DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 107, 110, 171, 172, 173, 174, 175, 176, 177, 178, and 180

[Docket No. PHMSA–2021–0091 (HM–260B)]

RIN 2137–AF56

Hazardous Materials: Editorial Corrections and Clarifications

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: This final rule corrects editorial errors and improves the clarity of certain provisions in PHMSA's program and procedural regulations and in the Hazardous Materials Regulations. The intended effect of this rulemaking is to enhance accuracy and reduce misunderstandings of the regulations. The amendments contained in this final rule are non-substantive changes and do not impose new requirements.

DATES: This final rule is effective January 26, 2023.

FOR FURTHER INFORMATION CONTACT: Yul B. Baker Jr., Standards and Rulemaking Division, 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:

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I. Background

The Pipeline and Hazardous Materials Safety Administration (PHMSA), in this final rule, is amending the Hazardous Materials Regulations (HMR; 49 Code of Federal Regulations (CFR) parts 171–180) to correct typographical errors; fix incorrect regulatory references and citations; remove obsolete references to regulatory provisions, dates, as well as outdated concepts such as other regulated materials-domestic (ORM–D); address misstatements of certain regulatory requirements; and supply information or language that had been inadvertently omitted. Further, within the scope of this rulemaking, PHMSA is revising certain procedural regulations at 49 CFR parts 107 and 110 to make them easier to understand. PHMSA expects the regulatory amendments adopted in this final rule will ensure stakeholders focus their resources on compliance with pertinent safety requirements of the HMR rather than trying to resolve erroneous, ambiguous, or obsolete language within PHMSA's regulations.

The amendments contained in this final rule are non-substantive changes that do not impose new requirements that necessitate public comment. The final rule's amendments are consistent with PHMSA's historical practice of regularly reviewing the HMR and PHMSA's program and procedural regulations for opportunities to eliminate regulatory confusion, fix typographical errors and omissions, and remove obsolete material and references.

II. Removing Outdated References to Other Regulated Materials-Domestic (ORM–D)

In 2011, PHMSA published final rule HM–215K [1] in which PHMSA amended the HMR to maintain alignment with updates to certain international standards and regulations. Among these amendments, PHMSA adopted changes to align existing limited quantity provisions with the global system of transport of limited quantity material under international standards and regulations including the International Maritime Dangerous Goods (IMDG) Code, the International Civil Aviation Organization's (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air, and the United Nations (UN) Recommendations on the Transport of Dangerous Goods—Model Regulations. These changes included the phase-out of existing provisions in the HMR for limited quantities reclassed as ORM–D (*e.g.,* limited quantity material defined as consumer commodities). This shift allowed for the use of a single global system for the transportation of limited quantities of hazardous materials and would transition shipments within the United States away from the domestic provisions for ORM–D reclassification and marking for certain limited quantity hazardous materials. Specifically, PHMSA adopted sunset dates for use of the domestic ORM–D classification and associated package marking ''Consumer commodity, ORM–D.'' Hazardous materials transported by air had an implementation date of January 1, 2013, and hazardous materials transported by all other modes had an implementation date of January 1, 2014.

In response to appeals to final rule HM–215K,[2] PHMSA extended the authorized use of the ORM–D classification and packages marked ''Consumer commodity, ORM–D'' for domestic highway, rail, and vessel transportation until December 31, 2020, to allow sufficient time for domestic shippers and carriers to adjust to this revised global system of transporting limited quantity materials. Since this phase-out period has passed—and use of the ORM–D classification is no longer authorized—PHMSA is removing any reference to ORM–D from the HMR in the following locations:

- Appendix A to Subpart D of Part 107—Guidelines for Civil Penalties (List of Frequently Cited Violations)
- § 171.8—In the definition of ''Agricultural product''
- § 172.101(f)
- § 172.101—deletion of Hazardous Materials Table (HMT) entries: ''Cartridges power device (used to project fastening devices), ORM–D,'' ''Cartridges, small arms, ORM–D,'' and ''Consumer commodity, ORM–D.''
- § 172.102(c)(1)—deletion of Special Provision 222
- § 172.200(b)(3)
- § 172.315(d)
- § 172.316
- § 172.500(b)(2)
- § 172.504—Table 2
- § 172.512(c)
- § 172.600(d)
- § 173.2—Hazardous Material Classes and Index to Hazard Classifications
- § 173.6(a)(1) introductory text and (a)(1)(ii)
- § 173.12(h) introductory text, (h)(1) and (h)(3)
- § 173.24a(c)(1)(iii)
- § 173.27—Table 3
- § 173.29(b)(2)(iv)(A)
- § 173.36(h)(1)(iii)
- § 173.63(b)(1)(ii), (b)(1)(iii) introductory text, and (b)(2) introductory text
- § 173.144
- § 173.145
- § 173.150(c)

[1] 76 FR 3308 (Jan. 19, 2011).

[2] 78 FR 1101 (Jan. 7, 2013).

- § 173.151(c)
- § 173.152(c)
- § 173.153(c)
- § 173.154(c)
- § 173.155(c)
- § 173.156(b), (b)(2), and (d)
- § 173.161(d)(2)
- § 173.165(d)
- § 173.230(h)
- § 173.306(a)(1), (b), (h)(2)(i), (i)(1), and (i)(2)
- § 174.82(a)
- § 176.11(e)

III. Updating Titles to Subpart B of Part 177

In part 177, subpart B—Loading and Unloading, some of the regulatory provision titles in the subpart reference the hazard class with a descriptive term while other titles reference only the hazard class number (*e.g.,* Class 8 (corrosive) materials vs Class 1 materials). For consistency and uniformity within subpart B, PHMSA amends the titles to include a descriptive term associated with the hazard class in the following sections:

- § 177.835—Class 1 (explosive) materials
- § 177.837—Class 3 (flammable liquid and combustible liquid) materials
- § 177.841—Division 6.1 (poisonous) materials and Division 2.3 (poisonous gas) materials

IV. Section-by-Section Review of Changes

In addition to the specific changes noted in ''Section II. Removing Outdated References to Other Regulated Materials-Domestic (ORM–D),'' the following is a section-by-section summary of the editorial corrections and clarifications made in this final rule. PHMSA is also making minor technical corrections throughout the HMR to align cross-references with current regulatory requirements and provisions.

