49 CFR part 375.

FMCSA proposes to amend 49 CFR 375.213 to require motor carriers to provide individual shippers with the Rights and Responsibilities booklet at the time the estimate is provided. The regulations at 49 CFR 375.213 currently require the Rights and Responsibilities booklet to be provided along with the order for service. The statute at 49 U.S.C. 14104(b)(2) states, in part:

> Before the execution of a contract for service, the motor carrier shall provide the shipper copy of the Department of Transportation publication OCE 100, entitled ''Your Rights and Responsibilities When You Move'' required by section 375.213 of title 49, Code of Federal Regulations (or any successor regulation).

FMCSA is proposing to require the Rights and Responsibilities booklet be provided along with the estimate, which is prior to the execution of a contract for service (the bill of lading under the proposed changes in this rulemaking). Motor carriers would likely see an increased burden under this proposed change because they would be required to provide the Rights and Responsibilities booklet earlier in the moving process and more often than they are currently required. This proposed change, however, would also increase the likelihood that individual shippers would become aware of the consumer protection information in the booklet earlier in the moving process, when it would be more helpful for them to understand their rights and responsibilities.

[2] See *Household Goods Consumer Protection Working Group Report To Congress.* Available at *https://www.fmcsa.dot.gov/mission/policy/household-goods-consumer-protection-working-group-report-congress.* The Household Goods Consumer Protection Working Group Report To Congress is also in the docket for this rulemaking.

The Working Group Report, in its Recommendations 5 and 14, also suggests that FMCSA should revise its regulations to make it acceptable for motor carriers to provide documents, including the Rights and Responsibilities booklet, electronically without requiring the shipper to provide written consent to waive their right to a hard copy. These recommendations were considered by FMCSA after the Working Group Report in the rulemaking titled ''Electronic Documents and Signatures'' (NPRM, 79 FR 23306, (April 28, 2014), and final rule, 83 FR 16210 (April 17, 2018)) which implemented provisions similar to the related recommendation 13 by ''eliminating the requirement in § 375.213 for the Ready to Move brochure and Rights and Responsibilities booklet to be provided only in paper copy or retrieved at a URL.'' See 83 FR at 16214.

The Electronic Documents final rule retained the provisions of 49 CFR 375.213(e), which provides that a shipper may elect to waive receipt of a copy of either *Ready to Move?* or the Rights and Responsibilities booklet and elect to access the same information via a hyperlink on the carrier's website to the FMCSA web page. 49 CFR 375.213(a) and (b)(1). When the shipper elects to receive these documents via the hyperlink, the motor carrier is required to obtain a signed and dated receipt that includes ''verification of the shipper's agreement to access the Federal consumer protection information on the internet.'' 49 CFR 375.213(e)(2).

FMCSA is proposing to remove the requirement in section 375.213(e)(1) for a waiver in order for the individual shipper to have the option to access either *Ready to Move?* or the Rights and Responsibilities booklet via a hyperlink. FMCSA is not proposing to change the requirements of section 375.213(e)(2) and (3) for the motor carrier to obtain and retain proof that the shipper agreed to access one or both of these publications via the internet.[3] The proposed change would no longer require a waiver for the individual shipper to access documents electronically through a hyperlink, but would still require the motor carrier to obtain a signed receipt as proof of the individual shipper's acknowledgment that they have received access to the electronic copies of these documents. These documents are important to educate individual shippers, and it is necessary ensure that the motor carrier's records are clear that the shipper was able to access to these documents through the provided hyperlink.

B. Recommendation 6—Estimates

Recommendation 6 from the Recommendations Report suggested that FMCSA eliminate the motor carrier's ability to revise a binding estimate or a non-binding estimate and, if additional items are tendered, require that a new binding estimate or new non-binding estimate be prepared. The Working Group explained that, while this practice has been adopted in FMCSA guidance titled, *Regulatory Guidance Concerning Household Goods Carriers Requiring Shippers To Sign Blank or Incomplete Documents* (76 FR 50537, Aug. 15, 2011) (2011 guidance), it should be formally adopted into the regulations.

FMCSA proposes to amend 49 CFR 375.403(a)(6)(ii), (a)(9), and 49 CFR 375.405(b)(7)(ii) to clarify that a motor carrier must prepare a new binding or non-binding estimate when an individual shipper tenders additional household goods or requests additional services. This proposed change would update the regulatory language for consistency with FMCSA's interpretation of the regulations issued in response to question 3 in the 2011 guidance.

Additionally, FMCSA is proposing to incorporate the rest of the 2011 guidance into the regulations in 49 CFR part 375. The 2011 guidance refers to the regulations at § 375.501(d) when discussing blank documents, incomplete documents, and revised estimates. As discussed in section VI.D. below, FMCSA is proposing to remove 49 CFR 375.501 from the regulations and move certain items from 49 CFR 375.501 to 49 CFR 375.505, including the requirements that are currently located at § 375.501(d). Accordingly, the edits incorporating FMCSA's interpretation of § 375.501(d) found in the 2011 guidance would be made to paragraph § 375.505(g). FMCSA is proposing to add subparagraph (3) to proposed paragraph (g) of § 375.505, which would prevent a motor carrier from requiring an individual shipper to sign a blank document. The Agency is also proposing an additional sentence to paragraph (g)(2) of § 375.505 which would allow motor carriers to omit from documents only that information that cannot be determined before loading, such as actual shipment weight or unforeseen charges incurred in transit. These additional changes clarify how blank and incomplete documents may be involved in the moving process. Blank and incomplete documents may both be provided to the individual shippers for informational purposes. Motor carriers may never require an individual shipper to sign a blank document. Motor carriers may however require individual shippers to sign incomplete documents only when the information omitted from the documents cannot be determined before loading, such as actual shipment weight or unforeseen charges incurred in transit.

These proposed changes fully incorporate FMCSA's interpretation of the regulations from the 2011 guidance into 49 CFR part 375. The proposed changes would protect individual shippers from motor carriers that attempt improperly to utilize blank documents, incomplete documents, or revised estimates when such use is a violation of the regulations in 49 CFR part 375 and would provide additional clarity to motor carriers regarding proper use of blank and incomplete documents. FMCSA would rescind the 2011 guidance if the proposed changes discussed above are finalized.

C. Recommendations 7 and 8—Surveys of Household Goods

Recommendation 7 from the Recommendations Report suggested that FMCSA change the requirement for a physical survey to a visual survey. The Working Group stated that the term *visual survey* should include both physical and virtual surveys. The Working Group determined that the term *visual survey* was necessary to ensure that movers actually see what they would be moving before preparing an estimate, while recognizing that technological advances would allow remote surveys through the use of video capability in addition to physical surveys.

FMCSA proposes to define the term *physical survey* to include both on-site and virtual surveys. The requirement for a physical survey originates in 49 U.S.C 14104(b)(1)(A), which states:

> Except as otherwise provided in this subsection, every motor carrier providing transportation of household goods described in section 13102(10)(A) as a household goods motor carrier and subject to jurisdiction under subchapter I of chapter 135 shall conduct a physical survey of the household goods to be transported on behalf of a prospective individual shipper and shall provide the shipper with a written estimate of charges for the transportation and all related services.

However, there is no definition for the term *physical survey* in the statute and FMCSA has not established a definition

[3] Section 375.213(e) is proposed to be renumbered as section 375.213(f) with substantive changes to allow the proposed insertion of a new paragraph (e).

of the term in the regulations under 49 CFR 375. FMCSA therefore proposes a reasonable interpretation of the statutory term *physical survey* in order to give a clear meaning to the term and to resolve any ambiguity. FMCSA would not change the term *physical survey* to *visual survey* as recommended by the Working Group because FMCSA does not believe that it can replace the statutory term with a new term. However, FMCSA has sufficient authority to propose a reasonable interpretation of the term which meets the functional intent of the Working Group's recommendation.

FMCSA proposes to define *physical survey* in 49 CFR 375.103 as ''a survey which is conducted on-site or virtually. If the survey is performed virtually, the household goods motor carrier must be able to view the household goods through live video that allows it to clearly identify the household goods to be transported.'' The proposed definition of *physical survey* would allow for virtual surveys with a live video component that would permit motor carriers to see the household goods that are the subject of the survey as if the motor carrier were performing the survey on-site. Any survey conducted without a video component, such as verbally over the phone or through filling out a form, would not be acceptable under this proposed change. This definition requires both the motor carrier and the individual shipper to be physically present on a live video in order to perform a virtual survey.

This proposed change recognizes the significant technological advances (*e.g.,* use of smart phones, tablets, faster computers) that have occurred since the passage of SAFETEA–LU and its implementing regulations, which allow for clear live videos between motor carriers and individual shippers. Allowing motor carriers to use this technology to conduct remote surveys of household goods reduces the burden of those surveys on the motor carriers. Requiring a live visual component to the survey process ensures that motor carriers provide consumers with estimates that are as accurate as those prepared following an on-site survey.

Recommendation 8 from the Recommendations Report suggested that FMCSA require movers to offer visual surveys for all household goods shipments, including those that are located over 50 miles from the motor carrier agent's location. The Working Group determined that, with the availability of virtual surveys, consumers' ability to obtain a visual survey should no longer be limited because of distance.

FMCSA proposes to remove the provision under 49 CFR 375.401(a)(1) that excepts from the physical survey requirement those surveys where the household goods are located more than 50 miles from the motor carrier agent's location. FMCSA also proposes to remove similar language from 49 CFR 371.113(a) to ensure consistency in the regulations relating to household goods brokers. The statutory language in 49 U.S.C. 14104(b)(1)(C) states that the written estimate given to an individual shipper shall be based on a physical survey of the household goods if the household goods are located within a 50-mile radius of the location of the carrier's agent preparing the estimate. Congress enacted this provision in section 4205 of SAFETEA–LU, Public Law 109–59, 119 Stat. 1144 at 1753–54 (Aug. 10, 2005). Both the statute and legislative history are silent on whether an estimate should be based on a physical survey when the household goods are located more than 50 miles from the location of the carrier's agent. (Id., see also Sen. Rep. 109–120 at 47–48 (July 29, 2005), and H. Conf. Rep. 109–203 at 1009–1010 (July 28, 2005)). But the Senate report on SAFETEA–LU also noted that:

> Inaccurate estimates based on an inventory provided by a prospective customer over the telephone or the internet are the source of many complaints and disputes. It is hoped that requiring an estimate be based on a visual inspection of the goods to be moved prior to the execution of a contract will significantly reduce such disputes.

In 2007, FMCSA adopted regulations to implement this statutory provision, among others, in *Amendments To Implement Certain Provisions of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU),* 72 FR 36760. The Agency stated that:

> The statute permits two exceptions to the requirement for a physical survey. First, the motor carrier need not conduct a physical survey if the household goods are located beyond a 50-mile radius of the location of the carrier's household goods agent preparing the written estimate provided to the individual shipper.

72 FR at 36764. Because the statute permitted, but did not require, that estimates for household goods located more than 50 miles from the motor carrier agent's location be based on a physical survey, the implementing regulation, in § 375.401(a)(1) provides:

> If the household goods are located beyond a 50-mile radius of the location of the household goods motor carrier's agent preparing the estimate, the requirement to base the estimate on a physical survey does not apply.

See also 72 FR at 36766. Even though household goods carriers and their agents are not required to perform a physical survey on goods located more than 50 miles from the motor carrier agent's location, neither the statute nor the regulation precludes carriers from conducting a physical survey in such circumstances, if they choose to do so. For similar reasons, the statute also does not preclude the consideration of a regulatory requirement for physical inspection of household goods located beyond the 50-mile radius.

Recommendation 8 in the Recommendations Report states:

> Movers should be required to offer visual surveys for all household goods shipments, including those that are located over 50-miles from the mover's location. Consumers should continue to have the option to waive in writing the visual survey if they choose, but movers must offer them the option of a visual survey regardless of distance.

As the Recommendations Report explained:

> The Working Group also discussed the current exception to the survey requirements for consumers who are over 50 miles from the HHG carrier's agent. The reason for this exception is because consumers living in remote areas may not be able to obtain one or more estimates if movers were required to travel long distances to physically inspect shipments. The Working Group determined that since virtual surveys are a realistic possibility, that consumers' ability to obtain a visual survey should not now be waived automatically because of distance. Rather, if consumers' goods are located more than 50 miles from the mover's agent that is providing the estimate, they should be given the option of a visual survey. Consumers should continue to have the option to waive the visual survey if they choose, but movers must offer them the option of a visual survey regardless of distance. Movers will be required to perform a visual survey unless the *consumer* decides to voluntarily waive the right for such survey.

Report at 30–31 (emphasis in original). In the Report to Congress in response to the Working Group's recommendations (submitted in September 2019 as required by section 5503 of the FAST Act), FMCSA addressed Recommendation 8 as follows:

> FMCSA is evaluating the working group's recommendation. If deemed appropriate by the Administrator/Secretary, FMCSA will develop proposed regulatory changes for notice and comment rulemaking. This recommendation would add a potential benefit to the consumer by preventing unexpected charges for additional household goods.

Report at 4.

As recognized in the passage above from the Senate Report on SAFETEA–LU, a physical inspection of the

household goods to be moved is important because it provides an accurate inventory, permits the creation of a meaningful estimate (whether binding or non-binding), and minimizes the opportunity for both fraudulent actions by the carriers or their agents and/or disputes with consumers. The development of technology that allows virtual surveys to be conducted accurately and efficiently by remote electronic means that can be included within the scope of physical surveys (as proposed in the NPRM) enables the requirement to be extended to household goods shippers located more than 50 miles from the motor carrier agent's location. FMCSA is proposing to adopt this requirement because it has concluded that 49 U.S.C. 14104(b) does not preclude the application of a requirement of a physical survey (either on-site or virtual, as discussed earlier in this proposal). Even if the carrier would be required to offer a physical survey to all individual shippers, those individual shippers could still waive the physical survey, if desired.

In addition, 49 U.S.C. 14104(a) includes a general delegation of authority to the Agency to adopt regulations for the protection of individual shippers of household goods. By expanding the required use of physical surveys (either on-site or virtual) to individual shippers located beyond 50 miles, the proposed amendment would provide more shippers with protections and increase the competitive alternatives available to them. Requiring a physical survey beyond 50 miles could result in motor carriers performing more surveys of household goods than they perform under the current regulations. FMCSA estimates however that all shippers located beyond 50 miles from the motor carrier agent's location would take advantage of the virtual survey option, as discussed in section IX.A.

D. Recommendations 9, 10, and 11—Order for Service and Bill of Lading

Recommendation 9 from the Recommendations Report suggested that FMCSA should eliminate the order for service and add any items on the order for service that are not already on the bill of lading to that document. The Working Group explained that the requirement for an order for service results in an additional paperwork burden for motor carriers without providing any additional protection for individual shippers. The Working Group stated that the information required by the bill of lading and order for service is very similar, therefore they could be combined to reduce the paperwork burden for motor carriers.

FMCSA proposes to remove the requirement for an order for service for the shipment of household goods under Part 375. This proposed change recognizes the significant overlaps in the current order for service requirements in § 375.501 and the bill of lading requirements in § 375.505. Additionally, FMCSA proposes to remove all references to the order for service from Part 375 and replace them with references to the bill of lading. FMCSA proposes to delete 49 CFR 375.501 and, as discussed below, to update 49 CFR 375.505 with all of the requirements currently found in § 375.501.

Recommendation 10 from the Recommendations Report suggested that FMCSA make a variety of updates to the bill of lading requirements:

- Add the carrier's physical address, telephone number, DOT number, any identification or registration number assigned to the shipment, and a statement that the bill of lading incorporates by reference all of the services and charges printed on the estimate;
- Continue to require the carrier's name on the bill of lading, and provide that either the legal or trade name (*i.e.,* doing business as name) registered with FMCSA is acceptable for use;
- Eliminate the requirement that names, addresses, and telephone numbers of additional motor carriers involved in the move be provided; and
- Remove references to the order for service;

Recommendation 11 from the Recommendations Report suggested that FMCSA should require movers to provide the bill of lading to consumers prior to the date of loading.

FMCSA proposes to update the requirements for a bill of lading under 49 CFR 375.505 to include requirements currently found in an order for service. The proposed bill of lading requirements would offer the same level of protection, but with a lesser paperwork burden. These updates to the bill of lading requirements include almost all of the recommended changes in recommendation 10. FMCSA is not proposing to eliminate the requirement to provide names, addresses, and telephone numbers of additional motor carriers involved in the move, because this requirement provides the individual shipper with information that is often necessary to understand which motor carriers are involved in the shipment of their household goods.

FMCSA proposes to update § 375.505(b) by adding the requirements currently found in § 375.501(a) which are not already covered by § 375.505(b). This proposed change ensures that § 375.505(b) would require the same information on a bill of lading currently required in an order for service. By ensuring that all the information from both documents would be included in the bill of lading, the proposed change would provide the same level of consumer protection while only requiring a single document and therefore reducing the burden on motor carriers.

FMCSA also proposes to update 49 CFR 375.505 by adding the requirements that are currently in 49 CFR 375.501(b) through (e). Under the proposed change, these sections would be moved to § 375.505(e) through (h). These sections would also be updated to replace references to an order for service with references to a bill of lading. FMCSA also proposes an additional update to the new § 375.505(f) to clarify that the bill of lading must be signed at both the origin and the destination of the shipment by the motor carrier and the individual shipper. These proposed changes would ensure that the regulatory requirements that are currently in 49 CFR 375.501 are fully incorporated into 49 CFR 375.505 and would not be lost by removing the requirement for an order for service.

Additionally, FMCSA proposes to add § 375.505(h) to require movers to provide the bill of lading to consumers prior to the date of load. The Working Group recommended that the bill of lading be provided before the date of the load, at least as early as the order for service was provided. The current regulations do not have a specific requirement for when the order for service must be provided to an individual shipper. However, § 375.501(e) mentions allowing for a 3-day period, if possible, for the individual shipper to rescind the order for service after it is provided by the motor carrier. FMCSA proposes to require motor carriers to provide a bill of lading to individual shippers at least 3 days prior to the date the shipment is scheduled to be loaded. This proposed approach implements recommendation 11 and ensures that individual shippers will have sufficient time to fully read and understand the bill of lading and decide if they want to rescind it. FMCSA specifically requests public comment on whether the bill of lading should be provided more or fewer than 3 days before the date the shipment is scheduled to be loaded.

E. Recommendation 12—Invoice

Recommendation 12 from the Recommendations Report suggested that FMCSA remove the requirement for a freight bill, and replace references in the Federal Motor Carrier Safety Regulations to a freight bill with references to an invoice. The Working Group stated that the freight bill requirement is repetitive and unnecessary, evidenced by the fact that movers typically combine it with the bill of lading. The Working Group explained that customers who have already paid in full for their charges find a freight bill confusing, while customers with a balance due after their deliveries better understand an invoice as a request for payment.

FMCSA proposes to replace the requirement for a freight bill in Subpart H of 49 CFR part 375 with a requirement for an invoice. This proposed change would reduce the need for essentially duplicative documents, while increasing clarity regarding outstanding charges for individual shippers. Accordingly, FMCSA proposes to replace the term ''freight bill'' with the word ''invoice'' throughout 49 CFR 375.

F. Recommendations 15 and 18—Ready To Move

Recommendation 15 from the Recommendations Report suggested that FMCSA require movers to provide FMCSA publication ESA 03005 (*Ready to Move?*) when the physical survey is either scheduled or waived by the consumer. The Working Group determined that consumers are not currently receiving the brochure at the right time in the moving process, and that consumers should receive the information contained in the brochure earlier in the process, before picking a mover. The Working Group explained that the brochure provides critical information about how to select a mover and the best time for consumers to receive this information is during the very early stages of the process.

FMCSA is not proposing to implement recommendation 15. FMCSA does not believe that the statute at 49 U.S.C. 14104(b)(2) allows *Ready to Move?* to be provided earlier than at the time the estimate is provided. That statutory provision states, in part:

> At the time that a motor carrier provides the written estimate required by paragraph (1), the motor carrier shall provide the shipper a copy of the Department of Transportation publication FMCSA–ESA–03–005 (or its successor publication) entitled ''Ready to Move?''.

FMCSA believes this language explicitly requires *Ready to Move?* to be provided when the motor carrier provides the estimate to the individual shipper. For this reason, FMCSA is not proposing to implement recommendation 15 at this time.

Recommendation 18 from the Recommendations Report suggested that FMCSA should require all household goods motor carriers that have a website to display prominently, at their option, either a link to *Ready to Move?* on the FMCSA website or a true and accurate copy of *Ready to Move?* on their own websites. The Working Group determined that this requirement would allow consumers to have access to this information as soon as they start searching for movers and would ensure broader distribution.

FMCSA proposes to update 49 CFR 375.213 to include a requirement for a motor carrier that has a website to display prominently either a link to *Ready to Move?* on the FMCSA website or a true and accurate copy of *Ready to Move?* on their own website. This proposed change would only apply to motor carriers that already have a website and does not impose any requirement for motor carriers to create a website. Requiring motor carriers to update their existing website including the hyperlink or electronic document ensures that individual shippers are more likely to become aware of *Ready to Move?* earlier in the process when they are initially looking for motor carriers to contact. The Agency specifically requests public comment on whether the term ''display prominently'' provides sufficient clarity to motor carriers regarding where to include either a link to *Ready to Move?* on the FMCSA website or a true and accurate copy of *Ready to Move?* on their own website. If the term does not provide sufficient clarity, the Agency specifically requests public comment on alternative language to ensure that individual shippers can easily find the required link to *Ready to Move?* on the FMCSA website or a true and accurate copy of *Ready to Move?* on a motor carrier's website.

G. Additional Proposed Changes

FMCSA proposes to make clarifying changes to 49 CFR part 375 in addition to the recommendations from the Working Group. The Agency proposes to define *bill of lading* as ''both the receipt and the contract for the transportation of the individual shipper's household goods.'' This proposed definition would provide additional information regarding the role of the bill of lading in the household goods moving process in light of the removal of the order for service requirement.

FMCSA proposes to update the definition of *Surface Transportation Board* in 49 CFR 375.103 to reflect that the STB is no longer an agency within DOT and is an independent establishment of the United States government. See 49 U.S.C. 1301.

FMCSA proposes to require that motor carriers provide a direct hyperlink to *Ready to Move?* and the Rights and Responsibilities booklet on the Agency's website if they use a hyperlink to provide those documents to individual shippers under 49 CFR 375.213. This proposed revision would specify that the hyperlinks be direct to each document and not to FMCSA's website generally, in order to ensure that individual shippers who are provided with those hyperlinks are able to access the required documents without needing to search FMCSA's website for the required information. The Agency recognizes that the location of documents on its website may change as the website is updated and would ensure that their location is not affected by website updates or updates to the documents themselves.

FMCSA proposes to revise the title of 49 CFR 375.801 to read ''What types of charges are subject to subpart H?'' instead of ''What types of charges apply to subpart H?'' This would clarify that 49 CFR 375.801 discusses which types of charges are subject to the requirements of subpart H.

Overall, the implementation of the proposed changes discussed in this NPRM are expected to reduce paperwork burden, save money on printing materials, and save time for regulated entities and stakeholders. Consumers would have fewer documents to review, approve, and sign and potentially experience less confusion in a stressful situation.

VII. International Impacts

The regulations in 49 CFR parts 371 and 375 apply only within the United States (50 states and the District of Columbia). Motor carriers and drivers are subject to the laws and regulations of the countries in which they operate, unless an international agreement states otherwise. Drivers and carriers should be aware of the regulatory differences among nations.

VIII. Section-by-Section Analysis

This section-by-section analysis describes the proposed changes in numerical order.

A. Section 371.113 May I provide individual shippers with a written estimate?

Paragraph (a) of this section would be revised to remove the requirement for household goods to be within 50 miles of the motor carrier agent's location before a physical survey is required.

B. Section 375.103 What are the definitions of terms used in this part?

In this section, a definition for *bill of lading* would be added to clarify the role of the bill of lading as both a contract and a receipt in the transportation of household goods. The current definition for *order for service* would be removed. A definition for *physical survey* would also be added, which would allow for virtual surveys. The current definition for *reasonable dispatch* would be revised to remove the reference to the order for service. The current definition for *Surface Transportation Board* would be updated to reflect that the STB is no longer an agency within DOT, but is instead an independent agency.

C. Section 375.211 Must I have an arbitration program?

In paragraph (a) subparagraph (2), the term ''order for service'' would be removed and replaced with ''bill of lading.''

D. Section 375.213 What information must I provide to a prospective individual shipper?

In this section, the introductory text of paragraph (a) would be revised and subparagraphs (1) and (2) would be added. The new paragraph (a) would require both *Ready to Move?* and the Rights and Responsibilities booklet to be provided to the individual shipper along with the estimate. Subparagraphs (1) and (2) would also include a requirement for motor carriers providing a hyperlink for either of the documents to the individual shipper to provide a hyperlink directly to those documents on the FMCSA website.

In the introductory text of paragraph (b), the term ''order for service'' would be removed and replaced with ''bill of lading'' and the word ''five'' would be removed and replaced with ''four.'' Paragraph (b)(1) would be deleted and paragraphs (b)(2) through (b)(5) would be renumbered as (b)(1) through (b)(4).

Paragraph (e) would be redesignated as paragraph (f) and a new paragraph (e) would be added, which would require motor carriers that have a website to display prominently either a link to the *Ready to Move?* document on the FMCSA website or a true and accurate copy of that document on their own websites.

E. Section 375.215 How must I collect charges?

In this section, the requirement for a freight or expense bill in the first sentence would be replaced with a requirement for an invoice.

F. Section 375.217 How must I collect charges upon delivery?

In paragraph (b), the language regarding an order for service would be removed.

G. Section 375.221 May I use a charge or credit card plan for payments?

In paragraph (c), the phrase ''for a freight or expense bill'' would be removed and replaced with the phrase ''an invoice.''

H. Section 375.401 Must I estimate charges?

In this section, the introductory text of paragraph (a) would be revised to require a physical survey for all shipments unless waived, and to state that the only way to waive the physical survey of household goods is through a written agreement between an individual and a motor carrier. Additionally, paragraph (a) would be further revised so that paragraphs (a)(2)(i) through (a)(2)(iii) would be redesignated as (a)(1) through (a)(3).

Paragraph (b) would be revised by removing the phrase ''an order for service'' and replacing it with ''a bill of lading.'' In paragraph (f), the phrase ''the order for service and'' would be removed in both places it appears.

I. Section 375.403 How must I provide a binding estimate?

In this section, paragraph (a)(1) would be revised to reflect that 49 CFR 375.401(a) would allow for only one waiver procedure under the proposed changes discussed above. Paragraphs (a)(6)(ii) and (a)(9) would be revised to no longer allow for a revised binding estimate and instead require the preparation of a new binding estimate when an individual shipper tenders additional household goods or requires additional services related to the transportation of the household goods.

J. Section 375.405 How must I provide a non-binding estimate?

In this section, paragraph (b)(7)(ii) would be revised to no longer allow for a revised non-binding estimate and would instead require the preparation of a new non-binding estimate when an individual shipper tenders additional household goods or requires additional services related to the transportation of the household goods.

In paragraph (c) the language regarding an order for service would be removed.

K. Section 375.501 Must I write up an order for service?

This section would be deleted in its entirety.

L. Section 375.505 Must I write up a bill of lading?

In this section, paragraph (a) would be revised to clarify that a motor carrier must prepare and issue a bill of lading at least 3 days before receiving a shipment of household goods to transport for an individual shipper. Additionally, the last three sentences in the paragraph would be removed. Removing these sentences would delete a discussion of incomplete bills of lading, which would be addressed under paragraph (h), as well as a reference to an order for service.

Paragraph (b) would be revised to require a bill of lading to contain 17 items, instead of the 14 items a bill of lading is currently required to contain. The additional three items, as well as updates to the other items listed in paragraph (b)(1) through (b)(17), incorporate requirements currently found in 49 CFR 375.501(a).

In paragraph (d), the word ''bills'' would be removed and replaced with ''a bill of lading.''

New paragraph (e), which would mirror current paragraph 49 CFR 375.501(b), would be added to this section.

New paragraph (f), which would mirror current paragraph 49 CFR 375.501(c), would be added to this section with updates to replace all references to an order for service with language regarding a bill of lading.

New paragraphs (g)(1) through (g)(3) would be added to this section. Paragraphs (g)(1) and (g)(2) would mirror current paragraphs 49 CFR 375.501(d)(1) and (2) with updates to remove the reference to an order for service in subparagraph (1) and replacing ''at origin'' with ''before the shipment is loaded'' in subparagraph (2). Subparagraph (3) would be added to state that a motor carrier cannot require an individual shipper to sign a blank document.

A new paragraph (h) would be added to this section to require the motor carrier to provide the bill of lading at least 3 days before loading and provide the individual shipper a 3-day period after the individual shipper signs the bill of lading to rescind the bill of lading. It would also require a motor

carrier to provide the individual shipper with the opportunity to rescind the bill of lading without any penalty for a 3-day period after the individual shipper signs the bill of lading. Paragraph (h) would also state that, if a new estimate is prepared under §§ 375.403(a)(6)(ii) or 375.405(b)(7)(ii), ''the corresponding changes to the bill of lading from the new estimate do not require a new 3-day period as otherwise required in this paragraph (h).''

M. Section 375.605 How must I notify an individual shipper of any service delays?

In paragraph (a), the term ''order for service'' would be removed and replaced with the term ''bill of lading.''

N. Section 375.801 What types of charges apply to subpart H?

The title of this section would be changed to read ''What types of charges are subject to subpart H?'' to clarify that 49 CFR 375.801 discusses which types of charges are subject to the requirements of subpart H. Additionally, the term ''invoice'' would replace the term ''freight bill'' in paragraph (a).

O. Section 375.803 How must I present my freight or expense bill?

In this section, the term ''invoice'' would replace the term ''freight bill'' everywhere it appears, including in the section title. The new title would read ''How must I present my invoice?''

P. Section 375.805 If I am forced to relinquish a collect-on-delivery shipment before the payment of ALL charges, how do I collect the balance?

The term ''invoice'' would replace the term ''freight bill.''

Q. Section 375.807 What actions may I take to collect the charges upon my freight bill?

In this section, the term ''invoice'' would replace the term ''freight bill'' everywhere it appears, including in the section title. The new title would read ''What actions may I take to collect the charges upon my invoice?''

R. Appendix A to Part 375—Your Rights and Responsibilities When You Move

This appendix would be replaced in its entirety with the information contained in the updated Your Rights and Responsibilities When You Move booklet, which would conform with the other revisions to part 375 discussed in this proposal.

IX. Regulatory Analyses

A. Executive Order (E.O.) 12866 (Regulatory Planning and Review), E.O. 13563 (Improving Regulation and Regulatory Review), and DOT Regulatory Policies and Procedures

Under section 3(f) of E.O. 12866 (58 FR 51735, October 4, 1993), Regulatory Planning and Review, as supplemented by E.O. 13563 (76 FR 3821, January 21, 2011), Improving Regulation and Regulatory Review, this NPRM does not require an assessment of potential costs and benefits under section 6(a)(3) of E.O. 12866. Accordingly, the Office of Management and Budget has not reviewed it under those Orders. In addition, this rule is not significant within the meaning of DOT regulatory policies and procedures.

Affected Entities

This proposed rule affects household goods motor carriers covered by the 49 CFR part 375 regulations. These regulations are based on the commercial statutes with special provisions for household goods carriers that authorize States, at their discretion, to enforce Federal rules, but only for interstate household goods transportation. The motor carrier safety assistance program (MCSAP) statutes do not require MCSAP grant recipients to adopt compatible commercial regulations for intrastate transportation not related to safety.[4] Therefore, FMCSA anticipates that this rule would affect interstate household goods motor carriers, and does not include intrastate household goods motor carriers in the counts of affected entities.

FMCSA obtained motor carrier count information from the Motor Carrier Management Information System (MCMIS), which includes information submitted to FMCSA by motor carriers the first time they apply for a DOT number, and then biennially thereafter. The table below shows the counts of household goods motor carriers in 2019 and estimates of the number of carriers that would be affected by this rule annually during the analysis period of 2022 to 2031.

FMCSA estimated the future baseline number of motor carriers by developing a compound average growth rate (CAGR) using historical counts from 2014 through 2019. There were 3,472 active household goods motor carriers in 2014, and 4,297 active household goods motor carriers in 2019, resulting in a CAGR of 4.36 percent.

This rule would also affect shippers, or consumers who hire household goods motor carriers. The U.S. Census Bureau estimates that approximately 7.4 million people moved interstate during 2018, and that the average household contained 2.63 people. Therefore, we can estimate that approximately 2.8 million households participated in interstate moves during 2018 (7,443,306 ÷ 2.63 = 2,830,154).[5] However, most interstate moves do not involve a for-hire mover, and thus would not be affected by this rule. As discussed below, the American Moving and Storage Association (AMSA) estimated that approximately 20 percent of interstate household good moves are completed by for-hire movers.[6]

TABLE 1—INTERSTATE HOUSEHOLD GOODS (HHG) MOTOR CARRIERS

Year	Interstate HHG motor carriers
2019	4,297
2020	4,484
2021	4,680
2022	4,884
2023	5,097
2024	5,319
2025	5,551
2026	5,793
2027	6,046
2028	6,309
2029	6,584
2030	6,871
2031	7,171

Analysis Inputs

Motor Carrier Profit per Hour

Broadly speaking, the opportunity cost to the motor carrier (the firm) of a given regulatory action is the value of the best alternative that the firm must forgo in order to comply with the regulatory action. In this analysis, FMCSA follows the methodology used in the Entry-Level Driver Training rulemakings published in 2016 and 2018 and values the change in time spent in nonproductive activity as the opportunity cost to the firm, which is represented by the now attainable profit, using three variables: The marginal cost of operating a CMV, an estimate of a typical average motor carrier profit margin, and the change in nonproductive time.

The American Transportation Research Institute (ATRI) report, *An*

[4] See 49 U.S.C. 31102(c)(2)(Q).

[5] U.S. Census Bureau. 2018: ACS 5-Year Estimates Data Profiles. Available at: *https://data.census.gov/cedsci/table?d=ACS%205-Year%20Estimates%20Data%20Profiles&table=DP02&tid=ACSDP5Y2018.DP02&vintage=2018&hidePreview=true* (accessed October 6, 2020).

[6] The AMSA will become a conference of the ATA. AMSA to Become Conference of American Trucking Associations (Aug. 7, 2020), available at *https://www.moving.org/amsa-to-become-conference-of-american-trucking-associations/*.

Analysis of the Operational Costs of Trucking: 2019 Update, found that marginal operating costs were $71.78 per hour in 2018.[7] These marginal costs include vehicle-based costs (*e.g.,* fuel costs, insurance premiums, etc.), and driver-based costs (*i.e.,* wages and benefits).

Next, the Agency estimated the profit margin for motor carriers. Profit is a function of revenue and operating expenses, and the American Trucking Associations (ATA) defines the operating ratio of a motor carrier as a measure of profitability based on operating expenses as a percentage of gross revenues.[8] Armstrong & Associates, Inc. (2009) states that trucking companies that cannot maintain a minimum operating ratio of 95% (calculated as operating costs ÷ net revenue) will not have sufficient profitability to continue operations in the long run.[9] Therefore, Armstrong & Associates states that trucking companies need a minimum profit margin of 5% of revenue to continue operating in the future. Transport Topics publishes data on the ''Top 100'' for-hire carriers, ranked by revenue.[10] For 2014, 39 of these Top 100 carriers also have net income information reported by Transport Topics. FMCSA estimates that the 39 carriers with both revenue and net income information have an average profit margin of approximately 4.3 percent for 2014. For 2018, 33 of these Top 100 carriers have net income information reported by Transport Topics, with an average profit margin of approximately 6 percent for 2018.[11] The higher profit margin experienced in 2018 is reinforced by a Forbes article that found net profit margin for freight trucking companies ''expanded to 6 percent in 2018, compared with an annual average of between 2.5 percent and 4 percent each year since 2012.'' [12] In 2019, the data provided by Transport Topics shows a similar pattern based on the 28 companies that provided net income information, with an average profit margin of 5.8 percent.[13] It is uncertain whether the recent surge in net profit margin will continue through the analysis period, so FMCSA assumes the lower profit margin of 5 percent for motor carriers for purposes of this analysis.

Using the assumed profit margin of 5 percent for motor carriers, FMCSA estimated the revenue gained per hour for motor carriers by multiplying the marginal cost per hour by the profit margin. This calculation resulted in a profit per hour of $3.59.

Number of Interstate Moves per Year

FMCSA estimates the number of interstate moves by for-hire movers using U.S. Census Bureau data based on the number of people moving interstate, the average number of people per household, and an AMSA estimate of the number of moves that involved for-hire moving services. The U.S. Census Bureau estimates that approximately 7.4 million people moved interstate during 2018, and that the average household contained 2.63 people. Therefore, we can estimate that approximately 2.8 million households participated in interstate moves during 2018 (7,443,306 ÷ 2.63 = 2,830,154).[14] FMCSA estimates the growth in interstate moves using the same Census data from 2010 through 2018, and finds an annual average growth rate of 0.08 percent.[15] AMSA estimated that 550,000, or approximately 20 percent, of the interstate household goods moves in 2017 were completed by for-hire movers.[16]

Some impacts of the proposed rule would be based on the distance of the shipper's location from the motor carrier. For instance, moves that are within 50 miles of the motor carrier agent's location must receive a physical survey unless the shipper signs a waiver. The information collection request (ICR) supporting statement, published in November 2019, estimated that the motor carrier agent is within 50 miles of the shipper's location for 95 percent of interstate moves, and beyond 50 miles for 5 percent of moves. The table below shows the number of household interstate moves by for-hire movers, and those that are within and beyond 50 miles from the motor carrier agent's location.

TABLE 2—NUMBER OF INTERSTATE MOVES BY: HOUSEHOLDS, FOR-HIRE MOVERS, WITHIN AND BEYOND 50 MILES OF THE MOTOR CARRIER AGENT LOCATION

Year	Total number of interstate moves by households A	Number of household interstate moves by for-hire movers B = A × 20%	Number of interstate moves by for-hire movers within 50 miles C = B × 95%	Number of interstate moves by for-hire movers beyond 50 miles D = B × 5%
2018	2,830,154	556,621	528,784	27,837
2019	2,832,418	557,066	529,207	27,859
2020	2,834,684	557,512	529,630	27,882
2021	2,836,952	557,958	530,054	27,904
2022	2,839,221	558,404	530,478	27,926
2023	2,841,493	558,851	530,902	27,949
2024	2,843,766	559,298	531,327	27,971
2025	2,846,041	559,745	531,752	27,993
2026	2,848,318	560,193	532,177	28,016

[7] ATRI. An Analysis of the Operational Costs of Trucking: 2019 Update. October 2019. Table 10, pg. 19. Available at: *https://truckingresearch.org/wp-content/uploads/2019/11/ATRI-Operational-Costs-of-Trucking-2019-1.pdf* (accessed December 11, 2019). Source data are assumed to be presented in 2018 dollar terms.

[8] ATA. *American Trucking Trends 2015.* Page 79.

[9] Armstrong & Associates, Inc. *Carrier Procurement Insights.* 2009. Pages 4–5. Available at: *https://www.3plogistics.com/product/carrier-procurement-insights-trucking-company-volume-cost-and-pricing-tradeoffs-2009/* (accessed January 5, 2016).

[10] Transport Topics. 2014. *Top 100 For-Hire Carriers.* Available at: *http://ttnews.com/top100/for-hire/2014* (accessed November 19, 2018).

[11] Transport Topics. 2018. *Top 100 For-Hire Carriers.* Available at: *https://www.ttnews.com/top100/for-hire/2018* (accessed November 19, 2018).

[12] Forbes. *Trucking Companies Hauling in Higher Sales.* Available at: *https://www.forbes.com/sites/sageworks/2018/03/04/trucking-companies-hauling-in-higher-sales/#40e0012f3f27* (accessed November 19, 2018).

[13] Transport Topics. 2019. *Top 100 For-Hire Carriers.* Available at: *https://www.ttnews.com/top100/for-hire/2019* (accessed October 14, 2020).

[14] U.S. Census Bureau. 2018: ACS 5-Year Estimates Data Profiles. Available at: *https://data.census.gov/cedsci/table?d=ACS%205-Year%20Estimates%20Data%20Profiles&table=DP02&tid=ACSDP5Y2018.DP02&vintage=2018&hidePreview=true* (accessed October 6, 2020).

[15] 0.08 percent = (average households that moved interstate in 2018 ÷ average household that moved interstate in 2010) $(\frac{1}{8}) - 1\wedge$.

[16] American Moving and Storage Association. Newsroom: About our Industry. *https://www.moving.org/newsroom/data-research/about-our-industry/* (accessed December 29, 2020).

TABLE 2—NUMBER OF INTERSTATE MOVES BY: HOUSEHOLDS, FOR-HIRE MOVERS, WITHIN AND BEYOND 50 MILES OF THE MOTOR CARRIER AGENT LOCATION—Continued

Year	Total number of interstate moves by households A	Number of household interstate moves by for-hire movers B = A × 20%	Number of interstate moves by for-hire movers within 50 miles C = B × 95%	Number of interstate moves by for-hire movers beyond 50 miles D = B × 5%
2027	2,850,596	560,641	532,603	28,038
2028	2,852,877	561,090	533,029	28,061
2029	2,855,159	561,539	533,456	28,083
2030	2,857,443	561,988	533,882	28,106
2031	2,859,729	562,438	534,309	28,128
2032	2,862,017	562,888	534,737	28,151

Cost Impacts

Recommendation 5—Appendix A

FMCSA is proposing to adopt the working group recommendation that would require the Rights and Responsibilities booklet to be provided earlier in the process—at the time the estimate is provided to the shipper. This document contains useful information to assist a shipper in making a determination regarding which household goods motor carrier to hire. However, requiring the document earlier in the process, prior to when a shipper has chosen a carrier, would result in providing an additional two documents per interstate move, as FMCSA estimates that shippers request an estimate from three household goods carriers and only contract with one. Therefore, while FMCSA considers it important to require this information early enough in the process for the information to inform the shipper's decision on which household goods carrier to choose, the proposed requirement would result in costs equal to the increase in the time required to print the additional hard-copy Rights and Responsibilities booklets provided.

FMCSA estimated this cost by first determining the increase in the number of hard-copy Rights and Responsibilities booklets printed each year. This can be determined by subtracting the number of estimates provided from the number of orders for service provided, and adjusting for the preference to receive electronic documents. The number of orders for service provided is equal to the number of household interstate moves by for-hire movers from Table 2. The number of estimates provided is equal to the number of orders for service provided multiplied by three, accounting for the fact that shippers likely request estimates from more than one motor carrier. In the ICR supporting statement, FMCSA previously estimated that 40 percent of shippers prefer to receive information in hard copy form, and that 60 percent prefer to receive electronic information.

As shown in columns A and B of Table 3 below, FMCSA multiplied the number of interstate moves per year by 40 percent to estimate the number of hard-copy Rights and Responsibilities booklets provided to shippers under the existing requirements, and multiplied the number of orders for service where hard-copies are provided by three (to account for the assumption that shippers seek an estimate from three different household goods carriers) to estimate the number of hard-copy Rights and Responsibilities booklets that would be provided under the proposed rule. The difference between these two variables (column C) represents the increase in the number of hard-copy Rights and Responsibilities booklets that would be printed as a result of this rule.

The ICR supporting statement estimated that a carrier could print roughly 1,600 pages per hour, and that each Rights and Responsibilities booklet consists of 25 pages. Thus, the increase in the number of hours needed to print hard-copy Rights and Responsibilities documents is equal to the number of Rights and Responsibilities documents from Table 3, Column C, multiplied by 25 pages per document, and divided by 1,600 pages per hour. Column D shows this maximum increase in hours spent printing.

The time spent printing additional copies of the Rights and Responsibilities booklet is time not spent in other revenue producing activities. As shown in Table 3, Column E, FMCSA quantifies this opportunity cost of time using the previously discussed estimate of the motor carrier profit per hour, $3.59, resulting in total 10-year costs of $251,000, or $218,000 discounted at 3 percent, and $179,000 discounted at 7 percent. On an annualized basis, the costs would be $26,000 discounted at 3 percent and $26,000 discounted at 7 percent.

TABLE 3—RECOMMENDATION 5: MOTOR CARRIER OPPORTUNITY COST RESULTING FROM INCREASED PRINTING OF YOUR RIGHTS AND RESPONSIBILITIES BOOKLET

Year	Number of orders for service with hard copy YRR[c] provided A = Interstate moves by for-hire movers × 40%	Number of estimates with hard copy of YRR provided B = A × 3	Maximum increase in number of hard copies provided C = B − A	Maximum increase in total hours spent printing D = C × 25 ÷ 1600	Motor carrier increase in cost for hours spent printing E = D × $3.59
2022	223,362	670,085	446,723	6,980	$25,051
2023	223,540	670,621	447,081	6,986	25,071
2024	223,719	671,158	447,438	6,991	25,092
2025	223,898	671,695	447,796	6,997	25,112

TABLE 3—RECOMMENDATION 5: MOTOR CARRIER OPPORTUNITY COST RESULTING FROM INCREASED PRINTING OF YOUR RIGHTS AND RESPONSIBILITIES BOOKLET—Continued

Year	Number of orders for service with hard copy YRR[c] provided A = Interstate moves by for-hire movers × 40%	Number of estimates with hard copy of YRR provided B = A × 3	Maximum increase in number of hard copies provided C = B − A	Maximum increase in total hours spent printing D = C × 25 ÷ 1600	Motor carrier increase in cost for hours spent printing E = D × $3.59
2026	224,077	672,232	448,155	7,002	25,132
2027	224,257	672,770	448,513	7,008	25,152
2028	224,436	673,308	448,872	7,014	25,172
2029	224,616	673,847	449,231	7,019	25,192
2030	224,795	674,386	449,590	7,025	25,212
2031	224,975	674,925	449,950	7,030	25,232
Total 10-Year Cost					251,418
Total Annualized Cost					25,142

Notes:
[a] Total cost values may not equal the sum of the components due to rounding. (The totals shown in this column are the rounded sum of unrounded components.)
[b] Values shown in parentheses are negative values (*i.e.*, less than zero) and represent a decrease in cost or a cost savings.
[c] The Rights and Responsibilities booklet is abbreviated as YRR for the purposes of the tables in this section.

FMCSA also proposes to adopt the recommendation to make it acceptable for motor carriers to provide documents, including the Rights and Responsibilities booklet, electronically without requiring the motor carrier to include a waiver statement on the written estimate. Under the existing requirements, when the shipper elects to receive these documents via the hyperlink, the motor carrier is required to obtain a signed waiver of the shipper's right to a hard copy via a statement on the written estimate, as well as a signed and dated receipt that includes ''verification of the shipper's agreement to access the Federal consumer protection information on the internet.'' The proposal would remove the requirement in 49 CFR 375.213(e)(1) for the shippers to include a waiver statement on the written estimate, but would retain the requirement to obtain a receipt. FMCSA expects that removing the waiver statement would be a de minimis one-time cost savings for motor carrier, but requests comment on the current process for obtaining the waiver statement and receipt required in 49 CFR 375.213(e), and whether removing the requirement to obtain a waiver would result in measurable cost savings.

Recommendation 7—Survey of Household Goods

In agreement with the recommendations, FMCSA proposes to change the requirement to conduct a survey of the shipper's goods by redefining a ''physical survey'' to include both an ''in person'' and a ''virtual'' survey. The physical survey would include in-person surveys and virtual surveys. This change does not require that shippers receive only virtual surveys, but it does provide the option and allows the shipper to determine whether a physical or virtual survey would better suit their needs.

In the event of a virtual survey, the motor carrier would likely spend the same amount of time completing the survey but would not need to travel to and from the shipper's location. This reduction in travel would allow that time to be put to other productive uses, resulting in a motor carrier cost savings equal to the now attainable profit that can be earned during that time. FMCSA estimates this cost savings using three variables; the reduction in travel time per completed survey, the number of completed surveys that would now be virtual, and the motor carrier hourly profit. The distance and time required to travel to and from a move site varies with each survey. However, the survey requirement is in place for moves originating within 50 miles from the motor carrier agent's location. Therefore, we can estimate that the time savings would accrue to those moves originating within 50 miles. FMCSA estimated the average round-trip travel time for a move originating within 50 miles of the motor carrier agent would be approximately 1 hour.

Under the current requirements, physical surveys must be completed for all moves originating within 50 miles of the motor carrier agent's location, unless the physical survey is waived by the individual shipper. FMCSA assumes that under the proposal, some portion of shippers would voluntarily request a virtual survey but is unable to estimate the exact number of virtual surveys that would be conducted under the proposal. FMCSA developed an estimate of the number of surveys that would be conducted virtually using a range from 25 percent to 75 percent, with a primary estimate of 50 percent. As shown in the table below, the motor carrier cost savings are estimated by multiplying the number of virtual surveys originating within 50 miles, by the 1 hour of time savings, and by the motor carrier profit per hour of $3.59. FMCSA estimates that providing virtual surveys would result in in costs of $9.6 million over 10 years (or $9.6 million in cost savings), $8.1 million (or $8.1 million in cost savings) discounted at 3 percent, and $6.7 million (or $6.7 million in cost savings) discounted at 7 percent. On an annualized basis, the costs would be $955,000 (or $955,000 in cost savings) discounted at 3 percent and $955,000 (or $955,000 in cost savings) discounted at 7 percent.

TABLE 4—RECOMMENDATION 7: MOTOR CARRIER OPPORTUNITY COST SAVINGS FOR PROVIDING VIRTUAL SURVEYS WITHIN 50 MILES

Year	Number of virtual surveys (low) A	Number of virtual surveys (primary) B	Number of virtual surveys (high) C	Motor carrier opportunity cost (low) D = A × $3.59 × −1 hour	Motor carrier opportunity cost (primary) E = B × $3.59 × −1 hour	Motor carrier opportunity cost (high) F = C × $3.59 × −1 hour
2022	132,619	265,239	397,858	($475,971)	($951,942)	($1,427,914)
2023	132,726	265,451	398,177	(476,352)	(952,704)	(1,429,056)
2024	132,832	265,663	398,495	(476,733)	(953,466)	(1,430,199)
2025	132,938	265,876	398,814	(477,114)	(954,229)	(1,431,343)
2026	133,044	266,089	399,133	(477,496)	(954,992)	(1,432,488)
2027	133,151	266,302	399,452	(477,878)	(955,756)	(1,433,634)
2028	133,257	266,515	399,772	(478,260)	(956,521)	(1,434,781)
2029	133,364	266,728	400,092	(478,643)	(957,286)	(1,435,929)
2030	133,471	266,941	400,412	(479,026)	(958,052)	(1,437,078)
2031	133,577	267,155	400,732	(479,409)	(958,818)	(1,438,228)
Total 10-Year Cost Savings				(4,776,884)	(9,553,767)	(14,330,651)
Total Annualized Cost Savings				(477,688)	(955,377)	(1,433,065)

Notes:
[a] Total cost values may not equal the sum of the components due to rounding. (The totals shown in this column are the rounded sum of unrounded components.)
[b] Values shown in parentheses are negative values (*i.e.*, less than zero) and represent a decrease in cost or a cost savings.