A. Part 107

Section 107.109

This paragraph provides the requirements to apply for the renewal of a special permit. In paragraph (a)(4) of § 107.109, a person must include a certification that the original application, as updated by any application for renewal, remains accurate. PHMSA provides examples, in parentheses, of information that must be certified by a person for the renewal of a special permit application (*e.g.,* all section references, shipping description, etc.). To clarify additional information a person must certify, PHMSA revises paragraph (a)(4) by including ''email address'' among the information that must be accurate before submitting a renewal application for a special permit. Certifying an accurate email address will allow for a timely response from PHMSA and avoid unnecessary delays in the special permit renewal process.

Section 107.502

This section provides the general registration requirements for cargo tanks and cargo tank motor vehicles. In § 107.502(d), PHMSA is revising the Federal Motor Carrier Safety Administration (FMCSA) Hazardous Materials Division designation ''MC–ECH'' to read ''MC–SEH.'' PHMSA is also revising the FMCSA mailing address for registration statements to remove redundant reference to the division designation within the address.

B. Part 110

Section 110.7

This section provides the Office of Management and Budget (OMB) control number assigned to each collection of information. In final rule HM–209A,[3] PHMSA revised the HMR to align with OMB's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (2 CFR part 200), as well as new requirements outlined in the Fixing America's Surface Transportation Act of 2015 (Pub. L. 114–94). In HM–209A, PHMSA removed and reserved §§ 110.70, 110.80, and 110.90 to eliminate duplicative language found in 2 CFR part 200. However, PHMSA did not make an accompanying revision to § 110.7, which still contains the now reserved sections. Therefore, PHMSA is removing the reference to the reserved sections currently found in § 110.7.

C. Part 171

Section 171.6

This section provides the OMB control numbers assigned to collections of information within the HMR. In final rule HM–251,[4] PHMSA requested a new information collection under OMB Control No. 2137–0628 titled ''Flammable Hazardous Materials by Rail Transportation.'' PHMSA inadvertently left out OMB control number 2137–0628 from the § 171.6(b)(2) table, and therefore, PHMSA is adding the missing control number, title, and reference sections, as appropriate, for full transparency of authorized HMR information collections.

Section 171.7

This section lists material incorporated by reference into the HMR. In final rule HM–215N,[5] PHMSA amended the HMR to maintain consistency with international regulations and standards by harmonizing with changes made to the IMDG Code, the ICAO Technical Instructions, and the UN Model Regulations. However, PHMSA made a typographical error that incorrectly changed the publication date for the referenced edition of the International Organization for Standardization standard ''ISO 4706:2008(E).'' The publication date was inadvertently changed from ''2008–04–15'' as presented in the notice of proposed rulemaking (NPRM) for HM–215N[6] to ''2008–07–014,'' which is incorrect. PHMSA is correcting this error to accurately reflect the ISO publication date of the version incorporated by reference to read: ''ISO 4706:2008(E), Gas cylinders—Refillable welded steel cylinders—Test pressure 60 bar and below, First Edition, 2008–04–15, Corrected Version, 2008–07–01'' into § 178.71.

In final rule HM–224B[7] and in consultation with the Federal Aviation Administration (FAA), PHMSA amended the HMR to authorize the use of Air Transport Association Specification 300 for Type I (ATA 300) shipping containers. Because of extensive testing and research, PHMSA eliminated special provision ''A52'' and relocated ''Oxygen, compressed'' packaging requirements from one or more of §§ 173.168(d), 173.302(f)(3), and 173.304(f)(3). However, PHMSA did not list these sections in § 171.7(b) in association with the ATA 300 standard incorporated by reference. Therefore, PHMSA is revising § 171.7(b)(1) ''ATA Specification No. 300 Packaging of Airline Supplies, Revision 19, July 31, 1996'' to include a reference to §§ 173.168(d), 173.302(f)(3), and 173.304(f)(3). In addition, PHMSA includes a cross-reference to § 171.7 within each of those same sections.

Finally, PHMSA was notified by the Compressed Gas Association (CGA) that their address in § 171.7(n) was outdated. As such, PHMSA is amending the address from ''1235 Jefferson Davis Highway, Arlington, VA 22202'' to ''8484 Westpark Drive, Suite 220, McLean, VA 22102'' per CGA's request.

[3] 84 FR 3993 (Feb. 14, 2019).
[4] 80 FR 26643 (May 8, 2015).
[5] 82 FR 15796 (Mar. 30, 2017).
[6] 81 FR 61741 (Sep. 7, 2016).
[7] 72 FR 4442 (Jan. 31, 2007).

Section 171.8

This section provides definitions and abbreviations used within the HMR. In final rule HM–215K,[8] PHMSA revised the definition of ''Oxidizing gas,'' but the outdated definition inadvertently remains in this section as a duplicate definition that is a source of confusion. Therefore, PHMSA is removing the outdated first definition of ''Oxidizing gas'' listed in the section to avoid any confusion on the applicable definition and thereby, enhancing safety for the regulated community. The version being removed reads: ''*Oxidizing gas* means a gas which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does.''

Section 171.12

This section provides requirements specific to North American shipments of hazardous materials. Paragraph (b) of the section addresses shipments to or from Mexico. Moreover, paragraph (b) sets out specific requirements for shipments of material poisonous by inhalation (PIH). In § 171.12(b)(4), there is a reference to nonexistent paragraph (e)(5). Current paragraph (b)(4) reads that packages of PIH material are to be labeled and placarded as POISON GAS or POISON INHALATION HAZARD in accordance with the HMR, except as provided in (e)(5); and current paragraph (b)(5) indicates a label or placard conforming to the UN Model Regulations may be substituted for a POISON GAS or POISON INHALATION HAZARD label or placard. In final rule HM–215F,[9] PHMSA revised and consolidated provisions applying to North American shipments, which, in part, redesignated previous paragraphs (e)(1) through (e)(5) as paragraphs (b)(1) through (b)(5). However, in HM–215F, PHMSA did not make a conforming amendment to revise the reference to previous paragraph (e)(5) to redesignated (b)(5). Thus, PHMSA will change the paragraph reference from ''(e)(5)'' to ''(b)(5)'' to appropriately reference the alternative way to label or placard a PIH package.

Section 171.15

This section provides the requirements for the immediate notice of certain hazardous materials incidents. In § 171.15(a), PHMSA is revising this paragraph by removing the URL link to *http://www.nrc.uscg.mil* as it is no longer a valid resource for reporting hazardous material incidents. As revised, § 171.15 would require persons to instead contact the National Response Center hotline at 1–800–424–8802.

D. Part 172

Section 172.101

This section contains the Hazardous Materials Table (HMT) and explanatory text for each of the columns in the table. In this final rule, PHMSA is amending the HMT explanatory text as described below:

- Section 172.101(f) addresses column (5) of the HMT for assignment of the packing group and explains that certain Classes and Divisions of hazardous materials are not assigned packing groups. This includes Division 6.2 materials other than Division 6.2 regulated medical wastes. However, in final rule HM–215P,[10] PHMSA removed the assignment of PG II in column (5) for the hazardous materials description ''UN3291, Regulated medical waste, n.o.s. *or* Clinical medical waste, unspecified, n.o.s. *or* (BIO) Medical waste, n.o.s. *or* Biomedical waste, n.o.s., *or* Medical Waste n.o.s.'' creating an inconsistency with the text in § 172.101(f). Accordingly, PHMSA is revising the second sentence of § 172.101(f) by deleting the parenthetical text ''(other than regulated medical wastes)'' to remove any possible misunderstanding that Division 6.2 regulated medical wastes are not assigned a packing group and thus removing a source of confusion whether to indicate the packaging group on a shipping paper for regulated medical waste.
- In final rule HM–218C,[11] PHMSA amended the HMR by adopting miscellaneous changes based on petitions for rulemaking and PHMSA initiatives. In HM–218C, PHMSA amended § 172.101(i)(3) by adding a statement to clarify that some bulk packaging authorizations are found in column (8B) and the special provisions in column (7) of the HMT. However, PHMSA inadvertently removed subparagraphs (i–iii) from § 172.101(i)(3); therefore, PHMSA will add the subparagraphs back to this section.

Additionally, PHMSA is making corrections to information in the HMT as follows:

Column 1—Symbol Changes

- PHMSA is correcting an inadvertent deletion of the ''G'' symbol for the following entries: ''UN2920, Corrosive liquid, self-heating, n.o.s., 8, PG I,'' ''UN2921, Corrosive solids, flammable, n.o.s., 8, PG I,'' and ''UN2925, Flammable solids, corrosive, organic, n.o.s., 4.1, PG II'' by adding the ''G'' symbol for these entries. The assignment of a ''G'' identifies a proper shipping name (PSN) for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description (*i.e.,* with the UN identification number, the PSN, the hazard class, and the packing group). These HMT entries are n.o.s. PSNs and as defined in § 171.8, ''N.O.S.'' means not otherwise specified. Because they do not specify a technical name for the hazardous material, n.o.s. PSNs are typically assigned ''G'' in column (1).

Column 2—PSN Changes

- PHMSA is correcting an inadvertent typo where the language in italics for ''UN1263, Paint *including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base*'' is missing a set of parentheses to indicate the language in italics is not a part of the PSN. PHMSA is correcting this error by including a parenthesis before the word ''including'' and after the word ''base.''
- In final rule HM–219C,[12] PHMSA amended the HMR in response to petitions for rulemaking. HM–219C revised the transportation requirements for limited quantity shipments of hydrogen peroxide including revising the HMT entries to harmonize the limited quantity exceptions with the ICAO Technical Instructions and the UN Model Regulations. For ''UN2014, Hydrogen, peroxide, aqueous solutions with more than 40 percent, but not more than 60 percent hydrogen peroxide (stabilized as necessary), 5.1, PG II'' and ''UN2014, Hydrogen peroxide, aqueous solutions with not less than 20 percent, but not more than 40 percent hydrogen peroxide (stabilized as necessary), 5.1, PG II,'' the HMT entries do not display the correct PSN. The language ''with more than 40 percent, but not more than 60 percent hydrogen peroxide (stabilized as necessary)'' and ''with not less than 20 percent, but not more than 40 percent hydrogen peroxide (stabilized as necessary),'' respectively, is displayed in Roman type font making it appear that the text is part of the PSN. This is incorrect. The PSN is ''Hydrogen peroxide, aqueous solutions'' and the remainder of the language should be italicized. As instructed in § 172.101(c)(1), words in italics are not part of the PSN, but may be used in addition to the PSN. Therefore, PHMSA

[8] 76 FR 3308 (Jan. 19, 2011).

[9] 72 FR 25161 (May 3, 2007).

[10] 87 FR 44944 (Jul. 26, 2022).

[11] 70 FR 34066 (Jun. 13, 2005).

[12] 85 FR 75680 (Nov. 25, 2020).

is correcting this error to italicize the additional text.

• For ''UN3021, Pesticides, liquid, flammable, toxic, flash point less than 23 degrees C,'' the PSN as well as the explanatory text regarding the flash point of the material is displayed in Roman type font. In final rule HM–215M,[13] PHMSA inadvertently revised the italic font of the explanatory text for ''UN3021'' when the stowage code assigned in the HMT for this entry was updated. By not having the explanatory text in italics, the whole description reads as the PSN. Therefore, PHMSA is amending the ''UN3021 entry to the following: ''UN3021, Pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C.*''

• For ''UN3321, Radioactive material, low specific activity (LSA–III) non fissile or fissile-excepted,'' the explanatory text regarding non fissile or fissile-excepted is displayed in Roman type font, making the text part of the PSN, which is not the intent. In HM–215O,[14] PHMSA inadvertently revised the italic font for ''non fissile or fissile-excepted'' when the table entry for ''UN3321'' was updated to reflect the addition of special provision 325. Therefore, PHMSA is amending the ''UN3321'' entry to the following: ''UN3321, Radioactive material, low specific activity (LSA–III) *non fissile or fissile-excepted*.''