Recommendation 8—Survey of Household Goods; beyond 50 miles

In agreement with the recommendations, FMCSA is proposing to require that movers offer physical surveys for all household goods shipments, including those that are located over 50 miles from the motor carrier agent's location.

Currently, motor carriers are not required to offer physical surveys for household goods shipments that are located beyond 50 miles from the motor carrier agent's location. Often, a consumer will discuss the shipment load and the mover will provide an estimate based on the discussion, without visually inspecting the amount or weight of goods for transport. The purpose of the survey is to develop a more accurate estimate of moving fees and to prevent unexpected charges from surfacing later in the move process. Because FMCSA lacks data on how behavior would change, FMCSA estimates that all shippers located beyond 50 miles from the motor carrier agent's location would take advantage of the virtual survey option. These surveys would take about 1.5 hours each, and FMCSA monetizes this time using the motor carrier profit margin of $3.59 per hour. As shown below, FMCSA estimates the cost of providing virtual surveys to be approximately $1.5 million over 10 years, $1.3 million at a 3 percent discount rate, and $1.1 million at a 7 percent discount rate. On an annualized basis, the cost would be $151,000 annualized at both a 3 and 7 percent discount rate.

TABLE 5—RECOMMENDATION 8: MOTOR CARRIER OPPORTUNITY COST FOR PROVIDING VIRTUAL SURVEYS BEYOND 50 MILES

Year	Number of moves beyond 50 miles with a virtual survey A	Motor carrier opportunity cost A = B × 1.5 hours × $3.59	Motor carrier opportunity cost 3% discount rate	Motor carrier opportunity cost 7% discount rate
2022	27,926	$150,342	$145,963	$140,506
2023	27,949	150,462	141,825	131,419
2024	27,971	150,582	137,804	122,920
2025	27,993	150,703	133,898	114,971
2026	28,016	150,823	130,102	107,535
2027	28,038	150,944	126,413	100,580
2028	28,061	151,065	122,830	94,076
2029	28,083	151,186	119,347	87,991
2030	28,106	151,307	115,964	82,301
2031	28,128	151,428	112,676	76,978
Total 10-Year Cost Savings			1,286,822	1,059,278
Total Annualized Cost Savings			150,855	150,817

Notes:
[a] Total cost values may not equal the sum of the components due to rounding. (The totals shown in this column are the rounded sum of unrounded components.)
[b] Values shown in parentheses are negative values (*i.e.*, less than zero) and represent a decrease in cost or a cost savings.

Recommendation 9—Order for Service

In agreement with the working group recommendation, FMCSA is proposing to eliminate the order for service. Much of the information provided on the order for service is also on the bill of lading, and is therefore duplicative.[17] Eliminating the order for service would reduce the amount of paperwork consumers are required to review, but would not reduce the necessary information they are provided. Currently, each interstate move requires both an order for service and a bill of lading. Each document takes 30 minutes to prepare. Under the proposal, a motor carrier would be able to save 30 minutes of time for each interstate move by no longer drafting an order for service. FMCSA monetized this time using the motor carrier hourly profit margin of $3.59. As shown below, FMCSA estimates that eliminating the order for service would result in costs of −$10 million over 10 years (or cost savings of $10 million), −$8.6 million (or $8.6 million in cost savings) discounted at 3 percent, and −$7.1 million (or $7.1 million in cost savings) discounted at 7 percent. On an annualized basis, the costs would be −$1.0 million (or $1.0 million in cost savings) discounted at 3 percent and 7 percent.

TABLE 6—RECOMMENDATION 9: MOTOR CARRIER OPPORTUNITY COST FOR ELIMINATING THE ORDER FOR SERVICE

Year	Number of interstate moves by for-hire movers A	Motor carrier opportunity cost B = A × −0.5 hours × $3.59	Motor carrier opportunity cost discounted at 3%	Motor carrier opportunity cost discounted at 7%
2022	558,404	($1,002,056)	($972,870)	($936,501)
2023	558,851	(1,002,858)	(945,290)	(875,935)
2024	559,298	(1,003,660)	(918,491)	(819,286)
2025	559,745	(1,004,463)	(892,453)	(766,300)
2026	560,193	(1,005,267)	(867,152)	(716,741)
2027	560,641	(1,006,071)	(842,569)	(670,388)
2028	561,090	(1,006,876)	(818,682)	(627,032)
2029	561,539	(1,007,681)	(795,473)	(586,480)
2030	561,988	(1,008,487)	(772,922)	(548,550)
2031	562,438	(1,009,294)	(751,010)	(513,074)
Total 10- Year Cost Savings	.....	.....	(8,576,911)	(7,060,287)
Total Annualized Cost Savings	.....	.....	(1,005,476)	(1,005,226)

Notes:
[a] Total cost values may not equal the sum of the components due to rounding. (The totals shown in this column are the rounded sum of unrounded components.)
[b] Values shown in parentheses are negative values (*i.e.,* less than zero) and represent a decrease in cost or a cost savings.

Document Production Cost

The ICR supporting statement also estimated printing costs of $0.15 per page for both the Rights and Responsibilities booklet and the Order for Service. FMCSA estimates the change in the cost of materials for printing the Rights and Responsibilities booklet and the Orders for Service by multiplying the change in the number of pages by the $0.15 cost per page. As shown in Table 7, FMCSA estimates a 10-year materials cost to total $16 million, or $13.6 million discounted at 3 percent, and $11.2 million discounted at 7 percent. On an annualized basis, the costs would be $1.6 million discounted at both 3 and 7 percent.

TABLE 7—DOCUMENT PRODUCTION COST

Year	Recommendation 5—Increase in pages for hard copy YRR A	Recommendation 9—Eliminating the order for service (reduction in pages) B	Total change in number of pages C = A + B	Total cost for producing documents D = C × $0.15
2022	11,168,084	−558,404	10,609,680	$1,591,452
2023	11,177,018	−558,851	10,618,167	1,592,725
2024	11,185,960	−559,298	10,626,662	1,593,999
2025	11,194,909	−559,745	10,635,163	1,595,275
2026	11,203,865	−560,193	10,643,671	1,596,551
2027	11,212,828	−560,641	10,652,186	1,597,828
2028	11,221,798	−561,090	10,660,708	1,599,106
2029	11,230,775	−561,539	10,669,237	1,600,386
2030	11,239,760	−561,988	10,677,772	1,601,666
2031	11,248,752	−562,438	10,686,314	1,602,947

[17] FMCSA is revising the requirements for a bill of lading to incorporate all of the requirements from an order for service, including non-duplicative information.

TABLE 7—DOCUMENT PRODUCTION COST—Continued

Year	Recommendation 5—Increase in pages for hard copy YRR	Recommendation 9—Eliminating the order for service (reduction in pages)	Total change in number of pages	Total cost for producing documents
	A	B	C = A + B	D = C × $0.15
Total 10-Year Cost Savings				15,971,934
Total Annualized Cost Savings				1,597,193

Notes:
[a] Total cost values may not equal the sum of the components due to rounding. (The totals shown in this column are the rounded sum of unrounded components.)
[b] Values shown in parentheses are negative values (*i.e.,* less than zero) and represent a decrease in cost or a cost savings.

Total Costs

As shown below, FMCSA estimates the total costs of this final rule at $1.6 million (or $1.6 million in cost savings) discounted at 3 percent, and $1.3 million (or $1.3 million in cost savings) discounted at 7 percent. Expressed on an annualized basis, this equates to −$188,000 in costs (or $188,000 in cost savings) at both a 3 and 7 percent discount rate.

TABLE 8—TOTAL 10-YEAR AND ANNUALIZED COSTS OF THE PROPOSED RULE
[Thousands of 2018$]

Year	Rec. 5: Appendix A [c]	Rec. 7: Virtual survey of HHG (primary) [d]	Rec. 8: Survey of HHG beyond 50 miles [e]	Rec. 9: Order for service [f]	Document production [g]	Total cost (primary)	Total cost discounted at 3%	Total cost discounted at 7%
2022	$25.1	($951.9)	150.3	(1,002.1)	1,591.5	(187.2)	(181.7)	(174.9)
2023	25.1	(952.7)	150.5	(1,002.9)	1,592.7	(187.3)	(176.6)	(163.6)
2024	25.1	(953.5)	150.6	(1,003.7)	1,594.0	(187.5)	(171.5)	(153.0)
2025	25.1	(954.2)	150.7	(1,004.5)	1,595.3	(187.6)	(166.7)	(143.1)
2026	25.1	(955.0)	150.8	(1,005.3)	1,596.6	(187.8)	(162.0)	(133.9)
2027	25.2	(955.8)	150.9	(1,006.1)	1,597.8	(187.9)	(157.4)	(125.2)
2028	25.2	(956.5)	151.1	(1,006.9)	1,599.1	(188.1)	(152.9)	(117.1)
2029	25.2	(957.3)	151.2	(1,007.7)	1,600.4	(188.2)	(148.6)	(109.5)
2030	25.2	(958.1)	151.3	(1,008.5)	1,601.7	(188.4)	(144.4)	(102.5)
2031	25.2	(958.8)	151.4	(1,009.3)	1,602.9	(188.5)	(140.3)	(95.8)
Total 10-Year Cost Savings						(1,878.3)	(1,601.9)	(1,318.6)
Total Annualized Cost Savings						(187.8)	(187.8)	(187.8)

Notes:
[a] Total cost values may not equal the sum of the components due to rounding. (The totals shown in this column are the rounded sum of unrounded components.)
[b] Values shown in parentheses are negative values (*i.e.,* less than zero) and represent a decrease in cost or a cost savings.
[c] (Increase in Number of Hard Copy YRR Booklets Provided) × (25 ÷ 1600) × ($3.59).
[d] (Number of Virtual Surveys) × ($3.59) × (−1 hour).
[e] (Interstate Moves beyond 50 miles by For-Hire Movers) × (−0.5 hours) × ($3.59).
[f] (Interstate Moves by For-Hire Movers) × (−0.5 hours) × ($3.59).
[g] ((Increase in Pages for YRR Booklet) + (Decrease in Pages for Elimination of Order for Service)) × $0.15.

Benefit Impacts

FMCSA does not expect this rule to impact safety, but does expect that it would result in benefits related to consumer protection and fuel savings. Recommendation 5 would result in shippers receiving accurate and clear information earlier in the process, allowing them to make more informed and better decisions regarding which household goods motor carrier to hire, and would allow shippers to obtain more accurate estimates of moving fees based on physical surveys for those interstate moves beyond 50 miles from a motor carrier agent's location. The motor carrier efficiencies discussed above would not negatively impact shippers, as the services and information received today would not change under the proposed rule.

FMCSA anticipates that providing virtual surveys for those moves within 50 miles of a motor carrier agent's location would not only result in motor carrier time savings quantified above, but could potentially result in fuel savings if motor carriers drive fewer miles, which could produce a small reduction in CO2 emissions. It is important to note that FMCSA is not anticipating a change in CMV vehicle miles traveled, as the rule does not affect the number of interstate moves occurring per year, but recognizes that motor carriers could reduce miles driven in light-duty vehicles used for providing estimates to shippers. The distance and fuel required to travel to and from a move site varies with each survey. However, the survey requirement is in place for moves within 50 miles from the motor carrier agent's location, and we can estimate that any potential fuel savings would only accrue to those moves. FMCSA assumes the average mileage for these moves would be approximately 25 miles, or 50 miles round-trip. Based on data provided by the Bureau of Transportation Statistics, light-duty vehicles averaged approximately 22 miles per gallon in 2017, resulting in just over 2 gallons saved per trip (22.27 miles per gallon ÷ 50 miles per trip = 2.24 gallons per trip).[18] The U.S. Energy

[18] U.S. Department of Transportation, Bureau of Transportation Statistics. Table 4–23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Available at: *https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles*

Information Administration forecasts real petroleum prices for motor gasoline, and estimates an average price per gallon over the analysis period of $3.28 in 2018 dollars.[19] Therefore, FMCSA estimates that each virtual survey could result in $7.37 in avoided fuel costs (2.24 gallons per trip × $3.28 per gallon). Any potential fuel savings would result from a reduction in vehicle miles traveled in light-duty vehicles. The Agency is uncertain how motor carriers would respond to the proposed change allowing virtual surveys, and whether they would be involved in other driving-related activities which could diminish or negate any potential fuel savings. For these reasons, FMCSA is not quantifying any potential fuel impacts but requests comment on how motor carriers would adjust their operations in response to this proposed rule. Similarly, while these potential fuel savings, if realized, would result in a reduction of CO2 emissions that is directly proportional to the amount of fuel saved, the Agency is not quantifying those potential savings in this proposed rule due to the aforementioned uncertainty with respect to how motor carriers would adjust their operations. If FMCSA receives data that enables the quantification of fuel savings in the context of the development of a subsequent final rule, the Agency would monetize the commensurate reduction in CO2 emissions consistent with the social cost of carbon values, as established by the White House and the Interagency Working Group on the Social Cost of Greenhouse Gases.

B. Congressional Review Act

Pursuant to the Congressional Review Act (5 U.S.C. 801, *et seq.*), the Office of Information and Regulatory Affairs designated this rule as not a ''major rule,'' as defined by 5 U.S.C. 804(2).[20]

C. Regulatory Flexibility Act (Small Entities)

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 *et seq.*) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121, 110 Stat. 857), requires Federal agencies to consider the effects of the regulatory action on small business and other small entities and to minimize any significant economic impact. The term ''small entities'' comprises small businesses and not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000 (5 U.S.C. 601(6)). Accordingly, DOT policy requires an analysis of the impact of all regulations on small entities, and mandates that agencies strive to lessen any adverse effects on these businesses. Section 605 of the RFA allows an Agency to certify a rule, in lieu of preparing an analysis, if the rulemaking is not expected to have a significant economic impact on a substantial number of small entities.

This rule affects shippers and household goods motor carriers. Shippers, or consumers that hire household good motor carriers, are not considered small entities because they do not meet the definition of a small entity in Section 601 of the RFA. Specifically, shippers are considered neither a small business under Section 601(3) of the RFA, nor are they considered a small organization under Section 601(4) of the RFA.

The SBA defines the size standards used to classify entities as small. SBA establishes separate standards for each industry, as defined by the North American Industry Classification System (NAICS).[21] Household goods motor carriers would fall under Subsector Industry 48421, household good and office goods moving, which has an SBA size standard based on annual revenue of $30 million.

FMCSA examined data from the U.S. Census Bureau to determine the number of small entities within the identified 5-digit NAICS industry group. The Census Bureau collects and publishes data on the number of firms, establishments, employment, annual payroll, and estimated receipts by revenue size of the firm. The most recent data available are from the 2012 County Business Patterns and the 2012 Economic Census.[22] The revenue size categories used in the 2012 Economic Census do not exactly align with the SBA size standard, but they do allow FMCSA to develop a good estimate of the percentage of small entities within the NAICS industry group 48421. The 2012 Economic Census reported that there were 5,718 firms operating for the entire year within NAICS industry group 48421 (household goods and office goods moving). Of those firms that operated for the entire year, 5,663 firms (99 percent), had annual revenues of less than $25 million, and 5,692 firms (100 percent) had annual revenues less than $50 million. FMCSA concludes that this rule will impact a substantial number of small entities.

The RFA does not define a threshold for determining whether a specific regulation results in a significant impact. However, the SBA, in guidance to government agencies, provides some objective measures of significance that the agencies can consider using.[23] Revenue is one measure that could be used to illustrate a significant impact, specifically, if the cost of the regulation exceeds one percent of the average annual revenues of small entities in the sector.

Examining the 2012 Economic Census data discussed above, FMCSA found that affected entities had average revenues ranging from $55,000 to $35 million. The cost of the regulation would thus need to exceed $550 per carrier in any one year in order to be considered a significant impact on the entities within the smallest revenue size category. The exact impact per motor carrier is dependent on many variables throughout the year (*e.g.,* the number of hard-copy Rights and Responsibilities booklets provided, the number of virtual surveys provided for those moves within 50 miles of the motor carrier agents' locations, and the number of virtual surveys completed for moves beyond 50 miles of the motor carrier agents' locations), and cannot be estimated with precision. While FMCSA cannot provide the exact impact per

[19] U.S. Energy Information Administration. Petroleum and Other Liquids Prices, Transportation, Motor Gasoline: Reference Case, years 2022—2031, inflated to 2018$. Available at: *https://www.eia.gov/outlooks/aeo/data/browser/#/?id=12-AEO2015&region=0-0&cases=ref2015~highmacro~lowmacro~highprice~lowprice&start=2020&end=2034&f=A&linechart=ref2015-d021915a.3-12-AEO2015~highmacro-d021915a.3-12-AEO2015~lowmacro-d021915a.3-12-AEO2015~highprice-d021915a.3-12-AEO2015~lowprice-d021915a.3-12-AEO2015&sourcekey=0* (accessed October, 15 2020).

[20] A ''major rule'' means any rule that the Administrator of Office of Information and Regulatory Affairs at the Office of Management and Budget finds has resulted in or is likely to result in (a) an annual effect on the economy of $100 million or more; (b) a major increase in costs or prices for consumers, individual industries, Federal agencies, State agencies, local government agencies, or geographic regions; or (c) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and export markets (5 U.S.C. 804(2)).

[21] Executive Office of the President, OMB. ''North American Industry Classification System.'' 2017. Available at: *https://www.census.gov/eos/www/naics/2017NAICS/2017_NAICS_Manual.pdf* (accessed January 15, 2020).

[22] U.S. Department of Commerce, U.S. Census Bureau. Establishment and Firm Size: Summary Statistics by Revenue Size of Firms for the U.S. Release date March, 2016. Available at: *https://www2.census.gov/econ2012/EC/sector48/EC1248SSSZ4.zip* (accessed September 18, 2020).

[23] SBA, Office of Advocacy. ''A Guide for Government Agencies. How to Comply with the Regulatory Flexibility Act.'' 2017. Available at: *https://www.sba.gov/sites/default/files/advocacy/How-to-Comply-with-the-RFA-WEB.pdf* (accessed on December 30, 2020).

motor carrier, it is possible to evenly distribute the total cost of the rule across all affected motor carriers to determine the average impact per motor carrier. As shown in the table below, the estimated impact per motor carrier does not exceed $550 in any year, and therefore is not a significant impact.

TABLE 8—ESTIMATED IMPACT PER MOTOR CARRIER

Year	Household goods motor carriers	Total cost (discounted at 7%)	Estimated impact per motor carrier
2022	4,884	($174,909.9)	($35.8)
2023	5,097	(163,597.9)	(32.1)
2024	5,319	(153,017.6)	(28.8)
2025	5,551	(143,121.5)	(25.8)
2026	5,793	(133,865.4)	(23.1)
2027	6,046	(125,208.0)	(20.7)
2028	6,309	(117,110.4)	(18.6)
2029	6,584	(109,536.5)	(16.6)
2030	6,871	(102,452.5)	(14.9)
2031	7,171	(95,826.6)	(13.4)

Consequently, I certify that the proposed action would not have a significant economic impact on a substantial number of small entities.

D. Assistance for Small Entities

In accordance with section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996, FMCSA wants to assist small entities in understanding this NPRM so they can better evaluate its effects on themselves and participate in the rulemaking initiative. If the NPRM would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance; please consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

Small businesses may send comments on the actions of Federal employees who enforce or otherwise determine compliance with Federal regulations to the Small Business Administration's Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of FMCSA, call 1–888–REG–FAIR (1–888–734–3247). DOT has a policy regarding the rights of small entities to regulatory enforcement fairness and an explicit policy against retaliation for exercising these rights.

E. Unfunded Mandates Reform Act of 1995

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or Tribal government, in the aggregate, or by the private sector of $168 million (which is the value equivalent of $100 million in 1995, adjusted for inflation to 2019 levels) or more in any one year. Though this NPRM would not result in such an expenditure, the Agency does discuss the effects of this rule elsewhere in this preamble.

F. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520) requires that an agency consider the impact of paperwork and other information collection burdens imposed on the public. An agency is prohibited from collecting or sponsoring an information collection, as well as imposing an information collection requirement, unless it displays a valid OMB control number (5 CFR 1320.8(b)(3)(vi)).

This proposed rule would amend the existing approved information collection titled ''Transportation of Household Goods; Consumer Protection,'' OMB control number 2126–0025, which expires on November 30, 2022. Specifically, FMCSA seeks approval for the revision of the information collection request (ICR) due to the Agency's development of this NPRM. In accordance with 44 U.S.C. 3507(d), FMCSA will submit the proposed information collection amendments to the Office of Information and Regulatory Affairs (OIRA) at OMB for its approval.

Title: Transportation of Household Goods; Consumer Protection.

OMB Control Number: 2126–0025.

Type of Review: Revision of a currently-approved information collection.

Summary: FMCSA is proposing to make various changes to the household goods regulations recommended by Household Goods Consumer Protection Working Group. These proposed changes include further revisions to streamline the Rights and Responsibilities booklet which would be incorporated in appendix A of the regulations, requiring new binding or non-binding estimates when an individual shipper tenders more goods or requests additional service instead of a revised estimate, allowing a motor carrier to provide a virtual survey, removing the exception from the survey requirement for moves where the household goods are located more than 50 miles from the motor carrier agent's location, eliminating the order for service and incorporating that document into the bill of lading, and making other minor updates to increase the clarity of the regulations. These proposed changes are intended to reduce the paperwork burden on household goods motor carriers and reduce confusion for individual shippers. FMCSA summarizes the resulting changes from the existing ICR below.

IC–1: Required Information for Prospective Individual Shippers

FMCSA is proposing to require the Rights and Responsibilities booklet to be provided earlier in the process, when the estimate is provided to the shipper, which would result in providing an additional two documents per interstate move. This is because FMCSA estimates that shippers request an estimate from three household goods carriers but contract with only one. FMCSA multiplied the average number of interstate moves per year by 40 percent to estimate the number of hard-copy Rights and Responsibilities booklets provided to shippers under the existing requirements (558,851 × 40 percent = 223,540 copies). FMCSA then multiplied the number of orders for

service where hard-copies are provided by three, to account for the assumption that shippers seek an estimate from three different household goods carriers, (223,540 × 3 = 670,621 copies). The number of additional hard copies that would be provided as a result of this rule is 447,081 (670,621 − 223,540 = 447,081 copies). It is estimated that a carrier could print roughly 1,600 pages per hour and each Rights and Responsibilities booklet consists of 25 pages. The increase in the number of hours needed to print hard-copy Rights and Responsibilities booklets would be the additional hard copies multiplied by 25 pages per document (447,081 × 25 = 11,177,021 pages) divided by 1,600 pages per hour (11,177,021÷ 1,600 = 6,986 hours). The Agency assumes printing and storing these booklets would be completed by an office clerk with a loaded hourly wage of $33.31. Therefore, the increase in burden hours would be 6,986 and the increase in cost resulting from the proposed rule is $232,705, (6,986 burden hours × $33.31 = $232,693).

Estimated Number of Respondents: 5,100.

Estimated Responses: 447,081.

Estimated Burden Hours: 6,986.

Estimated Cost: $232,693.

IC–2: Estimating Charges

The proposed rule would require that movers offer surveys for all household goods shipments, including those that are located over 50 miles from the motor carrier agent's location. Currently, household goods motor carriers are not required to offer surveys for household goods shipments that are located beyond 50 miles from the motor carrier agent's location. FMCSA estimates that all shippers located beyond 50 miles from the motor carrier agent's location would take advantage of the survey option. There is an annual average of 27,949 moves beyond 50 miles, of those moves that currently receive non-binding surveys. These surveys would take about 1.5 hours each, and FMCSA assumes all tasks will be completed by a first line supervisor of a transportation and material moving worker with a loaded hourly wage of $44.11, resulting in an increase of 41,923 burden hours and an increased cost of $1,849,045 (27,959 × 1.5 hours × $44.11 = $1,849,045).

Estimated Number of Respondents: 5,100.

Estimated Responses: 27,949.

Estimated Burden Hours: 41,923.

Estimated Cost: $1,849,045.

IC–3: Pick Up of Shipments of Household Goods

FMCSA is proposing to eliminate the order for service because much of the information provided on the order for service is also provided on the bill of lading. Currently, each interstate move requires both an order for service and a bill of lading and it takes 30 minutes to prepare each document. As such, removing the order for service form requirement would save 30 minutes per move. The Agency assumes all tasks would be completed by a cargo agent with a loaded hourly wage of $33.80. With the annual average of 558,851 total interstate moves and 30 minute time savings, motor carriers would save 279,426 burden hours (558,851 interstate moves × –0.5 hours = − 279,426 burden hours). The estimated cost savings would be $9,445,421 (− 279,426 burden hours × $33.80 = − $9,445,421).

Estimated Number of Respondents: 5,100.

Estimated Responses: 558,851.

Estimated Burden Hours: − 279,426.

Estimated Cost Savings: $9,445,421.

Document Production

The estimates of the costs of producing required documents is based on the total number of pages movers would need to produce multiplied by a flat rate of $0.15 per page. With the estimated annual average of 670,621 ''Your Rights and Responsibilities'' documents printed, there would be 16,765,531 total pages printed (670,621 documents printed × 25 pages per document = 16,765,531 total pages printed). The estimated total annual printing cost to respondents is $2.5 million (16,765,531 total pages printed × $0.15 per page = $2.5 million).

In removing the order for service form, which is a one page document, the Agency estimates that there would be 558,851 fewer documents printed. This results in an estimated annual cost savings to respondents of $83,828 (558,851 documents printed × 1 page per document × $0.15 per page = $83,828).

Estimated Number of Respondents: 5,100.

Estimated Responses: 1,229,472.

Estimated Cost: $2,431,002.

FMCSA asks for comment on the information collection requirements of this proposed rule. Specifically, the Agency asks for comment on: (1) Whether the proposed information collection is necessary for FMCSA to perform its functions; (2) how the Agency can improve the quality, usefulness, and clarity of the information to be collected; (3) the accuracy of FMCSA's estimate of the burden of this information collection; and (4) how the Agency can minimize the burden of the information collection.

If you have comments on the collection of information, you must send those comments to FMCSA as outlined under the PUBLIC PARTICIPATION AND REQUEST FOR COMMENTS section at the beginning of this NPRM.

G. E.O. 13132 (Federalism)

A rule has implications for federalism under Section 1(a) of E.O. 13132 if it has ''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.''

FMCSA has determined that this rule would not have substantial direct costs on or for States, nor would it limit the policymaking discretion of States. Nothing in this document preempts any State law or regulation. Therefore, this rule does not have sufficient federalism implications to warrant the preparation of a Federalism Impact Statement.

H. Privacy

The Consolidated Appropriations Act, 2005,[24] requires the Agency to conduct a privacy impact assessment (PIA) of a regulation that will affect the privacy of individuals. This NPRM would not require the collection of personally identifiable information (PII). The Agency will complete a Privacy Threshold Assessment (PTA) to evaluate the risks and effects the proposed rulemaking might have on collecting, storing, and sharing personally identifiable information. The PTA will be submitted to FMCSA's Privacy Officer for review and preliminary adjudication and to DOT's Privacy Officer for review and final adjudication.

I. E.O. 13175 (Indian Tribal Governments)

This rule does not have Tribal implications under E.O. 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect on one or more Indian Tribes, on the relationship between the Federal Government and Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes.

[24] Public Law 108–447, 118 Stat. 2809, 3268, note following 5 U.S.C. 552a (Dec. 4, 2014).

J. National Environmental Policy Act of 1969

FMCSA analyzed this proposed rule for the purpose of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and determined this action is categorically excluded from further analysis and documentation in an environmental assessment or environmental impact statement under FMCSA Order 5610.1 (69 FR 9680, March 1, 2004), Appendix 2, paragraphs 6.m. and 6.l. The Categorical Exclusions (CEs) in paragraphs 6.m. and 6.l., respectively, cover regulations requiring every motor carrier to issue and keep a receipt or bill of lading (or record) for property tendered for transportation in interstate or foreign commerce, and regulations implementing procedures applicable to the operations of household good carriers engaged in the transportation of household goods. The proposed requirements in this rule are covered by these CEs, and the proposed rule would not have any effect on the quality of the environment. The CE determination is available for inspection or copying in the docket.

List of Subjects

49 CFR 371

Brokers, Motor carriers, Reporting and recordkeeping requirements.

49 CFR 375

Advertising, Consumer protection, Freight, Highways and roads, Insurance, Motor carriers, Moving of household goods, Reporting and recordkeeping requirements.

Accordingly, FMCSA proposes to amend 49 CFR chapter 3, parts 371 and 375 as follows:

PART 371—BROKERS OF PROPERTY

■ 1. The authority citation for part 371 continues to read as follows:

Authority: 49 U.S.C. 13301, 13501, and 14122; subtitle B, title IV of Pub. L. 109–59; and 49 CFR 1.87.

■ 2. Amend § 371.113 by revising paragraph (a) to read as follows:

§ 371.113 May I provide individual shippers with a written estimate?

(a) You may provide each individual shipper with an estimate of transportation and accessorial charges. If you provide an estimate, it must be in writing and must be based on a physical survey of the household goods conducted by the authorized motor carrier on whose behalf the estimate is provided. The estimate must be prepared in accordance with a signed, written agreement, as specified in § 371.115 of this subpart.

* * * * *

PART 375—TRANSPORTATION OF HOUSEHOLD GOODS IN INTERSTATE COMMERCE; CONSUMER PROTECTION REGULATIONS

■ 3. The authority citation for part 375 continues to read as follows:

Authority: 49 U.S.C. 13102, 13301, 13501, 13704, 13707, 13902, 14104, 14706, 14708; subtitle B, title IV of Pub. L. 109–59; and 49 CFR 1.87.

■ 4. Amend § 375.103 by:
■ a. Adding, in alphabetical order, definitions for ''Bill of lading'' and ''Physical survey'';
■ b. Removing the definition for ''Order for service''; and
■ c. Revising the definitions for ''Reasonable dispatch'' and ''Surface Transportation Board''.

The additions and revisions read as follows:

§ 375.103 What are the definitions of terms used in this part?

* * * * *

Bill of lading means both the receipt and the contract for the transportation of the individual shipper's household goods.

* * * * *

Physical survey means a survey which is conducted on-site or virtually. If the survey is performed virtually, the household goods motor carrier must be able to view the household goods through live video that allows it to clearly identify the household goods to be transported.

* * * * *

Reasonable dispatch means the performance of transportation on the dates, or during the period, agreed upon by you and the individual shipper and shown on the bill of lading. For example, if you deliberately withhold any shipment from delivery after an individual shipper offers to pay the binding estimate or 110 percent of a non-binding estimate, you have not transported the goods with reasonable dispatch. The term ''reasonable dispatch'' excludes transportation provided under your tariff provisions requiring guaranteed service dates. You will have the defenses of force majeure, *i.e.,* superior or irresistible force, as construed by the courts.

* * * * *

Surface Transportation Board means an independent agency of the United States that regulates household goods carrier tariffs, among other economic regulatory responsibilities.

* * * * *

■ 5. Amend § 375.211 by revising the introductory text of paragraph (a)(2) to read as follows:

§ 375.211 Must I have an arbitration program?

(a) * * *

(2) Before execution of the bill of lading, you must provide notice to the individual shipper of the availability of neutral arbitration, including all three of the following items:

* * * * *

■ 6. Amend § 375.213 by:
■ a. Revising paragraph (a);
■ b. Revising the introductory text of paragraph (b);
■ c. Removing paragraph (b)(1);
■ d. Redesignating paragraphs (b)(2) through (5) as paragraphs (b)(1) through (4);
■ e. Redesignating paragraph (e) as paragraph (f);
■ f. Adding new paragraph (e); and
■ g. Revising newly redesignated paragraph (f).

The revisions and addition read as follows:

§ 375.213 What information must I provide to a prospective individual shipper?

(a) When you provide the written estimate to a prospective individual shipper, you must also provide the individual shipper with the following documents:

(1) The DOT publication titled ''Ready to Move?—Tips for a Successful Interstate Move'' (Department of Transportation publication FMCSA–ESA–03–005, or its successor publication). You must provide the individual shipper with either a copy or provide a hyperlink on your internet website to the web page on the FMCSA website containing that publication.

(2) The contents of appendix A of this part, titled ''Your Rights and Responsibilities When You Move'' (Department of Transportation publication FMCSA–ESA–03–006, or its successor publication). You must provide the individual shipper with either a copy or provide a hyperlink on your internet website to the web page on the FMCSA website with the publication ''Your Rights and Responsibilities When You Move.''

(b) Before you execute a bill of lading for a shipment of household goods, you must furnish to your prospective individual shipper all four of the following documents:

* * * * *

(e) If you have a website, you are required to display prominently either a link to the DOT publication titled ''Ready to Move?—Tips for a Successful Interstate Move'' (Department of

Transportation publication FMCSA–ESA–03–005, or its successor publication) on the FMCSA website or a true and accurate copy of that document on your website.

(f) If an individual shipper elects to access the Federal consumer protection information via the hyperlink on the internet as provided in paragraphs (a)(1) and (2) of this section:

(1) You must obtain a signed, dated receipt showing the individual shipper has received either or both of the publications that includes verification of the shipper's agreement to access the Federal consumer protection information on the internet.

(2) You must maintain the signed receipt required by paragraph (f)(1) of this section for one year from the date the individual shipper signs the receipt. You are not required to maintain the signed receipt when you do not actually transport household goods or perform related services for the individual shipper who signed the receipt.

■ 7. Revise § 375.215 to read as follows:

§ 375.215 How must I collect charges?

You must issue an honest, truthful invoice that includes all the information required by subpart A of part 373 of this chapter. All rates and charges for the transportation and related services must be in accordance with your appropriately published tariff provisions in effect, including the method of payment.

■ 8. Amend § 375.217 by revising paragraph (b) to read as follows:

§ 375.217 How must I collect charges upon delivery?

* * * * *

(b) You must specify the same form of payment provided in paragraph (a) of this section when you prepare the bill of lading.

* * * * *

■ 9. Amend § 375.221 by revising paragraph (c) to read as follows:

§ 375.221 May I use a charge or credit card plan for payments?

* * * * *

(c) If you allow an individual shipper to pay an invoice by charge or credit card, you are deeming such payment to be the same as payment by cash, certified check, money order, or a cashier's check.

* * * * *

■ 10. Amend § 375.401 by revising paragraphs (a), (b) introductory text, and (f) to read as follows:

§ 375.401 Must I estimate charges?

(a) You must conduct a physical survey of the household goods to be transported and provide the prospective individual shipper with a written estimate, based on the physical survey, of the charges for the transportation and all related services. An individual shipper may elect to waive a physical survey. The waiver agreement is subject to the following requirements:

(1) It must be in writing;

(2) It must be signed by the shipper before the shipment is loaded; and

(3) You must retain a copy of the waiver agreement as an addendum to the bill of lading with the understanding that the waiver agreement will be subject to the same record retention requirements that apply to bills of lading, as provided in § 375.505(d).

(b) Before you execute a bill of lading for a shipment of household goods for an individual shipper, you must provide a written estimate of the total charges and indicate whether it is a binding or a non-binding estimate, as follows:

* * * * *

(f) You must determine charges for any accessorial services such as elevators, long carries, etc., before preparing the bill of lading for binding or non-binding estimates. If you fail to ask the shipper about such charges and fail to determine such charges before preparing the bill of lading, you must deliver the goods and bill the shipper after 30 days for the additional charges.

* * * * *

■ 11. Amend § 375.403 by revising paragraphs (a)(1), (a)(6)(ii), and (a)(9) to read as follows:

§ 375.403 How must I provide a binding estimate?

(a) * * *

(1) You must base the binding estimate on the physical survey unless waived as provided in § 375.401(a).

* * * * *

(6) * * *

(ii) Prepare a new binding estimate prior to loading. The new estimate must be signed by the individual shipper. You should maintain a record of the date, time, and manner that the new estimate was prepared.

* * * * *

(9) If the individual shipper requests additional services after the bill of lading has been issued, you must inform the individual shipper of the additional charges involved. The individual shipper must agree to the new charges. You must prepare a new binding estimate and have the new binding estimate signed by the individual shipper. You may require full payment at destination for these additional services and for 100 percent of the original binding estimate. If applicable, you also may require payment at delivery of charges for impracticable operations (as defined in your carrier tariff) not to exceed 15 percent of all other charges due at delivery. You must bill and collect from the individual shipper any applicable charges not collected at delivery in accordance with subpart H of this part.

* * * * *

■ 12. Amend § 375.405 by revising paragraphs (b)(7)(ii) and (c) to read as follows:

§ 375.405 How must I provide a non-binding estimate?

* * * * *

(b) * * *

(7) * * *

(ii) Prepare a new non-binding estimate which must be signed by the individual shipper.

* * * * *

(c) If you furnish a non-binding estimate, you must enter the estimated charges upon the bill of lading.

* * * * *

§ 375.501 [Removed and Reserved]

■ 13. Remove and reserve § 375.501.

■ 14. Amend § 375.505 by revising paragraphs (a), (b) introductory text, (b)(1), (6), and (14 through (17), and (d), and adding paragraphs (e) through (h) to read as follows:

§ 375.505 Must I write up a bill of lading?

(a) Before you receive a shipment of household goods you will transport for an individual shipper, you must prepare and issue a bill of lading. The bill of lading must contain the terms and conditions of the contract.

(b) On a bill of lading, you must include the following 17 items:

(1) Your legal or trade name (*i.e.,* doing business as name) as it is registered with FMCSA, to include your physical address.

(2) The names, telephone numbers, addresses, and USDOT numbers of any motor carriers, when known, who will participate in transportation of the shipment.

(3) The individual shipper's name, address, and, if available, telephone number(s).

* * * * *

(6) *For non-guaranteed service,* the agreed date or period of time for pickup of the shipment and the agreed date or period of time for the delivery of the shipment.

* * * * *

(14) A complete description of any special or accessorial services ordered and minimum weight or volume charges applicable to the shipment, subject to the following two conditions:

(i) If you provide service for individual shippers on rates based upon the transportation of a minimum weight or volume, you must indicate on the bill of lading the minimum weight- or volume-based rates, and the minimum charges applicable to the shipment.

(ii) If you do not indicate the minimum rates and charges, your tariff must provide how you will compute the final charges relating to such a shipment based upon the actual weight or volume of the shipment.

(15) Each attachment to the bill of lading. Each attachment is an integral part of the bill of lading contract. If not provided elsewhere to the shipper, the following two items must be added as an attachment to the bill of lading.

(i) The binding or non-binding estimate.

(ii) The inventory.

(16) Any identification or registration number you assign to the shipment.

(17) A statement that the bill of lading incorporates by reference all the services included on the estimate.

* * * * *

(d) You must retain a copy of the bill of lading for each move you perform for at least 1 year from the date you created the bill of lading.

(e) You, your agent, or your driver must inform the individual shipper if you reasonably expect a special or accessorial service is necessary to safely transport a shipment. You must refuse to accept the shipment when you reasonably expect a special or accessorial service is necessary to safely transport a shipment and the individual shipper refuses to purchase the special or accessorial service. You must make a written note if the shipper refuses any special or accessorial services that you reasonably expect to be necessary.

(f) You and the individual shipper must sign the bill of lading prior to the shipment being loaded. The bill of lading must be signed at both the origin and the destination. You must provide a dated copy of the bill of lading to the individual shipper at the time you sign the bill of lading.

(g)(1) You may provide the individual shipper with blank or incomplete estimates, bills of lading, or any other blank or incomplete documents pertaining to the move.

(2) You may require the individual shipper to sign an incomplete document prior to the shipment being loaded provided it contains all relevant shipping information except the actual shipment weight and any other information necessary to determine the final charges for all services performed. You may omit only that information that cannot be determined before loading, such as actual shipment weight in the case of shipments moved under non-binding estimates or unforeseen charges incurred in transit.

(3) You may not require an individual shipper to sign a blank document.

(h) The bill of lading must be provided to, signed, and dated by the individual shipper at least 3 days before the shipment is scheduled to be loaded. You must provide the individual shipper the opportunity to rescind the bill of lading without any penalty for a 3-day period after the individual shipper signs the bill of lading. If the individual shipper tenders additional items to be moved or requires additional services on the day of the move, resulting in a new binding estimate under § 375.403(a)(6)(ii) or a new non-binding estimate under § 375.405(b)(7)(ii), the corresponding changes to the bill of lading from the new estimate do not require a new 3-day period as otherwise required in this paragraph.

■ 15. Amend § 375.605 by revising paragraph (a) introductory text to read as follows:

§ 375.605 How must I notify an individual shipper of any service delays?

(a) When you are unable to perform either the pickup or delivery of a shipment on the dates or during the periods specified in the bill of lading and as soon as the delay becomes apparent to you, you must notify the individual shipper of the delay, at your expense, in one of the following six ways:

* * * * *

§ 375.801 [Amended]

■ 16. Amend § 375.801 by removing the words ''freight or expense bill'' and adding, in their place, the word ''invoice''.

§ 375.803 [Amended]

■ 17. Amend § 375.803 by removing the words ''freight or expense bill'' and adding, in their place, the word ''invoice''.

§ 375.805 [Amended]

■ 18. Amend § 375.805 by removing the words ''freight bill'' and adding, in their place, the word ''invoice''.

§ 375.807 [Amended]

■ 19. Amend § 375.807 by removing the words ''freight bill'' and adding, in their place, the word ''invoice'' in the section heading and paragraphs (a) and (c)(1) through (4).

■ 20. Revise appendix A to part 375 to read as follows:

Appendix A to Part 375—Your Rights and Responsibilities When You Move

General Requirements

The Federal Motor Carrier Safety Administration's (FMCSA) regulations protect consumers of interstate moves and define the rights and responsibilities of consumers (shippers) and household goods motor carriers (movers).

The household goods motor carrier gave you this booklet to provide information about your rights and responsibilities as an individual shipper of household goods. Your primary responsibilities are to ensure that you understand the terms and conditions of the moving contract (bill of lading), and know what to do in case problems arise.

The primary responsibility for protecting your move lies with you in selecting a reputable household goods mover or household goods broker, and making sure you understand the terms and conditions of your contract and the remedies that are available to you in case problems arise.

Definitions and Common Terms

Accessorial (Additional) Services—These are services such as packing, unpacking, appliance servicing, or piano carrying, that you request to be performed or are necessary because of landlord requirements or other special circumstances.

Advanced Charges—Charges for services performed by someone other than the mover. A professional, craftsman, or other third party may perform these services at your request. The mover pays for these services and adds the charges to your bill of lading.

Agent—A local moving company authorized to act on behalf of a larger national company.

Appliance Service by Third Party—The preparation of major electrical appliances to make them safe for transportation. Charges for these services may be in addition to the line-haul charges.

Bill of Lading—The receipt for your shipment and the contract for its transportation.

Broker—A company that arranges for the transportation of household goods by a registered moving company.

Collect on Delivery (COD)—This means payment is required at the time of delivery at the destination residence (or warehouse).

Certified Scale—Any scale designed for weighing motor vehicles, including trailers or semitrailers not attached to a tractor, and certified by an authorized scale inspection and licensing authority. A certified scale may also be a platform or warehouse type scale that is properly inspected and certified.

Commercial Zone—A commercial zone is roughly equivalent to the local metropolitan area of a city or town. Moves that cross state lines within these zones are exempt from FMCSA's commercial jurisdiction and, therefore, the moves are not subject to FMCSA household goods regulations. For example, a move between Brooklyn, New York, and Hackensack, New Jersey, would be within the New York City commercial zone. Although it crossed states lines, this move would not be subject to FMCSA household goods regulations.

Estimate, Binding—This is a written agreement made in advance with your mover. It guarantees the total cost of the move based upon the quantities and services shown on the estimate.

Estimate, Non-Binding—This is what your mover believes the cost will be, based upon the estimated weight of the shipment and the services requested. A non-binding estimate is not binding on the mover. The final charges will be based upon the actual weight of your shipment, the services provided, and the tariff provisions in effect.

Expedited Service—An agreement with the mover to perform transportation by a set date in exchange for an agreed upon additional charge.

Flight Charge—An additional charge for carrying items up or down flights of stairs. Charges for these services may be in addition to the line-haul charges.

Full Value Protection—The liability coverage option you are to receive for your shipment unless you waive this option in writing. It means your mover will process your loss and damage claim by replacing or repairing the item to restore its original like, kind, and quality.

Guaranteed Pickup and/or Delivery Service—An additional level of service featuring guaranteed dates of service. Your mover will provide reimbursement to you for delays. This service may be subject to minimum weight requirements.

High-Value Article—These are items valued at more than $100 per pound.

Household Goods—As used in connection with transportation, household goods are the personal effects or property used, or to be used, in a dwelling, when part of the equipment or supplies of the dwelling belong to an individual shipper. Transporting of the household goods must be arranged for and paid by you or another individual on your behalf.

Household Goods Motor Carrier—A motor carrier that, in the normal course of its business of providing transportation of household goods, offers some or all the following additional services: (1) Binding and non-binding estimates, (2) Inventorying, (3) Protective packing and unpacking of individual items at personal residences, and (4) Loading and unloading at personal residences. The term does not include a motor carrier when the motor carrier provides transportation of household goods in containers or trailers that are entirely loaded and unloaded by an individual (other than an employee or agent of the motor carrier).

Individual Shipper—Any person who:

1. Is the shipper, consignor, or consignee of a household goods shipment;

2. Is identified as the shipper, consignor, or consignee on the face of the bill of lading;

3. Owns the household goods being transported; and

4. Pays his or her own tariff transportation charges.

Impracticable Operations—Conditions which make it physically impossible for the mover to perform pickup or delivery with its normally assigned road-haul equipment so that the mover is required to use specialized equipment and/or additional labor to complete pickup or delivery of your shipment. A mover may require payment of additional charges for services required due to impracticable operations, even if you do not request these services. The specific services considered to be impracticable operations by your mover are defined in your mover's tariff.

Inventory—The detailed list of your household goods showing the quantity and condition of each item.

Line-Haul Charges—The charges for the transportation portion of your move when a household goods mover transports your shipment.

Household goods brokers or movers must provide you with basic information before you move. You should expect to receive the following information:

- A written estimate
- The ''Ready to Move'' Brochure (or a web link to access the document)
- Information about the mover's arbitration program
- Written notice about access to the mover's tariff
- The process for handling claims
- This booklet, ''Your Rights and Responsibilities When You Move'' (or a web link to access the document)

You should avoid brokers and movers that are not registered with FMCSA or refuse to perform a physical survey of your household goods. If a broker or mover requires cash, FMCSA advises you to retain all receipts and supporting documents associated with the transaction.

Customer's Responsibilities

As a customer, you have responsibilities both to your mover and to yourself. They include:

- Reading all moving documents issued by the mover or broker.
- Being available at the time of pickup and delivery of your shipment. If you are not available, you should appoint a representative to act on your behalf.
- Promptly notifying your mover if something has changed regarding your shipment (*i.e.,* move dates, additional items).
- Making payment in the amount required and in the form agreed to with the mover based on the bill of lading document.
- Promptly filing claims for loss, damage, or delays with your mover, if necessary.

Estimates

The two most important things to understand for your interstate move are: The types of estimates offered and the mover's liability in the event of loss or damage. As you read further, you will discover that movers offer two different types of estimates—binding and non-binding. The type of estimate you select determines how the charges for your shipment will be calculated. The estimate provided by your mover will notify you of the two liability coverage options: Option 1—Full Value Protection and Option 2—Waiver of Full Value Protection (60 cents per pound). The mover's liability is discussed in detail in the next section.

FMCSA requires your mover to provide written estimates on every shipment transported for you. Your mover's verbal quote of charges is not an official estimate since it is not in writing. Your mover must provide you with a written estimate of all charges including transportation, and accessorial and advanced charges (defined at the end of this booklet). This written estimate must be dated and signed by you and the mover.

The estimate your mover provides you will include a statement notifying you of two options of liability coverage for your shipment: Full Value Protection and Waiver of Full Value Protection, Released Value of 60 cents per pound per article.

Your mover must provide an estimate based upon a physical survey of your household goods. A physical survey means a survey which is conducted on-site or virtually, that allows your mover to see the household goods to be transported. A physical survey must be performed unless you waive this requirement in writing.

Please be aware that a household goods broker may only provide an estimate on a mover's behalf if the broker has a written agreement with the mover and uses the mover's published tariff.

You and your mover may agree to change an estimate of charges based on changed circumstances, but only before your shipment is loaded. Your mover may not change an estimate after loading the shipment. There is more information about changes to estimates in the following sections.

Binding Estimates

A binding estimate guarantees that you cannot be required to pay more than the amount on the estimate at the time of delivery. However, if you add additional items to your shipment or request additional services, you and your mover may:

- Agree to abide by the original binding estimate;
- prepare a new binding estimate; or
- agree to convert the binding estimate into a non-binding estimate.

If you and the mover do not agree to one of the three options listed above, the mover is not required to service the shipment. If the mover does not give you a new binding estimate in writing, or agree in writing to convert the binding estimate to a non-binding estimate before your goods are loaded, the original binding estimate is reaffirmed. Under these circumstances, your mover should not charge or collect more than the amount of the original binding estimate at delivery for the quantities and services included in the estimate.

If there are unforeseen circumstances (such as elevators, stairs, or required parking permits) at the destination the mover can bill you for these additional expenses after 30 days from delivery. Charges for services required because of impracticable operations (defined at the end of this booklet) are due at delivery, but may not exceed 15 percent of all other charges due at delivery; any remaining charges will be billed to you with payment due in 30 days from delivery.

If you are unable to pay 100 percent of the charges on a binding estimate at delivery, your mover may place your shipment in

storage at your expense. In an effort to schedule delivery of your shipment from storage, you will have to pay the required charges and storage fees, if listed in the tariffs, after your shipment arrives at the residence.

Your mover may charge a fee to prepare a binding estimate.

Non-Binding Estimates

A non-binding estimate is intended to provide you with an estimate of the cost of your move. A non-binding estimate is not a guarantee of your final costs, but it should be reasonably accurate. The estimate must indicate that your final charges will be based upon the actual weight of your shipment, the services provided, and the mover's published tariff. Therefore, the amount of your mover's non-binding estimate may be different than the amount you ultimately must pay to receive your shipment.

A non-binding estimate must be in writing and clearly describe the shipment and all services provided. Under a non-binding estimate, the mover cannot require you to pay more than 110 percent of the non-binding estimate at the time of delivery. This does not excuse you from paying all the charges due on your shipment. The mover will bill you for any remaining charges after 30 days from delivery.

On the day of pick-up, if you have additional items to move, your mover must do one of two things prior to loading:

- Reaffirm your non-binding estimate; or
- prepare a new non-binding estimate to include all the items that are being moved.

If you and the mover do not agree to one of the two options listed above, the mover is not required to service the shipment. If you are unable to pay 110 percent of the charges on a non-binding estimate at delivery, your mover may place your shipment in storage at your expense. In order to schedule delivery of your shipment from storage, you will likely have to agree to pay the required charges and storage fees, if listed in the tariffs, after your shipment arrives at the residence.