• PHMSA is correcting a typographical error where the language in the HMT shows the term ''wheel chair'' as two separate words, which is incorrect. To clarify and to eliminate confusion, the term should be one word and spelled as ''wheelchair'' instead.

Column 6—Label Code Changes

• In final rule HM–215P, the proper shipping name for ''UN3363, Dangerous Goods in Machinery *or* Dangerous Goods in Apparatus, 9,'' was revised to the following: ''UN3363, Dangerous goods in articles *or* Dangerous goods in machinery *or* Dangerous goods in apparatus, 9.'' This PSN revision is reflected in the current UN Model Regulations. In making this revision to the PSN, PHMSA mistakenly deleted the label code in column (6) for this table entry. Therefore, PHMSA is correcting this error by adding label code ''9'' back to column (6) to indicate a Class 9 label is required for this material.

Column 7—Special Provision Changes

• In final rule HM–233F,[15] PHMSA added special provision 383 in association with adopting DOT special permit (DOT–SP) 11356 into the HMR, which authorized a material meeting the conditions for high viscosity flammable liquids specified in § 173.121(b)(1)(i), (b)(1)(ii), and (b)(1)(iv), to be re-classed to PG III for transportation by motor vehicle. However, PHMSA inadvertently did not add the new special provision to the following HMT entries: ''UN1139, Coating solution *(includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining),* 3, PG II'' and ''UN1263, 3, PG II'' even though these materials were covered in DOT–SP 11356. PHMSA is correcting this omission by adding special provision 383 to HMT entries ''UN1139'' and ''UN1263'', respectively.

• In final rule HM–215P, PHMSA amended the regulations to allow ''UN2216, Fish meal, stabilized *or* Fish scrap, stabilized, 9, PGIII,'' to be transported by passenger and cargo aircraft subject to specific quantity limitations for the material. When PHMSA proposed the changes to this table entry, we did not propose removal of special provision ''B136'' from column (7) nor did we propose to remove the word ''None'' from column (6), yet we mistakenly deleted special provision ''B136'' and the word ''None.'' Therefore, PHMSA is correcting this error by adding special provision ''B136'' back to column (7) and the word ''None'' back to column (6).

• For ''UN3084, Corrosive solids, oxidizing, n.o.s., PG II,'' there is a typographical error where special provision 154 is listed in column 7, but there is no such special provision in § 172.102. Therefore, PHMSA is removing ''154'' from column 7.

• In final rule HM–259,[16] PHMSA removed special provision A6, which provided methods of packaging liquid hazardous material for air transport, from certain HMT entries. Specifically, PHMSA removed the assignment of A6 from liquid hazardous material. However, in HM–219C, special provision A6 was inadvertently reassigned to some of the entries from which they were originally removed. Therefore, PHMSA is correcting this by again removing assignment of special provision A6 from the following:

○ ''UN1111, Amyl mercaptan, 3, PG II''

○ ''UN1228, Mercaptans, liquid, flammable, toxic, n.o.s. *or* Mercaptan mixtures, liquid, flammable, toxic, n.o.s., 3, PG III''

○ ''UN1732, Antimony pentafluoride, 8, PG II''

○ ''UN1768, Difluorophosphoric acid, anhydrous, 8, PG II''

○ ''UN1776, Fluorophosphoric acid anhydrous, 8, PG II''

○ ''UN1778, Fluorosilicic acid, 8, PG II''

○ ''UN1782, Hexafluorophosphoric acid, 8, PG II''

○ ''UN1808, Phosphorus tribromide, 8, PG II''

○ ''UN2031, Nitric acid *other than red fuming, with at least 65 percent, but not more than 70 percent nitric acid,* 8, PG II''

○ ''UN2031, Nitric acid *other than red fuming, with more than 20 percent and less than 65 percent nitric acid,* 8, PG II''

○ ''UN2031, Nitric acid *other than red fuming, with not more than 20 percent nitric acid,* 8, PG II''

○ ''UN2258, 1,2-Propylenediamine, 8, PG II''

○ ''UN2734, Amine, liquid, corrosive, flammable, n.o.s. *or* Polyamines, liquid, corrosive, flammable, n.o.s., 8, PG I''

○ ''UN2920, Corrosive liquids, flammable, n.o.s., 8, PG I''

○ ''UN3093, Corrosive liquids, oxidizing, n.o.s., 8, PG I''

○ ''UN3093, Corrosive liquids, oxidizing, n.o.s., 8, PG II''

○ ''UN3098, Oxidizing liquid, corrosive, n.o.s., 5.1, PG I''

○ ''UN3149, Hydrogen peroxide and peroxyacetic acid mixtures, stabilized *with acids, water, and not more than 5 percent peroxyacetic acid,* 5.1, PG II''

○ ''UN2014, Hydrogen peroxide, aqueous solutions *with not less than 20 percent, but not more than 40 percent hydrogen peroxide (stabilized as necessary),* 5.1, PG II''

• For ''UN1740, Hydrogendifluoride, solid, n.o.s., 8, PG III,'' PHMSA is correcting an error where special provisions 53 and 58 are missing from column 7.

• For ''UN1783, Hexamethylenediamine solution, 8, PG III, PHMSA is correcting an error where special provision 52 is missing from column 7.

Column 8—Packaging Authorization Changes

• In column (8B) for ''UN2734, Amine, liquid, corrosive, flammable, n.o.s. *or* Polyamines, liquid, corrosive, flammable, n.o.s., 8, PG II,'' the packaging instruction was inadvertently changed from ''202'' to ''201.'' To correct this error, PHMSA will revert

[13] 80 FR 1076 (Jan. 8, 2015).

[14] 85 FR 27810 (May 11, 2020).

[15] 81 FR 3636 (Jan. 21, 2016).

[16] 83 FR 52878 (Oct. 18, 2018).

the packaging instruction in column 8(B) back to ''202.'' The packagings authorized under § 173.201 are for liquid hazardous materials in PG I. Section 173.202 provides authorized packagings for liquid hazardous materials in PG II which is the correct packaging section reference for this PG II material.

Column 10—Vessel Stowage Changes

- In column (10B) for ''UN1510, Tetranitromethane, 6.1, PG I,'' there is a typographical error for one of the vessel stowage codes assigned to this material. The stowage codes as currently listed for ''UN1510'' are ''40 and 6.'' The stowage code 6 is incorrect as it is missing a ''6.'' PHMSA is amending column (10B) to reflect the correct stowage code of ''66.'' Stowage code 6 instructs that a material is an emergency temperature material, which is not relevant in the case of stowage of tetranitromethane. Stowage code 66 instructs a person to stow this material separated from flammable solids, which is consistent with IMDG Code segregation code ''SG16'' assigned to ''UN1510'' to ''stow separated from Division 4.1'' (flammable solids). This amendment will ensure that this material is properly stowed for safe transport.
- In column (10B) for ''UN2627, Nitrites, inorganic, n.o.s., 5.1, PG II,'' there is a typographical error for one of the vessel stowage codes assigned to this material. The stowage codes as listed for ''UN2627'' are ''46, 56, 58, and 13.'' Stowage code 13 is incorrect as it is missing a ''3.'' PHMSA is amending column (10B) to reflect the correct stowage code of ''133.'' Stowage code 13 instructs to keep as reasonably dry as possible, which is not relevant in the case of stowage of inorganic nitrite. Stowage code 133 instructs to stow ''separate from sulfur,'' and is thus the appropriate stowage instruction, and is consistent with § 176.400(d) as well as IMDG Code segregation code ''SG62'' assigned to ''UN2627'' to stow ''separated from'' sulfur. This amendment will ensure that this material is properly stowed for safe transport.
- In column (10B), for ''UN1788, Hydrobromic acid, *with not more than 49 percent hydrobromic acid,* 8, PG II'' and for ''UN1788, Hydrobromic acid, *with not more than 49 percent hydrobromic acid,* 8, PG III,'' stowage codes ''53'' and ''58'' are missing. Stowage code ''53'' provision means stow ''separated from'' alkaline compounds and stowage code ''58'' provision means stow ''separated from'' cyanides. In final rule HM–215O, PHMSA amended the HMR to maintain alignment with international regulations and standards by incorporating various amendments, including changes to vessel stowage requirements. Consistent with changes made to Amendment 39–18 of the IMDG Code, PHMSA made numerous changes to special stowage and segregation provisions, specifically ''Other'' provisions as indicated in column (10B). Because of these changes, ''UN1788'' for both PG II and PG III should have stowage codes ''53'' and ''58'' listed in column (10B) therefore, PHMSA is amending the HMT to reflect this inadvertent omission.

Section 172.102

This section provides a list of special provisions as referred to in Column (7) of the HMT. Regarding ''UN1408, Ferrosilicon *with 30 percent or more, but less than 90 percent silicon,* 4.3, PG III,'' it is assigned IP code [17] ''IP7'' in the HMT, yet the material (*i.e.,* the UN identification number) is not listed among the materials subject to IP7. IP codes are special provisions on the use of intermediate bulk containers (IBCs) for transport of certain hazardous materials. In final rule HM–215G,[18] the Research and Special Programs Administration (RSPA)—now PHMSA—amended the HMR to align with international standards, which included changes to special provisions. The omission from special provision IP7 was inadvertent as ''UN1408'' is listed among materials subject to the same IBC special provision as part of the IMDG Code. For clarity of understanding that IP7 applies to ferrosilicon material, PHMSA is adding ''UN1408'' to the list of UN identification numbers in IP7.

Section 172.202

This section provides the requirements to describe hazardous materials on shipping papers. In § 172.202(a)(4), there is a requirement to include the packing group (PG) [19] with the required shipping description of a hazardous material on a shipping paper. However, certain types of hazardous materials are not assigned a ''PG'' because they do not exhibit a degree of danger that needs to be communicated. For instance, batteries of all types, including lithium, lithium ion, and sodium batteries, are not assigned a ''PG'' in the HMT. In final rule HM–215M, PHMSA amended the HMR to maintain alignment with international standards, which included removing the generalized ''PG II'' assignment for lithium ion batteries, lithium metal batteries, and sodium batteries. However, the language in § 172.202(a)(4) states that ''batteries other than those containing lithium, lithium ions, or sodium'' are excepted from including a ''PG'' is a source of confusion because lithium, lithium ion, or sodium batteries are no longer assigned a ''PG'' in the HMT. Therefore, PHMSA is amending § 172.202(a)(4) by removing reference to lithium, lithium ion, and sodium batteries from this paragraph.

Section 172.203

This section provides additional description requirements for shipping papers. Section 172.203(e)(1) and (e)(2) provide instruction for the description of residue hazardous material on a shipping paper. The language to include ''residue: last contained'' reads different in the paragraphs, specifically, ''RESIDUE: Last Contained***'' in (e)(1) and ''RESIDUE: LAST CONTAINED***'' in (e)(2). For consistency, PHMSA is revising the language in (e)(2) to the following: ''RESIDUE: Last Contained.'' Additionally, consistent with § 172.101(l)(1)(ii), stocks of preprinted shipping papers may be continued in use, with the text previously required in (e)(2), until depleted or for a one-year period, after the effective date of this rule, whichever is less.

Section 172.204

This section provides the requirements for shipper's certification. In final rule HM–216B,[20] PHMSA amended the HMR to adopt provisions contained in certain widely used or longstanding rail special permits, which included revisions to the shipper certification for transportation by rail. PHMSA had received a comment from Union Pacific Railroad to revise the language in § 172.204(a)(3)(ii) to the following: ''*Electronic certification.* When transmitted electronically, by entering the name of the principal person, partner, officer, or employee of the offeror or his agent in a specific EDI.'' [21] PHMSA agreed with revising the language; and offered a revised version ''to emphasize that by completing a signature field on an EDI document, the shipper is certifying that the document complies with . . .