Your mover must give you possession of your shipment if you pay 110 percent of a non-binding estimate or 100 percent of a binding estimate, plus 15 percent of the impracticable operations charges (if applicable). If your mover does not relinquish possession, the mover is holding your shipment hostage in violation of Federal law.

Your Mover's Liability and Your Claims

In general, your mover is legally liable for loss or damage that occurs during the transportation of your shipment and all related services identified on the bill of lading.

The extent of your mover's liability is governed by the Surface Transportation Board's Released Rates Order. The Surface Transportation Board is an independent Federal agency that has jurisdiction over HHG motor carrier tariffs and valuation for lost or damaged goods. You may obtain a copy of the current Released Rates Order by visiting the Surface Transportation Board's website at: *https://prod.stb.gov/wp-content/uploads/files/docs/householdGoodsMoving/41845.pdf.* In addition, your mover may, but is not required to, offer to sell you separate third-party liability insurance.

All moving companies are required to assume liability for the value of the household goods they transport. However, there are two different levels of liability that apply to interstate moves: Full Value Protection and Waiver of Full Value Protection—Released Value. It is important you understand the charges that apply and the amount of protection provided by each level.

Full Value Protection

This is the most comprehensive option available to protect your household goods, but it will increase the cost of your move. The initial cost estimate of charges that you receive from your mover must include this level of protection. Your shipment will be transported at this level of liability unless you waive Full Value Protection. Under your mover's Full Value Protection level of liability, subject to the allowable exceptions in your mover's tariff, if any article is lost, destroyed, or damaged while in your mover's custody, your mover will, at its option, either (1) repair the article to the extent necessary to restore it to the same condition as when it was received by your mover, or pay you for the cost of such repairs; or (2) replace the article with an article of like, kind and quality, or pay you for the cost to replace the items.

The exact cost for your shipment, including Full Value Protection, may vary by mover and may be further subject to various deductible levels. Full Value Protection will increase the cost of your move above the basic transportation cost. The minimum valuation level for determining the cost of Full Value Protection of your shipment is $6.00 per pound times the weight of your shipment. Your mover may use a higher minimum value or you may declare a higher value for your shipment (at an additional cost). The charges that apply for providing Full Value Protection must be shown in your mover's tariff. Ask your mover for the details under its specific program.

Under this option, movers are permitted to limit their liability for loss or damage to articles of extraordinary value, unless you specifically list these articles on the shipping documents. An article of extraordinary value is any item whose value exceeds $100 per pound (for example, jewelry, silverware, china, furs, antiques, oriental rugs, and computer software). Ask your mover for a complete explanation of this limitation before your move. It is your responsibility to study this provision carefully and to make the necessary declaration.

Waiver of Full Value Protection (Released Value of 60 Cents per Pound per Article)

Released Value is minimal protection; however, it is the most economical protection available as there is no charge to you. Under this option, the mover assumes liability for no more than 60 cents per pound, per article. For example, if a 10-pound stereo component valued at $1,000 was lost or destroyed, the mover would be liable for no more than $6.00 (10 pounds × $ .60). Obviously, you should think carefully before agreeing to such an arrangement.

Third Party Insurance

If you purchase separate third party cargo liability insurance through your mover, the mover is required to issue a policy or other written record of the purchase and to provide you with a copy of the policy or other document at the time of purchase. If the mover fails to comply with this requirement, the mover is liable for any claim for loss or damage.

Shipments transported under a mover's bill of lading may be subject to arbitration in the event of a dispute over loss or damage claims. However, disputes with third party insurance companies are not subject to FMCSA regulations.

Reducing Your Mover's Normal Liability

The following are some actions that may limit or reduce your mover's liability for loss or damage to your household goods:

1. Your acts or omissions cause the loss or damage to occur. For example, improper packing of containers you pack yourself do not provide sufficient protection or you include perishable, dangerous, or hazardous materials in your shipment without your mover's knowledge. Federal law forbids you to ship hazardous materials in your household goods boxes or luggage without informing your mover.
2. You chose the Waiver of Full Value Protection—Released Value level of liability (60 cents per pound per article) but ship household goods valued at more than 60 cents per pound per article.
3. You declare a value for your shipment which is less than the actual value of the articles in your shipment.
4. You fail to notify your mover in writing of articles valued at more than $100 per pound. (If you do notify your mover, you will be entitled to full recovery up to the declared value of the article or articles, not to exceed the declared value of the entire shipment.)

Loss and Damage Claims

Movers customarily take every precaution to make sure that, while your shipment is in their possession, no items are lost, damaged or destroyed. However, despite the precautions taken, articles are sometimes lost or destroyed during the move. You have the right to file a claim with your mover to be compensated for loss or damage.

You have 9 months from the date of delivery (or in the event of loss for the entire shipment, from the date your shipment should have been delivered) to file your claim.

The claim must be submitted in writing to your mover or to your mover's third party insurer for claim processing. After you submit your claim, your mover has 30 days to acknowledge receipt of it. The mover then has 120 days to provide you with a disposition. The mover might be entitled to 60-day extensions if the claim cannot be processed or disposed of within 120 days. If an extension is necessary, your mover must notify you in writing.

Delay Claims

Delay claims are processed when you have contracted with your mover for guaranteed service for pickup and delivery. Your mover will outline on the bill of lading any penalty or per diem entitlements when there is a pickup delay and/or delivery delay.

Moving Paperwork

Do not sign entirely blank documents. And only sign *incomplete* documents where the only incomplete sections are for information that cannot be determined prior to loading, specifically the actual weight of your shipment, in the case of a non-binding estimate, and unforeseen charges that occur in transit or at destination.

Inventory

Your mover must prepare an inventory of your shipment. This is usually done at the time the mover loads your shipment. The mover is required to list any damage or unusual wear to any items. The purpose is to make a record of the existence and condition of each item before it is moved.

After completing the inventory, both you and the mover must sign each page of the inventory. It is important that before signing you make sure the inventory lists every item in your shipment and that entries regarding the condition of each item are correct. You have the right to note any disagreement. When your shipment is delivered, if an item is missing or damaged, your ability to recover from the mover for any loss or damage may depend on the notations made on this form.

The mover will give you a copy of each page of the inventory. Attach the complete inventory to your copy of the bill of lading. It is your receipt for the shipment.

At the time your shipment is delivered, it is your responsibility to check the items delivered against the items listed on your inventory. If new damage is discovered, make a record of it on the inventory form. Call the damage to the attention of the mover and request that a record of the damage be made on the mover's copy of the inventory.

After the complete shipment is unloaded, the mover will request that you sign the mover's copy of the inventory to show that you received the items listed. Do not sign until you have assured yourself that it is accurate and that proper notations have been entered regarding any missing or damaged items. Movers are prohibited from having you sign documents that release the mover from all liability for loss or damage to the shipment in exchange for delivery.

Bill of Lading

Your mover is required by law to prepare a bill of lading for your shipment. The bill of lading is the contract between you and the mover for the transportation of your shipment. This document is issued at least 3 days prior to the pickup date. The information on the bill of lading is required to include all the information and charges associated with the transportation of your shipment. The driver who loads your shipment must give you a copy of the bill of lading before or at the time of loading your shipment. The bill of lading is an important document. Do not lose or misplace your copy. Keep it available until your shipment is delivered, all charges are paid, and all claims, if any, are settled.

IT IS YOUR RESPONSIBILITY TO READ THE BILL OF LADING BEFORE YOU ACCEPT IT

The bill of lading requires the mover to provide the service you requested and requires you to pay the charges for the service. It is your responsibility to understand the bill of lading before you sign it. If you do not agree with something on the bill of lading, do not sign it until you are satisfied it is correct.

The bill of lading serves to identify the mover and specifies when the transportation is to be performed. Be sure that the portions of the bill of lading that note the dates when pickup and delivery are to be performed are completed and that you agree with the dates. The bill of lading also specifies the terms and conditions for payment of the total charges and the maximum amount required to be paid at the time of delivery for shipments moving under a binding estimate. In the case of shipments moving under non-binding estimates, the bill of lading will not include a final calculation of charges because that cannot be determined until the shipment is weighed. However, the bill of lading must contain all relevant shipment information—except the shipment weight that will be determined after the shipment has been weighed and any unforeseen charges that occur in transit or at destination.

The bill of lading must include the following 17 items:

1. The legal or trade name (*i.e.,* doing business as name) of the mover as it is registered with FMCSA, to include its physical address.

2. The names, telephone numbers, addresses, and USDOT Numbers of any motor carriers, when known, who will participate in transportation of the shipment.

3. Your name, address, and, if available, telephone number(s).

4. The form of payment the mover and its agents will honor at delivery. The payment information must be the same that was entered on the estimate.

5. When transportation is on a collect-on-delivery basis, the name, address, and if furnished, the telephone number, facsimile number, or email address of a person to notify about the charges. The notification may also be made by overnight courier or certified mail, return receipt requested.

6. For non-guaranteed service, the agreed date or period of time for pickup of the shipment and the agreed date or period of time for the delivery of the shipment.

7. For guaranteed service, subject to tariff provisions, the dates for pickup and delivery, and any penalty or per diem entitlements due to you.

8. The actual date of pickup.

9. The company or motor carrier identification number of the vehicle(s) that will transport your shipment.

10. The terms and conditions for payment of the total charges, including notice of any minimum charges.

11. The maximum amount your mover will demand at the time of delivery in order for you to obtain possession of the shipment, when you transport under a collect-on-delivery basis.

12. The valuation statements provided in the Surface Transportation Board (STB)'s released rates order. These statements require individual shippers either to accept Full Value Protection for their liability or to waive the Full Value Protection in favor of the STB's released rates. The released rates may be increased annually by the motor carrier based on the U.S. Department of Commerce's Cost of Living Adjustment. Contact the STB for a copy of the Released Rates of Motor Carrier Shipments of Household Goods. If the individual shipper waives your Full Value Protection in writing on the STB's valuation statement, you must include the charges, if any, for optional valuation coverage (other than Full Value Protection).

13. Evidence of any insurance coverage sold to or procured for the individual shipper from an independent insurer, including the amount of the premium for such insurance.

14. A complete description of any special or accessorial services ordered and minimum weight or volume charges applicable to the shipment, subject to the following two conditions:

(i) If your mover provides service for you on rates based upon the transportation of a minimum weight or volume, your mover must indicate on the bill of lading the minimum weight- or volume-based rates, and the minimum charges applicable to the shipment.

(ii) If your mover does not indicate the minimum rates and charges, your mover's tariff must provide information to compute the final charges relating to such a shipment based upon the actual weight or volume of the shipment.

15. Each attachment to the bill of lading is an integral part of the contract. That includes the binding or non-binding estimate, inventory and any signed waiver documents associated with the shipment.

16. Any identification or registration number assigned to the shipment.

17. A statement that the bill of lading incorporates by reference all the services included on the estimate, including any new estimate prepared by the mover.

The bill of lading must be signed and dated by you and your mover at origin and destination.

Invoice

At the time of payment of transportation charges, your mover must give you an invoice identifying the service provided and the charge for each service. It is customary for most movers to use a copy of the bill of lading as the invoice.

Except in those instances where a shipment is moving on a binding estimate, the invoice must specifically identify each service performed, the rate or charge per service performed, and the total charges for each service. If this information is not on the invoice, do not accept or pay the invoice.

Your mover must deliver your shipment upon payment of 100 percent of a binding estimate or 110 percent of a non-binding estimate, plus the full cost of any additional services that you required after the contract was executed and any charges for

impracticable operation, not to exceed 15 percent of all other charges due at delivery. If you do not pay the transportation charges due at the time of delivery, your mover has the right, under the bill of lading, to refuse to deliver your shipment. The mover may place your shipment in storage, at your expense, until the charges are paid.

On shipments paid in advance, your mover must present its invoice for all transportation charges within 15 days of the date your mover delivered the shipment. This period excludes Saturdays, Sundays, and Federal holidays.

On shipments paid upon delivery, your mover must present its invoice for all transportation charges on the date of delivery, or, at its discretion, within 15 days calculated from the date the shipment was delivered at your destination. This period excludes Saturdays, Sundays, and Federal holidays. Bills for additional charges based on the weight of the shipment will be presented after 30 days from delivery; charges for impracticable operations not paid at delivery are due within 30 days of the invoice.

Your mover's invoice and accompanying written notices must state the following five items:

1. Penalties for late payment
2. The period of time for any credit extended
3. Service or finance charges
4. Collection expense charges
5. Any applicable discount terms

Weight Tickets

Your mover must obtain weight tickets if your shipment is moving under a non-binding estimate. Each time your shipment is weighed, a separate weight ticket must be obtained and signed by the weigh master. If both weighings are performed on the same scale, one weight ticket may be used to record both weighings. The weight tickets must be presented with the invoice. Each weight ticket must contain the following six items:

1. The complete name and location of the scale.
2. The date of each weighing.
3. The identification of the weight entries as being the tare, gross, or net weights.
4. The company or mover identification of the vehicle.
5. The last name of the individual shipper as it appears on the bill of lading.
6. The mover's shipment registration or bill of lading number.

Additional information regarding weighing shipments is located later in this booklet.

Collection of Charges

Your mover must issue you an honest and truthful invoice for each shipment transported. When your shipment is delivered, you will be expected to pay either: (1) 100 percent of the charges on your binding estimate, or (2) 110 percent of the charges on your non-binding estimate. You will also be requested to pay the charges for any services that you requested (for example, waiting time, an extra pickup or delivery, storage) after the contract with your mover was executed that were not included in the estimate, and any charges for services performed in conjunction with impracticable operations, not to exceed 15 percent of all other charges due at delivery. Your mover will bill you after your shipment is delivered for any remaining services.

You should verify in advance what method of payment your mover will accept. Your mover must note in writing on the bill of lading the forms of payment it accepts at delivery. Do not assume your mover will accept payment by credit card unless it is clearly indicated on the bill of lading.

If you do not pay the charges due at the time of delivery, the mover has the right to refuse to deliver your shipment and to place it into storage at your expense until the charges are paid. It is standard procedure for you to pay the charges due at delivery prior to the mover unloading the shipment at destination, in accordance with the terms specified on the bill of lading.

If your shipment is transported by two or more trucks, the mover may require payment for each portion as it is delivered. You mover may delay the collection of all the charges until the entire shipment is delivered, at its discretion. When you confirm your shipment transportation with your mover, you should ask the mover about this policy.

Your mover can only collect the charges on the percentage of the shipment that was successfully delivered. For example, if you receive a binding estimate of $1,000 to move 1,000 pounds of your goods, and 50 percent of that shipment is lost, then the mover can only collect 50 percent of the estimate or $500. If the estimate is non-binding then only 50 percent of the actual charges, not to exceed 110 percent of the estimate, can be collected, which would be $550.

Your mover is forbidden from collecting, or requiring you to pay, any freight charges (including any charges for accessorial or terminal services) when your shipment is totally lost or destroyed in transit, unless the loss or destruction was due to an act or omission by you. However, if you receive Full Value Protection on your shipment, you will be required to pay the premium to process your claim for the total loss.

Transportation of Your Shipment

Pickup and Delivery

Before you move, be sure to reach an agreement with your mover on the dates for pickup and delivery of your shipment. It is your responsibility to determine on what date your shipment will be picked up and the date or timeframe you require delivery. Once an agreement is reached, your mover must enter those dates on the bill of lading. Upon loading your shipment, your mover is contractually bound to provide the service described in the bill of lading.

The mover might use the term ''delivery spread'' as the timeframe in which you can expect your shipment to be delivered. This means that your shipment could arrive anytime during the delivery spread. The mover is required to give you a 24-hour advance notice of when they plan to arrive with your shipment. At that time, you must be available to accept delivery or your shipment could be placed in storage at your expense.

When you and the mover agree to a delivery date, or to a range of dates, it is your responsibility to be available to accept delivery on any of those dates. The same applies when you and the mover agree to alternate delivery dates.

Do not agree to have your shipment picked up or delivered ''as soon as possible.'' The dates or periods you and your mover agree upon should be definite.

If you request the mover to change the dates for your shipment, most movers will agree to do so if the change will not result in unreasonable delay to their equipment or interfere with another customer's move. However, the mover is not required to change the dates and can place your shipment in storage at your expense if you are unwilling or unable to accept delivery on the agreed dates.

The only reason your mover would be excused from providing a service as described in the bill of lading is because of ''force majeure.'' This is a legal term which means an unforeseen change of circumstances beyond the control of the mover. For example, if there were a major snow storm that prevented your mover from servicing your shipment as outlined in the bill of lading, your mover would not be responsible for damages resulting from its nonperformance.

If your mover fails to pick up or deliver your shipment on the agreed date or during the delivery spread, and you have expenses that you otherwise would not have, you may be able to recover these expenses from the mover through a delay of shipment claim.

Ask your mover before you move what payment or other arrangements you can expect if your shipment is delayed through the fault of the mover.

Your mover must transport your household goods in a timely manner. This is also known as ''reasonable dispatch service.'' If you have arranged for a guaranteed delivery date, the terms of that agreement with your mover apply.

When your mover is unable to meet either the pickup or delivery dates or provide service during the periods of time specified in the bill of lading, your mover must notify you of the delay. The mover must advise you of the dates or periods of time it may be able to pick up and/or deliver your shipment. Your mover must provide this information in writing.

Early Delivery

If you are unable to accept delivery before the first day of the delivery spread, then your mover may place your shipment in storage in a warehouse located in proximity to the destination. If your mover exercises this option, your mover must immediately notify you of the name and address of the warehouse where your mover places your shipment. Your mover has full responsibility for the charges for re-delivery, handling, and storage until it makes the final delivery.

Storage in Transit

You may request your mover to store your household goods before delivering them. Your mover must notify you in writing or in person at least 10 days before the expiration date of:

1. The specified period of time when your mover is to hold your shipment in storage.

2. The maximum period of time provided in its tariff for storage-in-transit.

If your mover holds your household goods in storage-in-transit for less than 10 days, your mover must notify you, 1 day before the storage-in-transit period expires of the same information specified above.

When the storage period is about to expire, your mover must notify you in writing about the following four items:

1. The date when storage-in-transit will covert to permanent storage.

2. The existence of a 9-month period after the date of conversion to permanent storage, during which you may file claims against your mover for loss or damage occurring to your goods while in transit or during the storage-in-transit period.

3. When your mover's liability will end for loss and damage.

4. When your shipment will become subject to the rules, regulations, and charges of the management of the storage facility.

Weighing Shipments

If your mover transports your household goods on a non-binding estimate, your mover must determine the actual weight of your shipment on a certified scale in order to calculate its lawful tariff charge. If your mover provided a binding estimate, the weight of the shipment will not affect the charges you will pay, so there is no requirement to weigh shipments moving under binding estimates.

Most movers have a minimum weight charge for transporting a shipment. If your shipment appears to weigh less than the mover's minimum weight, your mover must state the minimum cost on the bill of lading. Should your mover fail to advise you of the minimum charges and your shipment is less than the minimum weight, your mover must base your final charges upon the actual weight, not upon the minimum weight.

Usually, your shipment will be weighed in the city or local area where the shipment originates. The driver has the truck weighed before coming to your residence and then has it weighed again after your shipment has been loaded. The difference in these two weights is the weight of your shipment.

The mover may also weigh your shipment at its destination when the shipment is delivered. The driver will have the truck weighed with your shipment on board and then weighed a second time after your shipment has been unloaded. Each time a weighing is performed, the driver is required to obtain an official weight ticket signed by the weigh master of a certified scale and a copy of the weight tickets must accompany your copy of the bill of lading. Shipments of less than 3,000 pounds may be weighed on a certified warehouse scale.

You have the right, and your mover must inform you of your right, to observe all weighing of your shipment. Your mover must tell you where and when each weighing will occur. Your mover must give you a reasonable opportunity to be present to observe the weighing. You may waive your right to observe weighing; however, you must waive that right in writing.

If your shipment is weighed at origin and you believe that the weight may not be accurate, you have the right to request that the shipment be reweighed before it is unloaded. The mover is not permitted to charge you for the reweighing, but the final charges due will be based on the reweigh weight, even if it is more than the initial weight.

If you request notification of the actual weight and charges of your shipment, your mover must comply with your request if it is moving your household goods on a collect-on-delivery basis. This requirement is conditioned upon you supplying your mover with contact information.

Notification of Delivery

You must receive the mover's notification at least 24-hours before the scheduled delivery, excluding Saturdays, Sundays, and Federal holidays.

Your mover may disregard this 24-hour notification requirement on shipments subject to one of the following three situations:

1. When your mover weighs your shipment at destination.

2. When pickup and delivery encompasses two consecutive weekdays, if you agree.

3. When the maximum payment at time of delivery is 110 percent of the estimated charges, if you agree.

Resolving Disputes With Your Mover

The FMCSA maintains regulations to govern the processing of loss and damage claims; however, we cannot resolve these claims on your behalf. If you cannot reach a settlement with your mover, you have the right to request arbitration from your mover. All movers are required to participate in an arbitration program, and your mover is required to provide you with a summary of its arbitration program before you sign the bill of lading.

Arbitration gives you the opportunity to resolve loss or damage claims and certain types of disputed charges through a neutral arbitrator. You may find submitting your claim to arbitration is a less expensive and more convenient way to seek recovery of your claim than filing a lawsuit. You are not required to submit to arbitration in the event of a dispute. However, if you request arbitration for a claim for $10,000 or less, the mover must agree to arbitration and the arbitrator's decision is binding on the parties. Further, the mover is not required to agree to arbitration if the claim exceeds $10,000. If the mover does agree, the arbitrator's decision will be binding on both you and the mover.

You may choose to pursue a civil action in a court of appropriate jurisdiction in lieu of arbitration. Legal action may be initiated by filing a claim in your State and serving papers on the mover's process agent in your State. You may file in State court or (if the amount of the claim is more than $10,000) in Federal court. You may obtain the mover's process agent information in your State by contacting FMCSA at (800) 832–5660. You may also obtain the name of the mover's process agent via the internet by following the instructions below.

1. Go to *http://li-public.fmcsa.dot.gov.*

2. Scroll to the bottom of the page and click on CONTINUE.

3. At the top of the screen click on CHOOSE MENU OPTION, for the drop-down box and select CARRIER SEARCH, then press GO.

4. Type in the USDOT or MC number for the motor carrier.

5. Click on HTML.

6. Scroll to the bottom of the page, see BLANKET COMPANY, and click on the link.

7. You will see a list of process agents by State, locate the process agent for your State.

The FMCSA cannot settle your dispute with your mover. You must resolve your own loss and damage and/or moving charge disputes with your mover.

You entered into a contractual agreement with your mover. Therefore, you are bound by each of the following terms and conditions:

1. The terms and conditions you accepted when you signed the bill of lading.

2. The terms and conditions you accepted when you signed for delivery of your shipment.

3. Any additional terms and conditions you agreed to with your mover.

If your mover refuses to deliver your shipment unless you pay an amount the mover is not entitled to charge, contact FMCSA immediately at (888) 368–7238.

Important Points To Remember

1. Movers must give written estimates. The estimates may be either binding or non-binding. Non-binding estimates are ''approximations'' only, and the actual transportation charges you are eventually required to pay may be higher than the estimated price.

2. Do not sign blank documents. Verify the document is complete before you sign. In limited situations, it may be appropriate to sign an incomplete document if the only information that does not appear in your moving paperwork is the actual weight of your shipment (in the case of a non- binding estimate) and unforeseen charges that occur in transit or at destination.

3. Be sure you understand the mover's responsibility for loss or damage. For more information see FMCSA's brochure titled, ''Understanding Valuation and Insurance Options'' *https://www.fmcsa.dot.gov/protect-your-move/valuation-insurance.*

4. Understand the type of liability to which you agree. Ask yourself if 60 cents per pound is enough coverage for your household goods or whether you need to purchase additional valuation.

5. Notify your mover if you have high value items. High value items are valued at more than $100 per pound.

6. You have the right to be present each time your shipment is weighed. You also have the right to request a reweigh at no charge.

7. Confirm with your mover the types of payment acceptable prior to the delivery of your shipment.

8. Consider requesting arbitration to settle disputed claims with your mover.

9. You should know if the company you are dealing with is a household goods motor carrier (mover) or household goods broker, and if they are registered with FMCSA. Go to *www.protectyourmove.gov* for this information.

10. Do not sign the delivery receipt if it contains any language releasing or discharging your mover or its agents from liability. Strike out such language before signing, or refuse delivery if the mover refuses to provide a proper delivery receipt.

Issued under authority delegated in 49 CFR 1.87.

Meera Joshi,

Deputy Administrator.

[FR Doc. 2021–13889 Filed 8–5–21; 4:15 pm]

BILLING CODE 4910–EX–P

FEDERAL REGISTER

Vol. 86 Tuesday,
No. 151 August 10, 2021

Part IV

Department of Transportation

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 171, 172, 173, et al.
Hazardous Materials: Harmonization With International Standards; Proposed Rule

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 171, 172, 173, 175, 176, 178, and 180

[Docket No. PHMSA–2019–0030 (HM–215P)]

RIN 2137–AF46

Hazardous Materials: Harmonization With International Standards

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: PHMSA proposes to amend the Hazardous Materials Regulations to maintain alignment with international regulations and standards by adopting various amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations, and vessel stowage requirements. Additionally, PHMSA proposes an amendment to the Hazardous Materials Regulations that would allow for better alignment with Transport Canada's Transportation of Dangerous Goods Regulations.

DATES: Comments must be received by October 12, 2021. To the extent possible, PHMSA will consider late-filed comments while a final rule is developed.

ADDRESSES: You may submit comments by any of the following methods:

- *Federal Rulemaking Portal: http://www.regulations.gov.* Follow the online instructions for submitting comments.
- *Fax:* 1–202–493–2251.
- *Mail:* Docket Management System; U.S. Department of Transportation, Docket Operations, M–30, Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590–0001.
- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M–30, Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590–0001 between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Instructions: Include the agency name and docket number PHMSA–2019–0030 (HM–215P) or RIN 2137–AF46 for this rulemaking at the beginning of your comment. Note that all comments received will be posted without change to *http://www.regulations.gov* including any personal information provided. If sent by mail, comments must be submitted in duplicate. Persons wishing to receive confirmation of receipt of their comments must include a self-addressed stamped postcard.

Docket: For access to the dockets to read background documents (including the Preliminary Regulatory Impact Analysis (PRIA)) or comments received, go to *http://www.regulations.gov* or DOT's Docket Operations Office (*see* **ADDRESSES**).

Confidential Business Information: Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA; 5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as ''PROPIN.'' Submissions containing CBI should be sent to Candace Casey, U.S. Department of Transportation, 1200 New Jersey Avenue SE, Washington, DC 20590–0001. Any commentary that PHMSA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

FOR FURTHER INFORMATION CONTACT: Candace Casey, Standards and Rulemaking, or Aaron Wiener, International Program, at (202) 366–8553, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue SE, East Building, 2nd Floor, Washington, DC 20590–0001.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Executive Summary

As discussed in further detail later in this NPRM (*see* the Section-By-Section Review of NPRM Proposals), the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to amend certain sections of the Hazardous Materials Regulations (HMR; 49 CFR parts 171 to 180) to maintain alignment with international regulations and standards by adopting various amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations, and vessel stowage requirements.

PHMSA expects adoption of the regulatory amendments proposed in this NPRM will maintain the high safety standard currently achieved under the HMR, facilitate the safe transportation of critical vaccines and other medical materials associated with response to the coronavirus disease 2019 (COVID–19) public health emergency, and align HMR requirements with anticipated increases in the volume of lithium batteries transported in interstate commerce from electrification of the transportation and other economic sectors. PHMSA also notes that because harmonization of the HMR with international consensus standards as proposed could reduce delays and interruptions of hazardous materials during transportation, the proposed NPRM amendments may also lower greenhouse gas (GHG) emissions and safety risks to minority, low-income, underserved, and other disadvantaged populations and communities in the vicinity of interim storage sites and transportation arteries and hubs.

The following list summarizes the more noteworthy proposals set forth in this NPRM:

- *Incorporation by Reference:* PHMSA proposes to incorporate by reference updated versions of the following international hazardous materials regulations and standards: the 2021–2022 Edition of the International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions); Amendment 40–20 to the International Maritime Dangerous Goods Code (IMDG Code); the 21st revised edition of the United Nations Recommendations on the

Transport of Dangerous Goods—Model Regulations (UN Model Regulations); and the International Atomic Energy Agency (IAEA) ''Specific Safety Requirements Number SSR–6: Regulations for the Safe Transport of Radioactive Material 2018 Edition'' (SSR–6, Ref. 1). PHMSA also proposes the incorporation by reference of several new or updated International Organization for Standardization (ISO) standards as well as an updated version of the Organization for Economic Cooperation and Development (OECD) Guidelines for the Testing of Chemicals *Test No. 431: In vitro skin corrosion: reconstructed human epidermis (RHE) test method.*

• *Transport Canada temporary certificates:* PHMSA proposes amendments to the HMR that would authorize the motor carrier or rail transportation of a hazardous material within the United States pursuant to a temporary certificate issued under Transport Canada's Transportation of Dangerous Goods Regulations (TDG Regulations).

• *Hazardous Materials Table:* PHMSA proposes amendments to the Hazardous Materials Table (HMT; 49 CFR 172.101) to add, revise or remove certain proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, bulk packaging requirements, and passenger and cargo aircraft maximum quantity limits.

• *Data loggers:* PHMSA proposes exception from certain regulations for lithium batteries in equipment that are attached to or contained in packagings, large packagings, intermediate bulk containers (IBCs), or cargo transport units as equipment in use or intended for use during transport, such as data loggers. This would clarify regulations applicable to data loggers and cargo tracking devices powered by lithium batteries that are attached to or contained in, and in use or intended for use during transport. Additionally, in response to the COVID–19 public health emergency, and consistent with revisions to the 2021–2022 ICAO Technical Instructions, PHMSA proposes exceptions specific to the air transportation of these items used in association with shipments of COVID–19 pharmaceuticals, including vaccines.

• *Removal of metal wall thickness requirements for certain metal IBCs:* PHMSA proposes to remove the minimum wall thickness requirements for metal IBCs that have a capacity of 1500 liters (L) or less.

• *Stabilized fish meal or fish scrap by air:* PHMSA proposes to permit the transport of stabilized fish meal or fish scrap (UN2216) on passenger and cargo aircraft. Currently, when transported as a Class 9 material, stabilized fish meal or fish scrap is only authorized for transportation by vessel. As a part of this proposal, PHMSA is also expanding the applicability of the stabilization requirements currently in place for shipments of these materials by vessel.

• *UN3549 Category A Medical Wastes:* PHMSA proposes to create a new entry in the HMT for ''UN3549, Medical Waste, Category A, Affecting Humans, *solid* or Medical Waste, Category A, Affecting Animals *only, solid*.'' This entry provides an additional shipping description for solid materials meeting the Category A classification criteria that are not appropriate for classification in existing entries/classes ''UN2814, Infectious substance, affecting humans'' or ''UN2900, Infectious substance, affecting animals only.'' Solid medical waste containing Category A infectious substances generated from the medical treatment of humans or veterinary treatment of animals (*e.g.,* disposable personal protective equipment) may be assigned to UN3549. Although PHMSA is not adopting certain packaging provisions adopted in the UN Model Regulations, it proposes assigning Special Provision 131, which directs shippers to request a special permit prior to transportation, to UN3549. Additionally, PHMSA proposes amending certain parts of § 173.134, which provides definitions and exceptions for Class 6, Division 6.2 hazardous materials, to include references to this new UN number and proper shipping name.

• *Additional packagings for ''UN2211, Polymeric beads, expandable, evolving flammable vapor'' and ''UN3314, Plastic molding compound in dough, sheet or extruded rope form evolving flammable vapor'':* PHMSA proposes to expand the authorized packagings for polymeric beads and plastic molding compound to include combination packagings rather than limiting packaging options to single packagings.

• *Miscellaneous revisions of requirements pertaining to the transportation of lithium batteries:* PHMSA proposes a number of revisions to HMR requirements, including, but not limited to, minimum size markings and modification of stowage requirements for lithium batteries including those offered as damaged/defective or for disposal/recycling. PHMSA expects the revisions will contribute to the safe transportation of increased volumes of lithium batteries anticipated as a result of the increased use of that technology in the transportation and other economic sectors.

• *Definition of SADT (Self-accelerating decomposition temperature) and SAPT (Self-accelerating polymerizing temperature):* PHMSA proposes to amend the definitions of SADT and SAPT to clarify that the lowest temperature at which the these may occur can take place in a packaging, IBC or portable tank.

• *Periodic inspection for chemicals under pressure:* PHMSA proposes to extend the periodic inspection, from five to ten years, for cylinders that are filled with hazardous materials described as ''UN3500, Chemicals under pressure, n.o.s.'' that are also used as fire extinguishing agents.

• *Technical name requirements for marine pollutants:* PHMSA proposes to amend provisions pertaining to the addition of technical names to the shipping description when transporting hazardous materials that contain marine pollutants. These amendments aim to provide flexibility with regard to documentation and marking requirements, which currently require identifying the technical names of marine pollutant components in those materials. Additionally, PHMSA proposes to amend §§ 172.203(l) and 172.322 to limit the applicability of requirements for specific marine pollutant constituents for generic entries (indicated by the letter ''G'' in column 1 of the Hazardous Materials Table) and those containing ''n.o.s.'' as part of the proper shipping names.

• *Stability tests for nitrocellulose:* PHMSA proposes to add stability testing requirements for nitrocellulose, to require that these materials meet the criteria of the Bergmann-Junk test or methyl violet paper test in the UN Manual of Tests and Criteria, Appendix 10.

Some of the proposed amendments represent improvements in safety (*e.g.,* nitrocellulose stability testing, additional closures for packagings intended for pyrophoric materials, on deck stowage requirements for lithium batteries transported by vessel, etc.). All the proposed amendments are expected to maintain the HMR's high safety standard for the public and the environment. Additionally, PHMSA anticipates that there are safety benefits to be derived from improved compliance related to consistency amongst domestic and international regulations. PHMSA solicits comment on the amendments proposed in this NPRM pertaining to: need, benefits and costs of the proposed HMR revisions; impact on safety and the environment;

impact on environmental justice and equity; and any other relevant information. In addition, PHMSA solicits comment regarding approaches to reducing the costs of this rule while maintaining or increasing safety benefits. As further explained in the PRIA, PHMSA expects that the aggregate benefits of the amendments proposed in this NPRM justify their aggregate costs. Nonetheless, PHMSA solicits comment on specific changes (*e.g.,* greater flexibility with regard to a particular proposal) that might improve the rule.

II. Background

The Federal hazardous materials transportation 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 as consistent with promotion of safety and the public interest. *See* 49 U.S.C. 5120. This statutory mandate reflects the importance of international standard-setting activity in light of the globalization of commercial transportation of hazardous materials. Harmonization of the HMR with those efforts can reduce the costs and other burdens of complying with multiple or inconsistent safety requirements between nations. Consistency between the HMR and current international standards can also enhance safety by (1) ensuring that the HMR is informed by the latest best practices and lessons learned; (2) improving understanding of and compliance with pertinent requirements; (3) facilitating the smooth flow of hazardous materials from their points of origin to their points of destination, thereby avoiding risks to the public and the environment from release of hazardous materials from delays or interruptions in the transportation of those materials; and (4) enabling consistent emergency response procedures in the event of a hazardous materials incident.

PHMSA participates in the development of international regulations and standards for the transportation of hazardous materials. It also adopts within the HMR international standards consistent with PHMSA's safety mission. PHMSA reviews and evaluates each international standard it considers for incorporation within the HMR on its own merits, to include the effects on transportation safety, the environmental impacts, and any economic impact. PHMSA's goal is to harmonize with international standards without diminishing the level of safety currently provided by the HMR or imposing undue burdens on the regulated community.

In a final rule published December 21, 1990,[1] PHMSA's predecessor, the Research and Special Programs Administration (RSPA), comprehensively revised the HMR for greater consistency with the UN Model Regulations. The UN Model Regulations constitute a set of recommendations issued by the United Nations Sub-Committee of Experts (UNSCOE) on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The UN Model Regulations are amended and updated biennially by the UNSCOE and serve as the basis for national, regional, and international modal regulations, including the ICAO Technical Instructions and IMDG Code.

PHMSA has evaluated recent updates to the international standards, and proposes to revise the HMR to adopt changes consistent with revisions to the 2021–2022 Edition of the ICAO Technical Instructions, Amendment 40–20 to the IMDG Code,[2] and the 21st revised edition of the UN Model Regulations, all of which were published by or in effect on January 1, 2021. PHMSA issued an enforcement discretion on October 1, 2020, stating that while PHMSA is considering the 2021–2022 Edition of the ICAO Technical Instructions and amendment 40–20 of the IMDG Code for potential adoption into the HMR, PHMSA and other Federal agencies that enforce the HMR (the Federal Railroad Administration, the Federal Aviation Administration (FAA), the Federal Motor Carrier Safety Administration, and the United States Coast Guard) will not take enforcement action against any offeror or carrier who uses these standards as an alternative to complying with current HMR requirements when all or part of the transportation is by air with respect to the ICAO Technical Instructions, or by vessel with respect to the IMDG Code. In addition, PHMSA and its partners will not take enforcement action against any offeror or carrier who offers or accepts for domestic or international transportation by any mode packages marked or labeled in accordance with these standards. This notice remains in effect until withdrawn or otherwise modified.[3] Additionally, in response to the ongoing global COVID–19 public health emergency, on December 31, 2020 and February 23, 2021, ICAO published addenda to the 2021–2022 Edition of the ICAO Technical Instructions to provide additional provisions and exceptions to reduce regulatory compliance burdens for the transport of certain hazardous materials, such as alcohols and aerosols used for hygienic purposes, by air. PHMSA proposes to include those changes to international standards in this NPRM. Finally, PHMSA proposes to incorporate by reference these new international regulations and standards as well as new requirements from the IAEA, ''Specific Safety Requirements Number SSR–6: Regulations for the Safe Transport of Radioactive Material 2018 Edition'' (SSR–6, Ref. 1); several new or updated ISO standards; and an updated version of the OECD Guidelines for the Testing of Chemicals *Test No. 431: In vitro skin corrosion: reconstructed human epidermis (RHE) test method.* The standards incorporated by reference are authorized for use for domestic transportation, under specific conditions, by part 171, subpart C of the HMR.

Contemporaneously with PHMSA's development of the NPRM, the President has issued a series of Executive Orders coordinating Federal response to the COVID–19 public health emergency, a handful of those are pertinent to this NPRM. Specifically, section 2 of Executive Order 13987 (''Organizing and Mobilizing the United States Government to Provide a Unified and Effective Response to Combat COVID–19 and To Provide United States Leadership on Global Health and Security'')[4] contemplates broad-based action across the Federal Government to ''produce, supply, and distribute personal protective equipment, vaccines, tests, and other supplies for the Nation's COVID–19 response.'' Similarly, Executive Order 14002 (''Economic Relief Related to COVID–19 Pandemic'')[5] directs Federal agencies like PHMSA to respond to the economic harm caused by the COVID–19 public health emergency by promptly identifying actions they can take within existing authorities to provide economic relief to affected persons and

[1] 55 FR 52401 (Dec. 21, 1990).

[2] Amendment 40–20 to the IMDG Code may be voluntarily complied with as of January 1, 2021; however, Amendment 39–18 will remain effective through May 31, 2022.

[3] PHMSA, Notice of Enforcement Policy Regarding International Standards (Oct. 1, 2020), *https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2020-10/Notice%20of%20Enforcement%20Policy%20Regarding%20International%20Standards%20Oct%201%202020.pdf.* PHMSA expects that it may withdraw this enforcement discretion should the HMR amendments proposed here be adopted in a final rule.

[4] 86 FR 7019 (Jan. 20, 2021).

[5] 86 FR 7229 (Jan. 21, 2021).

businesses. Lastly, the President has announced ambitious reductions in national GHG emissions to combat climate, change, identifying electrification of the transportation and other economic sectors—to include enabling more widespread use of electric storage technologies (such as lithium batteries) — as a critical element of that effort.[6]

III. Incorporation by Reference Discussion Under 1 CFR Part 51

According to the Office of Management and Budget (OMB), Circular A–119, ''Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities,'' government agencies must use voluntary consensus standards wherever practical in the development of regulations.

PHMSA currently incorporates by reference into the HMR all or parts of several standards and specifications developed and published by standard development organizations (SDO). In general, SDOs update and revise their published standards every 2 to 5 years to reflect modern technology and best technical practices. The National Technology Transfer and Advancement Act of 1995 (NTTAA; Pub. L. 104–113) directs Federal agencies to use standards developed by voluntary consensus standards bodies in lieu of government-written standards whenever possible. Voluntary consensus standards bodies develop, establish, or coordinate technical standards using agreed-upon procedures. OMB issued Circular A–119 to implement section 12(d) of the NTTAA relative to the utilization of consensus technical standards by Federal agencies. This circular provides guidance for agencies participating in voluntary consensus standards bodies and describes procedures for satisfying the reporting requirements in the NTTAA. Accordingly, PHMSA is responsible for determining which currently referenced standards should be updated, revised, or removed, and which standards should be added to the HMR. Revisions to materials incorporated by reference in the HMR are handled via the rulemaking process, which allows for the public and regulated entities to provide input. During the rulemaking process, PHMSA must also obtain approval from the Office of the Federal Register to incorporate by reference any new materials. The Office of the Federal Register issued a rulemaking on November 7, 2014 that revised 1 CFR 51.5 to require that agencies detail in the preamble of an NPRM the ways the materials it proposes to incorporate by reference are reasonably available to interested parties, or how the agency worked to make those materials reasonably available to interested parties.

The UN Model Regulations, the UN Manual of Tests and Criteria, the IAEA Regulations for the Safe Transport of Radioactive Material, and the OECD Guidelines for the Testing of Chemicals *Test No. 431: In vitro skin corrosion: reconstructed human epidermis (RHE) test method* are free and easily accessible to the public on the internet, with access provided through the parent organization websites. The ICAO Technical Instructions, IMDG Code, and all ISO standard references are available for interested parties to purchase in either print or electronic versions through the parent organization websites. The price charged for those not freely available helps to cover the cost of developing, maintaining, hosting and accessing these standards. The specific standards are discussed in greater detail in Section V.

IV. Amendments Not Being Considered for Adoption in this NPRM

As documented below, PHMSA has determined that certain elements of updated international regulations and standards that are the subject of this rulemaking should not be adopted into the HMR because the structure of the HMR is such that it makes adoption unnecessary, or PHMSA has deemed it is a safer approach to authorize certain transport requirements through a special permit rather than adopting into the HMR. Use of a special permit allows for greater oversight and development of transport history and data prior to determining adoption within the HMR.

The following is a list of elements of updated international standards that PHMSA is not considering for adoption in this NPRM, and the rationale for that decision:

- *Issue #1:* As discussed previously, PHMSA proposes to add a new HMT entry for ''UN3549 Medical Waste, Category A, Affecting Humans, solid *or* Medical Waste, Category A, Affecting Animals only, solid'' for consistency with updates to the Dangerous Goods Lists of the ICAO Technical Instructions (Dangerous Goods List) and the UN Model Regulations. However, PHMSA is not proposing to revise the HMR/HMT to incorporate the corresponding packaging instructions for these materials. Instead, PHMSA plans to continue to approve the packaging and transport of these materials through a special permit. Maintaining approval of these shipments under a special permit allows for oversight of the grantees in that PHMSA can conduct a fitness evaluation prior to granting a special permit and data on the number of shipments made under a special permit are provided to PHMSA.
- *Issue #2:* In the 2021–2022 Edition of the ICAO Technical Instructions, Special Provision A201 was revised to provide provisions for transport of lithium batteries on a passenger aircraft with the prior approval of the State of Origin and the operator, provided the batteries were intended for urgent medical need. PHMSA is not proposing to make a corresponding amendment to the HMR because PHMSA added § 173.185(g) in an interim final rule (HM–224I) published on March 6, 2019[7] in response to a statutory mandate in the FAA Reauthorization Act of 2018. Pub. L. 115–254 (Oct. 5, 2018). That HMR amendment provided limited exceptions from HMR prohibitions permitting air transportation of medical device batteries with the approval of the Associate Administrator. A final rule covering the issues adopted on an interim basis in HM–224I is currently under development.
- *Issue #3:* The 21st revised edition of the UN Model Regulations, the 2021–2022 edition of the ICAO Technical Instructions, and Amendment 40–20 to the IMDG Code amended various radioactive transportation requirements to harmonize with the IAEA Regulations for the Safe Transport of Radioactive Material, No. SSR–6. While PHMSA proposes to incorporate by reference Regulations for the Safe Transport of Radioactive Material, No. SSR–6, PHMSA is not proposing to harmonize the HMR with the remainder of the changes made by the various international regulations (*i.e.,* ICAO Technical Instructions, UN Model Regulations, IMDG Code) regarding radioactive materials requirements. PHMSA plans to address domestic radioactive harmonization issues in a future rulemaking (HM–250A, under RIN137–AF42) in coordination with the Nuclear Regulatory Commission.
- *Issue #4:* The 21st revised edition of the UN Model Regulations contains an

[6] See, *e.g.,* White House, ''Fact Sheet: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies'' (Apr. 21, 2021), *https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/.*

[7] 84 FR 8006 (Mar. 6, 2019).

amendment to general requirements permitting the use of the proper shipping name ''Articles containing dangerous goods, n.o.s.'' Specifically, this amendment authorizes the use of this entry for articles containing explosives if the article is excluded from Class 1 (explosives) by meeting certain exclusion criteria identified in section 2.1.3.6.4 of the UN Model Regulations. However, PHMSA is not proposing a corresponding amendment to § 173.232 because PHMSA does not permit shippers to self-exclude a potential explosive (*i.e.,* an article) from Class 1. Rather, § 173.56 of the HMR requires shippers to submit explosives to PHMSA-approved explosives test labs, which perform evaluations to determine whether the explosive meets the exclusion criteria and then recommend a classification to PHMSA for explosives submitted to them for review. If an article is excluded from Class 1, a document would be issued by PHMSA that indicates it is not an explosive, but must be classified based on any other hazard presented by the article. In this case, the shipper would be required to pick the most appropriate proper shipping name, which could include the appropriate ''Articles, n.o.s.'' entry.

• *Issue #5:* The 21st revised edition of the UN Model Regulations contains amendments to Packing Instruction P801, applicable to used batteries assigned the following UN numbers: ''UN2794, Batteries, wet, filled with acid, *electric storage*''*;* ''UN2795, Batteries, wet, filled with alkali, electric storage''; and ''UN3028, Batteries, dry, containing potassium hydroxide solid, *electric storage.*'' These amendments were adopted to correct issues pertaining to requirements unique to the UN Model Regulations for the use of stainless steel boxes and plastic bins as packaging for those used batteries. In contrast, the HMR does not specify such packagings for used UN2794/2795/3028 batteries, nor does this NPRM propose to amend the HMR to authorize such packaging. Existing HMR packaging requirements in § 173.159 for such batteries are adequately protective. The HMR allows used batteries that are not damaged or leaking to be offered for transportation in accordance with the general packaging requirements in § 173.159(a)–(e) or paragraph (k) for damaged batteries. Because of the combination of general packaging requirements in 49 CFR part 173, subpart B, and the battery specific packaging requirements in § 173.159, PHMSA does not believe there is a safety justification to limit transportation of used batteries to those packaged in accordance with the new UN packing instruction requirements in P801 or to add these stainless steel boxes or plastic bins to the current packaging authorizations in the HMR.

V. Section-By-Section Review of NPRM Proposals

The following is a section-by-section review of the amendments proposed in this NPRM.

A. Part 171

Section 171.7

Section 171.7 provides a listing of all voluntary consensus standards incorporated by reference into the HMR, as directed by the NTTAA. For this rulemaking, PHMSA 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. PHMSA contributed to the development of those standards—each of which build on the well-established and documented safety histories of earlier editions — as it participated in the discussions and working group activities associated with their proposal, revision, and approval. Those activities in turn have informed PHMSA's evaluation of the effect those updated consensus standards would have on safety when incorporated by reference and provisions adopted into the HMR. Further, PHMSA notes that some of the consensus standards proposed for incorporation by reference within the HMR in this rulemaking have already been adopted into the regulatory schemes of other countries; note again that PHMSA itself has issued an enforcement discretion authorizing their use as an interim strategy for complying with current HMR requirements. PHMSA is not aware of adverse safety impacts from that operational experience. For these reasons, PHMSA expects their adoption will maintain the high safety standard currently achieved under the HMR. Therefore, PHMSA proposes to add or revise the following incorporation by reference materials: [8]

• In paragraph (s)(1), incorporate by reference the 2018 edition of the IAEA Regulations for the Safe Transport of Radioactive Material, Safety Standards Series No. SSR–6 (Rev.1), to replace the 2012 edition, which is currently referenced in §§ 171.22; 171.23; 171.26; 173.415; 173.416; 173.417; 173.435; and 173.473. The IAEA regulations establish standards of safety for control of the radiation, criticality, and thermal hazards to people, property, and the environment that are associated with the transport of radioactive materials. Notable changes from the previous edition include clarification of marking requirements, a new group of surface contaminated objects SCO–III for UN2914, and amendments to basic radionuclide values (activity of the radionuclide as listed in § 173.435) for seven specific radionuclides (Ba-135m, Ge-69, Ir-193m, Ni-57, Sr-83, Tb-149 and Tb-161). The Regulations for the Safe Transport of Radioactive Material are available for download and purchase in hard copy on the IAEA website at: *https://www.iaea.org/publications/12288/regulations-for-the-safe-transport-of-radioactive-material.*

• In paragraph (t)(1), incorporate by reference the 2021–2022 edition of the ICAO Technical Instructions, to replace the 2019–2020 Edition, which is currently referenced in §§ 171.8; 171.22; 171.23; 171.24; 172.101; 172.202; 172.401; 172.407; 172.512; 172.519; 172.602; 173.56; 173.320; 175.10, 175.33; and 178.3. The ICAO Technical Instructions specify detailed instructions for the safe international transport of dangerous goods by air. The requirements in the 2021–2022 edition have been amended to align better with the 21st revised edition of the United Nations Recommendations on the Transport of Dangerous Goods and the IAEA Regulations for the Safe Transport of Radioactive Material. Notable changes in the 2021–2022 edition of the ICAO Technical Instructions include new packing and stowage provisions, new and revised entries on the Dangerous Goods List, and editorial corrections. The 2021–2022 edition of the ICAO Technical Instructions are available for purchase on the ICAO website at *https://store.icao.int/en/shop-by-areas/safety/dangerous-goods.*

• In paragraph (v)(2), incorporate by reference the 2020 edition of the IMDG Code, Incorporating Amendment 40–20 (English Edition), to replace Incorporating Amendment 39–18, 2018 Edition, which is currently referenced in §§ 171.22; 171.23; 171.25; 172.101; 172.202; 172.203 172.401; 172.407; 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; 176.906; 178.3; and 178.274. The IMDG Code is a unified international code that outlines standards and requirements for the transport of dangerous goods by sea. Notable changes in Amendment 40–20 include new packing and stowage provisions, new and revised entries on

[8] All other standards that are set out as part of the regulatory text of § 171.7(w) were previously approved for incorporation by reference and no changes are proposed.

the Dangerous Goods List, and editorial corrections. Distributors of the IMDG Code can be found on the International Maritime Organization (IMO) website at: *https://www.imo.org/en/publications/Pages/Distributors-default.aspx.*

• In paragraph (w), incorporate by reference or remove the following ISO documents to include new and updated standards for the specification, design, construction, testing, and use of gas cylinders:

—ISO 10156:2017, ''*Gas cylinders—Gases and gas mixtures—Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets*'' in paragraph (w)(38) and referenced in § 173.115. ISO 10156 specifies methods for determining whether a gas or gas mixture is flammable in air and whether a gas or gas mixture is more or less oxidizing than air under atmospheric conditions. It is intended to be used for the classification of gases and gas mixtures including the selection of gas cylinder valve outlets. This amendment would remove ISO 10156:2010, third edition, and the associated corrigendum (ISO 10156:2010/Cor.1:2010(E)), from the HMR and add the revised ISO 10156:2017(E), fourth edition, as the former documents have been withdrawn by ISO and replaced with updated 2017 versions. As part of the five-year periodic review of all standards, ISO reviewed ISO 1056:2010 and published an updated version, ISO 10156:2017, which was published in September 2017 and adopted in the 21st revised edition of the UN Model Regulations. While many of the edits in this 2017 version were editorial changes made to suit the ISO publication rules, the standard has also been supplemented with a test method to determine the flammability limits of gases and gas mixtures in air and a calculation method to determine the lower flammability limit of a gas mixture. PHMSA expects that the latter change will enhance safety by providing improved instruction on determination of flammability of gases and gas mixtures which would aid in the proper selection of a valve. (*see* § 173.115 of the Section-by-Section Review for additional discussion of this proposed change).