[17] IP codes are special provisions that apply to intermediate bulk containers.

[18] 69 FR 76044 (Dec. 20, 2004).

[19] Packing group means a grouping according to the degree of danger presented by hazardous materials. Packing Group I indicates great danger; Packing Group II, medium danger; Packing Group III, minor danger.

[20] 77 FR 37962 (Jun. 25, 2012).

[21] EDI, or electronic data interchange, as defined in § 171.8, means the computer-to-computer exchange of business data in standard formats.

§ 172.204(a).'' However, stakeholders have reported that the current language adopted in the HM–216B [22] notice of proposed rulemaking (''must be substituted for the asterisks'') is considered a source of confusion because there are neither asterisks in the certification statement in § 172.204(a) nor in typical EDI documents. To clarify this section for simplicity of understanding and consistent with final rule HM–216B, PHMSA will amend § 172.204(a)(3)(ii) to read as follows: ''Electronic Certification. When transmitted electronically, by completing the field designated for the shipper's signature with the name of the principal person, partner, officer, or employee of the offeror or their agent, the shipper is also certifying its compliance with the certification specified in § 172.204(a).'' This revision is consistent with § 172.204(d)(3) certification signature requirements for transportation by rail that requires ''the name of the principal person, partner, officer, or employee of the offeror or his agent in a computer field defined for that purpose.''

Section 172.315

This section provides the requirements for limited quantities of hazardous material. The dates for transitional exceptions in § 172.315(d) allowing limited quantity marking requirements for alternatively marked packages and ORM–D marked packages have passed. Therefore, PHMSA is deleting and reserving paragraph (d) as the transition periods no longer apply.

Section 172.332

This section provides the requirements for identification number markings. In § 172.332(d), the placard dimensions illustrated in this paragraph are incorrect. In final rule HM–218F,[23] PHMSA amended the HMR to make miscellaneous amendments to update and clarify certain regulatory requirements. To align with international standards, PHMSA authorized the use of placards measuring 250 mm (9.84 inches) on each side. However, for the example used in § 172.332(d) to illustrate the display of an identification number on a placard, the placard dimensions are not consistent with the current minimum size requirements for a placard found in § 172.519(c). Therefore, to avoid confusion PHMSA is amending § 172.332(d) by replacing the illustration with one that does not have measurements.

Section 172.400

This section provides general requirements for labeling of packages. In the table to paragraph (b), there is a typo where the word ''Oxidizer'' is misspelled as ''Oxider.'' PHMSA is correcting this misspelling by replacing it with the correct term ''Oxidizer.''

Section 172.519

This section provides the requirements for general specifications for placards. Section 172.519(c)(1)(i) currently states, ''A placard in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.'' The transitional period for this exception to use a placard that conforms to § 172.519(c)(1) requirements effective at the end of 2014 has passed. Therefore, PHMSA is amending § 172.519(c)(1) by deleting the transitional exception reference and merging what is currently in paragraphs (c)(1) introductory text and (c)(1)(ii) together.

E. Part 173

Section 173.4a

This section provides the requirements for excepted quantities of hazardous material. The § 173.4a(g)(2)(i) transitional exception from the excepted quantities marking specifications states: ''A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.'' This transitional period for exception from certain marking requirements has passed. Therefore, PHMSA is amending § 173.4a(g)(2) by deleting the paragraph (g)(2)(i) transitional exception and merging what is currently in paragraphs (g)(2) introductory text and (g)(2)(ii) together.

Section 173.11

This section provides exceptions for the shipment of light bulbs containing hazardous materials. In § 173.11(b), there is a punctuation error at the end of the paragraph where a semicolon is used instead of a period to separate the standalone provisions of paragraphs (b) and (c) in this section. PHMSA is revising paragraph (b) by replacing the semicolon with a period at the end of the paragraph to clearly communicate that paragraph (b) and (c) are standalone provisions.

Section 173.25

This section provides the requirements for authorized packagings and overpacks. Section 173.25(a)(4)(i) states: ''A marking in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue to be used until December 31, 2016.'' The transitional exception period to mark an overpack has passed. Therefore, PHMSA is amending § 173.25(a)(4) by deleting this transitional exception reference and merging what is currently in paragraphs (a)(4) introductory text and (a)(4)(ii) together.

Section 173.27

This section provides the general requirements for transportation by aircraft. In HM–215P, PHMSA made numerous amendments in Table 1 and Table 2 to paragraph (f) by clarifying the inner packaging quantity limits for combination packages and added inner package limits for certain Class 9 HMT entries consistent with the ICAO Technical Instructions. When these amendments were added, PHMSA inadvertently made a change that had not been proposed for comment to the Table 2 maximum authorized net capacity of each inner packaging for transportation by cargo aircraft. Specifically, for packages containing a net quantity of solids not greater than 15 kg, PHMSA made a change to the maximum authorized net capacity for metal or plastic inner packagings. Prior to publication of HM–215P, the HMR authorized 2.5 kg consistent with the ICAO Technical Instructions. As it currently reads in the HMR, the maximum authorized net capacity of each inner packaging for metal or plastic inner packagings is 1 kg—which is incorrect—which is now a source of confusion and disharmony with international air transport regulations. Therefore, PHMSA is correcting this error by revising 1 kg back to 2.5 kg. In addition, PHMSA is removing the ''periods'' in the third column of Table 2 for consistency with the first and second columns, which do not have periods associated with the information presented in those columns.

Section 173.62

This section provides specific packaging requirements for explosives. In HM–215B,[24] RSPA amended the HMR to maintain alignment with corresponding provisions of international standards. Prior to final rule HM–215B, ''UN0485, Substances, explosive, n.o.s., 1.4G'' was included in the table and assigned packing instruction E–103 in the HMR, which required packagings to be determined by

[22] 76 FR 51324 (Aug. 18, 2011).

[23] 76 FR 43510 (Jul. 20, 2011).