—ISO 10297: 2014/Amd 1:2017, ''*Gas cylinders — Cylinder valves—Specification and type testing*'' in paragraph (w)(42) and referenced in § 173.301b and § 178.71. ISO published this supplemental amendment to the 2014 version of this document (*i.e.,* ISO 10297: 2014) to clarify valve requirements for tubes and pressure drums and to correct errors found in the 2014 version. PHMSA proposes to reference this amendment in §§ 173.301b and 178.71, where use of ISO 10297:2014 is required. PHMSA reviewed this document and determined that the amendments it adds would provide additional safety benefits for hazardous materials in transportation.

—ISO 10462:2013, ''*Gas cylinders — Transportable cylinders for dissolved acetylene — Periodic inspection and maintenance.*'' PHMSA proposes to delete this second edition of ISO 10462 currently in paragraph (w)(44) from the list of materials incorporated by reference. PHMSA requires the use of ISO 10462 for the requalification of a dissolved acetylene cylinder in § 180.207. In final rule HM–215N,[9] PHMSA incorporated by reference the updated third edition of ISO 10462; however, the rule included a sunset provision to allow continued use of this second edition until December 31, 2018. Because this date has since passed, and the second edition is no longer authorized for use under § 180.207, PHMSA proposes removing reference to this edition in § 171.7, as well as a making a conforming revision to remove the sunset provision in § 180.207.

—ISO 11114–1:2012/Amd 1:2017(E), ''*Gas cylinders—Compatibility of cylinder and valve materials with gas contents—Part 1: Metallic materials—Amendment 1,*'' in paragraph (w)(47), which PHMSA proposes to reference in § 172.102, § 173.301b, and § 178.71. This 2017 document supplements ISO 11114–1:2012(E), which provides requirements for the selection of safe combinations of metallic cylinder and valve materials, and cylinder gas contents. As part of ISO's regular five-year review of its standards, the 2012 version of this document was amended through the issuance of this supplemental document, ISO 11114–1:2012/Amd 1:2017(E). This 2017 document amends the 2012 version by providing more explicit instructions on the permissible concentrations of gases containing halogens in aluminum cylinders. It also provides amended requirements for butylene, hydrogen cyanide, hydrogen sulfide and nitric oxide. Consequently, the 21st revised edition of the UN Model Regulations updated all references to the 2012 edition to include a reference to the supplemental amendment (ISO 11114–1:2012/Amd 1:2017(E)). PHMSA proposes to revise the HMR likewise, by amending Special Provision 379, § 173.301b and § 178.71 where ISO 11114–1:2012(E) is permitted or required, to also require compatibility with ISO 11114–1:2012/Amd 1:2017(E).

—ISO 11119–1:2012(E), ''*Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing— Part 1: Hoop wrapped fibre reinforced composite gas cylinders and tubes up to 450 l*'', found in paragraph (w)(55). This document specifies requirements for composite gas cylinders and tubes between 0.5 L and 450 L water capacity, for the storage and conveyance of compressed or liquefied gases. ISO 11119–1:2012(E) is currently incorporated by reference in § 178.71; however, PHMSA is proposing to additionally incorporate by reference in § 178.75.

—ISO 11119–2:2012(E), ''*Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 2: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 l with load-sharing metal liners*'' found in paragraph (w)(57). ISO 11119–2:2012 specifies requirements for composite gas cylinders and tubes between 0.5 L and 450 L water capacity, for the storage and conveyance of compressed or liquefied gases. ISO 11119–2:2012(E) is currently incorporated by reference in § 178.71; however, PHMSA is proposing to additionally incorporate by reference in § 178.75.

—ISO 11119–2:2012/Amd.1:2014(E), Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 2: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 l with load-sharing metal liners, Amendment 1, found in paragraph (w)(58). ISO 11119–2:2012/Amd. 1:2014(E) is currently incorporated by reference in § 178.71; however, PHMSA is proposing to additionally incorporate by reference in § 178.75. This supplemental amendment was published to align the drop test originally provided in ISO 11119–2 with the drop test outlined in ISO 11119–3 ''*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*''.

—ISO 11119–3:2013(E), ''*Gas cylinders of composite construction—*

[9] 82 FR 15796 (Mar. 30, 2017).

Specification and test methods—Part 3: Fully wrapped fibre reinforced composite gas cylinders with non-load-sharing metallic or non-metallic liners'' listed in paragraph (w)(60). This document is currently incorporated by reference in § 178.71; however, PHMSA is proposing to additionally incorporate by reference in § 178.75. ISO 11119–3:2013 specifies requirements for composite gas cylinders up to 150 l water capacity and composite tubes above 150 L water capacity and up to 450 L water capacity, for the storage and conveyance of compressed or liquefied gases.

—ISO 11119–4:2016, ''*Gas cylinders—Refillable composite gas cylinders—Design, construction and testing—Part 4: Fully wrapped fibre reinforced composite gas cylinders up to 150 L with load-sharing welded metallic liners,*'' in (w)(61), which PHMSA proposes to add a new reference to in § 178.71 and 178.75. This standard provides requirements for composite gas cylinders with load-sharing welded liners between 0.5 L and 150 L water capacity and a maximum test pressure of 450 bar [10] for the storage and conveyance of compressed or liquefied gases. PHMSA proposes requiring UN composite cylinders and tubes to conform to this standard in § 178.71. *See* 178.71 of Section-by-Section Review for additional discussion on this new incorporation by reference.

—ISO 14246:2014/Amd 1:2017, ''*Gas cylinders—Cylinder valves—Manufacturing tests and examinations—Amendment 1,*'' in paragraph (w)(72). PHMSA proposes to add a reference to this document in § 178.71. This one page amendment, published in 2017, is intended for use in conjunction with ISO 14246:2014, which specifies the procedures and acceptance criteria for manufacturing testing and examination of cylinder valves that have been manufactured to achieve type approval. This 2017 document amends the 2014 version by updating the pressure test and leakproofness test specifically for acetylene valves. Consequently, the 21st revised edition of the UN Model Regulations updated all references to the 2014 edition to include a reference to the supplemental amendment (ISO 14246/Amd 1:2017). Therefore, PHMSA proposes to do likewise by adding a reference to this supplement in § 178.71, where inspection and testing in accordance with ISO 14246:2014 are required. *See* 178.71 of the Section-by-Section Review for additional discussion on this proposal.

—ISO 17879:2017, ''*Gas cylinders—Self-closing cylinder valves—Specification and type testing,*'' in paragraph (w)(75). PHMSA proposes to add a reference to this standard in § 173.301b and § 178.71. This standard provides the design, type testing, marking, and manufacturing tests and examinations requirements for self-closing cylinder valves intended to be fitted to refillable transportable gas cylinders used to transport compressed, liquefied or dissolved gases.

—ISO 20475:2018, ''*Gas cylinders—Cylinder bundles—Periodic inspection and testing*'' in paragraph (w)(77). This standard provides the requirements for the periodic inspection and testing of cylinder bundles containing compressed, liquefied, and dissolved gas. PHMSA proposes to add a reference to this standard in § 180.207, which provides the requirements for requalification of UN pressure receptacles.

All ISO standards are available for preview and purchase at: *https://www.iso.org/standards.html.*

• In paragraph (aa)(3), incorporate by reference the updated 2016 version of the OECD Guidelines for the Testing of Chemicals ''*Test No. 431: In vitro skin corrosion: reconstructed human Epidermis (RHE) test method*.'' PHMSA proposes to update the version of OECD Guidelines for the Testing of Chemicals *Test No. 431* referenced in § 173.137, to maintain alignment with the UN Model Regulations. This document is used for the identification of corrosive chemical substances and mixtures. This updated edition includes in vitro methods allowing for better differentiation between hazard categories, which had not been possible under earlier editions due to the limited set of well-known in vivo corrosive sub-category chemicals against which to validate in vitro testing results. Therefore, this updated test protocol may provide clearer distinctions between severe and less severe skin corrosives. OECD test methods can be found in the OECD iLibrary available at *https://www.oecd-ilibrary.org/.*

• In paragraph (dd), incorporate by reference United Nations standards including:

—''*The Recommendations on the Transport of Dangerous Goods—Model Regulations,*'' 21st revised edition (2019), Volumes I and II, in paragraph (dd)(1), which are referenced in §§ 171.8; 171.12; 172.202; 172.401; 172.407; 172.502; 172.519; 173.22; 173.24; 173.24b; 173.40; 173.56; 173.192; 173.302b; 173.304b; 178.75; and 178.274. The Model Regulations provide framework provisions promoting uniform development of national and international regulations governing the transportation of hazardous materials by various modes of transport. At its ninth session on December 7, 2018, the UNSCOE on the Transport of Dangerous Goods and on the GHS adopted amendments to the UN Model Regulations concerning, inter alia, electric storage systems (including lithium batteries installed in cargo transport units and defective batteries), explosives, infectious waste of Category A, waste gas cartridges, harmonization with the 2018 edition of IAEA's Regulations for the Safe Transport of Radioactive Material, listing of dangerous goods, update of LC50 values for some toxic gases and use of in vitro skin corrosion methods for classification. The 21st revised edition of the UN Model Regulations is available online at: *https://unece.org/rev-21-2019.*

—The Manual of Tests and Criteria, 7th revised edition (2019), in paragraph (dd)(2), which is referenced in §§ 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; 173.221; 173.224; 173.225; 173.232; part 173, appendix H; 175.10; 176.905; and 178.274. The Manual of Tests and Criteria contains instruction for the classification of hazardous materials for purposes of transportation according to the UN Model Regulations. PHMSA proposes to replace the sixth revised edition (2015) and the sixth revised edition, Amendment 1 (2017) with the seventh revised edition. The amendments adopted in 2018 for the seventh revised edition include: A full review of the text of the Manual to facilitate its use in the context of the GHS; a new test under test series 8 to determine the sensitiveness of a candidate ammonium nitrate, emulsion or suspension, or gel, intermediate for blasting explosive, to the effect of intense localized thermal ignition under high confinement; new provisions addressing classification of polymerizing substances for transport; stability tests for nitrocellulose mixtures (new Appendix 10); and a compilation of classification results on industrial nitrocellulose in accordance with Chapter 2.17 of the GHS, which can be used for the

[10] 1 Bar = 100 kPa = 14.504 psi.

classification of industrial nitrocellulose based products (new Appendix 11). Additionally, the Committee considered that the reference to the ''Recommendations on the Transport of Dangerous Goods'' in the title of the manual was no longer appropriate, and decided that the manual should be entitled ''*Manual of Tests and Criteria.*'' Therefore, PHMSA proposes to amend the title of this document in the list of reference material in § 171.7 to reflect this change. The seventh revised edition of the ''*Manual of Tests and Criteria*'' can be accessed at: *https://unece.org/rev7-files.*

—''*Globally Harmonized System of Classification and Labelling of Chemicals*'', eighth revised edition (2019) in paragraph (dd)(3), which is referenced in § 172.401. The GHS standard provides a basic scheme to identify the hazards of substances and mixtures and to communicate the hazards. At its ninth session on December 7, 2018, the Committee adopted a set of amendments to the seventh revised edition of the GHS which include, inter alia: new classification criteria, hazard communication elements, decision logics, and guidance for chemicals under pressure; new provisions for the use of in vitro/ex vivo data and non-test methods to assess skin corrosion and skin irritation; miscellaneous amendments to clarify the classification criteria for Specific Target Organ Toxicity; revised and further rationalized precautionary statements and an editorial revision of Sections 2 and 3 of Annex 3; new examples of precautionary pictograms to convey the precautionary statement ''Keep out of reach of children''; a new example in Annex 7 addressing labelling of sets or kits; and guidance on the identification of dust explosion hazards and the need for risk assessment, prevention, mitigation, and hazard communication. The eighth revised edition of the GHS can be accessed at *https://unece.org/ghs-rev8-2019.*

—''*European Agreement concerning the International Carriage of Dangerous Goods by Road*'', in (dd)(4), which is referenced in § 171.23. The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) outlines regulations concerning the international carriage of dangerous goods by road within the EU and other countries that are party to the agreement. This publication presents the European Agreement, the Protocol Signatures, the annexes, and the amendments. In addition to a new title, the 2020 edition of this document includes amendments necessary to ensure harmonization of ADR with the UN Model Regulations, additional amendments adopted by the Working Group on Tanks as well as amendments proposed by the Working Group on Standards. PHMSA proposes to remove references to the 2019 edition of the ADR, ECE/TRANS/257, and add references to volumes I and II of the 2020 edition, ECE/TRANS/300. The ADR can be accessed at: *https://www.unece.org/trans/danger/publi/adr/adr_e.html.*

Section 171.8

Section 171.8 defines terms used throughout the HMR that have broad or multi-modal applicability. Currently, the definitions provided in § 171.8 for SADT, *i.e.,* ''self-accelerating decomposition temperature'' and SAPT, *i.e.,* ''self-accelerating polymerization temperature'' only spell out the abbreviations and direct users to § 173.21—Forbidden materials and packages—for the actual defining criteria. PHMSA proposes to make editorial changes to improve the utility of the definitions of SADT and SAPT by providing a clear explanation of these terms in the context of packaging within the HMR.

Section 171.12

Paragraph (a) of § 171.12 prescribes requirements for the use of the TDG Regulations for hazardous materials transported from Canada to the United States, from the United States to Canada, or through the United States to Canada or a foreign destination. PHMSA proposes to amend § 171.12(a)(1) to authorize the use of a temporary certificate issued by Transport Canada for motor carrier or rail transportation of a hazardous material.

In a 2017 rulemaking, HM–215N,[11] PHMSA authorized hazardous materials to be offered for transportation or transported by motor carrier and rail in accordance with an equivalency certificate issued by Transport Canada, as an alternative to transportation of these items under the TDG Regulations as provided in § 171.22. The HMR amendment resulted from negotiations by the U.S.-Canada Regulatory Cooperation Council (RCC), a government-to-government forum established in 2011 by the President of the United States and the Canadian Prime Minister for PHMSA and Transport Canada, respectively, to identify and resolve (with input from stakeholders) impediments to cross-border transportation of hazardous materials. Among the initiatives agreed upon by PHMSA and Transport Canada within the RCC was modification of their respective regulations to ensure reciprocal recognition of special permits (PHMSA) and certificates (Transport Canada) specifying the terms and conditions authorizing deviations from their respective regulatory requirements governing transportation of hazardous materials.

Subsequently, Transport Canada recognized PHMSA's special permits, which are issued based on either being in the public interest or on the basis that the permit provides a demonstrable equivalent level of safety. *See* § 107.105(d). In HM–215N, PHMSA revised the HMR to recognize equivalency certificates by Transport Canada on the basis of a finding of safety equivalence with the TDG Regulations. That rulemaking did not, however, reflect the fact that Transport Canada also issues temporary certificates authorizing deviation from the TDG Regulations on a finding that transportation of certain hazardous materials is in the public interest. Transport Canada issues temporary certificates after a technical review by its subject matter experts of an applicant's supporting documentation demonstrating shipment of the hazardous material is in the public interest. Temporary certificates are of limited duration and specify terms and conditions—often extensive—to mitigate risks to public safety and the environment. Transport Canada posts all temporary certificates to its publicly-available website.[12]

PHMSA has evaluated Transport Canada's practices in reviewing and issuing temporary certificates and expects that PHMSA's recognition of those certificates for motor carrier or rail transportation of hazardous materials will not adversely affect safety. As noted above, Transport Canada issues those certificates only after a technical review is completed by its own subject matter experts to mitigate residual risks to public safety and the environment as outlined by the certificates' terms and conditions, including limiting duration of those temporary certificates. Additionally, other regulatory requirements (of Transport Canada or PHMSA) not excepted by a temporary certificate remain in effect. PHMSA

[11] 82 FR 15796 (Mar. 30, 2017).

[12] See Transport Canada, ''Approvals—Search by Certificate Number,'' *https://wwwapps.tc.gc.ca/Saf-Sec-Sur/3/approvals-approbations/SearchCertificates.aspx* (last visited Apr. 16, 2021).

further notes that, consistent with the HMR's existing authorization in § 171.12 for reliance on the TDG Regulations to authorize certain shipments in the United States, the proposed new authorization to use a temporary certificate applies only for the duration of a shipment. In other words, once a shipment offered in accordance with a temporary certificate reaches its destination, any subsequent offering of packages imported under a Transport Canada temporary certificate would have to be completed in full compliance with the HMR. PHMSA's proposed revisions to § 171.12 would further mitigate risk to public safety and the environment by applying only to motor carrier and rail.

The proposed recognition of Transport Canada-issued temporary certificates would improve cross-border movement of hazardous materials from efforts responding to the COVID–19 public health emergency or other future emergencies. For example, among the temporary certificates recently issued by Transport Canada are several authorizing exceptions from TDG Regulations to enable movement of hand sanitizer chemicals and COVID–19 test samples.[13] Revision of the HMR as proposed would help to ensure that, should Transport Canada issue additional temporary certificates responding to the COVID–19 public health emergency or another cross-border threat to public safety or the environment, the HMR will not be an obstacle to those efforts.

Section 171.23

Section 171.23 outlines the requirements for specific materials and packagings transported under the ICAO Technical Instructions, IMDG Code, Transport Canada TDG Regulations, or the IAEA Regulations. It also includes provisions that authorize the use, under specific conditions, of pi-marked pressure vessels, which are pressure vessels and pressure receptacles that comply with ECE/TRANS/257, the ADR, and the EU Directive 2010/35/EU, and marked with a pi (π) symbol to denote such compliance. PHMSA proposes to amend § 171.23(a) to update the reference to ECE/TRANS/257 to: (1) Reference the 2020 edition of this document, ECE/TRANS/300, and (2) reference both volumes I and II of the ADR. The ADR outlines the regulations concerning the international carriage of dangerous goods by road within the EU and other countries that are member to the agreement, and this publication contains the European Agreement, the Protocol Signatures, the annexes, and the amendments. Specifically, § 171.23(a) authorizes cylinders that comply with the requirements of Packing Instruction P200 (packing instruction for cylinders, tubes, pressure drums, and bundles of cylinders) or P208 (packing instruction for Class 2 adsorbed gases) and 6.2 (requirements for the construction and testing of pressure receptacles, aerosol dispensers, small receptacles containing gas (gas cartridges), and fuel cell cartridges containing liquefied flammable gas) of the ADR, published in 2019 as document ECE/TRANS/257. Upon review of the 2020 edition of this document, ECE/TRANS/300, PHMSA did not find any substantive changes to the provisions in 6.2, P200, or P208, and therefore, does not expect that incorporating by reference ECE/TRANS/300 will impose any safety risk or economic impact. However, updating the version incorporated by reference to reflect the edition that is currently in force would facilitate access to foreign markets by U.S. manufacturers and businesses.

The proposed regulatory text references European Directive 2010/35/EU, which was previously approved for incorporation by reference in this section, and no changes are proposed for this standard.

B. Part 172

Section 172.101 Hazardous Materials Table (HMT)

The HMT summarizes terms and conditions governing transportation of certain hazardous materials under the HMR. For each entry, the HMT identifies information such as the proper shipping name, UN identification number, and hazard class. The HMT specifies additional information or reference requirements in the HMR such as hazard communication, packaging, quantity limits aboard aircraft, and stowage of hazardous materials aboard vessels. PHMSA proposes to amend certain entries in the HMT to reflect the proposed regulatory amendments discussed below in the Section by Section review. For purposes of the Government Publishing Office's typesetting procedures, proposed changes to the HMT appear under three sections of the HMT: ''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.'' Proposed amendments to the HMT include the following:

New HMT Entries

- UN0511 Detonators, electronic *programmable for blasting*
- UN0512 Detonators, electronic *programmable for blasting*
- UN0513 Detonators, electronic *programmable for blasting*
- UN3549 Medical Waste, Category A, Affecting Humans, *solid or* Medical Waste, Category A, Affecting Animals *only, solid*

The UN Model Regulations contain a new entry to its Dangerous Goods List for regulated medical waste in Category A (*see* above list for UN3549). PHMSA proposes to add this new entry for this proper shipping name and UN number, and assigning Special Provision 131 to inform offerors that an approval is required when shipping this material. PHMSA also proposes to assign a new special provision, Special Provision 430, to specify the appropriate use of this proper shipping name. The addition of a proper shipping name that more specifically describes the material in transportation is expected to reduce regulatory burdens in shipping this material internationally and domestically. And by limiting the scope of transport by way of special provision approval requirements for each shipment, PHMSA can exercise greater oversight of the transport of these materials to, from, or within the United States.

PHMSA also proposes to add three new entries for the proper shipping name ''Detonators, electronic *programmable for blasting*'' with the following new UN numbers: UN0511, UN0512, and UN0513. These entries were added in the 21st revised edition of UN Model Regulations as result of a proposal from the Australian Explosives Industry and Safety Group (AEISG) and ensuing discussions held by the UN Working Group on Explosives (EWG) of the Sub-Committee of Experts on the Transport of Dangerous Goods in 2017 and 2018.[14] AEISG proposed adding new entries in the Model Regulations for electronic detonators to distinguish them from electric detonators, which have significantly different design characteristics.

The HMT has nine entries for detonators (not used for ammunition) which include: ''Detonators, non-electric for blasting,'' ''Detonators, electric for blasting,'' and ''Detonator assemblies, non-electric for blasting,'' which may fall in to one of three hazard

[13] See Transport Canada, ''Temporary Certificates,'' *https://tc.canada.ca/en/dangerous-goods/temporary-certificates* (last visited Apr. 16, 2021).

[14] *https://unece.org/fileadmin/DAM/trans/doc/2018/dgac10c3/ST-SG-AC.10-C.3-2018-58e.pdf.*

classes (1.1B, 1.4B, 1.4S). Under the hazardous materials classification scheme, based on the existing available entries, electronic detonators are required to be transported as ''Detonators, electric for blasting'' which is not the most accurate description. While using this name does not pose inherent risks during transportation, it creates potential for risks in downstream storage, use, and handling operations. Because electronic detonators are significantly different from other electric and non-electric detonators, PHMSA proposes new entries for these devices rather than including them within the existing entries for electric detonator types. As with other explosives, the proper classification of these devices would depend on packaging and testing, hence new entries must include all possible hazard classifications (1.1B, 1.4G, and 1.4S). For other newly added hazardous materials assigned a UN number on the Dangerous Goods List in the UN Model Regulations, PHMSA proposes to add: UN0511 (1.1B), UN0512 (1.4B), and UN0513 (1.4S) to the HMT to facilitate proper classification and handling across governmental and modal jurisdictions. PHMSA expects that this change would provide clarity and enhance safety by adding more specific proper shipping names to describe electric detonators.

Column (1) Symbols

Section 172.101(b) describes column (1) of the HMT and symbols providing for additional requirements for transportation of listed hazardous materials that may be indicated in the column. As provided in § 172.101(b)(1): (1) The symbol ''A'' identifies a material that is subject to the requirements of the HMR only when offered or intended for transportation by aircraft; (2) the symbol ''W'' identifies a material that is subject to the requirements of the HMR only when offered or intended for transportation by vessel; and (3) the symbol ''I'' identifies proper shipping names which are appropriate for describing materials in international transportation. The UN Model Regulations were amended for consistency with the ICAO Technical Instructions to indicate that in addition to being regulated by vessel, the following entries are also regulated for air transport: ''UN1372, Fibers, animal *or* Fibers, vegetable *burnt, wet or damp,*'' ''UN1387, Wool waste, wet,'' ''UN1856, Rags, oily,'' ''UN1857, Textile waste, wet,'' and ''UN3360, Fibers, vegetable, dry.'' In the case of these particular entries, they are forbidden for air transport in the ICAO Technical Instructions. While reviewing this amendment, PHMSA found that all of these entries except for ''UN3360, Fibers, vegetable, dry,'' are also identified as only being regulated for air and vessel transportation as denoted by the symbols ''A'' and ''W'' in column (1). For UN3360, the symbols ''I'' and ''W'' are presently assigned in column (1) and the quantity limit in column (9) is ''No Limit'' for both passenger and cargo air. This is inconsistent with the ICAO Technical Instructions which forbid this material for transport by air. Therefore, consistent with the ICAO Technical Instructions for the UN3360 entry, PHMSA proposes to add the symbol ''A'' to column (1) and amend column (9) to read ''Forbidden.'' This is further consistent with the entries for similar materials ''UN1372, Fibers, animal *or* Fibers, vegetable'' and ''UN1373, Fibers *or* Fabrics, animal *or* vegetable *or* Synthetic, n.o.s.'' that are also assigned the symbol ''A'' in column (1) and ''Forbidden'' in column (9). PHMSA expects that this change will facilitate international air transportation and save shippers time and costs by preventing delayed and rejected shipments.

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. The UN Model Regulations contain the entry ''UN3363, Dangerous Goods in Articles *or* Dangerous Goods in Machinery *or* Dangerous Goods in Apparatus,'' in its Dangerous Goods List; however, the HMT entry UN3363 does not include ''Dangerous Goods in Articles or,'' in the proper shipping name. PHMSA proposes to add ''Dangerous Goods in Articles *or,*'' to the proper shipping name. This change provides flexibility for shippers selecting the most appropriate proper shipping name by adding a third option in the proper shipping name associated with this UN Number. Additionally, for the proper shipping name ''Fuel system components (including fuel control units (FCU), carburetors, fuel lines, fuel pumps)'' which currently directs HMT users to ''see Dangerous Goods in Apparatus or Dangerous Goods in Machinery'', PHMSA proposes to amend the directions to include a reference to ''Dangerous Goods in Articles.'' PHMSA expects that these changes will improve hazard communication by including a more specific description for articles containing hazardous materials.

Additionally, for the entry ''UN2522, 2-Dimethylaminoethyl methacrylate,'' PHMSA proposes to add the word ''stabilized'' to this proper shipping name to identify this material as a polymerizing substance. Discussions held by the UNSCOE identified ''UN2522, 2-Dimethylaminoethyl-methacrylate'' as having a similar molecular structure and polymerization behaviors to ''UN 3302, 2-Dimethylaminoethyl acrylate, stabilized.'' Under the HMR and international regulations, polymerizing substances require verification that a sufficient level of stabilization is provided prior to transportation. This requirement for stabilization is also indicated by assignment of Special Provision 387 in the HMT, which PHMSA proposes to add for UN2522.

Finally, for the entry ''UN3171, Battery-powered vehicle or Battery-powered equipment,'' PHMSA proposes to make an editorial change to italicize the ''or'' in the hazardous material description. Currently, the ''or'' is in roman type and not italicized. Section 172.101(c) introductory text instructs that proper shipping names are limited to those in roman type. Moreover, the current form of the entry is such that a person may confuse the proper shipping name with the whole description and not the option of ''Battery-powered vehicle'' or ''Battery-powered equipment.'' Therefore, PHMSA proposes revising the entry to read ''Battery-powered vehicle *or* Battery-powered equipment.''

Column (5) Packing Group

Section 172.101(f) describes column (5) of the HMT, which specifies one or more packing groups (PG I, II or III), assigned to certain materials. A PG indicates the required level of packaging according to the degree of danger presented by hazardous materials. PG I indicates the greatest level of danger, PG II corresponds to a medium level of danger, and PG III corresponds to a minor danger.

For consistency with the UN Model Regulations, PHMSA proposes to remove the assignment of PG II as indicated in column (5) for the entry ''UN3291, Regulated medical waste, n.o.s. *or* Clinical waste, unspecified, n.o.s. *or* (BIO) Medical waste, n.o.s. *or* Biomedical waste, n.o.s., *or* Medical Waste n.o.s.'' This entry is the only entry with a Division 6.2 classification that has PG II assigned in column (5). Amending this entry not to include PG II would align with international regulations and § 172.101(f), which specifically states that Division 6.2 materials are not assigned packing

groups in the HMR. For packing purposes, any requirement for a specific packaging performance level is set out in the applicable packing authorizations of part 173. Instead of having PG II indicated in Column (5), packing provisions for these materials would continue to be outlined in § 173.197. PHMSA expects this editorial change will maintain the current level of safety as no packing provisions are changing.

Column (6) Label Codes

Section 172.101(g) describes column (6) of the HMT, which contains label codes representing the hazard warning labels required for specific hazardous materials in the HMT. In the HM–215O final rule,[15] PHMSA added twelve HMT entries as part of a classification scheme for articles containing hazardous materials not otherwise specified by name (*i.e.,* n.o.s. entries) in the HMR. The entries were inadvertently added without label codes in column (6). PHMSA proposes to correct the entries here by adding the appropriate label codes to the following:

- UN3537 Articles containing flammable gas, n.o.s.
- UN3538 Articles containing non-flammable, non-toxic gas, n.o.s.
- UN3539 Articles containing toxic gas, n.o.s.
- UN3540 Articles containing flammable liquid, n.o.s.
- UN3541 Articles containing flammable solid, n.o.s.
- UN3542 Articles containing a substance liable to spontaneous combustion, n.o.s.
- UN3543 Articles containing a substance which in contact with water emits flammable gases, n.o.s.
- UN3544 Articles containing oxidizing substance, n.o.s.
- UN3545 Articles containing organic peroxide, n.o.s.
- UN3546 Articles containing toxic substance, n.o.s.
- UN3547 Articles containing corrosive substance, n.o.s.
- UN3548 Articles containing miscellaneous dangerous goods, n.o.s.

Column (7) Special Provisions

Section 172.101(h) describes column (7) of the HMT, which assigns special provisions for each HMT entry. Section 172.102 provides for the meaning and requirements of the special provisions assigned to entries in the HMT. The proposed revisions to column (7) of certain entries in the HMT are discussed below. Also, *see* § 172.102 of the Section-By-Section Review below for a detailed discussion of the special provision amendments addressed in this NPRM.

Special Provision 196:

PHMSA proposes to add new Special Provision 196 to the following HMT entries to outline thermal stability testing requirements for their transportation:

- UN0340, Nitrocellulose, *dry or wetted with less than 25 percent water (or alcohol), by mass*
- UN0341, Nitrocellulose, *unmodified or plasticized with less than 18 percent plasticizing substance, by mass*
- UN0342, Nitrocellulose, *wetted with not less than 25 percent alcohol, by mass*
- UN0343, Nitrocellulose, *plasticized with not less than 18 percent plasticizing substance, by mass.*

Special Provision 197

PHMSA proposes to assign new Special Provision 197 to the following entries in the HMT to outline thermal stability testing requirements for their transportation:

- UN2555, Nitrocellulose with water *with not less than 25 percent water, by mass*
- UN2556, Nitrocellulose with alcohol *with not less than 25 percent alcohol by mass, and with not more than 12.6 percent nitrogen, by dry mass*
- UN2557, Nitrocellulose, *with not more than 12.6 percent nitrogen, by dry mass* mixture with *or* without plasticizer, with *or* without pigment UN3380, Desensitized explosives, solid, n.o.s.

Special Provision 360

PHMSA proposes to assign Special Provision 360 to the following HMT entries:

- UN3481, Lithium ion batteries, contained in equipment or packed with equipment *including lithium ion polymer batteries*
- UN3091, Lithium metal batteries, contained in equipment or packed with equipment *including lithium alloy batteries*

Special Provision 360 instructs that vehicles only powered by lithium batteries must be assigned the identification number UN3171. *See* Section 172.102 Special Provisions for further discussion of Special Provision 360.

Special Provision 387

PHMSA proposes to assign Special Provision 387 to the HMT entry for ''UN2522, 2-Dimethylaminoethyl methacrylate.'' Special Provision 387 provides additional instructions for hazardous materials stabilized by chemical or temperature controls to ensure a level of stabilization prior to transportation sufficient to prevent the material from dangerous polymerization. The rationale for this change is discussed further below.

Portable Tank Special Provisions

PHMSA proposes to remove Special Provisions TP39 and T41 for the entries ''UN2381, Dimethyl disulfide'' and ''UN3148, Water-reactive liquid, n.o.s.'' respectively, as the transition period has expired. In HM–215L,[16] PHMSA added Special Provisions TP39 and TP41. Special Provision TP39 was assigned to HMT entry UN2381 and Special Provision TP41 was assigned to HMT entry UN3148. PHMSA added these two special provisions to provide more time for portable tank transporters to transition their fleets in compliance with portable-tank specific requirements in Special Provisions T4 and T9. Special Provision TP39 authorized continued use of portable tank requirements in Special Provision T4 until December 31, 2018. Special Provision TP41 authorized the continued use of portable tank instruction T9 until December 31, 2018. Since that date has passed, TP39 and TP41 are no longer necessary.

Column (9) Quantity Limitations

Section 172.101(j) explains the purpose of column (9) in the HMT. Column (9) specifies quantity limitations for packages transported by air and rail. Column (9) is divided into two columns: Column (9A) provides quantity limits for passenger aircraft/rail; and column (9B) provides quantity limits for cargo aircraft. The proposed revisions only address transportation by aircraft, as the UN Model Regulations did not contemplate any changes to the limitations for transport via rail.

The ICAO Technical Instructions have added provisions allowing ''UN2216, Fish meal, stabilized *or* Fish scrap, stabilized'' to be transported by aircraft when also meeting the provisions of ICAO Special Provision A219. Consistent with the ICAO Technical Instructions, PHMSA proposes to amend Column 9 for this entry to indicate quantity limits for passenger and cargo aircraft of 100 kg and 200 kg, respectively.

As a conforming amendment, PHMSA is also proposing to revise the § 173.218 packaging requirements for fish meal and fish scrap to reflect the authorization to transport this material by aircraft in addition to vessel. *See*

[15] 85 FR 27810 (May 11, 2020).

[16] 78 FR 987; (Jan. 1, 2013).

SECTION 173.218 of the Section-By-Section Review for further detail.

Column (10) Vessel Stowage

Section 172.101(k) explains the purpose of Column (10) of the HMT and prescribes the vessel stowage and segregation requirements for specific entries. 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.

In Column (10A) for the entry for ''UN3135, Water-reactive solid, self-heating, n.o.s, PG I,'' consistent with the IMDG Code, PHMSA proposes to amend the assigned stowage category from ''E'' to ''D.'' This proposed change means the material must be stowed ''on deck only'' on a cargo vessel or on a passenger vessel carrying a number of passengers limited to the greater of 25 passengers total or one passenger for each 3 meters of overall vessel length; transport would be prohibited on a passenger vessel in which those passenger limits have been exceeded. Stowage category ''E'' is currently assigned to this material which allows ''under deck'' storage. This proposed change is consistent with the stowage category for other Division 4.3, PG I, materials with subsidiary hazards that are also assigned stowage category ''D'' for ''on deck only'' stowage. The IMDG Code removed approval requirements (Special Provision 76) from this material and the assignment of appropriate transport provisions.

For the ''UN2900, Infectious substances, affecting animals *only*'' and ''UN2814, Infectious substances, affecting humans,'' PHMSA proposes to amend the assigned stowage category from ''B'' to ''E.'' This proposed change would allow ''on deck'' or ''under deck'' stowage, but would not allow stowage onboard when the number of passengers exceeds 25. This proposed change aligns with the IMDG Code assignment of this stowage category to these materials and is not expected to materially change the nature of authorized transport options for these materials.

Additionally, consistent with changes to the IMDG Code, PHMSA proposes numerous changes to the special stowage and segregation provisions indicated in column (10B) of the HMT, labeled ''other provisions.'' PHMSA proposes to assign stowage code 52, which requires stowage ''separated from'' acids, to several entries in the HMT that are in a group of chemicals called alcoholates. Segregation from acids is currently not required by the HMR for these materials. However, alcoholates are strong alkaline substances that react vigorously with acids. Stowage code 52 would be assigned to the following HMT entries:

- UN1289, Sodium methylate solutions *in alcohol*
- UN1431, Sodium methylate
- UN3206, Alkali metal alcoholates, self-heating, corrosive, n.o.s.
- UN3274, Alcoholates solution, n.o.s., *in alcohol*

For the entries ''UN2900, Infectious substances, affecting animals *only*'' and ''UN2814, Infectious substances, affecting humans,'' PHMSA proposes adding stowage codes 13 and 95 and new stowage code 155. Stowage codes 13 and 95 require keeping material as dry as reasonably practicable and stowage ''separated from'' foodstuffs. The IMDG Code has varying levels of stowage either ''away from'' or ''separated from'' foodstuffs depending on the type of shipment (*e.g.,* containerized or break-bulk). PHMSA proposes the more restrictive ''separated from,'' regardless of the type of shipment, and specifically solicits comments on this proposal. The stowage of these materials separated from foodstuffs is expected to prevent inadvertent cross contamination of food stuffs. New stowage code 155 requires vessel carriers to keep handling of the packages to a minimum and to inform the appropriate authority or veterinary authority where persons or animals may have been exposed to the package contents. Additionally, this handling restriction and communication requirement may facilitate reducing exposure and contract tracing surrounding UN2814 packages that contain COVID–19 materials. With the exception of the general ''separated from'' proposed language, these proposals are consistent with IMDG Code requirements.

Additionally, for the PG II and III entries of ''UN3129, Water-reactive liquid, corrosive, n.o.s,'' ''UN3132, Water-reactive solid, flammable, n.o.s,'' and ''UN3135, Water-reactive solid, self-heating, n.o.s,'' which are all water reactive Division 4.3 materials, PHMSA proposes adding stowage code 85 to column (10B). Stowage code 85 requires ''under deck'' stowage in mechanically ventilated spaces. This proposal is intended to ensure that if the cargo is stowed under deck, adequate mechanical ventilation is provided. Mechanical ventilation is important to ensure any potential dangerous gases or vapors released are expelled from the cargo hold and not allowed to build up below deck.

PHMSA proposes adding stowage code 156 to the lithium battery entries ''UN3090, Lithium metal batteries,'' ''UN3091, Lithium metal batteries contained in equipment, or Lithium metal batteries packed with equipment,'' ''UN3480, Lithium ion batteries,'' and ''UN3481, Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment'' in the HMT in column (10B). This new stowage code assignment requires that, in lieu of the stowage category A assigned in column (10A) in the current HMR which allows stowage ''on deck'' or ''under deck,'' lithium batteries that are offered in transportation for purposes of disposal or recycling, or that are offered under damaged or defective provisions (*see* § 173.185(f) of the HMR), would be required to be stowed in accordance with stowage category C which requires ''on deck only'' stowage on cargo and passenger vessels. PHMSA expects that this new stowage code will enhance the safety of shipment of lithium batteries expected from anticipated increases in use of lithium batteries in the transportation and other economic sectors in the years ahead.

PHMSA proposes adding stowage code 157 to column (10B) for numerous entries in the HMT. Stowage code 157 would require aerosols, small receptacles containing gas, or gas cartridges transported for purposes of recycling or disposal, to be stowed in accordance with stowage category C, which requires ''on deck only'' stowage, and to be clear of living quarters. This stowage code requirement is in lieu of the stowage category A assigned in column (10A) in the current HMR allowing ''on deck'' or ''under deck'' stowage. PHMSA proposes to add new stowage code 157 to the following entries in the HMT:

- UN1950, Aerosols, *corrosive, Packing Group II or III, (each not exceeding 1 L capacity)*
- UN1950, Aerosols, *flammable, (each not exceeding 1 L capacity)*
- UN1950, Aerosols, flammable, n.o.s. *(engine starting fluid) (each not exceeding 1 L capacity)*
- UN1950, Aerosols, *non-flammable, (each not exceeding 1 L capacity)*
- UN1950, Aerosols, *poison, Packing Group III (each not exceeding 1 L capacity)*
- UN2037, Gas cartridges, *(flammable) without a release device, non-refillable*
- UN2037, Receptacles, small, containing gas *or* gas cartridges *(flammable) without release device, not refillable and not exceeding 1 L capacity*

- UN2037, Receptacles, small, containing gas *or* gas cartridges *(non-flammable) without release device, not refillable and not exceeding 1 L capacity*
- UN2037, Receptacles, small, containing gas *or* gas cartridges *(oxidizing), without release device, not refillable and not exceeding 1 L capacity*

Section 172.102 Special Provisions

Section 172.102 lists special provisions applicable to the transportation of specific hazardous materials. Special provisions contain various provisions including packaging requirements, prohibitions, and exceptions applicable to particular quantities or forms of hazardous materials. PHMSA proposes the following revisions to the special provisions in this section:

Special Provision 47

Special Provision 47 allows mixtures of solids that are not subject to the HMR and Class 3 flammable liquids to be transported as flammable solid material described as ''UN3175, Solids containing flammable liquid, n.o.s., 4.1,'' without applying the Division 4.1 classification criteria. This classification is permitted provided that there is no free liquid visible at the time the material is loaded or at the time the packaging is closed. In addition to providing classification testing relief for these items, this special provision provides further relief from the HMR for packets and articles, generally referred to as small inner packagings, if they contain less than 10 mL of a Class 3 liquid (in Packing Group II or III) and if the liquid is absorbed (*i.e.,* no free liquid in the packet or article) onto a solid material. This special provision is widely used for articles such as alcohol wipes, and due to the ongoing COVID–19 public health emergency, these items are being transported in increasing numbers to meet demand. While many of these wipes, depending how they are packed, meet the conditions of this special provision and qualify for exception from regulation, confusion around the wording of the packaging conditions to qualify for the exception has led to an editorial amendment in the ICAO Technical Instructions.

On December 31, 2020, in an addendum to the 2021–2022 edition of the ICAO Technical Instructions, Special Provision A46 was amended to remove a reference to ''small inner packaging'' related to the sealed packets and articles. Prior to this amendment, and as currently provided in the HMR in Special Provision 47, it reads that to be excepted from the HMR, ''small inner packagings consisting of sealed packets and articles containing less than 10 mL of a Class 3 liquid in Packing Group II or III absorbed onto a solid material are not subject to this subchapter provided there is no free liquid in the packet or article.'' The phrasing is ambiguous enough that shippers may misinterpret the language as instructing them to pack small inner packagings with the sealed packets or articles. Instead, the intent of ''small inner packagings'' was to describe sealed packets and articles. The amendment to Special Provision A46 in the ICAO Technical Instructions is consistent with other provisions in the ICAO Technical Instructions; for example, Special Provision A158 clearly states that sealed packets and articles containing less than 10 mL of an environmentally hazardous liquid are not subject to the requirements when certain conditions are met. PHMSA agrees with the amendment made in the ICAO Technical Instructions removing the reference to ''small inner packagings'' to avoid confusion and proposes to make the same revision in Special Provision 47 to clarify the exception within the HMR. PHMSA expects this clarification of its regulations will facilitate the transport of hygienic products intended to prevent the spread of COVID–19.

Special Provision 134

Special Provision 134 provides instruction on the use of the HMT entry ''UN3171, Battery-powered vehicle *or* Battery-powered equipment,'' stipulating that it applies only to vehicles or equipment powered by wet batteries, sodium batteries, lithium metal batteries, or lithium ion batteries that are transported with these batteries installed. PHMSA proposes to amend language in Special Provision 134 to clarify its use in connection with lithium batteries installed in cargo transport units. Under the proposed amendment, these items would be described by a separate entry in the HMT, specifically, ''UN3536, Lithium batteries installed in cargo transport unit'' for which there are unique transportation requirements that do not apply to transport of battery-powered vehicles or equipment. PHMSA is also amending the language in this special provision to replace the phrase ''consigned under'' with the phrase ''described using'' to provide a more easily-accessible, plain language understanding of the requirement.

Special Provision 135

Special Provision 135 provides instruction for selecting the appropriate proper shipping name for vehicles with internal combustion engines powered by various fuel sources, such as a flammable gas, flammable liquid, or fuel cell. PHMSA proposes to amend Special Provision 135 to specify that lithium batteries installed in cargo transport units (UN3536), which are designed only to provide power external to the transport unit, may not be classified as an internal combustion engine installed in a vehicle. PHMSA expects that adding this clarifying language will avoid misclassifying lithium batteries in cargo transport units. Additionally, consistent with changes to Special Provision 134, PHMSA proposes to amend the language in this special provision to replace the phrase ''consigned under'' with the phrase ''described using'' to the entries to provide consistency across similar provisions and improve understanding of the requirement.

Special Provision 136

Special Provision 136 provides instructions regarding the use of the HMT entry ''UN3363, Dangerous Goods in Apparatus *or* Dangerous Goods in Machinery'' and indicates that this UN number and the associated proper shipping names are only applicable to machinery and apparatus containing hazardous materials as an integral element of the machinery or apparatus. In light of the proposed addition of ''Dangerous Goods in Articles'' to the list of acceptable proper shipping names for UN3363 (*see* § 172.101 of the Section-By-Section Review), PHMSA proposes to revise this special provision to add the words ''articles'' where machinery and apparatus are mentioned. PHMSA expects this proposed change to improve consistency across HMR provisions where UN3363 is discussed.

Special Provision 147

Special Provision 147, assigned to UN3375, provides instruction on the description and classification criteria for non-sensitized emulsions, suspensions, and gels consisting mostly of ammonium nitrate and fuel, intended to produce a Type E blasting explosive only after further processing prior to use, which are transported as ''UN3375, Ammonium nitrate emulsion *or* Ammonium nitrate suspension *or* Ammonium nitrate gel, intermediate for blasting explosives.'' Currently, the HMR requires applicants to pass Test Series 8(a), (b), and (c) of the UN Manual of Tests and Criteria, when requesting an approval for transportation under UN3375. However, PHMSA proposes to revise the last

sentence of Special Provision 147 by removing the specific requirement to pass Tests 8(a), (b), and (c), so that it can be met by passing any test in Test Series 8 of the UN Manual of Tests and Criteria. Modifying Special Provision 147 as proposed would align with the equivalent special provision in the UN Model Regulations (SP 309) which was amended similarly. PHMSA proposes this change to reflect and allow for the inclusion of an additional test in the Test Series 8 provided in the UN Manual of Tests and Criteria. In the 7th revised edition UN Manual of Tests and Criteria Test Series 8 was expanded to include Test 8(e) as an alternative to 8(c). This change in testing was the result of technical discussions and amendment proposals held during UNSCOE meetings. At the 47th session of the United Nations Sub-Committee of Experts on the Transport of Dangerous Goods, the EWG concluded that the UN Test 8(c) was unsuitable for ammonium nitrate emulsions (ANEs) due to a flaw in the method which could lead to a false positive under certain conditions.[17]

PHMSA expects that removing this requirement to specifically pass the 8(c) test will mitigate the risk of receiving a false positive result and consequently inaccurate classification. It would also allow shippers the ability to perform additional classification testing as provided in the seventh revised edition of the UN Manual Test Criteria.

Special Provisions 196 and 197

PHMSA proposes to add Special Provisions 196 and 197 pertaining to transportation of nitrocellulose. These new special provisions would require that manufacturers of nitrocellulose products ensure that these Class 1 and Class 4 materials employ certain tests verifying that the materials meet specific stability requirements to avoid the danger of self-ignition. Those test methods determine whether a material is stable when subjected to elevated temperatures in transportation, which is critical to the safe transportation of materials such a nitrocellulose. Special Provision 196 applies to nitrocellulose of Class 1 (explosive) nitrocellulose materials (UN0340, UN0341, UN0342, and UN0343), and specifically excepts those materials from Type 3(c) thermal stability testing. Special Provision 197 is assigned to nitrocellulose materials in Class 4 (UN2555, UN2556, UN2557, and UN3380).

[17] *https://unece.org/fileadmin/DAM/trans/doc/2018/dgac10c3/UN-SCETDG-53-INF22e.pdf.*

Special Provision 360

Special Provision 360 provides instruction to aid in proper identification of a battery-powered vehicle that contains lithium batteries. Currently, Special Provision 360 states that vehicles powered solely by lithium batteries must be identified as ''UN3171, Battery-powered vehicle *or* Battery-powered equipment.'' In HM–215O, PHMSA added a new UN entry, ''UN3536, Lithium batteries installed in cargo transport unit *lithium ion batteries or lithium metal batteries.*'' PHMSA proposes to revise Special Provision 360 to better distinguish between the various types of equipment with lithium batteries. The revised language would specify that lithium batteries that are installed in cargo transport units which are designed only to provide power external to the transport unit must be transported as ''UN3536, Lithium batteries installed in a cargo transport unit *lithium ion batteries or lithium metal batteries,*'' making them subject to packaging provisions and exceptions outlined in Special Provision 389. The intent of this language is to clarify further that these batteries should not be described and transported as ''UN3091, Lithium metal batteries, contained in equipment *including lithium alloy batteries*'' or ''UN3481, Lithium ion batteries, contained in equipment *including lithium ion polymer batteries.*''

Furthermore, Special Provision 360 was originally assigned to the HMT entry ''UN3091, Lithium batteries, contained in equipment,'' however, in final rule HM–224F,[18] PHMSA adopted separate entries based on the lithium battery chemistry, *i.e.,* ''UN3091, Lithium metal batteries, contained in equipment *including lithium alloy batteries*'' or ''UN3481, Lithium ion batteries, contained in equipment *including lithium ion polymer batteries.*'' In doing so, PHMSA inadvertently did not make a conforming revision to assign Special Provision 360 to these separate descriptions in the HMT. Consistent with the proposed revisions to Special Provision 360 to clarify appropriate use of descriptions for lithium battery equipment, PHMSA proposes to assign this special provision to the two lithium battery descriptions for contained in equipment and packed with equipment. Finally, PHMSA is also revising the text ''assigned to'' to read ''described using'' to improve understanding of the special provision instruction.

[18] 79 FR 46012 (Aug. 16, 2014).

Special Provision 370

Special Provision 370 is currently assigned to ''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.*'' The entry UN0222 (1.1D) is intended for certain ammonium nitrates that are not a commercially manufactured product and this entry is typically used to identify contaminated ammonium nitrate or ammonium nitrate fertilizers that give a positive result when tested in accordance with Test Series 2 of the UN Manual of Tests and Criteria. However, Special Provision 370 currently states that a hazardous material may also be classified as UN0222 even if it has more that 0.2 percent combustible substances. PHMSA proposes to amend special provision 370 to better clarify when the entry for UN0222 may be applied. Clarifying this classification instruction is necessary to ensure that more readily transported materials, such as ammonium nitrate mixed with fuel oil (ANFO), are not improperly transported as UN0222, which should be reserved for special non-commercial purposes. Given that inappropriately classified items pose an inherent safety risk to emergency responders, PHMSA proposes to revise Special Provision 370 to provide clarifying language to ensure that certain ammonium nitrate materials (such as ANFO) are not described and classified as ''UN0222, Ammonium nitrate.'' Specifically, the amendment to this special provision stipulates that this UN entry should not be used when other applicable proper shipping names exist.

Special Provision 379

Special Provision 379 provides conditions for exception from full regulation under the HMR for anhydrous ammonia adsorbed or absorbed on a solid contained in ammonia dispensing systems or receptacles intended to form part of such systems. Among these conditions, Special Provision 379 requires that receptacles containing adsorbed or absorbed ammonia must be made of a material compatible with ammonia as specified in ISO 11114–1:2012(E), ''Gas cylinders—Compatibility of cylinder and valve materials with gas contents—Part 1: Metallic materials.'' PHMSA proposes to revise language in Special Provision 379 to add a reference to an amendment to ISO standard 11114–1:2012(E), specifically, ISO 11114–1:2012/Amd 1:2017(E) and correct the unintentional omission of the (E) to

indicate the English language edition. As part of ISO's regular five-year review of its standards, the 2012 version of this document was amended through the issuance of document ISO 11114–1:2012/Amd 1:2017(E). The amended ISO standard provides more explicit instructions on the permissible concentrations of gases containing halogens in aluminum cylinders. It also provides amended requirements for butylene, hydrogen cyanide, hydrogen sulfide, and nitric oxide. Consequently, the 21st revised edition of the UN Model Regulations updated all references to the 2012 edition to include a reference to the amendment (ISO 11114–1:2012/Amd 1:2017(E)). PHMSA proposes similar conforming revisions. *See* SECTION 171.7 Section-by-Section discussion. Therefore, PHMSA also proposes to revise this special provision. In the course of its review of the 2017 amendment for ISO standard 11114, PHMSA determined that it enhances safety of transport and therefore, is appropriate for inclusion as an updated condition for transport of ammonia dispensing systems or receptacles intended to form part of such systems.

Special Provision 430

PHMSA proposes to add Special Provision 430 and assign it to the new HMT entry ''UN3549, Medical Waste, Category A, Affecting Humans, *solid or* Medical Waste, Category A, Affecting Animals *only, solid*'' discussed above. As with other special provisions that provide instruction pertaining to appropriate use of proper shipping names, PHMSA proposes to add Special Provision 430 to stipulate that only solid medical waste of Category A, which is being transported for disposal, may be described using this entry. The intent of this added language is to simplify the regulations and ensure proper classification of medical wastes to ensure safe transportation.

Special Provision 441

The UN Model Regulations and the IMDG Code contain an exception in their Special Provision 274 pertaining to ''UN3077, Environmentally hazardous substance, solid, n.o.s.'' and ''UN3082, Environmentally hazardous substance, liquid, n.o.s.'' Special Provision 274 requires a proper shipping name to be supplemented with a technical name, in the same manner as the letter ''G'' is assigned in the HMT. When a ''G'' is listed in Column (1) of the HMT in association with a particular entry, the proper shipping name must be supplemented with a technical name. For context, in both the UN Model Regulations and the HMT, when generic proper shipping names (*e.g.,* n.o.s. proper shipping names) are used, a technical name must be provided as part of the basic description to provide additional information for hazard communication related to the material being shipped. For example, the HMT entry ''UN1760, Corrosive liquid, n.o.s.,'' provides a generic description of a corrosive liquid and, therefore, marking and shipping papers requirements necessitate a technical name pertaining to the corrosive liquid (*e.g.,* octanoyl chloride).

The new exception in Special Provision 274 modifies the requirement to supplement the proper shipping name with a technical name. The revision, which is specifically for materials shipping under UN3077 or UN3082, allows the use of a proper shipping name found on the Dangerous Goods List (the IMDG Code and UN Model Regulations' equivalent of the HMT) to be used in place of a technical name, provided that it does not: (1) Include ''n.o.s.'' as part of the proper shipping name and; (2) is not an entry assigned Special Provision 274. In practice, this means that items, such as paint, that might be shipped as ''UN3082, Environmentally hazardous substance n.o.s.,'' are no longer required to include a supplemental technical name, and instead are permitted to include the more readily-recognizable name of the commodity (paint) on markings and shipping papers. For common commodities such as paint with various chemical components, emergency responders rely less on determining the specific chemical for performance of emergency response and respond to the known hazards of the commodity. PHMSA expects streamlining the hazardous material description requirements in this manner will help facilitate appropriate emergency response without a reduction in safety.

While the UN Model regulations broadly provided this relief for UN3077 and UN3082, environmentally hazardous materials classified under these UN numbers are applicable to a narrower scope of materials under the IMDG Code. Under the IMDG Code, ''environmentally hazardous substances'' are those that are pollutants specifically for aquatic environments (which is equivalent to marine pollutants under the HMR) whereas the UN model regulations are broadly applicable to aquatic and other environments.

PHMSA proposes to mirror expansion by the UN Model Regulations and IMDG Code's Special Provision 274 of acceptable technical names for marine pollutants transported under UN3077 and UN3082 by adding a new Special Provision 441 to the HMR. This special provision would provide the same shipping description flexibility specifically for marine pollutants by removing the requirement to supplement the proper shipping name associated with UN3077 and UN3082 with a technical name. PHMSA also proposes modifying §§ 172.203(l) and 172.322 to maintain alignment with the IMDG Code with regard to the documentation and marking requirements when marine pollutant components are present in hazardous materials. In addition to providing logistical benefits for shippers, PHMSA expects that the use of readily recognizable common commodity names instead of technical names will facilitate emergency response by making the hazardous material more quickly and easily identifiable. *See* §§ 172.203(l) and 172.322 of the Section-By-Section Review for additional discussions on proposals related to this amendment.

Special Provisions TP39 and TP 41

PHMSA proposes to remove portable tank special provisions TP39 and TP 41. The sunset provisions in special provisions TP39 and TP41 allowing use of other portable tank special provisions expired on December 31, 2018, and thus, PHMSA proposes removing them from the HMR to prevent the use of these expired provisions. *See* § 172.101 of the Section-By-Section Review for further detail of the deletion of these portable tank special provisions from the HMR.

Section 172.203

Section 172.203 prescribes additional description requirements for shipping papers. PHMSA proposes to revise paragraphs (i)(2) and (l)(1), and add new paragraphs (i)(4) and (q). Each proposed change is further described below, along with PHMSA's rationale for proposing the changes.

In paragraph (i), which provides requirements specific to vessel transportation, PHMSA proposes to clarify that the documentation of the flashpoint on shipping papers, as required in paragraph (i)(2), is only required for liquid hazardous materials that have a primary or subsidiary hazard of Class 3 and a flashpoint of 60°C or below (in °C closed-cup (c.c.)). This change aims to prevent the shipping delays resulting from confusion on how this documentation requirement applied to items for which flashpoint is not an appropriate classification criterion (*e.g.,* aerosols and flammable solids).

Furthermore, limiting the flashpoint information to a narrower subset of hazardous materials ensures identifying information of the materials in transport better aligns with the material properties of those materials because flashpoint is a safety-relevant criterion only for dangerous goods that are liquids with a main or subsidiary hazard of Class 3. PHMSA does not expect any reduction in safety as a result of this editorial change given that this change ensures that information regarding the flashpoint is only provided for items in which flashpoint is a safety-relevant criterion; avoidance of the delays in transportation experienced in the past also reduces the risks associated with that transportation.

PHMSA also proposes adding a new paragraph (i)(4), that would require shipments of lithium batteries that are offered into transportation for purposes of disposal or recycling, or offered under the damaged or defective provisions in § 173.185(f), to indicate on shipping papers one of the following disclaimers, as appropriate: ''DAMAGED/DEFECTIVE,'' ''LITHIUM BATTERIES FOR DISPOSAL,'' or ''LITHIUM BATTERIES FOR RECYCLING.'' This proposed change is consistent with changes adopted in the IMDG Code, and associated with an additional proposed revision to § 176.84 of the HMR to require lithium batteries that are damaged or defective, or those that are being transported for disposal or recycling, to be stowed in accordance with stowage category C requirements authorizing ''on deck only'' stowage instead of the currently-authorized ''on deck'' or ''under deck'' options. This additional shipping paper requirement would help communicate information about the batteries to individuals making stowage plans for the vessel, provide a mechanism for ensuring the ''on deck'' stowage of these materials, and allow for more easily identifiable and effective response actions in the event of a fire involving lithium batteries onboard a vessel. PHMSA expects that these revised shipping requirements will contribute to the safe transportation of increased volumes of damaged/defective/exhausted lithium batteries anticipated as a result of the increased use of lithium batteries in the transportation and other economic sectors. For additional information on this stowage requirement, *see* Section 176.84 of the Section-By-Section Review.

In paragraph (l)(1), PHMSA proposes to revise the scope of hazardous materials for which a specific marine polluting component must be identified in association with the basic description (*i.e.,* the combination of the UN number, proper shipping name, hazard class, and packing group) on a shipping paper. Currently, § 172.203(l) specifies that, when the proper shipping name for a hazardous material which is a marine pollutant does not identify the component that makes the hazardous material a marine pollutant, the name of the marine pollutant constituent must appear in parentheses within the basic description. PHMSA proposes to revise paragraph (l)(1) to limit the scope of this requirement to make it applicable only to generic HMT entries (as indicated by the G in Column 1 on the HMT) as well as those that have ''n.o.s.'' as part of the proper shipping name. The intent of this proposed amendment is to extend the documentation and marking flexibility provided by Special Provision 441 (which currently applies only to environmentally hazardous substances (UN3077 and UN 3082)) and to other hazardous materials that may contain components(s) that are marine pollutants. For example, under the current HMR, if ''UN1263, Paint'' contains marine pollutants, the basic description required on shipping papers and markings would have to include the specific marine polluting component(s) that are present in the paint, in addition to the words ''marine pollutant'' (*e.g.,* ''UN1263, Paint, 3 (propyl acetate, di-n-butyltin di-2-ethylhexanoate) MARINE POLLUTANT''). But under this proposed amendment, the basic description for ''UN1263, Paint'' would no longer require the addition of the ''marine pollutant'' language. Given that emergency responders do not depend on the specific technical name provided in association with the shipping description to effectively respond to emergencies, PHMSA expects streamlining the description to provide more readily recognizable and usable information that reflects the hazardous materials involved may facilitate emergency response.

Finally, PHMSA proposes to add a new paragraph (q) to this section to require documentation of the holding time for refrigerated liquefied gases transported in portable tanks. Holding time is the span of time, as determined by testing, that elapses from the time of loading until the pressure of the contents, under equilibrium conditions, reaches the set point for the lowest pressure control valve or pressure relief valve setting. PHMSA proposes to require including the specific date at which the holding time ends on the shipping paper for refrigerated liquefied gases transported in portable tanks. Knowing the holding time assists in preventing unexpected venting while in transportation, which could lead to exposure to and risks associated with a hazardous material release as well as the loss of product. Including this information on the shipping paper would aid in managing the transportation of refrigerated liquefied gases to ensure the material arrives safely at its destination without an unintended release of hazardous materials, including those that are known greenhouse gases (GHGs) (*e.g.,* nitrous oxide). PHMSA anticipates that establishing this requirement to provide this information for portable tanks will improve safety of international transport of refrigerated liquefied gases in portable tanks.

Section 172.301

Section 172.301 prescribes general marking requirements for non-bulk packagings. PHMSA proposes to amend paragraph (a)(1) to clarify that the exception permitting reduced size marking requirements are applicable to packages with either 5L or less capacity, or those with a 5 kilograms (kg) or less net mass. The current HMR text states that the exception is applicable to packages with a maximum capacity of 5 kg or 5 L or less, rather than the maximum net mass, which is the more appropriate measure for packages containing solids. A person shipping a solid material may unnecessarily apply the volume limitation, when a net mass limit is intended. This proposal clarifies that packages for solid material may have a maximum net mass of 5 kg or less. This editorial change is intended to reduce confusion over the application of the exception at § 172.301(a)(1) in that for solid materials, the quantity limit is based on the net amount of solid material and not the capacity of the packaging the material is placed in. This clarification is consistent with similar provisions for solids (net mass) and liquids (capacity) throughout the HMR. Ensuring the appropriate application of the reduced size marking allowance provides consistency across persons using the reduced-size marking and therefore, is expected to improve safety of transport.

Section 172.315

Section 172.315 prescribes the marking requirements for packages of limited quantities. Currently, the HMR require that the limited quantity mark be applied on at least one side or one end of the outer packaging. The 2021–2022 ICAO Technical Instructions clarified that marks, in particular those that are applied in a similar manner to self-adhesive labels, must be applied on

one side of a package (*i.e.,* not folded over an edge). Prior to these amendments, only hazard communication labels were required to be applied to a single side of a package and prohibited from being folded around the edge of a package. This requirement was extended to markings to ensure visibility and to communicate hazard(s) to the greatest extent possible. Consistent with the ICAO Technical Instructions, PHMSA proposes adding a new paragraph (b)(3) to require, for air transport, that the entire limited quantity mark must appear on one side of the package. For detail on the rationale for this proposed requirement, *see* Section 172.406 of the Section-by-Section Review.

Section 172.322

Section 172.322 prescribes the marking requirements for hazardous materials that are also marine pollutants. PHMSA proposes, consistent with proposed changes in Special Provision 441 and § 172.203(l)(1) discussed above, to limit the scope of hazardous materials, which are marine pollutants, that are subject to this technical name marking requirement. Specifically, PHMSA proposes to apply the technical name marking to proper shipping names that have a ''G'' assigned in column (1) of the § 172.101 Hazardous Materials Table or have the text ''n.o.s.'' as part of the proper shipping name. PHMSA also proposes to add language directing shippers using ''UN3077, Environmentally hazardous substance, solid, n.o.s.'' or ''UN3082, Environmentally hazardous substance, liquid, n.o.s.,'' to Special Provision 441 for additional requirements.

Section 172.406

Section 172.406 specifies the requirements for the placement of labels on a package. The 2021–2022 ICAO Technical Instructions clarified that marks, in particular those that are applied in a similar manner to self-adhesive labels, must be applied on one side of a package. The ICAO Technical Instructions have long required that all hazard communication labels not be folded (around the edge of a packages) and be applied to a single side. This requirement was introduced to ensure visibility and communicate hazard(s) to the greatest extent possible. In a working group session, the ICAO Dangerous Goods Panel agreed that extending this labeling requirement to marks was appropriate as marks, like labels, provide hazard communication. While PHMSA has not specifically prohibited extending labels onto other sides of packaging and allows the use of smaller labels to accommodate smaller packagings, PHMSA appreciates the need for readily visible hazard communication by air. Therefore, for the sake of harmonizing with the ICAO Technical Instructions, and to ensure visibility to communicate hazards to the greatest extent possible, PHMSA proposes to add specific restrictions on wrapping marks and labels for shipments that are transported by air.

During a review of the specific marking requirements that were added in the 2021–2022 ICAO Technical Instructions, PHMSA found that the HMR do not contain the same express limitation on ''folding'' of a part of a label around the edges of a package such that the entirety of a label would have to be on a single side. PHMSA expects that adopting both the pre-existing ICAO single side requirement for labels, and the recent requirement that marks must be on a single side of a package will provide increased visibility of hazard communication on the smaller package types that are frequently used in air transport. These measures would also reduce ambiguity for air operator employees conducting acceptance checks as to whether the package appropriately indicates the hazards without having to make a subjective determination.

Therefore, PHMSA proposes to require in a new paragraph (a)(1)(iii), that for air transport, the entirety of a required label must be displayed on one side of a package. For cylindrical packages not containing a traditional side, the labels and/or package must be of such dimensions that a label would not overlap itself. In the case of cylindrical packages containing radioactive materials, which require two identical labels, these labels must be centered on opposite points of the circumference and must not overlap each other. If the dimensions of the package are such that two identical labels cannot be affixed without overlapping each other, one label is acceptable provided it does not overlap itself.

In addition, PHMSA proposes to add requirements that marks must not be folded for: the limited quantity mark in § 172.315(b); the excepted quantity mark in § 173.4a(g); and the UN3373 Category B infectious substance mark in § 173.199(a). The ICAO Technical Instructions were also amended to require that the lithium battery handling mark be applied on a single side of a package; however, this is already prescribed in § 173.185(c)(3)(i), applicable to all modes of transport. Regarding the Category B infectious substance mark, the proposal would help ensure that any packages containing COVID–19 materials have appropriate visibility and thus, ensure the safe transport of such materials.

Section 172.447

Section 172.447 prescribes specifications for labels used for lithium batteries. PHMSA proposes to remove and reserve paragraph (c), which contains an expired transitional exception allowing for continued use of labels in conformance with the requirements that had been in place on December 31, 2016 until December 31, 2018. Since December 31, 2018 has passed, the continued use of an outdated label is no longer allowed.

C. Part 173

Section 173.4a

Part 173 contains general requirements for shippers regarding shipments and packagings. Section 173.4a prescribes transportation requirements for excepted packages. For consistency with the ICAO Technical Instructions, PHMSA proposes adding a new paragraph (g)(3) to require for air transport that the entire excepted quantity mark must be appear on one side of the package. For detail on the rationale for this proposed requirement, *see* Section 172.406 of the Section-by-Section Review for discussion of the proposed requirement to display a mark on a single side.

Section 173.14

PHMSA proposes to add a new section, § 173.14, to provide exceptions from the HMR for certain devices or equipment containing hazardous materials that are in actual use or which are intended for use during transport. Examples of such devices include cargo tracking devices and data loggers attached to, or placed in, packages, overpacks, containers, or load compartments. These items often contain component hazardous materials, such as lithium batteries or fuel cells, necessary to power the device or equipment. The proposed exception would provide clarity for these types of devices which are not offered into transportation as part of the consignment but instead accompany it to collect or disseminate information during transport. Eligibility for the exceptions would be limited to equipment that meets conditional safety requirements. These include requirements that the component hazardous material (*e.g.,* lithium batteries) meet the applicable construction and test requirements specified in the HMR, and that the

equipment can withstand the shocks and vibrations normally encountered during transport. The equipment must also be safe for use in different environmental conditions that it may be exposed to during transport such as temperature variations, inclement weather, and conditions in which explosive atmospheres caused by gases, vapors, mists, or air/dust mixtures may occur. The proposed text also clarifies that the exceptions are not applicable when this type of equipment is itself offered as cargo such that normal HMR requirements pertaining to packaging, shipping papers, marking and labeling would apply.

This proposed new section is consistent with provisions adopted in the UN Model Regulations and the IMDG Code. Additionally, in response to the ongoing global COVID–19 public health emergency, on December 31,2020 [19] and February 23, 2021,[20] ICAO published addenda to the 2021–2022 Edition of the ICAO Technical Instructions to provide a limited exception for lithium battery-powered data loggers and cargo tracking devices to facilitate the transport and distribution of COVID–19 pharmaceuticals, including vaccines. Specifically, the 2021–2022 ICAO Technical Instructions except these devices from lithium battery marking and documentation requirements when transported by aircraft. Consequently, PHMSA proposes exceptions in this section of the HMR to cover all modes of transportation for certain devices or equipment containing hazardous materials that are in actual use or which are intended for use during transport. However, the exceptions associated with aircraft transportation are limited to marking and documentation for lithium ion and lithium metal battery-powered devices or equipment that accompany shipments of COVID–19 pharmaceuticals, including vaccines. PHMSA requests comments on whether this exception for air transport should be expanded to additional medical supplies not related to COVID–19 (*e.g.,* other vaccines or more generally medicines).

Section 173.27

Section 173.27 provides the general requirements for transportation by aircraft. PHMSA proposes a number of corrections and revisions as follows: (1) Revise paragraph (c)(2) to clarify that all package types containing ''UN3082, Environmentally hazardous substance, liquid, n.o.s.'' are excepted from the pressure differential requirements and not only limited quantities; (2) revise the paragraph (f) introductory text to clarify the inner packaging quantity limits prescribed in Table 1 and Table 2 apply to combination packages and not only to excepted quantity packages; (3) in paragraph (f)(3) Table 1 and Table 2 add inner package limits for certain Class 9 HMT entries consistent with the ICAO Technical Instructions; and (4) in Table 1 and Table 2 remove the ''no limit'' quantity limits and add them to the paragraph (f) introductory text for a clearer description of the requirement for materials authorized to exceed 220 L or 200 kg in accordance with columns (9A) and (9B) of the 172.101 table. The 2021–2022 edition of the ICAO Technical Instructions contains editorial corrections to exceptions for ''UN3082, Environmentally hazardous substance, liquid, n.o.s.'' from differential pressure testing requirements in Packing Instructions 964 and Y964 (limited quantity). When reviewing the clarifying editorial correction [21] to the ICAO exception, PHMSA found that although the same update is not needed in the HMR, the corresponding exceptions in § 173.27 are not consistent with those provided for in the latest version of Packing Instructions 964 and Y964. PHMSA proposes revising § 173.27 to correct this discrepancy and align with the updated version of the ICAO Technical Instructions.

In a previous final rule, HM–215K,[22] PHMSA revised § 173.27 to align with the amendments made to the 2011–2012 edition of the ICAO Technical Instructions. That earlier edition of the ICAO Technical Instructions had included exceptions applicable to UN3082 from the pressure differential requirements in Packing Instructions 964 and Y964 for fully regulated and limited quantity packages. The exceptions were added because UN3082 materials assigned to Class 9 do not meet the criteria for classification as any other hazard class or division and are classified as hazardous materials solely because of their risk to the environment (*i.e.,* they are not capable of posing a risk to health, safety, or property when transported by air). When this exception was added in the HM–215K rulemaking, the text was placed in paragraph (f)(2)(vii), thereby inadvertently narrowing the exception to limited quantity materials. In the 2011–2012 edition of the ICAO Technical Instructions that the HM–215K rulemaking intended to align with, the exception from the pressure differential requirements applied to both combination packagings in PI 964 and limited quantity packagings in PI Y964. Therefore, PHMSA proposes to amend paragraph (c)(2) to except shipments of ''UN3082, Environmentally hazardous substance, liquid, n.o.s.'' from the pressure differential packaging requirements applicable for transportation by aircraft. This proposed change would align the pressure differential exceptions for UN3082 material with those found in the ICAO Technical Instructions and excepts these shipments, in all authorized packaging types, from the pressure differential requirements in paragraph (c)(2).

Further, PHMSA proposes to amend paragraph (f), which specifies requirements for combination packagings intended for transportation aboard an aircraft. A combination packaging, for transport purposes, consists of one or more inner packagings secured in a non-bulk outer packaging. Paragraph (f)(3) contains Table 1 and Table 2 indicating the maximum net capacity allowed for the inner packagings of the combination packaging on passenger-carrying and cargo aircraft, respectively. PHMSA proposes to revise paragraph (f) by moving the references to Table 1 and Table 2 from paragraph (f)(1), applicable to excepted quantities, to the paragraph (f) introductory text. The intent of this revision is to clarify that the inner packaging limits specified in paragraph (f)(3) Table 1 and Table 2 apply to all combination packages used to transport hazardous material by aircraft and not just to excepted packages (*i.e.,* packages for which exceptions from certain provisions are provided in the HMR). As it currently reads, the instruction for all combination packagings is imbedded in the paragraph (f)(1), which outlines provisions for excepted packages, thus making it appear that Tables 1 and 2 apply only to excepted packages. Correcting the reference in paragraph (f) would provide regulatory clarity by properly aligning packaging limits in

[19] ICAO, Addendum No.1 to the 2021–2022 of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Dec. 31, 2020), *https://www.icao.int/safety/DangerousGoods/Addendum Corrigendum%20to%20the%20Technical%20Instructions/Doc%209284-2021-2022.Addendum No1.en.pdf.*

[20] ICAO, Addendum No.2 to the 2021–2022 of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Feb. 23, 2021),*https://www.icao.int/safety/DangerousGoods/Addendum Corrigendum%20to%20the%20Technical%20Instructions/Doc%209284-2021-2022.Addendum No2.en.pdf.*

[21] Report of the ICAO Working Group 19 (paragraph 3.2.11) (May, 2019), *https://www.icao.int/safety/Dangerousfxsp0;Goods/WG19/DGPWG.19.fxsp0;WP.030.en.pdf.*

[22] 76 FR 3308 (Jan. 19, 2011).

the HMR with the ICAO Technical Instructions.

Additionally, the first column of Tables 1 and 2 provides the maximum net quantity per package from Column (9A) of the HMT. PHMSA proposes to replace the rows in Tables 1 and 2 noting that there are no maximum net capacity limits for quantities greater than 220 L for liquids and greater than 200 kg for solids with an instruction in the revised paragraph (f) introductory text conveying the same information.

Finally, PHMSA discovered that for certain Class 9 (miscellaneous hazardous) materials, the authorized inner packaging limit in the ICAO Technical Instructions is greater than the limit currently allowed in Tables 1 and 2 at § 173.27(f)(3). Therefore, PHMSA proposes to revise paragraph (f)(3), Table 1 and Table 2 to address this inconsistency with the ICAO Technical Instructions. Specifically, PHMSA proposes to revise, for consistency with the inner packaging limits provided in Packing Instructions 956, 958, and 964 of the ICAO Technical Instructions, inner packaging net capacity limits for the following Class 9 materials:

- UN1841 Acetaldehyde ammonia
- UN1931 Zinc dithionite *or* Zinc hydrosulphite
- UN1941 Dibromodifluoromethane
- UN1990 Benzaldehyde
- UN2071 Ammonium nitrate fertilizers
- UN2216 Fish meal, stabilized *or* Fish scrap, stabilized
- UN2315 Polychlorinated biphenyls, liquid
- UN2590 Asbestos, chrysotile
- UN2969 Castor beans *or* Castor flake *or* Castor meal or Castor pomace
- UN3077 Environmentally hazardous substance, solid, n.o.s.
- UN3082 Environmentally hazardous substance, liquid, n.o.s.
- UN3151 Polyhalogenated biphenyls, liquid *or* Polyhalogenated terphenyls, liquid *or* Halogenated monomethyldiphenylmethanes, liquid
- UN3152 Polyhalogenated biphenyls, solid or Polyhalogenated terphenyls, solid *or* Halogenated monomethyldiphenylmethanes, solid
- UN3334 Aviation regulated liquid, n.o.s.
- UN3335 Aviation regulated solid, n.o.s.
- UN3432 Polychlorinated biphenyls, solid

These materials have a history of safe transport under less restrictive inner packaging limits in accordance with the ICAO Technical Instructions. The proposed revisions would offer shippers greater flexibility in packaging options to transport these materials without a degradation of safety.

Section 173.59

Section 173.59 provides informational descriptions of terms for explosives. PHMSA proposes to amend the description of the term ''detonators'' to include a reference to electronic programmable detonators. Additionally, PHMSA proposes to add a separate term and description for ''Detonators, electronic *programmable for blasting.*'' These changes correspond to the proposed addition of the UN0511, UN0512, and UN0513 (Detonators, electronic *programmable for blasting*) to the HMT. PHMSA intends to distinguish between ''electronic detonators'' and ''electric detonators,'' as each has different design characteristics, by adding these new entries in the HMT and the editorial amendments in § 173.59. PHMSA expects this additional precision in shipping descriptions will provide a safety benefit. *See* § 172.101 of the Section-By-Section Review for additional discussion on electric and electronic detonators.

Section 173.115

Section 173.115 outlines classification criteria for Class 2 (gas) materials. PHMSA proposes to update the version of ISO 10156:2010, ''*Gases and gas mixtures—Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets,*'' that is incorporated by reference in paragraph (k), which specifies how the oxidizing ability of a Division 2.2 (non-flammable) gas should be calculated. Currently the HMR incorporates by reference the 2010 edition of this ISO standard and its associated technical corrigendum in § 171.7. As part of ISO's regular periodic review of each standard, ISO standard 10156:2010 was reviewed and updated and a new revised ISO 10156:2017 was published September 2017. The 2017 edition supersedes and replaces ISO 10156:2010, which had been technically revised through ISO 10156:2010/Cor 1:2010. PHMSA now proposes to update the incorporation by reference of ISO 10156, to the 2017 edition. The updated document includes technical revisions pertaining to the flammability of gases and gas mixtures in air as well as a new calculation method for determining the lower flammability limit of gas mixtures. PHMSA reviewed the calculation method and agrees that it will assist shippers in properly classifying a Division 2.2 gas, without introducing any adverse safety risks. Therefore, PHMSA proposes to incorporate by reference ISO 10156:2017 in § 173.115(k).

Section 173.134

Section 173.134 provides classification criteria and exceptions for Division 6.2 infectious substances. PHMSA proposes to revise paragraph (a) to include references to ''UN3549, Medical Waste, Category A, Affecting Humans, *solid or* Medical Waste, Category A, Affecting Animals *only, solid*.'' Specifically, paragraphs (a)(1), (a)(1)(i), and (a)(5) would be revised by including UN3549 among the list of UN numbers to use for description of an infectious substance. These proposed changes are consistent with the proposed addition of this new hazardous materials description to the HMT.

Additionally, PHMSA proposes to remove the term rickettsiae from the list of types of microorganisms in paragraph (a)(1). Rickettsiae are a specific group of bacteria, and this specific type of bacteria is redundant because bacteria are already listed as a type of potential pathogenic microorganism.

Section 173.137

Section 173.137 prescribes the requirements for assigning a PG to Class 8 (corrosive) materials. The HMR requires offerors to classify Class 8 material and assign a PG based on tests conducted in accordance with the OECD Guidelines for the Testing of Chemicals. One of the tests currently authorized in the HMR is the 2015 OECD Guideline for the Testing of Chemicals ''*Test No. 431: In vitro skin corrosion: reconstructed human epidermis (RHE) test method*'' which may be used to determine that a material is not corrosive to human skin. PHMSA proposes to incorporate by reference the 2016 version of OECD Guidelines for the Testing of Chemicals ''*Test No. 431: In vitro skin corrosion: reconstructed human epidermis (RHE) test method.*'' This document was updated to introduce sub-categorization for skin corrosion and adopted by the OECD in 2013 and further revised in 2014, 2015, and 2016, as Guidelines for the Testing of Chemicals ''*Test No. 431: In vitro skin corrosion: reconstructed human epidermis (RHE) test method.*'' According to the OECD, this updated test method permits subcategorization of corrosive chemicals into three categories: sub-category 1A and sub-category 1B/C, which correspond to PG I, PG II, and PG III, respectively. However, prior to the 2016 edition of the OECD Guidelines, the ability to clearly distinguish between PG II and

PG III had previously never been formally evaluated or validated due to the lack of high quality reference in vivo data against which to benchmark the in vitro results.

Changes to the UN Model Regulations were made as a result of the additional level of sub-categorization and differentiation that is possible using this updated test method. Accordingly, PHMSA also proposes to allow corrosive materials that are tested using OECD Guidelines for the Testing of Chemicals *Test No. 431* to be assigned to PG II without further in vivo testing if the test method does not clearly distinguish between PG II or PG III. Since the packing group assignment indicates the required level of packaging according to the degree of danger presented by hazardous materials, this would relegate corrosive material that cannot be clearly distinguished between a medium danger PG II and a low danger PG III to be subject to the more conservative packaging requirement associated with PG II material unless additional testing is conducted. PHMSA anticipates that the use of the 2016 version of the OECD Guidelines for the Testing of Chemicals *Test No. 431* will benefit shippers of potential corrosives by clarifying corrosivity determinations or exclusions, and eliminating excessive testing to distinguish between PG II and PG III.

The proposed regulatory text references OECD Guidelines for the Testing of Chemicals *Test No. 404, 430, and 435,* which are already approved for incorporation by reference in this section, and no change is proposed for these standards.

Section 173.172

Section 173.172 specifies the eligibility conditions for exception from packaging requirements for certain fuel tanks used on aircraft hydraulic power units. PHMSA proposes editorial changes to these provisions to clarify packaging limits for the fuel tanks that power hydraulic power units. The fuel tanks addressed in this section are comprised of a primary containment for the fuel in the hydraulic power unit. The primary containment must consist of a welded aluminum bladder as well as an outer vessel, which is packed in non-combustible cushioning material in a strong, tightly-closed metal outer packaging. Currently paragraphs (a) and (b) of this section state that the ''Maximum quantity of fuel per unit and package is 42 L (11 gallons).'' PHMSA proposes to replace the word ''unit'' in this sentence in paragraphs (a) and (b) with the word ''primary containment'' for consistency with the second sentence of each paragraph which states that the ''primary containment of the fuel within this vessel must consist of a welded aluminum bladder having a maximum internal volume of 46 L (12 gallons).'' These editorial revisions to clarify that the maximum quantity of fuel authorized applies to both the fuel within the vessel and completed package (primary containment) rather than the hydraulic power unit itself. This change would align the language for this packaging exception in the HMR with the language that was similarly amended in the 2021–2022 ICAO Technical Instructions and the 21st revised edition of the UN Model Regulations. PHMSA does not expect this change to adversely affect safety benefits.

Section 173.181

Section 173.181 prescribes packaging requirements for liquid pyrophoric materials. Specifically, § 173.181 provides the requirements on closures for metal or glass receptacles when used as inner packagings (*i.e.,* receptacles) in combination packagings. The UN Model Regulations contains Packing Instruction P404 which includes provisions for resealing inner receptacles with threaded closures. Currently, § 173.181 does not include provisions for resealing of inner receptacles with threaded closure. The safety concern when resealing inner receptacles that contain liquid pyrophoric materials is that small amounts of residue may adhere to the threads and present a hazard upon closing of the inner packaging and that friction generated from screwing the cap back onto the receptacle may cause the residue to react critically (*e.g.,* self-heating or spontaneous combustion). Based on this concern, the UN Model Regulations now permit closures of inner receptacles to be either threaded or physically held in place by any means capable of preventing back-off or loosening of the closure under conditions normally incident to transportation (*e.g.,* vibration during transport). PHMSA is also concerned about this potential hazard and proposes to authorize an alternative method of closure to prevent this potential hazard. Therefore, PHMSA proposes to revise the requirements of § 173.181 for closures of inner packagings for liquid pyrophoric materials to specify that they may have closures that are physically held in place by any means capable of preventing back-off or loosening during transportation.

Section 173.185

Section 173.185 prescribes requirements for transportation of lithium cells and batteries. Paragraph (c) prescribes requirements for smaller cells or batteries and paragraph (c)(3) specifies hazard communication requirements including the use of the lithium battery mark. PHMSA proposes to revise the minimum size of the lithium battery mark from 120 millimeters (mm) wide by 110 mm high to 100 mm by 100 mm. This reduction in size requirements for this mark would be consistent with the existing minimum size requirements for the limited quantity and excepted quantity marks in the HMR (*see* §§ 172.315 & 173.4a) and does not diminish the ability to read or recognize the marking. The reference to the shape of the mark would be amended to include ''square'' to account for the new minimum dimensions while also maintaining the existing shape of a ''rectangle'' to continue authorized use of the lithium battery mark with 120 mm by 110 mm dimensions. In addition, the minimum size of the lithium battery mark for packages too small to display the revised 100 mm by 100 mm dimensions, would be revised from 105 mm wide by 74 mm high to 100 mm wide by 70 mm high. Additionally, an informal working paper[23] submitted to the 54th Session of the UNSCOE noted that due to the large volume of lithium batteries shipped in small packages, the reduction in the size of the mark could reduce the quantity of packagings produced and consequently the quantity of empty packagings sent for disposal or recycling. This proposed minimum size would not invalidate use of larger marks meeting the currently authorized minimum size requirements.

Section 173.187

Section 173.187 prescribes packaging requirements and other provisions for ''pyrophoric solids, metals, or alloys, n.o.s.'' The 21st revised edition of the UN Model Regulations includes an amendment to Packing Instruction P404 to address concerns with threaded closures when resealing inner receptacles after partial removal of product. The amendment addresses small amounts of residue of pyrophoric materials that may adhere to the threads and present a hazard upon closing of an

[23] Rechargeable Battery Association (PRBA) & the Advanced Rechargeable & Lithium Batteries Association (RECHARGE), Proposal on the Dimensions of the Lithium Battery Mark Submitted to the UN Subcommittee of Experts on the Transport of Dangerous Goods at the 54th Session (Dec. 3, 2018), *https://www.unece.org/fileadmin/DAM/trans/doc/2018/dgac10c3/UN-SCETDG-54-INF55.e.pdf.*

inner receptacle. As with liquid pyrophoric materials, discussed above, there is concern that friction generated from screwing the cap back onto the inner receptacle may cause the residue to react critically (*e.g.,* self-heating or spontaneous combustion). Based on this concern, the UN Model Regulations now allow closures of inner receptacles to be either threaded *or* physically held in place by a means capable of preventing back-off or loosening of the closure under conditions normally incident to transportation (*e.g.,* impact or vibration during transport).

After reviewing this issue, PHMSA is also concerned about this potential hazard and proposes to amend § 173.187 to authorize an alternate method of closure to prevent this potential hazard. Specifically, PHMSA proposes to revise the requirements for closures of inner receptacles for solid pyrophoric materials to specify that they may have threaded closures or other closures that are physically held in place by a means capable of preventing back-off or loosening.

Section 173.199

Section 173.199 prescribes the packaging requirements for Division 6.2, Category B infectious substances. Consistent with the ICAO Technical Instructions, PHMSA proposes to revise paragraph (a)(5) to require that for air transport the entire UN3373 mark must appear on one side of the package. PHMSA expects that placing marks on a single side of a package will provide increased visibility of hazard communication on the smaller package types that are frequently used in air transport. These measures would also reduce ambiguity for air operator employees conducting acceptance checks as to whether the package appropriately indicates the hazards without having to make a subjective determination. Regarding the Category B infectious substance mark, the proposal would help ensure that any packages containing infectious substances, including COVID–19 materials, have appropriate visibility and thus, ensure the safe transport of such materials. For details on the rationale for this proposed requirement, *see* the discussion of § 172.406 in the Section-By-Section Review.

Section 173.218

Section 173.218 contains packaging and product stabilization requirements for transporting stabilized fish meal or fish scrap (UN2216) as a Class 9 material. Currently, the provisions of this section are limited to shipments by vessel; however, PHMSA proposes to revise this provision to authorize the transport of this material by air. This change responds to changes in the fish meal or fish scrap market which has experienced an increased demand for more timely shipments of samples of this item for evaluation by potential purchasers. Adding provisions to permit shipment by air, rather than limiting to shipment by vessel, would relieve frustration in the market for fish meal or fish scrap by allowing shipments of small amounts of this material to be expedited by air. This change is consistent with amendments adopted in the 2021–2022 version of the ICAO Technical Instructions, which have been revised to allow the transport by air of non-bulk packages of fish meal or fish scrap, subject to quantity limitations and stabilization requirements.

As proposed, UN2216 material would be permitted on passenger aircraft and cargo aircraft in amounts up to 100 kg and 200 kg, respectively, and in UN performance packaging that aligns with the ICAO Technical Instructions. Additionally, to ensure the safe transport of this material by air, PHMSA proposes adding stabilization requirements similar to those that are in place for shipments by vessel. PHMSA proposes fish meal or fish scrap transported by air must have been stabilized at production, and within the twelve months prior to transportation. Given the safeguard provided by stabilization of this material prior to transportation, as well as the proposed packaging and quantity restrictions, PHMSA expects that there will be no degradation of transportation safety in authorizing air transportation.

In addition to adding these stabilization requirements for air transportation, PHMSA proposes amending the stabilization requirements that are currently in place for vessel shipments. The HMR currently requires shipments of fish meal or fish scrap by vessel to contain at least 50 parts per million (ppm) (mg/kg) of ethoxyquin, 100 ppm (mg/kg) of butylated hydroxytoluene (BHT) or 250 ppm (mg/kg) of tocopherol based antioxidant at the time of shipment for bulk shipments when transported in freight containers. PHMSA proposes extending these stabilization requirements to all vessel shipments, as required by the IMDG Code. While the change in language would make the stabilization requirement more widely applicable, PHMSA expects that the impact on the regulated community will be minimal as fishmeal and fish scrap shipments offered for transport (in non-bulk and bulk) are already typically treated with quantities of stabilizer (antioxidants) well above the minimum amounts currently shown in section § 173.218 as common industry practice.

Section 173.221

Section 173.221 prescribes transportation requirements and exceptions therefrom for ''UN2211, Polymeric beads expandable'' and ''UN3314, Plastic molding compound,'' which are both Class 9 (miscellaneous) materials. Historically, transportation of these materials has been limited to single packagings under both the HMR and in Packing Instruction 957 of the ICAO Technical Instructions. However, these limitations are inconsistent with the UN Model Regulations and the general provisions of the ICAO Technical Instructions, which permit combination packagings when single packagings are authorized. These packagings are constructed with inner packagings made of glass, plastic, metal, paper, or fiber and with outer packagings utilizing drums, boxes, and jerricans made of various materials. This conflict in permitted packagings has been corrected in the most recent edition of the ICAO Technical Instructions.

PHMSA finds that allowing combination packaging for these Class 9, low hazard materials is consistent with general packaging authorizations throughout the HMR. In general, combination packaging is allowed for materials that are more hazardous as long as the minimum packaging performance requirements are achieved. Single packaging and combination packaging are subject to the same performance standards, meaning an equivalent level of safety is achieved. Therefore, PHMSA proposes conforming changes to § 173.221 to allow the use of combination packagings (*i.e.,* packagings that use a combination of inner and outer packagings for containment) for these materials. This change would provide packaging selection flexibility as well as consistency with UN Model Regulations and revised ICAO Technical Instructions without any impact on safe transport of these materials.

Section 173.222

Section 173.222 specifies the non-bulk packaging requirements for ''UN3363, Dangerous goods in machinery or apparatus.'' As discussed in connection to proposed changes to § 172.101, PHMSA proposes to modify the proper shipping name associated with UN3363 to include ''dangerous goods in articles,'' in addition to ''dangerous goods in machinery or apparatus.'' In the HM–215O final rule,

PHMSA added new entries for articles containing hazardous materials that are not otherwise specified by name in the HMT (*e.g.,* ''UN3547, Articles containing corrosive substance, n.o.s.''). These new entries addressed transportation scenarios where various hazardous materials or residues are present in articles above the quantities currently authorized for machinery or apparatus transported as ''UN3363, Dangerous goods in machinery *or* Dangerous goods in apparatus.'' In addition to adding these new entries to the HMT, PHMSA added packaging provisions in § 173.232, as well as a definition for articles. The definition states that ''article means machinery, apparatus, or other devices containing one or more hazardous materials (or residues thereof) that are an integral element of the article, necessary for its functioning, and that cannot be removed for the purpose of transport.'' This addition created regulatory discrepancies between articles that cannot be defined as machinery or apparatus but also do not qualify as ''Articles containing hazardous materials, n.o.s.'' even as there is no safety basis to exclude such articles from the scope of § 173.222 provisions. Therefore, PHMSA proposes to revise the provisions in § 173.222 to reflect the addition of dangerous goods in articles to the current HMT entry for ''UN3363, Dangerous Goods in Machinery *or* Dangerous Goods in Apparatus'' as discussed in connection with the proposed changes to § 172.101 above. These proposed changes are intended to provide flexibility in the choice of the most appropriate modifier to be selected as a proper shipping name (*e.g.,* article, machinery, or apparatus). This flexibility in selecting the most appropriate description of the hazardous material would help ensure appropriate packaging selection and hazard communication, thus enhancing safety.

Section 173.225

Section 173.225 prescribes packaging requirements and other provisions for organic peroxides. As a result of new peroxide formulations becoming commercially available, the 21st revised edition of the UN Model Regulations includes updates to the list of identified organic peroxides and new packing instructions for these materials. To maintain consistency with the UN Model Regulations, PHMSA proposes to update the Organic Peroxide Table in § 173.225(c) to revise the entry ''Di-(4-tert-butylcyclohexyl) peroxydicarbonate [as a paste],'' by (1) changing the classification of the material as ''UN3116, Organic peroxide type D, solid, temperature controlled'' to ''UN3118, Organic peroxide type E, solid, temperature controlled''; and (2) changing the packing method from OP7 to OP8.

An organic peroxide Type D is an organic peroxide that: (1) Detonates only partially, but does not deflagrate rapidly and is not affected by heat when confined; (2) does not detonate, deflagrates slowly, and shows no violent effect if heated when confined; or (3) does not detonate or deflagrate, and shows a medium effect when heated under confinement. An organic peroxide Type E is an organic peroxide which neither detonates nor deflagrates and shows low or no effect when heated under confinement. Di-(4-tert-butylcyclohexyl) peroxydicarbonate was identified as a Type E organic peroxide based on evaluation of new test data within the classification scheme for self-reactives and organic peroxide in Figure 20.1 of the UN Model Regulations. Finally, PHMSA proposes to revise the packing method from OP7 to OP8 consistent with the revised classification of Di-(4-tert-butylcyclohexyl) peroxydicarbonate to a lesser hazard Type E organic peroxide. The packing method indicates the largest size authorized for packaging of a particular organic peroxide. Specifically, for Di-(4-tert-butylcyclohexyl) peroxydicarbonate, assignment of OP8 would allow up to 400 kg for solids and combination packagings, and up to 225 L for liquids. *See* Section 173.225 Section-by-Section Review for further detail of packing methods for organic peroxides.

PHMSA also proposes to revise the Organic Peroxide IBC Table in paragraph (e) to maintain alignment with the 21st revised edition of UN Model Regulations by adding new entries for ''tert-Amyl peroxypivalate, not more than 42% as a stable dispersion in water'' and ''tert-Butyl peroxypivalate, not more than 42% in a diluent type A'' and identifying it as ''UN3119, Organic peroxide type F, liquid, temperature controlled.'' PHMSA expects that adding provisions for the transport of these newly available peroxide formulations will allow better oversight for safe and consistent shipment of these hazardous materials.

Section 173.301B

Section 173.301b outlines additional general requirements when shipping gases in UN pressure receptacles (*e.g.,* cylinders). Paragraph (a)(2) of this section requires that the gases or gas mixtures be compatible with the UN pressure receptacle and valve materials prescribed for metallic materials in ISO 11114–1:2012(E), *Gas cylinders—Compatibility of cylinder and valve materials with gas contents—Part 1: Metallic materials.* This document provides compatibility requirements for the selection of combinations of metallic cylinder and valve materials for use with gas or gas mixtures. In the interest of providing uniformity with regard to reference standards used domestically and internationally, PHMSA proposes to revise the compatibility requirements to include a reference to the 2017 amendment (ISO 11114–1:2012/Amd 2017(E)), which ISO published as a supplement to ISO 11114–1:2012(E). This supplement provides enhanced instructions on the permissible concentrations of certain gases to ensure safe transport of a wider variety of gases in newly developed types of metallic cylinders and valves.

Second, PHMSA proposes to revise paragraph (c)(1), which specifies valve requirements for pressure receptacles. Currently in the HMR, paragraph (c)(1) requires valves for pressure receptacles (excluding quick release cylinder valves, which must conform to the requirements in ISO 17871:2015(E)) to conform to various editions of ISO 10297, ''*Gas cylinders—Cylinder valves—Specification and type testing*'', including the 1999, 2006 and 2014 editions. ISO 10297:2014 specifies design, type testing, and marking requirements for certain cylinder valves intended to be fitted to refillable transportable gas cylinders which convey compressed, liquefied or dissolved gases. PHMSA proposes to modify the valve requirements in this paragraph such that when the use of a valve is prescribed, the valve must conform to the requirements of ISO 10297:2014 as well as the supplemental amendment, ISO 10297:2014/Amd 1:2017. ISO 10297:2014/Amd 1:2017 corrects errors in ISO 10297:2014 and also includes modifications for valves for tubes and pressure drums. For consistency with the UN Model Regulations, PHMSA also proposes to add a sunset date of December 31, 2022, for the authorization of the use of ISO 10297:2014 when not used in conjunction with the supplemental 2017 amendment. PHMSA has reviewed this supplemental amendment as part of its regular participation in the review of amendments proposed for the UN Model Regulations and does not expect any degradation of safety standards in association with the use of these two documents.

Lastly, paragraph (c)(2) of this section outlines certain requirements for valves

on UN pressure receptacles. Specifically, by following one of the listed methods or standards in this paragraph, valves are required to be protected from damage that could cause inadvertent release of their contents. PHMSA proposes to introduce an additional option by allowing the use of valves designed and constructed in accordance with Annex A of ISO 17879:2017 for UN pressure receptacles with self-closing valves with inherent protection (except those in acetylene service). Annex A of ISO 17870:2017 is a new standard which establishes design, type testing, marking, and manufacturing tests and examination requirements for self-closing valves fitted to refillable transportable gas cylinders conveying compressed, liquefied, or dissolved gases (other than acetylene). PHMSA has determined that incorporating ISO 17879 fulfills the need for a standard that governs self-closing valves on cylinders, which are typically used in the calibration, beverage, and medical gas industries and mirrors requirements for impact testing and burst testing specified in ISO 10297. PHMSA has experience with permitting the use of valves constructed to ISO 17879 through special permit,[24] which has occurred without incident since 2019. Incorporating this ISO standard would eliminate the need and associated burden for manufacturers to request a special permit to use the valves as they become more widely transported as a result of their authorization by other competent authorities.

The proposed regulatory text references the following standards that are already approved for incorporation by reference in this section and no change is proposed for these standards: ISO 11114–1:2012(E); ISO 11114–2:2013; ISO 10297:2014; ISO 17871:2015; ISO 11117:2008 and Technical Corrigendum 1; ISO 11117:1998; ISO 16111:2008.

Section 173.304B

Section 173.304b contains requirements for shipment of liquefied compressed gases in UN pressure receptacles. In this section, paragraph (b) describes the filling limits for UN pressure receptacles expressed in terms of ''filling ratio,'' or the ratio of the mass of gas in the cylinder compared to the water capacity of the cylinder. Paragraph (b)(2) of this section provides the maximum allowable filling limits for low pressure liquefied gases. As currently provided in paragraph (b) of 173.304b, the term ''filling factor'' is currently used to describe the filling limit in terms of the maximum mass of contents in kg of the gas per liter of water capacity, which is intended to have the same meaning as the ''filling ratio.'' To increase clarity of the HMR, PHMSA proposes to revise paragraph (b)(2) by deleting the term ''filling factor'' and only using the performance standard of ''maximum mass of contents per liter of water capacity'' so that this is not misunderstood as being different from the defined term ''filling ratio.'' This change is consistent with the same editorial correction made is the 21st revised edition of the UN Model Regulations. The term ''filling factor'' is used in the context of the UN Model Regulations and could be misunderstood as being different from the defined term ''filling ratio.'' PHMSA expects that clarifying the language pertaining to the filling ratio will provide a safety benefit by eliminating confusion about the definition of the term ''filing factor'' or ''filing ratio.''