[24] 87 FR 24690 (May 6, 1997).

a competent authority approval. However, RSPA inadvertently omitted this material from the revised Explosives Table. Therefore, PHMSA is amending Table 1 to Paragraph (b): Explosive Table to include an entry for ''UN0485'' and assign it packing instruction 101, requiring competent authority approval, consistent with the packing instruction assigned prior to the inadvertent omission and with international standards.

Section 173.185

This section provides the requirements for packing and hazard communication of lithium cells and batteries. The HMR includes use of the phrase ''assemblies of such batteries'' in § 173.185(b)(5) and (e)(5). However, we neither define this phrase nor does it have substantive meaning associated with the requirements for lithium batteries weighing 12 kg or more. Furthermore, use of this terminology was recently removed from the UN Model Regulations. To avoid confusion as to its intended meaning and to maintain consistency with international standards, PHMSA is amending § 173.185(b)(5) and (e)(5) by removing this language.

For § 173.185(c)(3), the title of (c)(3) ''Hazard communication,'' is no longer considered appropriate for the content of this paragraph. Paragraph (c)(3) covers the requirements for applying the lithium battery mark. Moreover, there are other hazard communication requirements that may apply besides those listed in § 173.185(c)(3), such as the requirements listed in § 173.185(c)(1)(iii) and (c)(1)(iv), which provide additional marking requirements for a lithium battery. Therefore, PHMSA is amending the title of § 173.185(c)(3) to read ''*Lithium battery mark*'' for a simpler understanding of the subject of this paragraph.

Section 173.185(d) provides limited exceptions from transportation requirements for lithium cells or batteries that are being shipped for disposal or recycling. However, the paragraph is not formatted to list each condition for exception as other similar paragraphs in the section and HMR. Therefore, to clarify the conditions for exception, PHMSA is amending § 173.185(d) by revising the paragraph to list each condition for transportation of a lithium cell or battery being shipped for disposal or recycling.

Section 173.225

This section provides packaging requirements and other provisions for organic peroxides. In final rule HM–215N,[25] PHMSA amended the HMR to maintain consistency with international regulations and standards. Specifically, to maintain consistency with UN Model Regulations, PHMSA amended several entries and corrected formatting errors in the Organic Peroxide Table in paragraph (c). As part of these revisions, the entire table was reproduced in final rule HM–215N. However, in reproducing the entire table, for many entries, the ''+'' symbol was inadvertently removed from Column 7 in the table. Column 7 specifies the control and emergency temperatures to be maintained for the listed material while it is in transportation. Without the ''+'' by the number provided in the column, a reader would be unable to determine for certain the required control and emergency temperatures. For example, for ''UN3115, tert-Amyl peroxy-2-ethylhexanoate,'' without a ''+'' in front of the ''20'' for the control temperature, one is not certain whether that is meant to be –20°C or +20°C. Therefore, PHMSA is adding the ''+'' symbol to specific entries in the table that were inadvertently removed under HM–215N to ensure clear understanding of the required control and emergency temperatures. This amendment will enhance safety by ensuring the proper control temperature is listed in the HMT.

Sections 173.244 and 173.314

This section provides the requirements for bulk packagings for certain pyrophoric liquids (Division 4.2), dangerous when wet materials (Division 4.3), and poisonous liquids with inhalation hazards (Division 6.1). Section 173.314 provides requirements for compressed gases in tank cars. In § 173.31(e)(4), which provides special requirements for use of rail tank cars for PIH material, the HMR provides a phase-out for the use of legacy tank cars where a tank car not meeting the requirements of §§ 173.244(a)(2) or (a)(3) and 173.314(c) or (d) may not be used for the transportation of PIH material. In final rule HM–219C,[26] PHMSA amended the HMR in response to petitions for rulemaking submitted by the regulated community, including a petition to adopt the phase-out date now found in § 173.31(e)(4). PHMSA revised the phase-out deadline for all non-HM–246[27] rail tank cars used for the transportation of PIH materials to December 31, 2027. However, although PHMSA adopted the phase-out date in § 173.31(e)(4), we did not include a reference to the phase-out deadline in §§ 173.244(a)(2) and 173.314(c)—Note 11 to Table 1, which has become a source of confusion. Therefore, to make clear the applicability of the phase-out date, PHMSA will make a reference to the phase-out date of December 31, 2027, in §§ 173.244(a)(2) and 173.314(c)—Note 11 to Table 1. In addition, PHMSA will make a reference in Note 11 to Table 1 regarding use of those tanks built after March 16, 2009. Finally, PHMSA is correcting grammatical and formatting issues in the § 173.314—Notes to Table 1 to paragraph (c).

Section 173.301

This section provides the general requirements for the shipment of compressed gases and other hazardous materials in cylinders, UN pressure receptacles, and spherical pressure vessels. Section 173.301(f)(5) provides instruction on when a pressure relief device is not required and specifies four options. The word ''or'' following paragraph (f)(5)(ii) and prior to (f)(5)(iii) is misplaced and should follow (f)(5)(iii) instead. Otherwise, it can be misunderstood that paragraph (f)(5)(iv) applies in addition to one of the first three options, which is not the case. Therefore, PHMSA is amending § 173.301(f)(5) by moving the word ''or'' between §§ 173.301(f)(5)(iii) and (iv) to ensure that it is understood that each option in the list is a standalone alternative compliance approach. In addition, PHMSA is correcting a typographical error in § 173.301(f)(5)(iv) where we are replacing the second ''or'' before the word ''this'' with the word ''of.''

Section 173.303

This section provides the requirements for charging cylinders with acetylene gas in solution. There is a typographical error in § 173.303(f)(1)(i) where the Euro sign ''€'' is listed after the first reference to ISO 3807:2013 instead of an uppercase ''(E).'' Therefore, PHMSA is revising this document reference to read as the following: ''ISO 3807:2013(E).''

Section 173.304a

This section provides additional requirements for the shipment of liquefied compressed gases in DOT specification cylinders. Table 1 to Paragraph (a)(2), ''Methyl acetylene-propadiene, mixtures, stabilized,'' has a maximum permitted filling density (percent) listed as ''not liquid at 130 °F,'' which is in error because the filling density requirement describes how full the cylinder may be and not whether the

[25] 82 FR 15796 (Mar. 30, 2017).