Section 173.306

Section 173.306 provides exceptions from HMR requirements for transportation of limited quantities of compressed gases. Paragraph (f) of this section provides exceptions for the transportation of accumulators, which are transported under ''UN3164, Articles, pressurized pneumatic *or* hydraulic.'' Accumulators are devices in which a fluid is kept under pressure as a means of storing energy. PHMSA proposes to revise paragraphs (f)(2) and (f)(3) to allow robust accumulators to be transported unpackaged, in crates, or in overpacks that provide equivalent protection to the hazardous material being transported. The term robust is used to describe articles that are strong enough to withstand the shocks and loadings normally encountered during transport, including trans-shipment between cargo transport units and between cargo transport units and warehouses, as well as any removal from a pallet for subsequent manual or mechanical handling. PHMSA expects that the proposed amendments will increase flexibility for shippers and harmonize with revisions to the UN Model Regulations which limits the packaging required for ''UN3164, Articles, pressurized pneumatic *or* hydraulic'' when afforded equivalent protection by the article being transported.

Additionally, PHMSA proposes to add a new paragraph (n) to include provisions for the transport of ''UN2037, Receptacles, small, containing gas *or* gas cartridges'' for recycling or disposal. These proposed provisions include packaging requirements, conditions for exception, and maximum gross weight limits, applicable to small receptacles or cartridges containing gas not exceeding 1.0 L (0.3 gallons) capacity. PHMSA expects that codifying these provisions will create a regulatory framework for transporting these materials for recycling or disposal and reduce the administrative burden that would otherwise apply to fully regulated gas receptacles. Further, reducing this administrative burden may lead to other environmental benefits by facilitating shipments destined for recycling or disposal. PHMSA solicits comments on the need to expand these provisions to other types of authorized packagings mentioned in this section.

Section 173.335

Section 173.335 specifies packaging requirements for hazardous materials transported as chemicals under pressure (*e.g.,* ''UN3500, Chemical under pressure, n.o.s.''). Chemicals under pressure are regulated as gases but differ in that they are liquids, pastes, or powders, and pressurized with a propellant that meets the definition of a gas in § 173.115. Materials transported under UN3500 may include those that are widely used in fire suppression systems and other items used for fire control.

PHMSA proposes to provide an extended periodic inspection period for cylinders containing fire extinguishing agents transported under UN3500. This amendment would be consistent with a new special packing provision, PP97, added in the 21st revised edition of the UN Model Regulations to provide a test period of 10 years for tubes (cylinders) that have a capacity of 450 L or less and that are filled with fire extinguishing agents. The intent of this change was to resolve the discrepancy in inspection periods between (1) gas-filled cylinders intended for installation in fire suppression systems and (2) cylinders used for the same purpose, but which contain a fire extinguishing agent (*e.g.,* a liquid) in combination with a gas used as a propellant. Gases transported under ''UN1956, compressed gas n.o.s.'' have a maximum test period for periodic inspection of 10 years, whereas the maximum test period for UN3500, chemical under pressure, n.o.s.'' is only five years. However, the updated UN Model Regulations extended the inspection period for cylinders containing fire extinguishing agents transported under UN3500 because they are typically (1) inert chemicals with no

[24] See, *e.g.,* Special Permit 20876 (Apr. 21, 2021), *https://cms7.phmsa.dot.gov/approvals-and-permits/hazmat/file-serve/authorization/2019045387_SP20876.pdf/2019045387/SP20876.*

subsidiary risks and (2) they are typically filled at lower pressures than cylinders containing UN1956 materials. Additionally, these fire extinguishing materials and devices are maintained and stored in a manner that minimizes the degradation of the cylinder (*e.g.,* in protected indoor environments).

A recent PHMSA rulemaking, HM–234,[25] broadened the scope of cylinders eligible to be classified as ''UN1044, fire extinguishers'' and the intent was to permit cylinders charged with fire extinguishing agents intended for use in fire suppression systems to be described and transported under ''UN1044, fire extinguishers.'' However, cylinders charged solely with a compressed gas or liquefied gas and used in a fire suppression system solely to expel a separately stored extinguishing agent are not eligible for transportation under UN1044. Furthermore, with respect to the UN Model Regulations, cylinders charged with a fire extinguishing agent and intended for use in a fire suppression are specifically excluded from transportation as ''UN1044, fire extinguisher.'' Therefore, while HM–234 added provisions that may allow hazardous materials in cylinders that have historically been described and transported as UN1956 or UN3500 to be transported as ''UN1044, fire extinguisher'', amending § 173.335 is still necessary to maintain alignment with the UN Model Regulations because the UN Model Regulations still do not allow cylinders intended for use in fire suppression systems to be transported under UN1044.

Because of this conflict in classification for similar items, PHMSA proposes to extend the periodic inspection period for cylinders containing gases or liquid/gas mixtures that are used as fire extinguishing agents under UN3500, to facilitate international shipment of these items by aligning the § 173.335 periodic inspection requirements with the periodic inspection period adopted in the UN Model Regulations. Recognizing that these items UN3500 and UN1044 are functionally the same but classified differently outside of the United States, PHMSA expects that establishing parallel inspections periods for similar items will facilitate international movement and continued use of these cylinders domestically and internationally.

[25] 85 FR 85380 (Dec., 28, 2020).

D. Part 175

Section 175.8

Part 175 of the HMR prescribes requirements that apply to the transportation of hazardous materials in commerce aboard aircraft, including items carried by air passengers and crew, as well as items carried by the aircraft operator in accordance with airworthiness requirements and operating regulations, or in support of in-flight service. Section 175.8 provides exceptions from the HMR for certain equipment and materials used by aircraft operators that are regulated as hazardous materials. PHMSA proposes to amend paragraph (b) to provide a new exception for alcohol-based hand sanitizers and alcohol-based cleaning products carried aboard an aircraft by the operator for the purposes of passenger and crew hygiene. The proposed changes align the HMR with amendments made to the ICAO Technical Instructions, as amended in Addendum 1, on December 31, 2020, in response to the COVID–19 public health emergency. The intent of this amendment is to ensure that air operators are able to equip aircraft with alcohol-based sanitizers for use in the cabin for the purposes of passenger and crew hygiene without the regulatory burden of documentation and packaging otherwise associated with the transport of Class 3 flammable liquid hazardous materials. This proposal is beneficial to public interest given that it assists in limiting the spread and contraction of viruses such as COVID–19 without an anticipated decrease in transportation safety.

Section 175.9

Section 175.9 provides exceptions from Subchapter C of the HMR for certain special aircraft operations. Paragraph (b)(5) excepts organ preservation units necessary to protect human organs when carried in the aircraft cabin, provided certain conditions are met. As written, the current provisions only allow for devices powered by non-spillable batteries. However, the technology for powering such devices has evolved to include lithium batteries. To maintain consistency with the ICAO Technical Instructions, PHMSA proposes to add provisions for organ preservation units powered by lithium batteries (both metal and ion). Specifically, lithium metal or lithium ion cells or batteries must meet the general provisions prescribed in § 173.185(a) and spare lithium batteries would need to be individually protected to prevent short circuits when not in use to ensure safe transport and use of this exception. PHMSA expects this proposed HMR amendment will promote broader use of the exception for organ preservation units. Finally, it facilitates international movement of these devices by harmonizing with ICAO Technical Instructions which allow lithium batteries as a power sources for the devices while still ensuring safe transport.

Section 175.10

Section 175.10 specifies the conditions under which passengers, crew members or an operator may carry hazardous materials aboard a passenger aircraft. PHMSA proposes to amend paragraph (a)(1)(ii) of this section to permit Division 2.2 aerosols with no subsidiary hazard in addition to those that are not for medicinal or personal toiletry use as carry-on items (*see* § 175.10(a)(1)(i) in the HMR for provisions pertaining to non-radioactive medicinal and toilet articles). Currently, these materials (2.2 non-flammable gases) are only authorized in checked baggage. Additionally, PHMSA proposes to add a conditional requirement to new paragraph (a)(1)(iv) that the material in the Division 2.2 aerosols must not cause extreme annoyance or discomfort, in the event of an unintentional release, to crew members so as to inhibit performance of their assigned duties. The proposed changes align the HMR with amendments made to the ICAO Technical Instructions. In addition, these proposed changes are consistent with special permit DOT–SP 21021,[26] which was issued in response to the COVID–19 public health emergency to ensure flight crews could carry-on sanitizing aerosol products that may not have been considered as items for personal use. PHMSA has determined that this proposal is beneficial and in the public interest because it expands the use of the passenger and crewmember exceptions applicable to Division 2.2 aerosols by allowing such aerosols in carry-on baggage. This is particularly beneficial for sanitizers to aid in preventing the potential spread and contraction of viruses such as COVID–19 without an anticipated decrease in transportation safety.[27]

Section 175.10(a)(11) outlines the provisions for self-inflating personal

[26] DOT Special Permit 21021 (May 29, 2020), *https://www.phmsa.dot.gov/approvals-and-permits/hazmat/file-serve/offer/SP21021.pdf/2020034999/SP21021.*

[27] PHMSA notes that, apart from the revisions to § 175.10 of the HMR proposed here, transportation of aerosols in carry-on baggage and for any other purpose may be subject to limitations imposed by other regulators, including (but not limited to) the Transportation Security Administration.

safety devices and currently allows for the carriage of only one device with the approval of the aircraft operator. PHMSA proposes to increase the allowance from a single self-inflating personal safety device to two devices in response to an increase in passengers seeking to travel with their own devices. PHMSA clarifies that each self-inflating safety device may be fitted with no more than two small gas cartridges and that an additional two spare cartridges per device may be carried with the devices. In addition, PHMSA proposes to add the text ''intended to be worn by a person'' to specify that this provision is only intended for self-inflating personal safety devices that are designed to be worn by a person and does not apply to other types of safety devices. PHMSA expects this proposal will promote use of the self-inflating personal safety devices. Specifically, it provides passengers more flexibility when carrying self-inflating devices such as life-jackets, motorcycle jackets and horse riding vests. Further, PHMSA does not expect transportation safety will be compromised as these devices are designed with multiple initiation processes required for inflation to occur, thereby inhibiting unintentional activation. PHMSA has not identified any incidents involving unintentional activation of self-inflating personal safety devices inflight.

Section 175.75

Section 175.75 provides quantity limitations and stowage location requirements for air transportation. During internal review of the stowage requirements found in § 175.75, PHMSA and FAA concluded that several editorial revisions would increase the clarity of this section, and therefore enhance the safety or hazardous materials transported by aircraft. These proposed revisions do not substantively change current requirements of this section. They are intended only for purposes of increasing the understanding of air stowage requirements. The proposed editorial revisions to this section are discussed as follows:

- The current structure for paragraph (b) outlines three distinct stowage requirements in a single paragraph. To increase readability, PHMSA proposes to revise paragraph (b) by separating the three requirements into three subparagraphs each addressing a single stowage requirement.
- Insertion of an additional distinct sentence in the aforementioned proposed revised format of paragraph (b) to highlight the existing requirement in § 175.75 that all packages displaying a Cargo Aircraft Only label in accordance with § 172.402(c) must be loaded in an accessible manner (*i.e.,* a manner accessible to the cargo aircraft's crew or other authorized person). This longstanding requirement of the HMR is buried in the Quantity and Loading Table of paragraph (f). Air carrier stakeholders have suggested to PHMSA and FAA that the stowage requirements would be clarified if this important requirement were explicitly stated in § 175.75. Therefore, PHMSA proposes to specify this requirement in the stowage requirements as subparagraph (b)(4).
- Correction of an inadvertent error in the Quantity and Loading Table of paragraph (f), Note 1, that removed Division 6.2 material from eligibility for exception from the inaccessible loading restriction for Cargo Aircraft Only packages. This inadvertent error occurred in a corrections and response to administrative appeals final rule.[28] PHMSA revised requirements for Division 6.1 material among the list of eligible materials but in doing so inadvertently removed reference to Division 6.2 material. This change was not intended and; therefore, PHMSA proposes to reinsert reference to Division 6.2 material in Note 1.
- Insertion of an Oxford comma in the Quantity and Loading Table of paragraph (f), Note 1, item d. to more clearly indicate that Class 9 material, limited quantity material, and excepted quantity material all qualify for this provision. PHMSA and FAA are aware that some air carrier stakeholders have expressed confusion with the language in Note 1, item d., and acknowledge that the omission of a comma between ''Limited Quantity'' and ''Excepted Quantity'' may create the impression that only Class 9 limited or excepted quantity material are eligible for this exception. Note 1, item d. has always included all eligible hazard classes of limited quantity and excepted quantity material.

E. Part 176

Section 176.84

Part 176 contains requirements associated with transportation of hazardous materials by vessel. Section 176.84 prescribes the meanings of numbered or alphanumeric vessel transport stowage provisions that are assigned to hazardous materials and which are listed in column (10B) of the HMT. The provisions in § 176.84 are separated into general stowage provisions, which are defined in the ''table of provisions'' in paragraph (b), and the stowage notes unique to vessel shipments of Class 1 explosives, which are defined in the table in paragraph (c)(2). PHMSA has determined that the following proposed revisions will improve safety by ensuring that hazardous materials are properly stowed on vessels.

First, PHMSA proposes to revise stowage provision 4 in paragraph (b). Existing stowage provision 4 directs shippers to ''Stow 'Separated from' liquid organic materials.'' PHMSA proposes to modify the language in this code for clarity and to facilitate proper stowage. In a proposal submitted to the IMO, it was noted that many liquid organic materials are not dangerous goods and that it is difficult to identify these commodities for purposes of segregation.[29] Furthermore, the distinction between organic and inorganic substances cannot be easily discovered by persons responsible for the packing of a cargo transport unit. PHMSA has determined that requiring a determination as to whether a cargo is an organic or inorganic substance should be amended with a more readily understood requirement to characterize these items as combustible materials. This clarification would aid in ensuring safe segregation of materials assigned this stowage provision. Therefore, PHMSA proposes to amend stowage provision 4 to require materials assigned this code to ''not be stowed'' with combustible materials in the same cargo transport unit.

Second, PHMSA proposes to add new stowage provisions under codes 155, 156, and 157:

- New stowage code 155 is assigned to ''UN2814, Infectious substances, affecting humans'' and ''UN2900, Infectious substances, affecting animals only.'' This new stowage provision advises vessel carriers to avoid handling of an infectious package or keep handling of the package to a minimum and to inform the appropriate public health authority or veterinary authority where persons or animals may have been exposed to the package contents. This provision may improve safety for packages that may be used to transport COVID–19 related material. Stowage code 155 would apply particularly to any cargo offered in the traditional manner (*i.e.,* break-bulk). The proposed stowage code advises cargo handling personnel to limit interaction with packages of Division 6.2 materials to a minimum. The requirement to notify the appropriate public health authority or

[28] 78 FR 65453 (Oct. 31, 2013). This rule affected rules HM–215K, HM–215L, HM218G, and HM–219.

[29] International Maritime Organization Sub-Committee on the Carriage of Cargoes and Containers CCC 5/6/3.

veterinary authority where persons or animals may have been exposed to package contents is intended to ensure appropriate medical attention can be provided in the event of an exposure and any potential further contamination as a result of contact with the material is controlled. This new stowage code serves to ensure vessel carriers are aware of the potential hazard of these packages and to ensure they follow all protocols related to handling such packages.

- New stowage code 156 is assigned to ''UN3090, Lithium metal batteries,'' ''UN3091, Lithium metal batteries contained in equipment, *or* Lithium metal batteries packed with equipment,'' ''UN3480, Lithium ion batteries,'' and ''UN3481, Lithium ion batteries contained in equipment *or* Lithium ion batteries packed with equipment.'' This new stowage provision would require damaged or defective lithium batteries that are offered for transportation in accordance with § 173.185(f) or being transported for purposes of disposal or recycling in accordance with proposed § 172.203(i)(4), to be stowed in accordance with stowage category C. Stowage category C requires on deck stowage instead of the currently authorized on deck or under deck stowage of these types of lithium batteries. This proposal harmonizes HMR stowage requirements for lithium batteries that are damaged/defective and those that are being offered for disposal or recycling with the IMDG Code stowage requirements. This proposed stowage change to require on deck stowage would allow for more easily identifiable and effective response actions in the event of a fire involving lithium batteries onboard a vessel. PHMSA expects that these revised shipping requirements will contribute to the safe transportation of increased volumes of lithium batteries anticipated as a result of the increased use of those technologies in the transportation and other economic sectors.
- New stowage code 157 is assigned to the five HMR UN1950 aerosol entries and the three UN2037 receptacles; small, containing gas or gas cartridges entries. This new stowage provision would require aerosols and receptacles for gas transported for recycling or disposal to be stowed in accordance with vessel stowage category C and clear of living quarters. The HMR does not currently contain separate stowage provisions for aerosols or receptacles small containing gas that are being offered for disposal or recycling. These materials are assigned stowage category A if they are new and never used, or if they are offered for transportation. The change from stowage category A to category C means these materials being offered for recycling or disposal would be required to be stowed ''on deck only'' instead of the currently authorized ''on deck or under deck.'' This proposed change in stowage requirements for aerosols and receptacles small containing gas provides more restrictive stowage requirements for these articles that have been utilized and are being offered for transportation under generally more relaxed packaging standards than if they were being offered as new articles. This more restrictive stowage requirement would more easily facilitate a response effort should one be required aboard a vessel.

Third, in the paragraph (c)(2) table, PHMSA proposes amending stowage provisions for notes 19E and 22E. When assigned to an HMT entry, these existing notes require separation ''away from'' explosives containing chlorates or perchlorates and ''away from'' ammonium compounds and explosives containing ammonium compounds or salts. PHMSA proposes to amend these stowage provisions to specify a more demanding ''separated from'' stowage requirement. The terms ''away from'' and ''separated from'' have various meanings based on the type of shipment (*e.g.,* break-bulk, shipments within a container, or container to container). Generally speaking, the term ''separated from'' requires more stringent segregation. As an example, for segregation from one container to another if ''away from'' applies, the containers cannot be stowed one on top of the other. If ''separated from'' is assigned, the containers cannot be stowed in the same vertical line. For more information on the applicability of these terms please, *see* § 176.83 of the HMR. This proposal also harmonizes the HMR with the IMDG Code and aligns with HMR stowage requirements for shipments of ammonium nitrates, chlorates, and perchlorates. These proposed changes provide additional segregation between loads of incompatible materials and decrease the likelihood of a reaction if a release were to occur onboard a vessel.

F. Part 178

Section 178.3

Part 178 contains specifications for packagings. Section 178.3 prescribes marking requirements for specification packagings. PHMSA proposes to amend paragraph (a)(4) to clarify the marking size requirement for packagings transporting solids with a 30 kg (66 pounds) maximum net mass. Additionally, PHMSA is proposing to amend the exception for reducing the size of the required package marking applicable to packagings with a capacity of 5 L or less, or of 5 kg maximum net mass. The existing HMR text only refers to capacity, and the proposed use of ''maximum net mass'' is a more appropriate standard for packagings intended for solids. This editorial change is intended to reduce confusion over the application of the reduce size marking requirements as they apply to packagings used for solid materials. The quantity limit should be based on the net amount of solid material and not the capacity of the packaging the material is placed in. This clarification is consistent with similar provisions for solids (net mass) and liquids (capacity) throughout the HMR. Ensuring the appropriate application of the reduced size marking allowance provides consistency across persons using the reduce sized marking and therefore, improves safety of transport.

Section 178.71

Section 178.71 prescribes specifications for UN pressure receptacles. To maintain consistency with the UN Model Regulations, PHMSA proposes to update four ISO documents incorporated by reference in this section.

First, PHMSA proposes to amend paragraph (d)(2), which outlines the configuration and design requirements for a cylinder's service equipment, and includes items that prevent the release of the pressure receptacle contents during handling and transportation. Currently this paragraph requires that valves for service equipment must conform to the 1999, 2006 and 2014 editions of ISO 10297. ISO 10297 specifies design, type testing and marking requirements for cylinder valves fitted to refillable transportable gas cylinders, main valves for cylinder bundles, and cylinder valves or main valves with an integrated pressure regulator (VIPR), which convey compressed, liquefied, or dissolved gases. PHMSA proposes to modify the valve conformance requirements in this paragraph such that when the use of a valve is prescribed, the valve must conform to the requirements of ISO 10297:2014 and the supplemental amendment, ISO 10297:2014/Amd 1:2017. ISO 10297:2014/Amd 1:2017 corrects errors in ISO 10297:2014 and also includes modifications for valves for tubes and pressure drums. PHMSA has reviewed this supplemental amendment as part of its regular participation in the review of amendments proposed for the UN

Model Regulations and does not expect any degradation of safety standards in association with the use of these two documents. Additionally, PHMSA proposes to add an end date of December 31, 2022 to the authorization to use ISO 10297:2014 when not used in conjunction with the supplemental 2017 amendment, ISO 10297:2014/Amd 1:2017.

Also in this paragraph, PHMSA proposes to amend references to ISO 14246, ''*Gas cylinders—Cylinder valves—Manufacturing tests and examinations.*'' Currently paragraph (d)(2) states that valves must be initially inspected and tested in accordance with ISO 14246:2014(E), ''*Gas cylinders—Cylinder valves—Manufacturing tests and examinations.*'' However, in 2017, ISO published ISO 14246:2014/Amd 1:2017, ''*Gas cylinders—Cylinder valves—Manufacturing tests and examinations,*'' which provides supplemental amendments pertaining to specific pressures to be used in the pressure test and leakproofness test of acetylene valves. PHMSA proposes to require the use of this amended document in § 178.71 to require acetylene valve users to use the updated values in ISO 14246:2014/Amd 1:2017. PHMSA has reviewed these documents as part its regular participation in the review of amendments proposed for the UN Model Regulations and does not expect any degradation of safety standards in association with the use of these two documents. PHMSA also proposes to add analogous compliance requirements for self-closing valves to paragraph (d)(2). ISO 17879:2017—Gas cylinders—Self-closing cylinder valves—Specification and type testing, specifies the design, type testing, marking, and manufacturing tests and examinations requirements for self-closing cylinder valves intended to be fitted to refillable transportable gas cylinders which convey compressed, liquefied, or dissolved gases.

Additionally, PHMSA proposes to amend paragraph (l)(1), which specifies the design and construction requirements for UN composite cylinders and tubes. The proposed change would add a new subparagraph (iv) to reference ISO 11119–4:2016, ''*Gas cylinders—Refillable composite gas cylinders—Design, construction and testing—Part 4: Fully wrapped fibre reinforced composite gas cylinders up to 150 L with load-sharing welded metallic liners.*'' This document, which was adopted in the UN Model Regulations, specifies requirements for composite gas cylinders with load-sharing welded liners between 0.5 L and 150 L water capacity and a maximum test pressure of 450 bar for the storage and transportation of compressed or liquefied gases. PHMSA incorporates by reference the first three parts of the ISO 11119 series, which cover various designs of composite cylinders with a seamless liner. This fourth part defines the requirements for design, construction, and testing of composite cylinders with a welded metallic liner. Incorporating this ISO standard would eliminate the need and associated burden for manufacturers to request a special permit to construct fully wrapped fiber reinforced composite gas cylinders with load-sharing welded steel liners.[30]

Finally, PHMSA proposes to amend paragraph (o)(1) of this section to update the reference to ISO 11114–1:2012(E), ''*Gas cylinders—Compatibility of cylinder and valve materials with gas contents—Part 1: Metallic materials.*'' ISO 11114–1:2012 provides requirements for the selection of safe combinations of metallic cylinder and valve materials and cylinder gas content. PHMSA proposes to amend the compatibility requirements to also require compatibility with the 2017 supplement to ISO 11114–1:2012, (ISO 11114–1:2012/Amd 1:2017) for material compatibility requirements. Permitting the use of this document would allow shippers to safely transport a wider variety of gases in newly developed types of metallic cylinders and valves. PHMSA has reviewed this document as part of its regular participation in the review of amendments proposed for the 21st revised edition of the UN Model Regulations and expects that adding it to the HMR will enhance the current safety of hazardous materials in transportation, in addition to harmonizing the HMR with international requirements. This amendment provides compatibility requirements for the selection of combinations of metallic cylinder and valve materials for use with gas or gas mixtures. In the interest of providing uniformity with regard to reference standards used domestically and internationally, PHMSA proposes to revise the compatibility requirements to also refer to the 2017 amendment of this ISO standard. This 2017 supplemental amendment provides more explicit instructions on the permissible concentrations of certain gases. PHMSA has determined that permitting the use of this updated document would allow safe transport of a wider variety of gases in newly developed types of metallic cylinders and valves without compromising safety.

Section 178.75

Section 178.75 prescribes specifications for multiple-element gas containers (MEGCs), which are assemblies of UN cylinders, tubes, or bundles of cylinders interconnected by a manifold and assembled within a framework. The term includes all service equipment and structural equipment necessary for the transport of gases including hazardous materials marked as Division 2.1 (such as compressed hydrogen). PHMSA proposes to revise paragraph (d) to permit explicitly the use of composite construction, which is allowed for other pressure vessels (*i.e.,* cylinders), rather than limiting authorized material of construction for an MEGC to seamless steel as in the current HMR. Composite cylinders are constructed of carbon, fiberglass, or a hybrid composite with high-strength aluminum liners. When the specifications for MEGCs were originally created, there were no standards for composite pressure receptacles in the international transport standards or the HMR. In the decades since standards for the use of ISO composite pressure receptacles have since been developed and authorized. International standards did not consider a corresponding allowance to use these composite pressure receptacles as elements of MEGCs when the specifications were originally adopted. The 21st revised edition of the UN Model Regulations have since been updated to include such an authorization and PHMSA proposes to similarly allow the use of composite pressure receptacles in MEGCs.

To that end, PHMSA is adding references to the following ISO design standards for composite MEGCs: ISO 11119–1:2012(E), ''*Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 1: Hoop wrapped fibre reinforced composite gas cylinders and tubes up to 450 L,*'' ISO 11119–2:2012(E), ''*Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 2: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 l with load-sharing metal liners,*'' and ISO 11119–3:2013(E), ''*Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 3: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 L with non-load-sharing metallic or non-metallic liners.*'' The 19th revised edition of the Model Regulations

[30] See, *e.g.,* Special Permit 14457 (Dec. 16, 2019), which served as the technical basis for the development of ISO 11119–4:2016.

amended the definition of a tube to include composite construction and this change also included standards for the construction of composite tubes. Due to the lack of any technical or safety concerns, the 21st revised edition of the UN Model Regulations included an amendment to the definition of MEGCs which provides for composite construction, in addition to stainless steel construction and were not intended to exclude MEGCs. With these proposed revisions, PHMSA expects that this will provide flexibility and opportunities for cost savings for manufacturers of MEGCs while not compromising safety. Additionally, authorizing alternative MEGC packaging construction would provide flexibility in packaging selection for shippers that could facilitate the transportation of hydrogen or other gases that may be used to support clean energy alternatives.

Section 178.275

Section 178.275 outlines requirements and definitions pertaining to UN portable tanks intended for the transportation of liquid and solid hazardous materials. Paragraph (i) specifies the capacity requirements for pressure relief devices that must be on these portable tanks. The HMR specify a formula that can be used to determine the required total capacity for these pressure relief devices. The formula defines variable ''U'' as ''thermal conductance of the insulation.'' Discussions held by the UNSCOE [31] led to the conclusion that usage of the phrase ''thermal conductance'' associated with the variable ''U'' in this formula is misleading because, in general scientific usage, ''conductance'' is expressed in ''kW. K^{-1}'', and is not a surface factor. Leaving the formula description as it currently appears in the HMR may cause confusion for those who use it given that the correct term for the unit given is ''heat transfer coefficient.'' PHMSA proposes to replace the phrase ''thermal conductance'' with ''heat transfer coefficient'' so that ''U'' is defined as ''heat transfer coefficient of the insulation'' which is more appropriate for what is being calculated and is consistent with use of the formula in the UN Model Regulations. This would ensure proper calculation of the total capacity for the pressure relief devices for these portable tanks.

[31] ''Use of the terms ''conductivity'' and ''conductance'' in chapter 6.7'' *https://www.unece.org/fileadmin/DAM/trans/doc/2018/dgac10c3/ST-SG-AC.10-C.3-2018-56e.pdf.*

Section 178.505

Section 178.505 prescribes specifications for aluminum drums and paragraph (b) prescribes the construction requirements for those aluminum drums. PHMSA proposes to add a new paragraph (b)(6) to specify conditions when internal protective coatings or treatments must be applied to these drums—consistent with requirements for other metal packagings, such as steel drums, as provided in § 178.504(b)(7) and aluminum and steel jerricans in § 178.511(b)(5). PHMSA agrees that, since metals are susceptible to corrosion from exposure to certain chemicals (*e.g.,* sodium hydroxide solution, or alkaline liquids), measures need to be taken to ensure the packaging is compatible with the contents. Further, the general requirements for packagings in the HMR include a compatibility requirement such that even though certain packagings are specified in the HMR, it is, nevertheless, the responsibility of the person offering a hazardous material for transportation to ensure that such packagings are compatible with their contents. This applies particularly to corrosivity, permeability, softening, premature aging, and embrittlement (*see* § 173.24(e)). Therefore, PHMSA proposes to add conditions when internal protective coatings or treatments must be applied to metal drums that are not constructed of steel or aluminum. This addition is consistent with international standards covering UN packages 1B1 and 1B2 aluminum drums. PHMSA expects that this proposal will improve consistency with regard to safety standards (*e.g.,* packaging integrity) across similar packagings.

Section 178.506

Section 178.506 prescribes specifications for metal drums that are not made of steel or aluminum, and paragraph (b) prescribes the construction requirements for these drums. PHMSA proposes to add a new paragraph (b)(6) to specify conditions when internal protective coatings or treatments must be applied to metal drums that are not constructed of steel or aluminum consistent with this requirement for specifications of other metal packagings. This new requirement would mirror the requirements to apply suitable internal protective coatings or treatments in § 178.504(b)(7) for steel drums and § 178.511(b)(5) for aluminum and steel jerricans. Since metals are susceptible to corrosion from exposure to certain chemicals (*e.g.,* sodium hydroxide solution, or alkaline liquids), PHMSA has determined measures need to be taken to ensure the packaging is compatible with the contents. Further, the general requirements for packagings in the HMR include a compatibility requirement such that even though certain packagings are specified in the HMR, it is, nevertheless, the responsibility of the person offering a hazardous material for transportation to ensure that such packagings are compatible with their contents. This applies particularly to corrosivity, permeability, softening, premature aging, and embrittlement (*see* § 173.24(e)). However, PHMSA expects that codifying specific conditions in which internal protective coatings or treatments must be applied to metal drums that are not constructed of steel or aluminum will provide needed consistency by providing uniform safety standards for similar packagings across the HMR and ensure safe packaging and transport within these metal drums.

Section 178.609

Section 178.609 provides test requirements for packagings for infectious substances. PHMSA proposes an editorial amendment in paragraph (g) to clarify the performance testing requirements for infectious substances packaging. Specifically, PHMSA proposes to amend paragraph (g) to clarify that only one additional test is required for packages for infectious substances containing dry ice. The 21st revised edition of the UN Model Regulations made a similar clarification regarding the testing requirements for these packagings and PHMSA has determined that the current HMR also contains conflicting language in § 178.609. Currently paragraph (g), which specifies additional testing requirement for packagings intended to contain dry ice, may be interpreted to either require five additional samples dropped once each, or one additional sample packaging dropped five times. However, requiring one sample to be dropped five times in one orientation would not be consistent with drop testing requirements applicable to other packagings. PHMSA proposes to amend paragraph (g) to clearly state only one additional sample must be dropped in a single orientation; namely, the orientation the tester determines would be most likely to result in failure of the packaging in light of the properties of the packaging and the test surface. PHMSA does not consider this change to be technical, but editorial, with the intent of conveying the testing protocol, as it was designed, more clearly. For that reason, PHMSA does not expect any change in level of safety than what

was originally intended. This change would simply result in a package being tested in line with the design of the original packaging test method.

Section 178.703

Section 178.703 outlines the marking requirements for intermediate bulk containers (IBCs). PHMSA proposes to amend two marking requirements in this Section.

In paragraph (b)(6), which specifies additional marking requirements for composite IBCs, the amendment would specify that the required markings on inner receptacles of these packagings must either be readily visible while in the outer casing or duplicated on the outer casing to facilitate inspection verifying compliance with the applicable package performance standard marking requirements.

In paragraph (b)(7), which outlines the marking requirements for IBCs that are designed to be stacked, PHMSA proposes to revise language in paragraph (b)(7)(iv) to clarify the maximum stacking load requirements pertaining to each marking requirement. Currently paragraph (b)(7)(iv) indicates that the maximum permitted stacking load ''applicable when the IBC is in use,'' must be displayed. PHMSA has determined that this phrase may be misinterpreted to mean that the stacking load applies only to transportation, leading to these packagings being stacked inappropriately when not in transportation, such as in warehouse storage. PHMSA proposes to remove the words ''applicable when the IBC is in use,'' to clarify that stacking loads should never be exceeded whether in transportation or in storage. PHMSA has determined that clarifying the regulatory text regarding the proper use of these packagings will provide an enhanced level of safety both during transport and during storage.

Section 178.705

Section 178.705 prescribes specifications for metal IBCs. Paragraph (c) outlines construction requirements and paragraph (c)(1)(iv) specifies the minimum wall thickness requirements for metal IBCs. Metal IBCs are currently the only type of IBCs for which there are minimum wall thickness requirements, which is likely a holdover from regulations for cubical tank containers, from which the metal IBCs were once derived.[32] In contrast, because of performance testing requirements' (*i.e.,* drop, stack and vibration) ability to demonstrate the integrity of the package, the 21st revised edition of the UN Model Regulations include an amendment which now provides that minimum wall thickness requirements apply only to metal IBCs that have a capacity of more than 1500 L (396 gallons), while metal IBCs with a volume of 1500 L or less are no longer subject to previous prescriptive minimum wall thickness requirements.

Therefore, PHMSA proposes to revise the minimum wall thickness requirements for metal IBCs with a volume of 1500 L or less to provide additional design and construction flexibility with regards to IBC designs. This amendment would harmonize with the 21st revised edition of the UN Model Regulations. PHMSA solicits comments on the following safety and economic impacts regarding this proposed amendment:

- Does the reliance on the performance testing system and the elimination of a prescriptive minimum wall thickness for metal IBC's with a capacity of 1500 L or less present an unnecessary safety risk (*e.g.,* reduced corrosion protection, ability to prevent punctures or ruptures resulting from conditions normally incident to transportation)? Explain.
- Do manufacturers primarily use a reference steel or are other steels commonly used? If so, which ones?
- If the minimum thickness requirement were removed for metal IBCs with a capacity of 1500 L or less, what calculations will the manufacturers use to determine the design minimum thickness for the IBCs made from the reference steel?
- What is an approximate number of metal IBC design types and the number of IBCs manufactured in accordance with these design types that could reasonably expected to be in transportation?
- What is the expected cost savings from the removal of a minimum wall thickness requirement for IBCs at or below the proposed 1500 L capacity?
- What are the expected impacts of not harmonizing HMR requirements for metal IBCs with a capacity of 1500 L or less?

As an alternative to the proposed rule, PHMSA is also considering a change to § 171.23, which prescribes requirements for specific materials and packagings transported under incorporated international standards to prohibit transportation or offering for transportation of metal IBCs with a capacity of 1500 L or less when that transportation is made in accordance with the ICAO Technical Instructions, IMDG Code, Transport Canada TDG Regulations, or the IAEA Regulations. PHMSA also solicits comments on that potential prohibition.

G. Part 180

Section 180.207

Section 180.207 outlines the requirements for the requalification of UN pressure receptacles. Paragraph (d) specifies the requalification procedures for various types of UN cylinders but, consistent with historical approach of the UN Model Regulations, does not include any procedures for the periodic inspection of UN cylinder bundles. However, the 21st revised edition of the UN Model Regulations addressed that gap by adding a new reference document entitled ISO 20475: 2018 ''Gas cylinders—Cylinder bundles—Periodic inspection and testing.'' ISO 20475 provides detailed procedures for maintenance and periodic inspection of cylinder bundles.

PHMSA proposes to add paragraph (d)(7) to reference ISO 20475:2018, ''*Gas cylinders—Cylinder bundles—Periodic inspection and testing*'' to provide a requalification standard for UN cylinder bundles because requalification procedures may differ for bundles of cylinders versus individual cylinders. This document was developed based on the need for a standard specific to cylinder bundles which would allow them to be reintroduced into service for an extended period of time. PHMSA expects that incorporating by reference a safety standard for requalification will reduce business costs and environmental effects by allowing existing cylinders to be reintroduced into service for continued use. As a participant on the UNSCOE, this standard was reviewed by PHMSA and other international bodies for inclusion in the UN Model Regulations based on its need and safety merit. Incorporating by reference ISO 20475 in the HMR is necessary, not only for international harmonization, but also to address the lack of such a standard in the HMR. Additionally, PHMSA proposes to remove a reference to the outdated, third edition of ISO 10462(E), ''*Gas cylinders—Transportable cylinders for dissolved acetylene—Periodic inspection and maintenance*'' in paragraph (d)(3) used for the requalification of dissolved acetylene cylinders. Requalification is required in accordance with the third edition of ISO 10462:2013(E); however, requalification

[32] Stainless Steel Container Association, Proposal on Minimum Wall Thickness for Metal IBCs Submitted to the Sub-Committee of Experts on the Transport of Dangerous Goods During the 54th Session (Sep. 7, 2018), *https://www.unece.org/fileadmin/DAM/trans/doc/2018/dgac10c3/ST-SG-AC.10-C.3-2018-96e.pdf.*

in accordance with the second edition was authorized until December 31, 2018 in 180.207(d)(3). This date has since passed and, therefore, PHMSA proposes removing reference from this Section of the HMR. Consistent with this revision, the incorporation by reference of the second edition is removed from § 171.7(w) of the HMR. Additionally, acetylene cylinders requalified in accordance with the second edition before December 31, 2018, must be subsequently requalified in accordance with referenced third edition. PHMSA expects that these amendments will enhance safety by providing cylinder users with the necessary guidelines for the continued use of UN cylinders.

The proposed regulatory text references ISO 10462:2013(E), which was previously approved for incorporation by reference in this section, and no changes are proposed for this standard.

VI. Regulatory Analyses and Notices

A. Statutory/Legal Authority for This Rulemaking

This NPRM is published under the authority of Federal hazardous materials transportation law. Section 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. Additionally, 49 U.S.C. 5120 authorizes the Secretary to consult with interested international authorities to ensure that, to the extent practicable, regulations governing the transportation of hazardous materials in commerce are consistent with the standards adopted by international authorities. The Secretary has delegated the authority granted in the Federal hazardous materials transportation law to the PHMSA Administrator at 49 CFR 1.97(b).

B. Executive Order 12866 and DOT Regulatory Policies and Procedures

Executive Order 12866 (''Regulatory Planning and Review'') [33] requires agencies to regulate in the ''most cost-effective manner,'' to make a ''reasoned determination that the benefits of the intended regulation justify its costs,'' and to develop regulations that ''impose the least burden on society.'' Similarly, DOT Order 2100.6A (''Policies and Procedures for Rulemakings'') requires that PHMSA rulemaking actions include ''an assessment of the potential benefits, costs, and other important impacts of the regulatory action,'' and (to the extent practicable) the benefits, costs, and any significant distributional impacts, including any environmental impacts.

Executive Order 12866 and DOT Order 2100.6A require that PHMSA submit ''significant regulatory actions'' to the Office of Management and Budget (OMB) for review. This rulemaking is not considered a significant regulatory action under section 3(f) of Executive Order 12866 and, therefore, was not formally reviewed by OMB. This rulemaking is also not considered a significant rule under DOT Order 2100.6A.

The following is a brief summary of costs, savings and net benefits of some of the amendments proposed in this notice. PHMSA has developed a more detailed analysis of these costs and benefits in the preliminary regulatory impact analysis (PRIA), a copy of which has been placed in the docket. PHMSA seeks public comment on its proposed revisions to the HMR and the preliminary cost and benefit analyses in the PRIA.

PHMSA proposes to amend the HMR to maintain alignment with international regulations and standards, thereby maintaining the high safety standard currently achieved under the HMR, facilitating the safe transportation of critical vaccines and other medical materials associated with the response to the COVID–19 public health emergency, and aligning HMR requirements with anticipated increases in the volume of lithium batteries transported in interstate commerce from electrification of the transportation and other economic sectors. PHMSA examined the likely impacts of finalizing and implementing the provisions proposed in the NPRM in order to assess the benefits and costs of these amendments. This analysis allowed PHMSA to quantitatively assess the material effects of three of the proposed amendments in the rulemaking. The effects of six remaining proposed amendments are not quantified but are assessed qualitatively.

PHMSA estimates that the annualized quantified net cost savings of this rulemaking, using a 7 percent discount rate, are approximately $23.5 to $28.5 million per year. The following table presents a summary of the monetized impacts that these proposed changes may have upon codification.

[33] 58 FR 51735 (Oct. 4, 1993).

SUMMARY TABLE OF NET REGULATORY COST SAVINGS, DISCOUNT RATE = 7%, 2022–2031
[$2019]

Rule amendments	10 year costs		10 year cost savings		10 year net cost savings		Annual costs		Annual cost savings		Annual net cost savings	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
Amendment 2: Electric and Electronic Detonators	$618,355	$811,662	0	0	($618,355)	($811,662)	$88,040	$115,562	0	0	($88,040)	($115,562)
Amendment 5: Lithium Battery Mark	0	0	159,315,195	173,458,922	159,315,195	173,458,922	0	0	22,682,900	24,696,648	22,682,900	24,696,648
Amendment 7: Data Loggers	0	0	6,257,717	27,622,576	6,257,717	27,622,576	0	0	890,958	3,932,833	890,958	3,932,833
Total	618,355	811,662	165,572,913	201,081,499	164,954,558	200,269,837	88,040	115,562	23,573,858	28,629,482	23,485,818	28,513,919

The safety and environmental benefits of the proposed rule have not been quantified. However, PHMSA expects the proposed amendments would help to improve public safety and reduce the risk of environmental harm by maintaining consistency between these international regulations and the HMR. Harmonization of the HMR with international consensus standards as proposed could reduce delays and interruptions of hazardous materials during transportation, thereby lowering GHG emissions and safety risks to communities (including minority, low-income, underserved, and other disadvantaged populations and communities) in the vicinity of interim storage sites and transportation arteries and hubs.

C. Executive Order 13132

PHMSA analyzed this rulemaking in accordance with the principles and criteria contained in Executive Order 13132 (''Federalism'') [34] and the Presidential memorandum (''Preemption'') that was published in the **Federal Register** on May 22, 2009.[35] Executive Order 13132 requires agencies to assure meaningful and timely input by State and local officials in the development of regulatory policies that may 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.''

The rulemaking may preempt State and local, and Native American 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. The Federal hazardous materials transportation law contains an express preemption provision at 49 U.S.C. 5125(b) that preempts State, local, and Tribal requirements on certain covered subjects, unless the non-Federal requirements are ''substantively the same'' as the Federal requirements, including the following:

(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 proposed rule addresses covered subject items (1), (2), (3), (4), and (5) above and would preempt State, local, and Tribal requirements not meeting the ''substantively the same'' standard. In this instance, the preemptive effect of the proposed rule is limited to the minimum level necessary to achieve the objectives of the hazardous materials transportation law under which the final rule is promulgated. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

D. Executive Order 13175

PHMSA analyzed this rulemaking in accordance with the principles and criteria contained in Executive Order 13175 (''Consultation and Coordination with Indian Tribal Governments'') [36] and DOT Order 5301.1 (''Department of Transportation Policies, Programs, and Procedures Affecting American Indians, Alaska Natives, and Tribes''). Executive Order 13175 and DOT Order 5301.1 require DOT Operating Administrations to assure meaningful and timely input from Native American Tribal government representatives in the development of rules that significantly or uniquely affect Tribal communities by imposing ''substantial direct compliance costs'' or ''substantial direct effects'' on such communities or the relationship and distribution of power between the Federal government and Native American Tribes.

PHMSA assessed the impact of the rulemaking and determined that it would not significantly or uniquely affect Tribal communities or Native American Tribal governments. The changes to the HMR proposed in this NPRM are facially neutral and would have broad, national scope; PHMSA, therefore, expects this rulemaking not to significantly or uniquely affect Tribal communities, much less impose substantial compliance costs on Native American Tribal governments or mandate Tribal action. And because PHMSA expects the rulemaking would not adversely affect the safe transportation of hazardous materials generally, PHMSA does not expect it would entail disproportionately high adverse risks for Tribal communities. For these reasons, PHMSA does not expect the funding and consultation requirements of Executive Order 13175 and DOT Order 5301.1 to apply. However, PHMSA solicits comment from Native American Tribal governments and communities on potential impacts of the proposed rulemaking.

E. Regulatory Flexibility Act and Executive Order 13272

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires agencies to review proposed regulations to assess their impact on small entities, unless the agency head certifies that a proposed rulemaking will not have a significant economic impact on a substantial number of small entities including small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations under 50,000. The Regulatory Flexibility Act directs agencies to establish exceptions and differing compliance standards for small businesses, where possible to do so and still meet the objectives of applicable regulatory statutes. Executive Order 13272 (''Proper Consideration of Small Entities in Agency Rulemaking'') [37] requires agencies to establish procedures and policies to promote compliance with the Regulatory Flexibility Act and to ''thoroughly review draft rules to assess and take appropriate account of the potential impact'' of the rules on small businesses, governmental jurisdictions, and small organizations. The DOT posts its implementing guidance on a dedicated web page.[38]

This proposed rulemaking has been developed in accordance with Executive Order 13272 and with 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. This proposed rule facilitates the transportation of hazardous materials in international commerce by providing consistency with international standards. It applies to offerors and carriers of hazardous materials, some of whom are small entities, such as chemical manufacturers, users, and suppliers,

[34] 64 FR 43255 (Aug. 10, 1999).

[35] 74 FR 24693 (May 22, 2009).

[36] 65 FR 67249 (Nov. 9, 2000).

[37] 67 FR 53461 (Aug. 16, 2002).

[38] DOT, ''Rulemaking Requirements Related to Small Entities,'' *https://www.transportation.gov/regulations/rulemaking-requirements-concerning-small-entities* (last accessed June 17, 2021).

packaging manufacturers, distributors, and training companies. As discussed at length in the PRIA in the rulemaking docket, the amendments in this proposed rule should result in net cost savings that would ease the regulatory compliance burden for those and other entities engaged in domestic and international commerce, including trans-border shipments within North America. Additionally, the changes proposed in this NPRM would relieve U.S. companies, including small entities competing in foreign markets, from the burden of complying with a dual system of regulations. Therefore, PHMSA expects that these amendments will not, if adopted, have a significant economic impact on a substantial number of small entities. However, PHMSA solicits comments on the anticipated economic impacts to small entities.

F. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), no person is required to respond to an information collection unless it has been approved by OMB and displays a valid OMB control number. Pursuant to 44 U.S.C. 3506(c)(2)(B) and 5 CFR 1320.8(d), PHMSA must provide interested members of the public and affected agencies with an opportunity to comment on information collection and recordkeeping requests.

PHMSA has analyzed this NPRM in accordance with the Paperwork Reduction Act. PHMSA currently accounts for shipping paper burdens under OMB Control Number 2137–0034, ''Hazardous Materials Shipping Papers and Emergency Response Information.'' PHMSA proposes a number of amendments that may impact the burden accounted for in OMB Control Number 2137–0034. They include requiring the word ''stabilized'' as a part of the proper shipping name for ''UN2522, 2-Dimethlaminoethl methacrylate,'' adding the applicable term ''DAMAGED/DEFECTIVE,'' ''LITHIUM BATTERIES FOR DISPOSAL'' or ''LITHIUM BATTERIES FOR RECYCLING'', excepting marine pollutants from the requirement to supplement the proper shipping name with a technical name for UN3077 and UN3082, and requiring documentation of the holding time for refrigerated liquefied gases transported in portable tanks. However, while PHMSA estimates that there will be some impact in the annual burden related to shipping papers, PHMSA expects the overall impact to annual burden is negligible in relation to the number of burden hours currently associated with this information collection.

OMB Control Number 2137–0051, ''Rulemaking, Special Permits, and Preemption Requirements,'' currently accounts for burden associated with petitions for rulemaking, special permit applications, and preemption requests. PHMSA proposes to authorize certain ISO standard valves in § 173.301b(c)(2) and expand § 175.10 to allow passenger and crewmembers to carry certain Division 2.2 aerosols in carry-on baggage, both of which eliminate the need for use of a special permit. While PHMSA expects these proposals to reduce the burden associated with this information collection, PHMSA anticipates the reduction is negligible in relation to the total burden hours associated with special permit applications.

PHMSA accounts for the burden from approval applications in OMB Control Number 2137–0557, ''Approvals for Hazardous Materials.'' PHMSA proposes to add a new HMT entry for ''UN3549, Medical Waste, Category A, Affecting Humans, *solid or* Medical Waste, Category A, Affecting Animals *only, solid*'' and require an approval for transportation in accordance with Special Provision 131, which PHMSA expects would increase the number of annual approval applicants. PHMSA also proposes to add new entries to the § 173.225 Organic Peroxide Table, which PHMSA expects would decrease the number of annual approval applicants. However, PHMSA expects that these proposed changes are negligible to the overall impact of the total burden in relation to the number of burden hours associated with this information collection.

PHMSA requests comments on the information collection and recordkeeping burdens associated with developing, implementing, and maintaining the proposed requirements in this NPRM. Address written comments to the DOT Docket Operations Office identified in the **ADDRESSES** section of this rulemaking. PHMSA must receive comments regarding information collection burdens prior to the close of the comment period identified in the **DATES** section of this rulemaking. Requests for a copy of this information collection should be directed to Steven Andrews or Shelby Geller, Standards and Rulemaking Division (PHH–10), Pipeline and Hazardous Materials Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590–0001. If these proposed requirements are adopted in a final rule, PHMSA will submit the revised information collection and recordkeeping requirements to OMB for approval.

G. Regulation Identifier Number

A regulation identifier number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulatory and Deregulatory Actions (''Unified Agenda''). The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year; the most recent version was published in June 2021. 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 of 1995

The Unfunded Mandates Reform Act of 1995 (UMRA; 2 U.S.C. 1501 *et seq.*) requires agencies to assess the effects of Federal regulatory actions on State, local, and Tribal governments, and the private sector. For any NPRM or final rule that includes a Federal mandate that may result in the expenditure by State, local, and Tribal governments, or by the private sector of $100 million or more in 1996 dollars in any given year, the agency must prepare, amongst other things, a written statement that qualitatively and quantitatively assesses the costs and benefits of the Federal mandate.

As explained in the PRIA, this proposed rulemaking does not impose unfunded mandates under the UMRA. It does not result in costs of $100 million or more in 1996 dollars to either State, local, or Tribal governments, or to the private sector, in any one year. A copy of the PRIA is available for review in the docket.

I. Environmental Assessment

The National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*), requires that Federal agencies analyze proposed actions to determine whether the action would have a significant impact on the human environment. The Council on Environmental Quality implementing regulations (40 CFR parts 1500–1508) 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. DOT Order 5610.1C (''Procedures for Considering Environmental Impacts'') establishes departmental procedures for evaluation of environmental impacts under NEPA and its implementing regulations.

1. Purpose and Need

This NPRM would amend the HMR to maintain alignment with international consensus standards by incorporating into the HMR various amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations, and vessel stowage requirements. PHMSA notes that the amendments proposed in this NPRM are intended to result in cost savings and reduced regulatory burden for shippers engaged in domestic and international commerce, including trans-border shipments within North America. Absent adoption of the amendments proposed in the NPRM, U.S. companies—including numerous small entities competing in foreign markets—may be at an economic disadvantage because of their need to comply with a dual system of regulations. Further, among the HMR amendments introduced in this rulemaking are those facilitating the transportation of critical vaccines and other medical materials associated with response to the COVID–19 public health emergency, and others aligning HMR requirements with anticipated increases in the volume of lithium batteries transported in interstate commerce from electrification of the transportation and other economic sectors.

As explained at greater length above in the preamble of this NPRM and in the PRIA (each of which are incorporated by reference in this discussion of the environmental impacts of the Proposed Action Alternative), PHMSA expects the adoption of the regulatory amendments proposed in this NPRM would maintain the high safety standard currently achieved under the HMR. PHMSA has evaluated the safety each of the amendments proposed in this NPRM on its own merit, as well as the aggregate impact on transportation safety from adoption of those amendments.

2. Alternatives

In proposing this rulemaking, PHMSA is considering the following alternatives:

No Action Alternative

If PHMSA were to select the No Action Alternative, current regulations would remain in place and no provisions would be amended or added.

Proposed Action Alternative

This alternative is the current proposal as it appears in this NPRM, applying to transport of hazardous materials by various transport modes (highway, rail, vessel and aircraft). The proposed amendments included in this alternative are more fully discussed in the preamble and regulatory text sections of this NPRM.

3. Reasonably Foreseeable Environmental Impacts of the Alternatives

No Action Alternative

If PHMSA were to select the No Action Alternative, the HMR would remain unchanged and no provisions would be amended or added. However, any economic benefits gained through harmonization of the HMR with updated international consensus standards (including, but not limited to, the 21st revised edition of the UN Model Regulations, the 2021–2022 ICAO Technical Instructions and amendment 40–20 of the IMDG Code) governing shipping of hazardous materials would not be realized.

Additionally, the No Action Alternative would not adopt enhanced and clarified regulatory requirements expected to maintain the high level of safety in transportation of hazardous materials provided by the HMR. As explained in the preamble to the NPRM, consistency between the HMR and current international standards can enhance safety by (1) ensuring that the HMR is informed by the latest best practices and lessons learned; (2) improving understanding of and compliance with pertinent requirements; (3) enabling consistent emergency response procedures in the event of a hazardous materials incident; and (4) facilitating the smooth flow of hazardous materials from their points of origin to their points of destination, thereby avoiding risks to the public and the environment from release of hazardous materials from delays or interruptions in the transportation of those materials. PHMSA would not capture those benefits if it were to pass on incorporating updated international standards into the HMR under the No Action Alternative.

Additionally, some of the proposed HMR amendments are expected to better accommodate than the current HMR the safe transportation of emerging technologies (in particular lithium battery technologies), and facilitate safe shipment of vaccines and other hazardous materials associated with efforts to combat the COVID–19 public health emergency. As explained in the PRIA, PHMSA expects a significant increase in the volume of shipments of lithium batteries over time as more sectors of the U.S. domestic and international economies electrify; PHMSA's proposed HMR amendments pertaining to lithium batteries (which touch on multiple stages in the lifecycle of a lithium battery) are intended to ensure that expansion occurs safely. Similarly, PHMSA understands that the response to the COVID–19 public health emergency will result in sustained demand for shipments of refrigerated packages employing data loggers transporting vaccines, as well as increased volumes of sanitizing chemicals and medical waste from diagnosis, treatment, and sanitization efforts; the HMR amendments within the Proposed Action Alternative are intended to address the risks associated with those COVID-related changes in transportation demand. The No Action Alternative, in contrast, would not amend the HMR to account for these emerging trends in demand for transportation of hazardous materials.

PHMSA notes that the No Action Alternative would avoid any risks to public safety and the environment from the NPRM's proposed authorization of shipments of hazardous materials offered pursuant to temporary certificates issued by Transport Canada. While the transportation of hazardous materials always entails risk, allowing the transportation of hazardous materials pursuant to temporary certificates issued by Transport Canada could facilitate shipments of hazardous materials that are not otherwise compliant with the HMR and do not meet an equivalent standard of safety. Arguably, this allowance could entail greater risks to public safety and the environment. However, based on years of collaboration, PHMSA considers Transport Canada to be a partner in hazardous materials safety and has confidence in the technical expertise and judgement of the hazardous materials safety SMEs at Transport Canada. PHMSA further submits that any risks are mitigated by (1) the technical review by Transport Canada subject matter experts to determine any shipments would be in the public interest, (2) the limited duration of those temporary certificates, (3) the terms and conditions imposed in those certificates, (4) other regulatory requirements under the TDG Regulations or the HMR that may remain applicable, and (5) PHMSA's limitation of its recognition of temporary certificates to transportation via motor carrier and rail during the particular shipment authorized by a temporary certificate.

PHMSA expects that the No Action Alternative could have a modest impact on GHG emissions. Because PHMSA expects the differences between the HMR and international standards for transportation of hazardous materials

could result in transportation delays or interruptions, PHMSA anticipates that there could be modestly higher GHG emissions from some combination of (1) transfer of delayed hazardous materials to and from interim storage, (2) return of improperly shipped materials to their point of origin, and (3) re-shipment of returned materials. PHMSA notes that it is unable to quantify such GHG emissions because of the difficulty in identifying the precise quantity or characteristics of such interim storage or returns/re-shipments. The less demanding holding time documentation requirements for refrigerated hazardous gasses under the current HMR could also result in more frequent venting of GHGs (including nitrous oxide, a potent GHG) from portable tanks during delays in transportation. PHMSA also submits that, as explained at greater length in Section IV.J., to the extent that there are any delays arising from inconsistencies between the HMR and recently updated international standards, there could also be adverse impacts from the No Action Alternative for minority populations, low-income populations, or other underserved and other disadvantaged communities.

Proposed Action Alternative

As explained further in the discussions in each of the No Action Alternative above, the preamble, and the PRIA, PHMSA anticipates the changes proposed under the Proposed Action Alternative will maintain the high safety standards currently achieved under the HMR. Harmonization of the HMR with updated international consensus standards is also expected to capture economic efficiencies gained from avoiding shipping delays and compliance costs associated with having to comply with divergent U.S. and international regulatory regimes for transportation of hazardous materials. Further, PHMSA expects revision of the HMR as proposed in the NPRM will accommodate safe transportation of emerging technologies (in particular lithium battery technologies), and facilitate safe shipment of vaccines and other hazardous materials critical in efforts to combat the COVID–19 public health emergency.

PHMSA acknowledges that the Proposed Action Alternative could introduce risks to public safety and the environment from authorization of shipments of hazardous materials pursuant to temporary certificates issued by Transport Canada. As explained in the above discussion of the No Action Alternative, PHMSA understands that risk to be largely theoretical; PHMSA is unaware of evidence that hazardous material incidents have occurred as a result of or under the authority of temporary certificates. Further, PHMSA notes that the suite of other factors (including Transport Canada's review process, certificate terms and conditions, and otherwise applicable regulatory requirements of the TDG Regulations and the HMR) would mitigate residual risks to public safety and the environment.

PHMSA expects that Proposed Action Alternative could realize modest reductions in GHG emissions. Because PHMSA expects the differences between the HMR and international standards for transportation of hazardous materials could result in delays or interruptions, PHMSA anticipates that the No Action Alternative could result in modestly higher GHG emissions from some combination of (1) transfer of delayed hazardous materials to and from interim storage, (2) return of improperly shipped materials to their point of origin, or (3) re-shipment of returned materials. The Proposed Action Alternative avoids those risks resulting from divergence of the HMR from updated international standards. PHMSA notes, however, that it is unable to quantify any GHG emissions benefits because of the difficulty in identifying the precise quantity or characteristics of such interim storage or returns/re-shipments. PHMSA also noted that the less demanding holding time documentation requirements for refrigerated hazardous gasses under the current HMR could also result in more frequent venting of GHGs (including nitrous oxide, a potent GHG) from portable tanks during delays in transportation than would occur under the Proposed Action Alternative. Lastly, PHMSA also submits that, as explained at greater length in Section IV.J., the Proposed Action Alternative would avoid any delayed or interrupted shipments arising from the divergence of the HMR from updated international standards under the No Action Alternative that could result in adverse impacts for minority populations, low-income populations, or other underserved and other disadvantaged communities.

4. Agencies Consulted

PHMSA has coordinated with the Federal Aviation Administration, the Federal Motor Carrier Safety Administration, the Federal Railroad Administration, and the U.S. Coast Guard in the development of this proposed rule. PHMSA solicits, and will consider, comments on the NPRM's potential impacts on the human environment submitted by members of the public, state and local governments, tribal communities and industry.

5. Proposed Finding of No Significant Impact

PHMSA expects the adoption of the Proposed Action Alternative's regulatory amendments will maintain the HMR's current high level of safety for shipments of hazardous materials transported by highway, rail, aircraft, and vessel, and as such finds the HMR amendments in the NPRM would have no significant impact on the human environment. PHMSA expects that the Proposed Action Alternative will avoid adverse safety, environmental justice, and GHG emissions impacts of the No Action Alternative. Furthermore, based on PHMSA's analysis of these provisions described above, PHMSA proposes to find that codification and implementation of this rule would not result in a significant impact to the human environment.

PHMSA welcomes any views, data, or information related to environmental impacts that may result from NPRM's proposed requirements, the No Action Alternative, and other viable alternatives and their environmental impacts.

J. Environmental Justice

DOT Order 5610.2C (Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations'') and Executive Orders 12898 (''Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations''),[39] 13985 (''Advancing Racial Equity and Support for Underserved Communities Through the Federal Government''),[40] 13990 (''Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis''),[41] and 14008 (''Tackling the Climate Crisis at Home and Abroad'') [42] require DOT agencies to achieve environmental justice as part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects, including interrelated social and economic effects of their programs, policies, and activities on minority populations, low-income populations, and other underserved and disadvantaged communities.

[39] 59 FR 7629 (Feb. 11, 1994).
[40] 86 FR 7009 (Jan. 20, 2021).
[41] 86 FR 7037 (Jan. 20, 2021).
[42] 86 FR 7619 (Feb. 1, 2021).

PHMSA has evaluated this proposed rule under the above Executive Orders and DOT Order 5610.2C. PHMSA does not expect the proposed rule, if finalized, to cause disproportionately high and adverse human health and environmental effects on minority, low-income, underserved, and other disadvantaged populations and communities. The rulemaking is facially neutral and national in scope; it is neither directed toward a particular population, region, or community, nor is it expected to adversely impact any particular population, region, or community. And because PHMSA expects the rulemaking would not adversely affect the safe transportation of hazardous materials generally, PHMSA does not expect the proposed revisions would entail disproportionately high adverse risks for minority populations, low-income populations, or other underserved and other disadvantaged communities.

PHMSA submits that the proposed rulemaking could in fact reduce risks to minority populations, low-income populations, or other underserved and other disadvantaged communities. Because the proposed HMR amendments could avoid the release of hazardous materials and reduce the frequency of delays and returned/resubmitted shipments of hazardous materials resulting from conflict between the current HMR and updated international standards, the proposed rule could reduce risks to populations and communities—including any minority, low-income, underserved and other disadvantaged populations and communities—in the vicinity of interim storage sites and transportation arteries and hubs. Additionally, as explained in the above discussion of NEPA, PHMSA expects that its proposed HMR amendments will yield modest GHG emissions reductions, thereby reducing the risks posed by anthropogenic climate change to minority, low-income, underserved, and other disadvantaged populations and communities.

PHMSA solicits comment from minority, low-income, underserved, and other disadvantaged populations and communities on potential impacts of the proposed rulemaking.

K. 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). DOT's complete Privacy Act Statement is in the **Federal Register** published on April 11, 2000,[43] or on DOT's website at *http://www.dot.gov/privacy.*

L. Executive Order 13609 and International Trade Analysis

Executive Order 13609 (''Promoting International Regulatory Cooperation'')[44] requires that agencies 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) (as amended, the Trade Agreements Act), prohibits agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to the Trade Agreements Act, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, 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 it has assessed the effects of the proposed rule to ensure that it does not cause unnecessary obstacles to foreign trade. In fact, the proposed rule is expected to facilitate international trade by harmonizing U.S. and international requirements for the transportation of hazardous materials so as to reduce regulatory burdens and minimize delays arising from having to comply with divergent regulatory requirements. Accordingly, this rulemaking is consistent with Executive Order 13609 and PHMSA's obligations under the Trade Agreements Act.

M. National Technology Transfer and Advancement Act

The NTTAA directs federal agencies to use voluntary consensus standards in their regulatory activities unless doing so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.,* specification of materials, test methods, or performance requirements) that are developed or adopted by voluntary consensus standard bodies. This rulemaking involves multiple voluntary consensus standards which are discussed at length in the discussion on § 171.7. *See* Section 171.7 of the Section-by-Section Review for further details.

N. Executive Order 13211

Executive Order 13211 (''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'')[45] requires Federal agencies to prepare a Statement of Energy Effects for any ''significant energy action.'' Executive Order 13211 defines a ''significant energy action'' as any action by an agency (normally published in the **Federal Register**) that promulgates, or is expected to lead to the promulgation of, a final rule or regulation that (1)(i) is a significant regulatory action under Executive Order 12866 or any successor order and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy (including a shortfall in supply, price increases, and increased use of foreign supplies); or (2) is designated by the Administrator of the Office of Information and Regulatory Affairs (OIRA) as a significant energy action.

This proposed rule is not a significant action under Executive Order 12866, nor is it expected to have an annual effect on the economy of $100 million. Further, this action is not expected to have a significant adverse effect on the supply, distribution, or use of energy in the United States. The Administrator of OIRA has not designated the proposed rule as a significant energy action. For additional discussion of the anticipated economic impact of this rulemaking, please review the PRIA posted in the rulemaking docket.

List of Subjects

49 CFR Part 171

Exports, Hazardous materials transportation, Hazardous waste, Imports, Incorporation by reference,

[43] 65 FR 19477 (Apr. 11, 2000).

[44] 77 FR 26413 (May. 4, 2012).

[45] 66 FR 28355 (May 22, 2001).

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, 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, Motor carriers, Motor vehicle safety, Packaging and containers, Railroad safety, Reporting and recordkeeping requirements.

In consideration of the foregoing, PHMSA proposes to amend 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; Pub. L. 104–134, section 31001; Pub. L. 114–74 section 4 (28 U.S.C. 2461 note); 49 CFR 1.81 and 1.97.

■ 2. Amend § 171.7 by:
■ a. Revising paragraphs (s)(1), (t)(1), and (v)(2);
■ b. Revising paragraphs (w)(38) through (77) and adding paragraphs (w)(78) through (81); and
■ c. Revising paragraphs (aa)(3), and (dd)(1) through (4).

The revisions and additions read as follows:

§ 171.7 Reference Material.

* * * * *

(s) * * *

(1) IAEA Regulations for the Safe Transport of Radioactive Material, Safety Standards Series No. SSR–6 (Rev.1), 2018 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), 2021–2022 Edition, copyright 2020 into §§ 171.8; 171.22; 171.23; 171.24; 172.101; 172.202; 172.401; 172.407; 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 40–20 (English Edition), Volumes 1 and 2, 2020 Edition, into §§ 171.22; 171.23; 171.25; 172.101; 172.202; 172.203 172.401; 172.407; 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; 176.906; 178.3; 178.274.

(w) * * *

(38) ISO 10156:2017(E), Gas cylinders—Gases and gas mixtures—Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets, Fourth edition, 2017–07–01, into § 173.115.

(39) ISO 10297:1999(E), Gas cylinders—Refillable gas cylinder valves—Specification and type testing, First Edition, 1995–05–01, into §§ 173.301b; 178.71.

(40) ISO 10297:2006(E), Transportable gas cylinders—Cylinder valves—Specification and type testing, Second Edition, 2006–01–15, into §§ 173.301b; 178.71.

(41) ISO 10297:2014(E), Gas cylinders—Cylinder valves—Specification and type testing, Third Edition, 2014–07–15, into §§ 173.301b; 178.71.

(42) ISO 10297:2014/Amd 1:2017(E), Gas cylinders—Cylinder valves—Specification and type testing—Amendment 1: Pressure drums and tubes, Third Edition, 2017–03, into §§ 173.301b; 178.71.

(43) 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.

(44) ISO 10462:2013(E), Gas cylinders—Acetylene cylinders—Periodic inspection and maintenance, Third edition, 2013–12–15, into § 180.207.

(45) 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.

(46) 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 §§ 172.102; 173.301b; 178.71.

(47) ISO 11114–1:2012/Amd 1:2017(E), Gas cylinders—Compatibility of cylinder and valve materials with gas contents—Part 1: Metallic materials—Amendment 1, Second Edition, 2017–01–01, into §§ 172.102, 173.301b, 178.71.

(48) ISO 11114–2:2013(E), Gas cylinders—Compatibility of cylinder and valve materials with gas contents—Part 2: Non-metallic materials, Second edition, 2013–04–01, into §§ 173.301b; 178.71.

(49) 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.

(50) ISO 11117:2008(E): Gas cylinders—Valve protection caps and valve guards—Design, construction and tests, Second edition, 2008–09–01, into § 173.301b.

(51) 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.

(52) ISO 11118(E), Gas cylinders—Non-refillable metallic gas cylinders—Specification and test methods, First edition, October 1999, into § 178.71.

(53) ISO 11118:2015(E), Gas cylinders—Non-refillable metallic gas cylinders—Specification and test methods, Second edition, 2015–09–15, into § 178.71.

(54) 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.

(55) ISO 11119–1:2012(E), Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing— Part 1: Hoop wrapped fibre reinforced composite gas cylinders and tubes up to 450 L, Second edition, 2012–08–01, into §§ 178.71; 178.75.

(56) 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.

(57) ISO 11119–2:2012(E), Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 2: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 l with load-sharing metal liners, Second edition, 2012–07–15, into §§ 178.71; 178.75.

(58) ISO 11119–2:2012/Amd.1:2014(E), Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 2: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 l with load-sharing metal liners, Amendment 1, 2014–08–15, into §§ 178.71; 178.75.

(59) 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.

(60) ISO 11119–3:2013(E), Gas cylinders— Refillable composite gas cylinders and tubes—Design, construction and testing—Part 3: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 l with non-load-sharing metallic or non-metallic liners, Second edition, 2013–04–15, into §§ 178.71; 178.75.

(61) ISO 11119–4:2016(E), Gas cylinders—Refillable composite gas cylinders—Design, construction and testing—Part 4: Fully wrapped fibre reinforced composite gas cylinders up to 150 l with load-sharing welded metallic liners, First Edition, 2016–02–01, into § 178.71; 178.75.

(62) ISO 11120 (E), Gas cylinders—Refillable seamless steel tubes for compressed gas transport, of water capacity between 150 l and 3000 l—Design, construction and testing, First edition, 1999–03, into §§ 178.71; 178.75.

(63) ISO 11120:2015(E), Gas cylinders—Refillable seamless steel tubes of water capacity between 150 l and 3000 l—Design, construction and testing, Second Edition, 2015–02–01, into §§ 178.71; 178.75.

(64) 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.

(65) ISO 11621(E), Gas cylinders—Procedures for change of gas service, First edition, April 1997, into §§ 173.302, 173.336, 173.337.

(66) ISO 11623(E), Transportable gas cylinders—Periodic inspection and testing of composite gas cylinders, First edition, March 2002, into § 180.207.

(67) ISO 11623(E), Transportable gas cylinders—Periodic inspection and testing of composite gas cylinders, Second edition, 2015–12–01, into § 180.207.

(68) 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.

(69) ISO 13736:2008(E), Determination of flash point—Abel closed-cup method, Second Edition, 2008–09–15, into § 173.120.

(70) ISO 14246:2014(E), Gas cylinders—Cylinder valves—Manufacturing tests and examination, Second Edition, 2014–06–15, into § 178.71.

(71) ISO 14246:2014/Amd 1:2017(E), Gas cylinders—Cylinder valves—Manufacturing tests and examinations –Amendment 1, Second Edition, 2017–06–01, into § 178.71.

(72) 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.

(73) ISO 16148:2016(E), Gas cylinders—Refillable seamless steel gas cylinders and tubes—Acoustic emission examination (AT) and follow-up ultrasonic examination (UT) for periodic inspection and testing, Second Edition, 2016–04–15, into § 180.207.

(74) ISO 17871:2015(E), Gas cylinders—Quick-release cylinder valves—Specification and type testing, First Edition, 2015–08–15, into § 173.301.

(75) ISO 17879: 2017(E), Gas cylinders—Self-closing cylinder valves—Specification and type testing, First Edition, 2017–07–01, into §§ 173.301b and 178.71.

(76) 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.

(77) ISO 20475:2018(E), Gas cylinders—Cylinder bundles—Periodic inspection and testing, First Edition, 2018–02–01, into § 180.207.

(78) ISO 20703:2006(E), Gas cylinders—Refillable welded aluminum-alloy cylinders—Design, construction and testing, First Edition, 2006–05–01, into § 178.71.

(79) ISO 21172–1:2015(E), Gas cylinders—Welded steel pressure drums up to 3 000 litres capacity for the transport of gases—Design and construction—Part 1: Capacities up to 1000 litres, First edition, 2015–04–01, into § 178.71.

(80) ISO 22434:2006(E), Transportable gas cylinders—Inspection and maintenance of cylinder valves, First Edition, 2006–09–01, into § 180.207.

(81) ISO/TR 11364:2012(E), Gas cylinders—Compilation of national and international valve system/gas cylinder neck threads and their identification and marking system, First Edition, 2012–12–01, into § 178.71.

* * * * *

(aa) * * *

(3) Test No. 431: In Vitro Skin Corrosion: Reconstructed Human Epidermis (RHE) Test Method, OECD Guidelines for the Testing of Chemicals, 29 July 2016, into § 173.137.

* * * * *

(dd) * * *

(1) UN Recommendations on the Transport of Dangerous Goods, Model Regulations (UN Recommendations), 21st revised edition, Volumes I and II, ST/SG/AC.10.1/21/Rev.21, (2019), into §§ 171.8; 171.12; 172.202; 172.401; 172.407; 172.502; 172.519; 173.22; 173.24; 173.24b; 173.40; 173.56; 173.192; 173.302b; 173.304b; 178.75; 178.274.

(2) Manual of Tests and Criteria, 7th revised edition, ST/SG/AC.10/11/Rev.7 (2019), 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; 173.221; 173.224; 173.225; 173.232; part 173, appendix H; 175.10; 176.905; 178.274.

(3) Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 8th revised edition, ST/SG/AC.10/30/Rev.8 (2019), into § 172.401.

(4) ECE/TRANS/300 (Vol. I and II), Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), copyright 2020, into § 171.23.

* * * * *

■ 3. In § 171.8, the definitions for ''SADT'' and ''SAPT'' are revised to read as follows:

§ 171.8 Definitions and abbreviations.

* * * * *

SADT means self-accelerated decomposition temperature and is the lowest temperature at which self-accelerating decomposition may occur in a substance in the packaging, IBC, or portable tank offered for transport. *See* also § 173.21(f) of this subchapter.

* * * * *

SAPT means self-accelerated polymerization temperature and is the lowest temperature at which self-accelerating polymerization may occur with a substance in the packaging, IBC,

or portable tank as offered for transport. *See* also § 173.21(f) of this subchapter. This definition will be effective until January 2, 2023.

* * * * *

■ 4. In § 171.12, paragraph (a)(1) is revised to read as follows:

§ 171.12 North American Shipments.

(a) * * *

(1) A hazardous material transported from Canada to the United States, from the United States to Canada, or transiting the United States to Canada or a foreign destination may be offered for transportation or transported by motor carrier and rail in accordance with the Transport Canada TDG Regulations (IBR, *see* § 171.7), an equivalency certificate (permit for equivalent level of safety), or a temporary certificate (permit in support of public interest) issued by Transport Canada as an alternative to the TDG Regulations, as authorized in § 171.22, provided the requirements in §§ 171.22 and 171.23, as applicable, and this section are met. In addition, a cylinder, pressure drum, MEGC, cargo tank motor vehicle, portable tank or rail tank car authorized by the Transport Canada TDG Regulations may be used for transportation to, from, or within the United States provided the cylinder, pressure drum, MEGC, cargo tank motor vehicle, portable tank, or rail tank car conforms to the applicable requirements of this section. Except as otherwise provided in this subpart and subpart C of this part, the requirements in parts 172, 173, and 178 of this subchapter do not apply for a material transported in accordance with the Transport Canada TDG Regulations.

* * * * *

■ 5. In § 171.23, paragraph (a)(3) is revised 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.

(a) * * *

(3) Pi-marked pressure receptacles. Pressure receptacles that are marked with a pi mark in accordance with the European Directive 2010/35/EU (IBR, *see* § 171.7) on transportable pressure equipment (TPED) and that comply with the requirements of Packing Instruction P200 or P208 and 6.2 of the ADR (IBR, *see* § 171.7) concerning pressure relief device use, test period, filling ratios, test pressure, maximum working pressure, and material compatibility for the lading contained or gas being filled, are authorized as follows:

* * * * *

PART 172—HAZARDOUS MATERIALS TABLE, SPECIAL PROVISIONS, HAZARDOUS MATERIALS COMMUNICATIONS, EMERGENCY RESPONSE INFORMATION, TRAINING REQUIREMENTS, AND SECURITY PLANS

■ 6. 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.

■ 7. In § 172.101, The Hazardous Materials Table is amended by removing the entries under ''[REMOVE],'' by adding the entries under ''[ADD,]'' and by revising entries under ''[REVISE]'' in the appropriate alphabetical sequence. The additions and revisions read as follows:

§ 172.101 Purpose and use of the hazardous materials table.

* * * * *

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification No.	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 air-craft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	[REMOVE]												
		*		*	*	*	*	*	*				
	Battery-powered vehicle or Battery-powered equipment.	9	UN3171		9	134	220	220	None	No limit	No limit	A	
		*		*	*	*	*	*	*				
	Dangerous Goods in Machinery *or* Dangerous Goods in Apparatus.	9	UN3363			136, A105	None	222	None	*See* A105	*See* A105	A	
		*		*	*	*	*	*	*				
	2-Dimethylaminoethyl methacrylate	6.1	UN2522	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	B	40
	Fuel system components (including fuel control units (FCU), carburetors, fuel lines, fuel pumps) see Dangerous Goods in Apparatus *or* Dangerous Goods in Machinery.												
	Regulated medical waste, n.o.s. *or* Clinical waste, unspecified, n.o.s. *or* (BIO) Medical waste, n.o.s. *or* Biomedical waste, n.o.s., *or* Medical Waste n.o.s..	6.2	UN3291	II	6.2	41, 337, A13	134	197	197	No limit	No limit	B	40
		*		*	*	*	*	*	*				
	[ADD]												
		*		*	*	*	*	*	*				
	Battery-powered vehicle *or* Battery-powered equipment.	9	UN3171		9	134, 360	220	220	None	No limit	No limit	A	
		*		*	*	*	*	*	*				
	Dangerous goods in articles *or* Dangerous goods in machinery *or* Dangerous goods in apparatus.	9	UN3363			136, A105	None	222	None	*See* A105	*See* A105	A	
		*		*	*	*	*	*	*				
	Detonators, electronic *programmable for blasting.*	1.1B	UN0511		1.1B	148	63(f), 63(g)	62	None	Forbidden	Forbidden	05	25
	Detonators, electronic *programmable for blasting.*	1.4B	UN0512		1.4B	103	63(f), 63(g)	62	None	Forbidden	75 kg	05	25
	Detonators, electronic *programmable for blasting.*	1.4S	UN0513		1.4S	148, 347	63(f), 63(g)	62	None	25 kg	100 kg	01	25
		*		*	*	*	*	*	*				
	2-Dimethylaminoethyl methacrylate, stabilized.	6.1	UN2522	II	6.1	387, IB2, T7, TP2	153	202	243	5 L	60 L	B	40
		*		*	*	*	*	*	*				
	Fuel system components (including fuel control units (FCU), carburetors, fuel lines, fuel pumps) see Dangerous Goods in Apparatus *or* Dangerous Goods in Articles *or* Dangerous Goods in Machinery.												
	Medical waste, category A, affecting humans, *solid or* Medical waste, category A, affecting animals *only, solid.*	6.2	UN3549		6.2	131, 430							
	Regulated medical waste, n.o.s. *or* Clinical waste, unspecified, n.o.s. *or* (BIO) Medical waste, n.o.s. *or* Biomedical waste, n.o.s., *or* Medical Waste n.o.s..	6.2	UN3291		6.2	41, 337, A13	134	197	197	No limit	No limit	B	40
		*		*	*	*	*	*	*				
	[REVISE]												

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification No.	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 air-craft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*	*	*	*	*	*				
	Aerosols, *corrosive, Packing Group II or III, (each not exceeding 1 L capacity).*	2.2	UN1950		2.2, 8	A34	306	None	None	75 kg	150 kg	A	25, 87, 126, 157
	Aerosols, *flammable, (each not exceeding 1 L capacity).*	2.1	UN1950		2.1	N82	306	None	None	75 kg	150 kg	A	25, 87, 126, 157
	Aerosols, flammable, n.o.s. *(engine starting fluid) (each not exceeding 1 L capacity).*	2.1	UN1950		2.1	N82	306	304	None	Forbidden	150 kg	A	25, 87, 126, 157
	Aerosols, *non-flammable, (each not exceeding 1 L capacity).*	2.2	UN1950		2.2		306	None	None	75 kg	150 kg	A	25, 87, 126, 157
	Aerosols, *poison, Packing Group III (each not exceeding 1 L capacity).*	2.2	UN1950		2.2, 6.1		306	None	None	Forbidden	Forbidden	A	25, 87, 126, 157
		*		*	*	*	*	*	*				
G	Alcoholates solution, n.o.s., *in alcohol*	3	UN3274	II	3, 8	IB2	150	202	243	1 L	5 L	B	52
		*		*	*	*	*	*	*				
G	Alkali metal alcoholates, self-heating, corrosive, n.o.s..	4.2	UN3206	II	4.2, 8	64, A7, IB5, IP2, T3, TP33, W31.	None	212	242	15 kg	50 kg	B	52
				III	4.2, 8	64, A7, IB8, IP3, T1, TP33, W31.	None	213	242	25 kg	10 kg	B	52
		*		*	*	*	*	*	*				
G	Articles containing a substance liable to spontaneous combustion, n.o.s..	4.2	UN3542		4.2	131, 391	None	214	214	Forbidden	Forbidden		
G	Articles containing a substance which in contact with water emits flammable gases, n.o.s..	4.3	UN3543		4.3	131, 391	None	214	214	Forbidden	Forbidden		
G	Articles containing corrosive substance, n.o.s..	8	UN3547		8	391	None	232	232	Forbidden	Forbidden	B	
G	Articles containing flammable gas, n.o.s..	2.1	UN3537		2.1	391	None	232	232	Forbidden	Forbidden	D	
G	Articles containing flammable liquid, n.o.s..	3	UN3540		3	391	None	232	232	Forbidden	Forbidden	B	
G	Articles containing flammable solid, n.o.s..	4.1	UN3541		4.1	391	None	232	232	Forbidden	Forbidden	B	
G	Articles containing miscellaneous dangerous goods, n.o.s..	9	UN3548		9	391	None	232	232	Forbidden	Forbidden	A	
G	Articles containing non-flammable, non-toxic gas, n.o.s..	2.2	UN3538		2.2	391	None	232	232	Forbidden	Forbidden	A	
G	Articles containing organic peroxide, n.o.s..	5.2	UN3545		5.2	131, 391	None	214	214	Forbidden	Forbidden		
G	Articles containing oxidizing substance, n.o.s..	5.1	UN3544		5.1	131, 391	None	214	214	Forbidden	Forbidden		
G	Articles containing toxic gas, n.o.s.	2.3	UN3539		2.3	131, 391	None	214	214	Forbidden	Forbidden		
G	Articles containing toxic substance, n.o.s..	6.1	UN3546		6.1	391	None	232	232	Forbidden	Forbidden	B	
		*		*	*	*	*	*	*				
	Desensitized explosives, solid, n.o.s.	4.1	UN3380	I	4.1	164, 197,	None	211	None	Forbidden	Forbidden	D	28, 36
		*		*	*	*	*	*	*				
	Dimethyl disulfide	3	UN2381	II	3, 6.1	IB2, T7, TP2, TP13	150	202	242	Forbidden	Forbidden	B	40
		*		*	*	*	*	*	*				
G	Environmentally hazardous substance, liquid, n.o.s..	9	UN3082	III	9	8, 146, 173, 335, 441, IB3,. T4, TP1, TP29	155	203	241	No limit	No limit	A	
G	Environmentally hazardous substance, solid, n.o.s..	9	UN3077	III	9	8, 146, 335, 384, 441, A112,. B54, B120, IB8, IP3, .. N20, N91, T1, TP33	155	213	240	No limit	No limit	A	

		*		*	*	*	*	*	*					
A, I, W	Fibers, vegetable, dry	4.1	UN3360	III	4.1	137	151	213	240	Forbidden	Forbidden	A		
		*		*	*	*	*	*	*					
A, W	Fish meal, stabilized *or* Fish scrap, stabilized.	9	UN2216	III		155, IB8, IP3, T1, TP33.	155	218	218	100 kg	200 kg	B	25, 88, 122, 128	
		*		*	*	*	*	*	*					
	Gas cartridges, *(flammable) without a release device, non-refillable.*	2.1	UN2037		2.1		306	304	None	1 kg	15 kg	B	40, 157	
		*		*	*	*	*	*	*					
G	Infectious substances, affecting animals *only.*	6.2	UN2900		6.2	A82	134	196	None	50 mL or 50 g.	4 L or 4 kg	E	13, 40, 95, 155	
G	Infectious substances, affecting humans.	6.2	UN2814		6.2	A82	134	196	None	50 mL or 50 g.	4 L or 4 kg	E	13, 40, 95, 155	
		*		*	*	*	*	*	*					
	Lithium ion batteries *including lithium ion polymer batteries.*	9	UN3480		9	388, 422, A54, A100	185	185	185	Forbidden	35 kg	A	156	
	Lithium ion batteries contained in equipment *including lithium ion polymer batteries.*	9	UN3481		9	181, 360, 388, 422, A54.	185	185	185	5 kg	35 kg	A	156	
	Lithium ion batteries packed with equipment *including lithium ion polymer batteries.*	9	UN3481		9	181, 360, 388, 422, A54.	185	185	185	5 kg	35 kg	A	156	
	Lithium metal batteries *including lithium alloy batteries.*	9	UN3090		9	388, 422, A54	185	185	185	Forbidden	35 kg	A	156	
	Lithium metal batteries contained in equipment *including lithium alloy batteries.*	9	UN3091		9	181, 360, 388, 422, A54, A101.	185	185	185	5 kg	35 kg	A	156	
	Lithium metal batteries packed with equipment *including lithium alloy batteries.*	9	UN3091		9	181, 360, 388, 422, A54.	185	185	185	5 kg	35 kg	A	156	
		*		*	*	*	*	*	*					
	Nitrocellulose, *dry or wetted with less than 25 percent water (or alcohol), by mass.*	1.1D	UN0340		1.1D	196	None	62	None	Forbidden	Forbidden	04	25, 27E	
	Nitrocellulose, *with not more than 12.6 percent nitrogen, by dry mass* mixture with *or* without plasticizer, with *or* without pigment.	4.1	UN2557	II	4.1	44, 197, W31	151	212	None	1 kg	15 kg	D	28, 36	
		*		*	*	*	*	*	*					
	Nitrocellulose, plasticized *with not less than 18 percent plasticizing substance, by mass.*	1.3C	UN0343		1.3C	196	None	62	None	Forbidden	Forbidden	04	25	
		*		*	*	*	*	*	*					
	Nitrocellulose, *unmodified or plasticized with less than 18 percent plasticizing substance, by mass.*	1.1D	UN0341		1.1D	196	None	62	None	Forbidden	Forbidden	04	25, 27E	
	Nitrocellulose, wetted *with not less than 25 percent alcohol, by mass.*	1.3C	UN0342		1.3C	196	None	62	None	Forbidden	Forbidden	04	25	
	Nitrocellulose with alcohol *with not less than 25 percent alcohol by mass, and with not more than 12.6 percent nitrogen, by dry mass.*	4.1	UN2556	II	4.1	197, W31	151	212	None	1 kg	15 kg	D	12, 25, 28, 36	
	Nitrocellulose with water *with not less than 25 percent water, by mass.*	4.1	UN2555	II	4.1	197, W31	151	212	None	15 kg	50 kg	E	28, 36	
		*		*	*	*	*	*	*					
	Receptacles, small, containing gas *or* gas cartridges *(flammable) without release device, not refillable and not exceeding 1 L capacity.*	2.1	UN2037		2.1		306	304	None	1 kg	15 kg	B	40, 157	
	Receptacles, small, containing gas *or* gas *cartridges (non-flammable) without release device, not refillable and not exceeding 1 L capacity.*	2.2	UN2037		2.2		306	304	None	1 kg	15 kg	B	40, 157	
	Receptacles, small, containing gas *or* gas cartridges *(oxidizing), without release device, not refillable and not exceeding 1 L capacity.*	2.2	UN2037		2.2, 5.1	, A14	306	304	None	1 kg	15 kg	B	40, 157	

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification No.	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 air-craft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
		*		*	*	*	*	*	*				
	Sodium methylate	4.2	UN1431	II	4.2	A7, A19, IB5, IP2, T3, TP33, W31.	None	212	242	15 kg	50 kg	B	52
	Sodium methylate solutions *in alcohol*	3	UN1289	II	3, 8	IB2, T7, TP1, TP8	150	202	243	1 L	5 L	B	52
	Sodium methylate solutions *in alcohol*	3	UN1289	III	3, 8	B1, IB3, T4, TP1	150	203	242	5 L	60 L	A	52
		*		*	*	*	*	*	*				
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
G	Water-reactive liquid, corrosive, n.o.s.	4.3	UN3129	II	4.3, 8	IB1, T11, TP2, TP7	None	202	243	1 L	5 L	E	13, 85, 148
G	Water-reactive liquid, corrosive, n.o.s.	4.3	UN3129	III	4.3, 8	IB2, T7, TP2, TP7	None	203	242	5 L	60 L	E	13, 85, 148
		*		*	*	*	*	*	*				
G	Water-reactive solid, flammable, n.o.s.	4.3	UN3132	I	4.3, 4.1	IB4, N40, W31	None	211	242	Forbidden	15 kg	D	13, 148
G	Water-reactive solid, flammable, n.o.s.	4.3	UN3132	II	4.3, 4.1	IB4, T3, TP33, W31, W40.	151	212	242	15 kg	50 kg	E	13, 85, 148
G	Water-reactive solid, flammable, n.o.s.	4.3	UN3132	III	4.3, 4.1	IB6, T1, TP33, W31	151	213	241	25 kg	100 kg	E	13, 85, 148
		*		*	*	*	*	*	*				
G	Water-reactive solid, self-heating, n.o.s..	4.3	UN3135	I	4.3, 4.2	N40, W31	None	211	242	Forbidden	15 kg	D	13, 148
G	Water-reactive solid, self-heating, n.o.s..	4.3	UN3135	II	4.3, 4.2	IB5, IP2, T3, TP33, W31, W40.	None	212	242	15 kg	50 kg	E	13, 85, 148
G	Water-reactive solid, self-heating, n.o.s..	4.3	UN3135	III	4.3, 4.2	IB8, IP4, T1, TP33, W31.	None	213	241	25 kg	100 kg	E	13, 85, 148
		*		*	*	*	*	*	*				
G	Water-reactive liquid, n.o.s.	4.3	UN3148	I	4.3	T13, TP2, TP7, W31	None	201	244	Forbidden	1 L	E	13, 40, 148
G	Water-reactive liquid, n.o.s.	4.3	UN3148	II	4.3	IB1, T7, TP2, TP7, W31.	None	202	243	1 L	5 L	E	13, 40, 148
G	Water-reactive liquid, n.o.s.	4.3	UN3148	III	4.3	IB2, T7, TP2, TP7, W31.	None	203	242	5 L	60 L	E	13, 40, 148
		*		*	*	*	*	*	*				

* * * * *

■ 8. In § 172.102:
■ a. In paragraph (c)(1):
■ i. Revise special provisions 47, 134, 135, 136, 147, 360, 370, 379(d)(1); and
■ ii. Add special provisions 196, 197, 430, and 441 in numerical order.
■ b. In paragraph (c)(8), remove TP codes TP39 and TP41.

The additions and revisions read as follows:

§ 172.102 Special Provisions.

* * * * *

(c) * * *

(1) * * *

47 Mixtures of solids that are not subject to this subchapter and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Except when the liquids are fully absorbed in solid material contained in sealed bags, for single packagings, each packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level. Sealed packets and articles containing less than 10 mL of a Class 3 liquid in Packing Group II or III absorbed onto a solid material are not subject to this subchapter provided there is no free liquid in the packet or article.

* * * * *

134 This entry applies only to vehicles powered by wet batteries, sodium batteries, lithium metal batteries or lithium ion batteries, and equipment powered by wet batteries or sodium batteries that are transported with these batteries installed. Lithium batteries installed in a cargo transport unit, designed only to provide power external to the transport unit must use the proper shipping name ''Lithium batteries installed in cargo transport unit'' found in the § 172.101 Hazardous Materials Table.

a. For the purpose of this special provision, vehicles are self-propelled apparatus designed to carry one or more persons or goods. Examples of such vehicles are electrically-powered cars, motorcycles, scooters, three- and four-wheeled vehicles or motorcycles, trucks, locomotives, bicycles (pedal cycles with an electric motor) and other vehicles of this type (*e.g.,* self-balancing vehicles or vehicles not equipped with at least one seating position), lawn tractors, self-propelled farming and construction equipment, boats, aircraft, wheelchairs and other mobility aids. This includes vehicles transported in a packaging. In this case, some parts of the vehicle may be detached from its frame to fit into the packaging.

b. Examples of equipment are lawnmowers, cleaning machines, or model boats and model aircraft. Equipment powered by lithium metal batteries or lithium ion batteries must be described using the entries ''Lithium metal batteries contained in equipment'' or ''Lithium metal batteries packed with equipment'' or ''Lithium ion batteries contained in equipment'' or ''Lithium ion batteries packed with equipment,'' as appropriate.

c. Self-propelled vehicles or equipment that also contain an internal combustion engine must be described using the entries ''Engine, internal combustion, flammable gas powered'' or ''Engine, internal combustion, flammable liquid powered'' or ''Vehicle, flammable gas powered'' or ''Vehicle, flammable liquid powered,'' as appropriate. These entries include hybrid electric vehicles powered by both an internal combustion engine and batteries. Additionally, self-propelled vehicles or equipment that contain a fuel cell engine must be described using the entries ''Engine, fuel cell, flammable gas powered'' or ''Engine, fuel cell, flammable liquid powered'' or ''Vehicle, fuel cell, flammable gas powered'' or ''Vehicle, fuel cell, flammable liquid powered,'' as appropriate. These entries include hybrid electric vehicles powered by a fuel cell engine, an internal combustion engine, and batteries.

135 Internal combustion engines installed in a vehicle must be described using ''Vehicle, flammable gas powered'' or ''Vehicle, flammable liquid powered,'' as appropriate. If a vehicle is powered by a flammable liquid and a flammable gas internal combustion engine, it must be described using ''Vehicle, flammable gas powered.'' This includes hybrid electric vehicles powered by both an internal combustion engine and wet, sodium or lithium batteries installed. If a fuel cell engine is installed in a vehicle, the vehicle must be described using ''Vehicle, fuel cell, flammable gas powered'' or ''Vehicle, fuel cell, flammable liquid powered,'' as appropriate. This includes hybrid electric vehicles powered by a fuel cell, an internal combustion engine, and wet, sodium or lithium batteries installed. For the purpose of this special provision, vehicles are self-propelled apparatus designed to carry one or more persons or goods. Examples of such vehicles are cars, motorcycles, trucks, locomotives, scooters, three- and four-wheeled vehicles or motorcycles, lawn tractors, self-propelled farming and construction equipment, boats, and aircraft. Furthermore, lithium batteries installed in a cargo transport unit, designed only to provide power external to the transport unit must be described using the proper shipping name ''Lithium batteries installed in cargo transport unit'' found in the § 172.101 Hazardous Materials Table.

136 This entry applies only to articles, machinery and apparatus containing hazardous materials as an integral element of the article, machinery, or apparatus. It may not be used to describe articles, machinery, or apparatus for which a proper shipping name exists in the § 172.101 Table. Except when approved by the Associate Administrator, these items may only contain hazardous materials for which exceptions are referenced in Column (8) of the § 172.101 Table and are provided in part 173, subparts D and G, of this subchapter. Hazardous materials shipped under this entry are excepted from the labeling requirements of this subchapter unless offered for transportation or transported by aircraft and are not subject to the placarding requirements of subpart F of this part. Orientation markings as described in § 172.312(a)(2) are required when liquid hazardous materials may escape due to incorrect orientation. The article, machinery, or apparatus, if unpackaged, or the packaging in which it is contained shall be marked ''Dangerous goods in articles'' or ''Dangerous goods in machinery'' or ''Dangerous goods in apparatus'' as appropriate, with the identification number UN3363. For transportation by aircraft, articles, machinery, or apparatus, may not contain any material forbidden for transportation by passenger or cargo aircraft. The Associate Administrator may except from the requirements of this subchapter articles, machinery, and apparatus provided:

a. It is shown that it does not pose a significant risk in transportation;

b. The quantities of hazardous materials do not exceed those specified in § 173.4a of this subchapter; and

c. The equipment, and machinery or apparatus articles conforms with § 173.222 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 satisfy the criteria for classification as an ammonium nitrate emulsion 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.

* * * * *

196 The nitrocellulose must meet the criteria of the Bergmann-Junk test or methyl violet paper test in the UN Manual of Tests and Criteria, Appendix 10 (IBR, *see* § 171.7 of this subchapter). Test of type 3(c) is not required.

197 The nitrocellulose must meet the criteria of the Bergmann-Junk test or methyl violet paper test in the UN Manual of Tests and Criteria, Appendix 10 (IBR, *see* § 171.7 of this subchapter).

* * * * *

360 Vehicles powered only by lithium batteries must be described using ''UN3171, Battery-powered vehicle.'' Lithium batteries installed in a cargo transport unit, designed only to provide power external to the transport unit must be described using ''UN3536, Lithium batteries installed in a cargo transport unit.''

* * * * *

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 (IBR; *see* § 171.7 of this subchapter). *See also* UN1942 in the § 172.101 Hazardous Materials Table. This entry may not be used for ammonium nitrate for which a proper shipping name already exists in the § 172.101 Hazardous Materials Table, including ammonium nitrate mixed with fuel oil or any other commercial grade of ammonium nitrate (*e.g.,* ammonium nitrate fertilizer).

* * * * *

379 * * *

d. * * *

(1) Receptacles shall be made of a material compatible with ammonia as specified in ISO 11114–1:2012(E) and ISO 11114–1:2012/Amd 1:2017(E) (IBR, *see* § 171.7 of this subchapter);

* * * * *

430 This entry shall only be used for solid medical waste of Category A transported for disposal.

* * * * *

441 For marine pollutants transported under ''UN3077, Environmentally hazardous substance, solid, n.o.s.'' or ''UN3082, Environmentally hazardous substance, solid, n.o.s.'' and for purposes of shipping paper and package marking requirements, the technical name used in association with the basic description may be a proper shipping name listed in the § 172.101 Hazardous Material Table; provided that the name chosen is not also an entry that includes ''n.o.s.'' as a part of the name or one that has a ''G'' in column (1) of the table.

* * * * *

■ 9. In § 172.203, revise the first sentence of paragraph (i)(2), revise paragraph (l)(1), and add paragraphs (i)(4) and (q) to read as follows:

§ 172.203 Additional description requirements.

* * * * *

(i) * * *

(2) A minimum flashpoint, if 60 °C (140 °F) or below (in °C closed cup (c.c.)), in association with the basic description, for Class 3 flammable liquid materials (as a primary or subsidiary hazard). * * *

* * * * *

(4) For lithium cells or batteries transported in accordance with § 173.185(f), ''DAMAGED/DEFECTIVE''; and for lithium cells or batteries transported for purposes of disposal or recycling, ''LITHIUM BATTERIES FOR DISPOSAL'' or ''LITHIUM BATTERIES FOR RECYCLING'', as appropriate.

* * * * *

(l) * * *

(1) For a proper shipping name used to describe a hazardous material that is a marine pollutant, either assigned the letter ''G'' in column (1) of the § 172.101 hazardous materials table or that contains the text ''n.o.s.'', the name of the component that makes the material a marine pollutant must appear in parentheses in association with the basic description. Where two or more components that make the material a marine pollutant are present, the names of at least two of the components most predominantly contributing to the marine pollutant designation must appear in parentheses in association with the basic description. For material described using ''UN3077, Environmentally hazardous substance, solid, n.o.s.'' and ''UN3082, Environmentally hazardous substance, liquid, n.o.s.,'' *see* § 172.102(c)(1), special provision 441 for additional provisions.

* * * * *

(q) *Holding time.* The date at which the actual holding time ends, as calculated in accordance with § 178.338–9, must be provided on the shipping paper in association with the basic description for refrigerated liquefied gases transported in a portable tank.

■ 10. In § 172.301, revise paragraph (a)(1) to read as follows:

§ 172.301 General marking requirements for non-bulk packagings.

(a) * * *

(1) Except as otherwise provided by this subchapter, each person who offers a hazardous material for transportation in a non-bulk packaging must mark the package with the proper shipping name and identification number (preceded by ''UN'', ''NA'' or ''ID,'' as appropriate), as shown in the § 172.101 Hazardous Materials Table. The identification number marking preceded by ''UN'', ''NA'', or ''ID'' as appropriate must be marked in characters at least 12 mm (0.47 inches) high. Packages with a maximum capacity of 30 liters (8 gallons) or less, 30 kg (66 pounds) maximum net mass, or cylinders with a water capacity of 60 liters (16 gallons) or less must be marked with characters at least 6 mm (0.24 inches) high. Packages with a maximum capacity of 5 liters (1.32 gallons) or less or 5 kg maximum net mass (11 pounds) or less must be marked in a size appropriate for the size of the package.

* * * * *

■ 11. In § 172.315, add paragraph (b)(3) to read as follows:

§ 172.315 Limited Quantities.

* * * * *

(b) * * *

(3) For transportation by aircraft, the entire mark must appear on one side of the package.

* * * * *

■ 12. In § 172.322, revise paragraph (a)(1) to read as follows:

§ 172.322 Marine Pollutants.

(a) * * *

(1) For a proper shipping name used to describe a hazardous material that is a marine pollutant and assigned the letter ''G'' in column (1) of the § 172.101 hazardous materials table or that contains the text ''n.o.s.,'' the name of the component which makes the material a marine pollutant must be

marked on the package in parentheses in association with the marked proper shipping name unless the proper shipping name identifies by name the component, which makes the material a marine pollutant. Where two or more components that make a material a marine pollutant are present, the names of at least two of the components most predominantly contributing to the marine pollutant designation must appear in parentheses in association with the marked proper shipping name. For materials described using ''UN3077, Environmentally hazardous substance, solid, n.o.s.'' and ''UN3082, Environmentally hazardous substance, liquid, n.o.s.,'' *see* § 172.102(c)(1), special provision 441 for additional provisions; and

* * * * *

■ 13. In § 172.406, revise paragraph (a) to read as follows:

§ 172.406 Placement of labels.

(a) *General.* (1) Except as provided in paragraphs (b) and (e) of this section, each label required by this subpart must—

(i) Be printed on or affixed to a surface (other than the bottom) of the package or containment device containing the hazardous material;

(ii) Be located on the same surface of the package and near the proper shipping name marking, if the package dimensions are adequate; and

(iii) For transportation by aircraft, the entire label(s) must appear on one side of the package. For cylindrical packages, the label must be of such dimensions that it will not overlap itself. In the case of cylindrical packages containing radioactive materials, which require two identical labels, these labels must be centered on opposite points of the circumference and must not overlap each other. If the dimensions of the package are such that two identical labels cannot be affixed without overlapping each other, one label is acceptable provided it does not overlap itself.

* * * * *

■ 14. In § 172.447, remove and reserve paragraph (c).

§ 172.447 LITHIUM BATTERY label.

* * * * *

(c) Reserved.

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

■ 15. 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.

■ 16. In § 173.4a, redesignate paragraph (g)(3) as (4), and add new paragraph (g)(3) to read as follows:

§ 173.4a Excepted quantities.

* * * * *

(g) * * *

(3) For transportation by aircraft, the entire mark must appear on one side of the package.

* * * * *

■ 17. Add new § 173.14 to read as follows:

§ 173.14 Hazardous materials in equipment in use or intended for use during transport.

(a) Except for transportation by aircraft, hazardous materials (*e.g.,* lithium batteries, fuel cell cartridges) contained in equipment, such as data loggers and cargo tracking devices, attached to or placed in packages, overpacks, or containers are not subject to this subchapter other than the following:

(1) The equipment must be in use or intended for use during transportation;

(2) The hazardous materials (*e.g.,* lithium batteries, fuel cell cartridges, etc.) must meet the applicable construction and test requirements specified in this subchapter;

(3) The equipment must be capable of withstanding the shocks and loadings normally encountered during transport and must be safe for use in the environments to which it may be exposed; and

(4) When offered for transport by vessel, the requirements in § 176.76(a)(9) of this subchapter apply.

(b) For transportation by aircraft, lithium batteries contained in equipment such as data loggers and cargo tracking devices, attached to or placed in packages containing COVID–19 pharmaceuticals are not subject to the marking and documentation requirements of § 173.185(c)(3) and (c)(4)(iv). This same package, when shipped without the COVID–19 pharmaceuticals for the purpose of use or reuse, is also not subject to the marking and documentation requirements of § 173.185(c)(3) and (c)(4)(iv), as applicable, provided prior arrangements have been made with the operator.

(c) [Reserved.]

■ 18. In § 173.27, revise paragraphs (c)(2), (f) introductory text, (f)(1), and (f)(3) Tables 1 and 2 to read as follows:

§ 173.27 General requirements for transportation by aircraft.

* * * * *

(c) * * *

(2) Except for packagings used for material transported as ''UN3082, Environmentally hazardous substance, liquid, n.o.s.,'' packagings for which retention of liquid is a basic function must be capable of withstanding without leakage the greater of—

* * * * *

(f) *Combination packagings.* Unless otherwise specified in this part, or in Subpart C of part 171 of this subchapter, when combination packagings are intended for transportation aboard an aircraft, inner packagings must conform to the quantity limitations set forth in Table 1 of this paragraph for transport aboard passenger-carrying aircraft and Table 2 of this paragraph for transport aboard cargo-only aircraft. For materials that are authorized to exceed 220 L (58 gallons) or 200 kg (441 pounds) in accordance with columns (9A) and (9B) of the § 172.101 Hazardous Materials Table, there is no limitation on the maximum authorized net capacity of each inner packaging.

(1) *Excepted quantities.* For authorized materials and inner and outer package quantity limits for combination packages of excepted quantities intended for transportation by aircraft, *see* § 173.4a of this part.

* * * * *

(3) * * *

TABLE 1—MAXIMUM NET CAPACITY OF INNER PACKAGING FOR TRANSPORTATION ON PASSENGER-CARRYING AIRCRAFT

Maximum net quantity per package from Column 9A of the § 172.101 table	Maximum authorized net capacity *of each inner packaging*	
	Glass, earthenware or fiber inner packagings	Metal or plastic inner packagings
Liquids:		
Not greater than 0.5 L	0.5 L	0.5 L.
Greater than 0.5 L, not greater than 1 L	0.5 L	1 L.

TABLE 1—MAXIMUM NET CAPACITY OF INNER PACKAGING FOR TRANSPORTATION ON PASSENGER-CARRYING AIRCRAFT—Continued

Maximum net quantity per package from Column 9A of the § 172.101 table	Maximum authorized net capacity *of each inner packaging*	
	Glass, earthenware or fiber inner packagings	Metal or plastic inner packagings
Greater than 1 L, not greater than 5 L	1 L	5 L.
Greater than 5 L, not greater than 60 L	2.5 L	10 L.
Greater than 60 L, not greater than 220 L	5 L	25 L.
Class 9: UN1941, UN1990, UN2315, UN3082, UN3151, UN3334	10	Plastic: 30. Metal: 40.
Solids:		
Not greater than 5 kg	0.5 kg	1 kg.
Greater than 5 kg. not greater than 25 kg	1 kg	2.5 kg.
Greater than 25 kg, not greater than 200 kg	5 kg	10 kg.
Class 9. UN1841, UN1931, UN2071, UN2216, UN2590, UN2969, UN3077, UN3152, UN3335, UN3432.	Glass or earthenware: 10 kg Fiber: 50 kg	50 kg.

TABLE 2—MAXIMUM NET CAPACITY OF INNER PACKAGING FOR TRANSPORTATION ON CARGO AIRCRAFT

Maximum net quantity per package from Column 9a of the § 172.101 table	Maximum authorized net capacity *of each inner packaging*	
	Glass, earthenware or fiber inner packagings	Metal or plastic inner packagings
Liquids:		
Not greater than 2.5L	1 L	1 L.
Greater than 2.5L, not greater than 30L	2.5 L	2.5 L.
Greater than 30L, not greater than 60L	5 L	10 L.
Greater than 60L, not greater than 220L	5 L	25 L.
Class 9: UN1941, UN1990, UN2315, UN3082, UN3151, UN3334	10 L	Plastic: 30 L. Metal: 40 L.
Solids:		
Not greater than 15 kg	1 kg	1 kg.
Greater than 15 kg. not greater than 50 kg	2.5 kg	5 kg.
Greater than 50 kg, not greater than 200 kg	5 kg	10 kg.
Class 9: UN1841, UN1931, UN2071, UN2216, UN2590, UN2969, UN3077, UN3152, UN3335, UN3432.	Glass or earthenware: 10 kg Fiber: 50 kg	50 kg.

* * * * *

■ 19. In § 173.59, revise the description for ''Detonators'', and add a new description for ''Detonators, electronic programmable for blasting'' in alphabetical order to read as follows:

§ 173.59 Description of terms for explosives.

* * * * *

Detonators. Articles consisting of a small metal or plastic tube containing explosives such as lead azide, PETN, or combinations of explosives. They are designed to start a detonation train. They may be constructed to detonate instantaneously, or may contain a delay element. They may contain no more than 10 g of total explosives weight, excluding ignition and delay charges, per unit. The term includes: Detonators for ammunition; detonators for blasting (electric, electronic, and non-electric); and detonating relays without flexible detonating cord.

Detonators, electronic programmable for blasting. Detonators using electronic components, such as an integrated circuit and/or micro processing technology to provide communications, energy control and storage capability, timing delay information, and validated commands to send a firing signal to the initiating charge.

* * * * *

■ 20. In § 173.115, revise paragraph (k) to read as follows:

§ 173.115 Class 2, Divisions 2.1, 2.2, and 2.3—Definitions.

* * * * *

(k) For Division 2.2 gases, the oxidizing ability shall be determined by tests or by calculation in accordance with ISO 10156:2017(E) (IBR, *see* § 171.7 of this subchapter).

* * * * *

■ 21. In § 173.134, revise paragraphs (a)(1) and (5) to read as follows:

§ 173.134 Class 6, Division 6.2—Definitions and exceptions.

* * * * *

(a) * * *

(1) *Division 6.2 (Infectious substance)* means a material known or reasonably expected to contain a pathogen. A pathogen is a microorganism (including bacteria, viruses, parasites, and fungi) or other agent, such as a proteinaceous infectious particle (prion) that can cause disease in humans or animals. An infectious substance must be assigned the identification number UN2814, UN2900, UN3291, UN3373, or UN3549 as appropriate, and must be assigned to one of the following categories:

(i) *Category A:* An infectious substance in a form capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when exposure to it occurs. An exposure occurs when an infectious substance is released outside of its protective packaging, resulting in physical contact with humans or

animals. A Category A infectious substance must be assigned to identification number UN2814, UN2900, or UN3549, as appropriate. Assignment to UN2814, UN2900, or UN3549 must be based on the known medical history or symptoms of the source patient or animal, endemic local conditions, or professional judgment concerning the individual circumstances of the source human or animal.

(ii) *Category B:* An infectious substance that is not in a form generally capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when exposure to it occurs. This includes Category B infectious substances transported for diagnostic or investigational purposes. A Category B infectious substance must be described as ''Biological substance, Category B'' and assigned identification number UN3373. This does not include regulated medical waste, which must be assigned identification number UN3291.

* * * * *

(5) *Regulated medical waste or clinical waste or (bio) medical waste* means a waste or reusable material derived from the medical treatment of an animal or human, which includes diagnosis and immunization, or from biomedical research, which includes the production and testing of biological products. Regulated medical waste or clinical waste or (bio) medical waste containing a Category A infectious substance must be classed as an infectious substance, and assigned to UN2814, UN2900, or UN3549, as appropriate.

* * * * *

■ 22. In § 173.137, revise the introductory text to read as follows:

§ 173.137 Class 8—Assignment of packing group.

The packing group of a Class 8 material is indicated in Column 5 of the § 172.101 Table. When the § 172.101 Table provides more than one packing group for a Class 8 material, the packing group must be determined using data obtained from tests conducted in accordance with the OECD Guidelines for the Testing of Chemicals, Test No. 435, ''*In Vitro* Membrane Barrier Test Method for Skin Corrosion'' (IBR, *see* § 171.7 of this subchapter) or Test No. 404, ''Acute Dermal Irritation/Corrosion'' (IBR, *see* § 171.7 of this subchapter). A material that is determined not to be corrosive in accordance with OECD Guideline for the Testing of Chemicals, Test No. 430, ''*In Vitro* Skin Corrosion: Transcutaneous Electrical Resistance Test (TER)'' (IBR, *see* § 171.7 of this subchapter) or Test No. 431, ''*In Vitro* Skin Corrosion: Reconstructed Human Epidermis (RHE) Test Method'' (IBR, *see* § 171.7 of this subchapter) may be considered not to be corrosive to human skin for the purposes of this subchapter without further testing. However, a material determined to be corrosive in accordance with Test No. 430 or Test No. 431 must be further tested using Test No. 435 or Test No. 404. If the in vitro test results indicate that the substance or mixture is corrosive, but the test method does not clearly distinguish between assignment of packing groups II and III, the material may be considered to be in packing group II without further testing. The packing group assignment using data obtained from tests conducted in accordance with OECD Guideline Test No. 404 or Test No. 435 must be as follows:

* * * * *

■ 23. In § 173.172, revise paragraphs (a) and (b) to read as follows:

§ 173.172 Aircraft hydraulic power unit fuel tank.

* * * * *

(a) The unit must consist of an aluminum pressure vessel made from tubing and having welded heads. Primary containment of the fuel within this vessel must consist of a welded aluminum bladder having a maximum internal volume of 46 L (12 gallons). The outer vessel must have a minimum design gauge pressure of 1,275 kPa (185 psig) and a minimum burst gauge pressure of 2,755 kPa (400 psig). Each vessel must be leak-checked during manufacture and before shipment and must be found leakproof. The complete inner unit must be securely packed in non-combustible cushioning material, such as vermiculite, in a strong outer tightly closed metal packaging which will adequately protect all fittings. Maximum quantity of fuel per primary containment and package is 42 L (11 gallons); or

(b) The unit must consist of an aluminum pressure vessel. Primary containment of the fuel within this vessel must consist of a welded hermetically sealed fuel compartment with an elastomeric bladder having a maximum internal volume of 46 L (12 gallons). The pressure vessel must have a minimum design gauge pressure of 5,170 kPa (750 psig). Each vessel must be leak-checked during manufacture and before shipment and must be securely packed in non-combustible cushioning material, such as vermiculite, in a strong outer tightly closed metal packaging which will adequately protect all fittings. Maximum quantity of fuel per primary containment and package is 42 L (11 gallons).

■ 24. In § 173.181, revise paragraph (b) to read as follows:

§ 173.181 Pyrophoric materials (liquids).

* * * * *

(b) Steel boxes (4A), aluminum boxes (4B), metal boxes, other than steel or aluminum (4N), wooden boxes (4C1, 4C2, 4D, or 4F) or fiberboard boxes (4G); steel drums (1A1 or 1A2), aluminum drums (1B1 or 1B2), metal drums, other than steel or aluminum (1N1 or 1N2), plywood drums (1D), or fiber drums (1G); or steel jerricans (3A1 or 3A2) or aluminum jerricans (3B1 or 3B2) enclosing not more than four strong, tight metal cans with inner receptacles of glass or metal, not over 1 L (0.3 gallon) capacity each, having positive screwcap closures adequately gasketed or alternative closures physically held in place by a means capable of preventing back-off or loosening of the closure due to conditions normally incident to transportation (*e.g.,* vibration). Inner packagings must be cushioned on all sides with dry, absorbent, incombustible material in a quantity sufficient to absorb the entire contents.

* * * * *

■ 25. In § 173.185, revise paragraphs (c)(3)(i) introductory text and (c)(3)(i)(A) to read as follows:

§ 173.185 Lithium cell and batteries.

* * * * *

(c) * * *

(3) * * *

(i) The mark must indicate the UN number: ''UN3090'' for lithium metal cells or batteries; or ''UN3480'' for lithium ion cells or batteries. Where the lithium cells or batteries are contained in, or packed with, equipment, the UN number ''UN3091'' or ''UN3481,'' as appropriate, must be indicated. Where a package contains lithium cells or batteries assigned to different UN numbers, all applicable UN numbers must be indicated on one or more marks. The package must be of such size that there is adequate space to affix the mark on one side without the mark being folded.

Figure 1 to paragraph (c)(3)(i)

(A) The mark must be in the form of a rectangle or a square with hatched edging. The mark must be not less than 100 mm (3.9 inches) wide by 100 mm (3.9 inches) high and the minimum width of the hatching must be 5 mm (0.2 inches), except marks of 100 mm (3.9 inches) wide by 70 mm (2.8 inches) high may be used on a package containing lithium batteries when the package is too small for the larger mark;

* * * * *

■ 26. In § 173.187, revise paragraphs (b), (c), (e) and (f) to read as follows:

§ 173.187 Pyrophoric solids, metals or alloys, n.o.s.

* * * * *

(b) In wooden boxes (4C1, 4C2, 4D, or 4F) with inner metal receptacles that have threaded closures or alternate closures physically held in place by a means capable of preventing back-off or loosening of the closure due to conditions normally incident to transportation (*e.g.,* impact, vibration, etc.). Each inner metal receptacle must not contain more than 15 kg (33 pounds).

(c) In fiberboard boxes (4G) with inner metal receptacles that have threaded closures or alternate closures physically held in place by a means capable of preventing back-off or loosening of the closure due to conditions normally incident to transportation (*e.g.,* impact, vibration, etc.). Each inner metal receptacle must not contain more than 7.5 kg (17 pounds).

* * * * *

(e) In plywood drums (1D) with inner metal receptacles that have threaded closures or alternate closures physically held in place by a means capable of preventing back-off or loosening of the closure due to conditions normally incident to transportation (*e.g.,* impact, vibration, etc.). Each inner metal receptacle must not contain more than 15 kg (33 pounds).

(f) In fiberboard drums (1G) with inner metal receptacles that have threaded closures or alternate closures physically held in place by a means capable of preventing back-off or loosening of the closure due to conditions normally incident to transportation (*e.g.,* impact, vibration, etc.) Each inner metal receptacle must not contain more than 15 kg (33 pounds).

* * * * *

■ 27. In § 173.199, revise the first four sentences in paragraph (a)(5) introductory text 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. For transportation by aircraft, the entire mark must appear on one side of the package. 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. * * *

* * * * *

■ 28. Revise § 173.218 to read as follows:

§ 173.218 Fish meal or fish scrap.

(a) *Transportation by vessel.* (1) Except as provided in Column (7) of the HMT in § 172.101 of this subchapter, fish meal or fish scrap, containing at least 6%, but not more than 12% water, is authorized for transportation in packagings as follows:

(i) Burlap (jute) bag;

(ii) Multi-wall paper bag;

(iii) Polyethylene-lined burlap or paper bag;

(iv) Cargo tank;

(v) Portable tank;

(vi) Rail car; or

(vii) Freight container.

(2) The fish meal or fish scrap must contain at least 50 ppm (mg/kg) of ethoxyquin, 100 ppm (mg/kg) of butylated hydroxytoluene (BHT), or 250 ppm (mg/kg) of tocopherol-based antioxidant at the time of shipment.

Stabilization of fish meal or fish scrap must occur at the time of production and the application must be within twelve months prior to shipment.

(b) *Transportation by air.* (1) Except as provided in Column (7) of the HMT in § 172.101 of this subchapter, fish meal or fish scrap, containing at least 6%, but not more than 12% water, is authorized for transportation in packagings as follows:

(i) The following combination packagings are authorized:

Outer packagings: Steel drum: 1A1 or 1A2; Aluminum drum: 1B1 or 1B2; Metal drum other than steel or aluminum: 1N1 or 1N2; Fiber drum: 1G; Plastic drum: 1H1 or 1H2; Steel jerrican: 3A1 or 3A2; Plastic jerrican: 3H1 or 3H2; Aluminum jerrican: 3B1 or 3B2; Steel box: 4A; Aluminum box: 4B; Natural wood box: 4C1 or 4C2; Plywood box: 4D; Reconstituted wood box: 4F; Fiberboard box: 4G; Solid plastic box: 4H2; or Metal box other than steel or aluminum: 4N.

Inner packagings: Glass, Fiber, Metal, or Plastic.

(ii) The following single packagings are authorized:

Steel drum: 1A1 or 1A2; Aluminum drum: 1B1 or 1B2; Plywood drum with liner: 1D; Plastic drum: 1H1 or 1H2; Fiber drum with liner: 1G; Metal drum other than steel or aluminum: 1N1 or 1N2; Steel jerrican: 3A1 or 3A2; Plastic jerrican: 3H1 or 3H2; Aluminum jerrican: 3B1 or 3B2; Steel box: 4A; Aluminum box: 4B; Metal box other than steel or aluminum: 4N; Natural wood box with liner: 4C2; Plywood box with liner: 4D; Reconstituted wood box with liner: 4F; Fiberboard box with liner: 4G; Solid plastic box: 4H2; Bag, woven plastic: 5H3; Bag, plastic film: 5H4; Bag, textile: 5L3; Bag, paper, multiwall, water resistant: 5M2; Plastic receptacle in steel, aluminum, plywood, fiber or plastic drum: 6HA1, 6HB1, 6HD1, 6HG1 or 6HH1; Plastic receptacle in steel, aluminum, wood, plywood or fiberboard box: 6HA2, 6HB2, 6HC, 6HD2, 6HG2 or 6HH2; or Cylinders, as prescribed for any compressed gas, except for Specification 8 and 3HT.

(2) The fish meal or fish scrap must contain at least 50 ppm (mg/kg) of ethoxyquin, 100 ppm (mg/kg) of butylated hydroxytoluene (BHT), or 250 ppm (mg/kg) of tocopherol-based antioxidant at the time of shipment. Stabilization of fish meal or fish scrap must occur at the time of production and the application must be within twelve months prior to shipment.

■ 29. In § 173.221, revise paragraph (a) to read as follows:

§ 173.221 Polymeric beads, expandable and Plastic molding compound.

(a) For non-bulk shipments of Polymeric beads (or granules), expandable *evolving flammable vapor* and Plastic molding compound *in dough, sheet or extruded rope form, evolving flammable vapor* the following packagings are authorized:

(1) *Single packagings:* Metal box (4A, 4B, or 4N); Wooden box (4C1 or 4C2); Plywood box (4D); Fiberboard box (4G); Reconstituted wood box (4F); Plastic box (4H1 or 4H2); Plywood drums: (1D) or Fiber drums (1G) with sealed inner plastic liners; in vapor tight metal or plastic drums (1A1, 1A2, 1B1, 1B2, 1N1, 1N2, 1H1 or 1H2); or in vapor tight metal or plastic jerricans (3A1, 3A2, 3B1, 3B2, 3H1, or 3H2).

(2) *Combination packagings:* (i) *Outer packagings:* Steel drum: 1A1 or 1A2; Aluminum drum: 1B1 or 1B2; Plywood drum: 1D; Fiber drum: 1G; Plastic drum: 1H1 or 1H2; Metal drum other than steel or aluminum: 1N1 or 1N2; Steel jerrican: 3A1 or 3A2; Plastic jerrican: 3H1 or 3H2; Aluminum jerrican: 3B1 or 3B2; Steel box: 4A; Aluminum box: 4B; Natural wood box: 4C1 or 4C2; Plywood box: 4D; Reconstituted wood box: 4F; Fiberboard box: 4G; Plastic box: 4H1 or 4H2; or Metal box other than steel or aluminum: 4N.

(ii) *Inner packagings:* Glass receptacles, Plastic receptacles, Metal receptacles, Paper receptacles, Fiber receptacles.

(3) Non-specification packagings when transported in dedicated vehicles or freight containers. The packagings need not conform to the requirements for package testing in part 178 of this subchapter, but must be capable of containing any evolving gases from the contents during normal conditions of transportation.

* * * * *

■ 30. Revise § 173.222 to read as follows:

§ 173.222 Dangerous goods in articles, machinery, or apparatus.

Hazardous materials in articles, machinery, or apparatus are excepted from the specification packaging requirements of this subchapter when packaged according to this section. Hazardous materials in articles, machinery, or apparatus must be packaged in strong outer packagings, unless the receptacles containing the hazardous materials are afforded adequate protection by the construction of the article, machinery, or apparatus. Each package must conform to the packaging requirements of subpart B of this part, except for the requirements in §§ 173.24(a)(1) and 173.27(e), and the following requirements:

(a) If the article, machinery, or apparatus contains more than one hazardous material, the materials must not be capable of reacting dangerously together.

(b) The nature of the containment must be as follows—

(1) Damage to the receptacles containing the hazardous materials during transport is unlikely. However, in the event of damage to the receptacles containing the hazardous materials, no leakage of the hazardous materials from the article, machinery or apparatus is possible. A leakproof liner may be used to satisfy this requirement.

(2) Receptacles containing hazardous materials must be secured and cushioned so as to prevent their breakage or leakage and so as to control their shifting within the article, machinery, or apparatus during normal conditions of transportation. Cushioning material must not react dangerously with the content of the receptacles. Any leakage of the contents must not substantially impair the protective properties of the cushioning material.

(3) Receptacles for gases, their contents and filling densities must conform to the applicable requirements of this subchapter, unless otherwise approved by the Associate Administrator.

(c)(1) Except for transportation by aircraft, the total net quantity of hazardous materials contained in one item of an article, machinery, or apparatus must not exceed the following:

(i) In the case of solids or liquids, the limited quantity amount specified in the corresponding section referenced in Column (8A) of the § 172.101 Table;

(ii) 0.5 kg (1.1 pounds) in the case of Division 2.2 gases.

(iii) When an article, machinery, or apparatus contains multiple hazardous materials, the quantity of each hazardous material must not exceed the quantity specified in the corresponding section referenced in Column (8A) of the § 172.101 Table, or for gases, paragraph (c)(1)(ii) of this section.

(2) For transportation by aircraft, the total net quantity of hazardous materials contained in one item of an article, machinery, or apparatus must not exceed the following:

(i) 1 kg (2.2 pounds) in the case of solids;

(ii) 0.5 L (0.1 gallons) in the case of liquids;

(iii) 0.5 kg (1.1 pounds) in the case of Division 2.2 gases. Division 2.2 gases with subsidiary risks and refrigerated liquefied gases are not authorized;

(iv) A total quantity of not more than the aggregate of that permitted in paragraphs (c)(2)(i) through (iii) of this section, for each category of material in the package, when a package contains hazardous materials in two or more of the categories in paragraphs (c)(2)(i) through (iii) of this section; and

(d) Except for transportation by aircraft, when a package contains hazardous materials in two or more of the categories listed in paragraph (c)(1) of this section the total quantity required by § 172.202(c) of this subchapter to be entered on the shipping paper must be either the aggregate quantity, or the estimated quantity, of all hazardous materials, expressed as net mass.

■ 31. In § 173.225:

■ a. Revising in paragraph (c), in the Organic Peroxide Table, the entry ''Di-(4-tert-butylcyclohexyl) peroxydicarbonate [as a paste]''; and

■ b. Adding in paragraph (e), in the Organic Peroxide IBC Table, entries for ''tert-Amyl peroxypivalate, not more than 42% as a stable dispersion in water'' and ''tert-Butyl peroxypivalate, not more than 42% in a diluent type A'' in alphabetical order.

The revisions read as follows:

§ 173.225 Packaging requirements and other provisions for organic peroxides.

* * * * *

(c) * * *

TABLE TO PARAGRAPH (c): ORGANIC PEROXIDE TABLE

Technical name	ID No.	Concentration (mass %)	Diluent (mass %)			Water (mass %)	Packing method	Temperature (°C)		Notes
			A	B	I			Control	Emergency	
(1)	(2)	(3)	(4a)	(4b)	(4c)	(5)	(6)	(7a)	(7b)	(8)
* * *			*		*		*		*	
Di-(4-tert-butylcyclohexyl)peroxydicarbonate [as a paste].	UN3118	≤ 42	.....	.....	.....	.....	OP8	35	40	.....
* * *			*		*		*		*	

* * * * * (e) * * *

TABLE TO PARAGRAPH (e): ORGANIC PEROXIDE IBC TABLE

UN No.	Organic peroxide	Type of IBC	Maximum quantity (liters)	Control temperature	Emergency temperature
*	* * *	*		*	*
3119	ORGANIC PEROXIDE, TYPE F, LIQUID, TEMPERATURE CONTROLLED.	.....	.....	.....	.....
*	* * *	*		*	*
	tert-Amyl peroxypivalate, not more than 42% as a stable dispersion in water.	31HA1	1000	0 °C	+10 °C
	tert-Butyl peroxypivalate, not more than 42% in a diluent type A	31HA1	1000	10 °C	15°C
		31A	1250	10 °C	15°C
*	* * *	*		*	*

* * * * *

■ 32. In § 173.301b, revise paragraphs (a)(2) and (c) to read as follows:

§ 173.301b Additional general requirements for shipment of UN pressure receptacles.

(a) * * *

(2) The gases or gas mixtures must be compatible with the UN pressure receptacle and valve materials as prescribed for metallic materials in ISO 11114–1:2012(E) and ISO 11114–1:2012/Amd 1:2017(E) (IBR, *see* § 171.7 of this subchapter) and for non-metallic materials in ISO 11114–2:2013(E) (IBR, *see* § 171.7 of this subchapter).

* * * * *

(c) *Pressure receptacle valve requirements.* (1) When the use of a valve is prescribed, the valve must conform to the requirements in ISO 10297:2014(E), and ISO 10297:2014/Amd 1:2017 (*see* § 171.7 of this subchapter). Quick release cylinder valves for specification and type testing must conform to the requirements in ISO 17871:2015(E) (IBR, *see* § 171.7 of this subchapter). Until December 31, 2020, the manufacture of a valve conforming to the requirements in ISO 10297:2006(E) (IBR, *see* § 171.7 of this subchapter) was authorized. Until December 31, 2008, the manufacture of a valve conforming to the requirements in ISO 10297:1999(E) (IBR, *see* § 171.7 of this subchapter) was authorized.

(2) A UN pressure receptacle must have its valves protected from damage that could cause inadvertent release of the contents of the UN pressure receptacle by one of the following methods:

(i) By constructing the pressure receptacle so that the valves are recessed inside the neck of the UN pressure receptacle and protected by a threaded plug or cap;

(ii) By equipping the UN pressure receptacle with a valve cap conforming to the requirements in ISO 11117:2008(E) 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(E) (IBR, *see* § 171.7 of this subchapter) was 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(E) 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(E) (IBR, *see* § 171.7 of this subchapter) was authorized. For metal hydride storage systems, by protecting the valves in accordance with the requirements in ISO 16111:2008(E) (IBR; *see* § 171.7 of this subchapter).

(iv) By using valves designed and constructed with sufficient inherent strength to withstand damage in accordance with Annex B of ISO 10297:2014(E);

(v) By enclosing the UN pressure receptacles in frames (*e.g.,* bundles of cylinders);

(vi) By packing the UN pressure receptacles in a strong outer package, such as a box or crate, capable of meeting the drop test specified in § 178.603 of this subchapter at the Packing Group I performance level; or

(vii) By using valves designed and constructed in accordance with Annex A of ISO 17879:2017(E) (IBR, *see* § 171.7 of this subchapter) for UN pressure receptacles with self-closing valves with inherent protection (except those in acetylene service).

* * * * *

■ 33. In § 173.304b, revise paragraph (b)(2) to read as follows:

§ 173.304b Additional requirements for shipment of liquefied compressed gases in UN pressure receptacles.

* * * * *

(b) * * *

(2) For low pressure liquefied gases, the maximum mass in kilograms of contents per liter of water capacity must be less than or equal to 95 percent of the liquid phase at 50 °C. In addition, the UN pressure receptacle may not be liquid full at 60 °C. The test pressure of the pressure receptacle must be equal to or greater than the vapor pressure of the liquid at 65 °C.

* * * * *

■ 34. In § 173.306, revise paragraphs (f)(2)(i) and (3)(iv), and add paragraph (n) to read as follows:

§ 173.306 Limited quantities of compressed gases.

* * * * *

(f) * * *

(2) * * *

(i) Each accumulator must be shipped as an inside packaging. Robust accumulators may be transported unpackaged, in crates, or in appropriate overpacks when the hazardous materials are afforded equivalent protection by the article in which they are contained;

* * * * *

(3) * * *

(iv) Accumulators must be packaged in strong outer packaging. Robust accumulators may be transported unpackaged, in crates, or in appropriate overpacks when the hazardous materials are afforded equivalent protection by the article in which they are contained.

* * * * *

(n) *Receptacles, small, containing gas or gas cartridges for recycling or disposal.* Receptacles, small, containing gas or gas cartridges not exceeding 1.0 L (0.3 gallons) capacity may be offered for transportation for the purposes of recycling or disposal. Receptacles, small, containing gas *or* gas cartridges are not required to be protected against shifting and inadvertent discharge if measures to prevent dangerous build-up of pressure and dangerous atmospheres are addressed and are excepted from the specification packaging requirements of this subchapter when packaged and offered in accordance with this paragraph (n).

(1) Receptacles, small containing gas *or* gas cartridges for recycling or disposal, other than those that are leaking or severely deformed, must be packaged as follows:

(i) The receptacles, small, containing gas *or* gas cartridges must be packaged in a strong outer packaging. The strong outer packaging and its contents must not exceed a gross weight of 55 kg (121 pounds) for fiberboard packagings or 125 kg (275 pounds) for other packagings; and

(ii) Packagings must be adequately ventilated to prevent the creation of dangerous atmospheres and build-up of pressure.

(2) Rigid large packagings are authorized conforming to the packing group II performance level made of:

(i) Steel (50A); Aluminum (50B); Metal other than steel or aluminum (50N); Rigid plastics (50H); Natural wood (50C); Plywood (50D); Reconstituted wood (50F); Rigid fiberboard (50G).

(ii) Large packagings must be designed and constructed to prevent dangerous shifting and inadvertent discharge during normal conditions of transport;

(iii) Large packagings must be adequately ventilated to prevent the creation of dangerous atmospheres and the build-up of pressure; and

(iv) Leaking or severely deformed containers must be transported in salvage cylinders or salvage packagings provided adequate measures are taken to prevent a dangerous build-up of pressure.

(3) Receptacles, small, containing gas or gas cartridges for recycling or disposal must not be transported in closed freight containers.

(4) Receptacles, small, containing gas or gas cartridges for recycling or disposal that were filled with Division 2.2 gases and have been pierced are not subject to the requirements of this subchapter.

■ 35. In § 173.335, revise paragraph (d) to read as follows:

§ 173.335 Chemical under pressure n.o.s.

* * * * *

(d) *Periodic inspection.*

(1) Except as specified in (d)(2) of this section, the maximum requalification test period for cylinders transporting chemical under pressure n.o.s. is 5 years.

(2) For cylinders with maximum capacity of 450 L or less and filled with materials used as fire extinguishing agents, the maximum requalification test period is 10 years.

* * * * *

PART 175—CARRIAGE BY AIRCRAFT

■ 36. 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.

■ 37. In § 175.8, add paragraph (b)(5) to read as follows:

§ 175.8 Exceptions for operator equipment and items of replacement.

* * * * *

(b) * * *

(5) Alcohol-based hand sanitizers and alcohol-based cleaning products that are accessible to crewmembers for use on the aircraft during the flight or series of flights for the purposes of passenger and crew hygiene. Conditions for the carriage and use must be described in an operations manual and/or other appropriate manuals.

■ 38. In § 175.9, revise paragraph (b)(5)(ii) to read as follows:

§ 175.9 Special aircraft operations.

(b) * * *

(5) * * *

(ii) Each type of battery used is either nonspillable, lithium metal, or lithium ion. Lithium metal or lithium ion batteries must meet the provisions of § 173.185(a) of this subchapter. Spare batteries must be individually protected to prevent short circuits when not in use;

* * * * *

■ 39. In § 175.10, revise paragraphs (a)(1) and (11) to read as follows:

§ 175.10 Exceptions for passengers, crewmembers, and air operators.

* * * * *

(a) * * *

(1)(i) Non-radioactive medicinal and toilet articles for personal use (including aerosols) carried in carry-on and checked baggage. Release devices on aerosols must be protected by a cap or other suitable means to prevent inadvertent release;

(ii) Other aerosols in Division 2.2 (nonflammable gas) with no subsidiary risk carried in carry-on or checked baggage. Release devices on aerosols must be protected by a cap or other suitable means to prevent inadvertent release;

(iii) The aggregate quantity of these hazardous materials carried by each person may not exceed 2 kg (70 ounces) by mass or 2 L (68 fluid ounces) by volume and the capacity of each container may not exceed 0.5 kg (18 ounces) by mass or 500 ml (17 fluid ounces) by volume; and

(iv) The release of gas must not cause extreme annoyance or discomfort to crew members so as to prevent the correct performance of assigned duties.

* * * * *

(11) No more than two self-inflating personal safety devices, intended to be worn by a person such as a life jacket or vest, fitted with no more than two small gas cartridges per device (containing no hazardous material other than a Division 2.2 gas) for inflation purposes plus no more than two spare cartridges per device. The personal safety device(s) 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 they cannot be accidently activated.

* * * * *

■ 40. In § 175.75, revise paragraph (b) and Note 1 to the Quantity and Loading Table in paragraph (f) to read as follows:

§ 175.75 Quantity limitations and cargo location.

* * * * *

(b) *Hazardous materials stowage.* (1) Except as otherwise provided in this subchapter, no person may carry a hazardous material in the cabin of a passenger-carrying aircraft or on the flight deck of any aircraft, and the hazardous material must be located in a place that is inaccessible to persons other than crew members.

(2) Hazardous materials may be carried in a main deck cargo compartment of a passenger aircraft provided that the compartment is inaccessible to passengers and that it meets all certification requirements for: A Class B aircraft cargo compartment in 14 CFR 25.857(b); or a Class C aircraft cargo compartment in 14 CFR 25.857(c).

(3) A package bearing a ''KEEP AWAY FROM HEAT'' handling marking must be protected from direct sunshine and stored in a cool and ventilated place, away from sources of heat.

(4) Except as provided in paragraph (f) of this section, a package containing a hazardous material acceptable for cargo-only aircraft must be loaded in an accessible manner.

* * * * *

(f) * * *

Note 1: The following materials are not subject to this loading restriction—

a. Class 3, PG III (unless the substance is also labeled CORROSIVE).

b. Division 6.1 (unless the substance is also labeled for any hazard class or division except FLAMMABLE LIQUID).

c. Division 6.2.

d. Class 7 (unless the hazardous material meets the definition of another hazard class).

e. Class 9, Limited Quantity, or Excepted Quantity material.

f. Articles of Identification Numbers UN0012, UN0014, or UN0055 also meeting the requirements of § 173.63(b).

g. Articles of Identification Numbers UN3528 or UN3529.

* * * * *

PART 176—CARRIAGE BY VESSEL

■ 41. 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.

■ 42. In § 176.84, in the paragraph (b) table, revise code 4, add codes 155, 156, and 157 in numerical order, and in the paragraph (c)(2) table, revise provisions 19E and 22E to read as follows:

§ 176.84 Other requirements for stowage, cargo handling, and segregation for cargo vessels and passenger vessels.

* * * * *

(b) * * *

Code	Provisions
* * * * * * *	
4	Shall not be stowed together with combustible material in the same cargo transport unit.
* * * * * * *	
155	Avoid handling the package or keep handling to a minimum. Inform the appropriate public health authority or veterinary authority where persons or animals may have been exposed.
156	For lithium batteries transported in accordance with § 173.185(f) or for purposes of disposal or recycling, stowage category C applies.
157	For aerosols and gas receptacles transported for purposes of recycling or disposal, stowage category C applies, and stowage must be clear of living quarters.
* * * * * * *	

* * * * *

(c) * * *

(2) * * *

Notes	Provisions
* * * * * * *	
19E	''Separated from'' explosives containing chlorates or perchlorates.
* * * * * * *	
22E	''Separated from'' ammonium compounds and explosives containing ammonium compounds or salts.

Notes			Provisions			
*	*	*	*	*	*	*

PART 178—SPECIFICATIONS FOR PACKAGINGS

■ 43. 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.

■ 44. In § 178.3, revise paragraph (a)(4) to read as follows:

§ 178.3 Marking of packagings.

(a) * * *

(4) Unless otherwise specified, letters and numerals must be at least 12.0 mm (0.47 inches) in height except for packagings of less than or equal to 30 L (7.9 gallons) capacity for liquids or 30 kg (66 pounds) maximum net mass for solids the height must be at least 6.0 mm (0.2 inches). For packagings having a capacity of 5 L (1.3 gallons) or less or of 5 kg (11 pounds) maximum net mass, letters and numerals must be of an appropriate size.

* * * * *

■ 45. In § 178.71 by:

■ a. Revising paragraph (d)(2);

■ b. Adding paragraph (l)(1)(iv), and

■ c. Revising paragraph (o)(1)

The revisions and additions read as follows:

§ 178.71 Specifications for UN pressure receptacles.

* * * * *

(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 10297:2014(E) and ISO 10297:2014/Amd 1:2017(E), or for non-refillable pressure receptacles valves manufactured until December 31, 2020, ISO 13340:2001(E) (IBR, *see* § 171.7 of this subchapter), and be protected as specified in § 173.301b(f) of this subchapter. Until December 31, 2022, the manufacture of a valve conforming to the requirements of ISO 10297:2014(E) (IBR, *see* § 171.7 of this subchapter) is authorized. Until December 31, 2020, the manufacture of a valve conforming to the requirements in ISO 10297:2006(E) (IBR, *see* § 171.7 of this subchapter) was authorized. Until December 31, 2008, the manufacture of a valve conforming to the requirements in ISO 10297:1999 (E) (IBR, *see* § 171.7 of this subchapter) was authorized. Additionally, valves must be initially inspected and tested in accordance with ISO 14246:2014(E) and ISO 14246:2014/Amd 1:2017(E), Gas cylinders—Cylinder valves—Manufacturing tests and examinations (IBR, *see* § 171.7 of this subchapter). For self-closing valves with inherent protection, the requirements of ISO 17879:2017(E) (IBR, *see* § 171.7 of this subchapter) shall be met until further notice.

* * * * *

(l) * * *

(1) * * *

(iv) ISO 11119–4:2016(E) (IBR, *see* § 171.7 of this subchapter). Until December 31, 2020, cylinders conforming to the requirements in ISO 11119–4(E) (IBR, *see* § 171.7 of this subchapter) was authorized.

* * * * *

(o) * * *

(1) ISO 11114–1:2012(E) and 11114–1:2012/Amd 1:2017(E) (IBR, *see* § 171.7 of this subchapter).

* * * * *

■ 46. In § 178.75, revise paragraph (d)(3) introductory text and add paragraphs (d)(3)(vi) through (ix) to read as follows:

§ 178.75 Specifications for MEGCs.

* * * * *

(d) * * *

(3) Each pressure receptacle of a MEGC must be of the same design type, seamless steel or composite, and constructed and tested according to one of the following ISO standards, as appropriate:

* * * * *

(vi) ISO 11119–1:2012(E), Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 1: Hoop wrapped fibre reinforced composite gas cylinders and tubes up to 450 L (IBR, *see* § 171.7 of this subchapter).

(vii) ISO 11119–2:2012(E) and ISO 11119–2:2012/Amd.1:2014(E), Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 2: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 L with load-sharing metal liners (both IBR, *see* § 171.7 of this subchapter).

(viii) ISO 11119–3:2013(E) Gas cylinders— Refillable composite gas cylinders and tubes—Design, construction and testing—Part 3: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 L with non-load-sharing metallic or non-metallic liners (IBR, *see* § 171.7 of this subchapter).

(ix) ISO 11119–4:2016 Gas cylinders—Refillable composite gas cylinders—Design, construction and testing—Part 4: Fully wrapped fibre reinforced composite gas cylinders up to 150 L with load-sharing welded metallic liners (IBR, *see* § 171.7 of this subchapter).

* * * * *

■ 47. In § 178.275, revise paragraph (i)(2)(i)(A) to read as follows:

§ 178.275 Specification for UN Portable Tanks intended for the transportation of liquid and solid hazardous materials.

* * * * *

(i) * * *

(2) * * *

(i) * * *

(A) To determine the total required capacity of the relief devices, which must be regarded as being the sum of the individual capacities of all the contributing devices, the following formula must be used:

$$Q = 12.4 \frac{FA^{0.82}}{LC}\sqrt{\frac{ZT}{M}}$$

Where:

Q = minimum required rate of discharge in cubic meters of air per second (m^3/s) at conditions: 1 bar and 0 °C (273 °K);

F = for uninsulated shells: 1; for insulated shells: U(649 − t)/13.6 but in no case, is less than 0.25

Where:

U = heat transfer coefficient of the insulation, in $kW\,m^{-2}K^{-1}$, at 38 °C (100 °F); and t = actual temperature of the hazardous material during filling (in °C) or when this temperature is unknown, let t = 15 °C (59 °F). The value of F given in this paragraph (i)(2)(i)(A) for insulated shells may only be used if the insulation is in conformance with paragraph (i)(2)(iv) of this section;

A = total external surface area of shell in square meters;

Z = the gas compressibility factor in the accumulating condition (when this factor is unknown, let Z equal 1.0);

T = absolute temperature in Kelvin (°C + 273) above the pressure relief devices in the accumulating condition;

L = the latent heat of vaporization of the liquid, in kJ/kg, in the accumulating condition;

M = molecular weight of the hazardous material.

* * * * *

■ 48. In § 178.505, redesignate paragraphs (b)(6) and (7) as (b)(7) and (8), respectively, and add new paragraph (b)(6) to read as follows:

§ 178.505 Standards for aluminum drums.

* * * * *

(b) * * *

(6) If materials used for body, heads, closures, and fittings are not compatible with the contents to be transported, suitable internal protective coatings or treatments must be applied. These coatings or treatments must retain their protective properties under normal conditions of transport.

(7) Maximum capacity of drum: 450 L (119 gallons).

(8) Maximum net mass: 400 kg (882 pounds).

■ 49. In § 178.506, redesignate paragraphs (b)(6) and (7) as (b)(7) and (8), respectively, and add new paragraph (b)(6) to read as follows:

§ 178.506 Standards for metal drums other than steel or aluminum.

* * * * *

(b) * * *

(6) If materials used for body, heads, closures, and fittings are not compatible with the contents to be transported, suitable internal protective coatings or treatments must be applied. These coatings or treatments must retain their protective properties under normal conditions of transport.

(7) Maximum capacity of drum: 450 L (119 gallons).

(8) Maximum net mass: 400 kg (882 pounds).

■ 50. In § 178.609, revise paragraph (g) to read as follows:

§ 178.609 Test requirements for packagings for infectious substances.

* * * * *

(g) Where packaging is intended to contain dry ice, an additional drop test to that specified in paragraph (d), and when appropriate, (e) or (f) of this section must be performed on one sample in one of the orientations described in (d)(1) or (d)(2) of this section, as appropriate, which is most likely to result in failure of the packaging. The sample must be stored so that all the dry ice dissipates prior to being subjected to the drop test.

* * * * *

■ 51. In § 178.703, revise paragraphs (b)(6) introductory text and (b)(7)(iv) to read as follows:

§ 178.703 Marking of IBCs.

* * * * *

(b) * * *

(6) For each composite IBC, the inner receptacle must be marked with at least the following information. The marking must be visible while inside of the outer receptacle. If the marking is not visible from the outer receptacle, the marking must be duplicated on the outer receptacle and include an indication that the marking applies to the inner receptacle.

* * * * *

(7) * * *

(iv) For IBCs designed for stacking, the maximum permitted stacking load must be displayed with the symbol. The mass in kilograms (kg) marked above the symbol must not exceed the load imposed during the design test, as indicated by the marking in paragraph (a)(1)(vii) of this section, divided by 1.8. The letters and numbers indicating the mass must be at least 12 mm (0.48 inches).

■ 52. In § 178.705, revise paragraph (c)(1)(iv) introductory text to read as follows:

§ 178.705 Standards for metal IBCs.

* * * * *

(c) * * *

(1) * * *

(iv) *Minimum wall thickness.* For metal IBCs with a capacity of more than 1500 liters, the minimum wall thickness must be determined as follows:

(A) For a reference steel having a product of $Rm \times Ao = 10{,}000$, where Ao is the minimum elongation (as a percentage) of the reference steel to be used on fracture under tensile stress ($Rm \times Ao = 10{,}000 \times 145$; if tensile strength is in U.S. Standard units of pounds per square inch), the wall thickness must not be less than:

WALL THICKNESS (T) IN MM

Types 11A, 11B, 11N		Types 21A, 21B, 21N, 31A, 31B, 31N	
Unprotected	Protected	Unprotected	Protected
T = C/2000 + 1.5	T = C/2000 + 1.0	T = C/1000 + 1.0	T = C/2000 + 1.5

* * * * *

PART 180—CONTINUING QUALIFICATION AND MAINTENANCE OF PACKAGINGS

■ 53. 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.

■ 54. In § 180.207, revise paragraph (d)(3) and add (7) to read as follows:

§ 180.207 Requirements for requalification of UN pressure receptacles.

* * * * *

(d) * * *

(3) Dissolved acetylene UN cylinders: Each dissolved acetylene cylinder must be requalified in accordance with ISO 10462:2013(E) (IBR, *see* § 171.7 of this subchapter). A cylinder requalified in accordance with ISO 10462(E) up until December 31, 2018, may continue to be used until the next required requalification. The porous mass and the shell must be requalified no sooner than 3 years, 6 months, from the date of manufacture. Thereafter, subsequent requalifications of the porous mass and shell must be performed at least once every ten years.

* * * * *

(7) UN cylinder bundles: UN cylinder bundles containing compressed, liquefied, and dissolved gas must be inspected and tested in accordance with ISO 20475:2018(E) (IBR, *see* § 171.7 of this subchapter).

Issued in Washington, DC on July 15, 2021, under authority delegated in 49 CFR 1.97.

William S. Schoonover,

Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration.

[FR Doc. 2021–15425 Filed 8–9–21; 8:45 am]

BILLING CODE 4910–60–P

FEDERAL REGISTER

Vol. 86 Tuesday,

No. 151 August 10, 2021

Part V

The President

Notice of August 6, 2021—Continuation of the National Emergency With Respect to Export Control Regulations

Federal Register
Vol. 86, No. 151
Tuesday, August 10, 2021

Presidential Documents

Title 3—

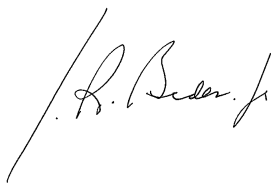
The President

Notice of August 6, 2021

Continuation of the National Emergency With Respect to Export Control Regulations

On August 17, 2001, the President issued Executive Order 13222 pursuant to the International Emergency Economic Powers Act (50 U.S.C. 1701 *et seq.*). In that order, the President declared a national emergency with respect to the unusual and extraordinary threat to the national security, foreign policy, and economy of the United States related to the expiration of the Export Administration Act of 1979, as amended. Because the implementation of certain sanctions authorities, including sections 11A, 11B, and 11C of such Export Administration Act of 1979, consistent with section 1766(b) of Public Law 115–232, the Export Control Reform Act (50 U.S.C. 4601 note), is to be carried out under the International Emergency Economic Powers Act, the national emergency declared on August 17, 2001, must continue in effect beyond August 17, 2021. Therefore, in accordance with section 202(d) of the National Emergencies Act (50 U.S.C. 1622(d)), I am continuing for 1 year the national emergency declared in Executive Order 13222, as amended by Executive Order 13637 of March 8, 2013.

This notice shall be published in the *Federal Register* and transmitted to the Congress.



THE WHITE HOUSE,
August 6, 2021.

[FR Doc. 2021–17195
Filed 8–9–21; 11:15 am]
Billing code 3295–F1–P

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Federal Register

Vol. 86, No. 151

Tuesday, August 10, 2021

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