[26] 85 FR 75680 (Nov. 25, 2020).

[27] 74 FR 1769 (Jan. 13, 2009).

contents are in a liquid or gaseous state. In addition, ''Methyl acetylene-propadiene, mixtures, stabilized,'' is listed differently in the HMT as opposed to how it is listed in Table 1. In the notice of proposed rulemaking for HM–220D,[28] RSPA proposed to amend the HMR by revising the requirements for hazardous materials that are authorized to be offered for transportation in cylinders. When RSPA proposed changes to the table to § 173.304a(a)(2), ''Methyl acetylene-propadiene, mixtures, stabilized,'' was listed with the appropriate filling density instruction of ''not liquid full at 130 °F.'' However, in final rule HM–220D,[29] RSPA inadvertently changed the filling density requirement to read ''not liquid at 130 °F.'' Moreover, in the final rule, in response to appeals, HM–220D,[30] RSPA revised the filling density temperature requirements from ''54 °C (130 °F)'' to ''55 °C (131 °F)'' for uniformity purposes with other sections, but still kept the language ''Not liquid at.'' Therefore, PHMSA is amending the maximum permitted filling density instruction for ''Methyl acetylene-propadiene, mixtures, stabilized'' to read ''Not liquid full at 131 °F.'' Furthermore, for consistency with the how the entry for the material reads in the HMT, PHMSA is revising ''Methyl acetylene-propadiene, mixtures, stabilized'' to read ''Methyl acetylene and propadiene mixtures, stabilized.''

Also, in Table 1 to Paragraph (a)(2), Column 3 provides the authorized packagings for listed hazardous material. For ''Methyl mercaptan,'' there is a typographical error where the letter ''D'' is missing from the current entry ''OT–4B240.'' PHMSA is correcting this error by adding the missing letter so that the cylinder specification reads correctly as ''DOT–4B240.'' Finally, PHMSA is correcting grammatical errors in the notes to Table 1 to Paragraph (a)(2). For example, in Note 2, we are adding a period to the abbreviation for pound (lb.).

Section 173.313

This section provides the UN portable tank table for liquefied compressed gases and chemicals under pressure. In final rule HM–215G,[31] RSPA amended the HMR to maintain alignment with international standards. Specifically, the rule relocated the design and use requirements for portable tanks in liquefied compressed gases and chemical under pressure service—previously found in § 172.102(c)(7) Special Provisions—to § 173.313 ''UN Portable Tank Table for Liquefied Compressed Gases and Chemical Under Pressure.'' In its explanation of those changes, PHMSA stated, ''The table provides the maximum allowable working pressures, bottom opening requirements, and degree of filling requirements for liquefied compressed gases permitted for transport in portable tanks.'' This language is confusing because the table includes a ''minimum design pressure (in bar)'' requirement — a minimum design value distinguishable from the maximum allowable working pressure (MAWP) value. The minimum design pressure relates to the pressure the portable tank should be exposed to under normal conditions based on factors like material of construction and thickness of the material. The MAWP is the maximum pressure at which the portable tank would be allowed to function at a specific temperature and considers the design pressure. Therefore, PHMSA is amending § 173.313 introductory language by adding the term ''minimum design pressure'' in the header of the third column of the table.

Section 173.315

This section provides the requirements for compressed gases in cargo tanks and portable tanks. In final rule HM–245,[32] PHMSA adopted the provisions of DOT–SP 13341 into the HMR, which allowed storage containers (of 500 gallons or less water capacity) intended to be permanently installed on a consumer's premises to be transported charged with liquefied petroleum gas (LPG) in quantities greater than five percent of the container's water capacity. Furthermore, the special permit authorized one-way transportation only from the consumer's location to the container owner's nearest LPG facility. In HM–245, PHMSA revised paragraph (j) to allow these designated storage containers under specific conditions. However, PHMSA mistakenly created § 173.315(j)(3) which states: ''Storage containers of less than 1,042 pounds water capacity (125 gallons) may be shipped when charged with liquefied petroleum gas in compliance with DOT filling density.'' This specific language should have been one of the conditions under § 173.315(j)(1), and not a standalone provision as (j)(3). Therefore, PHMSA is amending § 173.315(j) by redesignating paragraph (j)(3) as paragraph (j)(1)(iv) and removing and reserving § 173.315(j)(3).

F. Part 174

Section 174.5

This section provides the requirements for a rail carrier's materials and supplies. In the second sentence, it states: ''The requirements of this subchapter do not apply to railway torpedoes or fusees when carried in engines or rail cars.'' The use of the term ''fusees'' is an industry term used to describe railroad safety flares. For simplicity and understanding of what a fusee is, PHMSA is revising the second sentence, to read as follows, ''The requirements of this subchapter do not apply to railway torpedoes or railroad safety flares (*i.e.,* fusees) when carried in engines or rail cars.''

Section 174.55

This section provides general handling and loading requirements by rail. In § 174.55(a)—specifically, regarding the last sentence providing examples of blocking and bracing in freight containers and transport vehicles—PHMSA had intended to amend this section in final rule HM–218F [33] by removing reference to the Bureau of Explosives (BOE) Pamphlet Nos. 6 and 6C and to replace them with ''the Intermodal Loading Guide for Products in Closed Trailers and Containers'' as is listed in Table 1 to § 171.7—Materials Not Incorporated by Reference. However, only the reference to BOE Pamphlet No. 6C was removed and the reference to BOE Pamphlet No. 6 remains. Furthermore, § 171.19 states ''Effective December 31, 1998, approvals or authorizations issued by the Bureau of Explosives (BOE), other than those issued under part 179 of this subchapter, are no longer valid.'' Any reference to BOE Pamphlet Nos. 6 and 6C should have been removed from § 174.55(a). For consistency and to avoid confusion, PHMSA is removing the reference to BOE Pamphlet No. 6 in paragraph (a) as well as the ''IBR'' reference because the intermodal loading guide is not a material incorporated by reference. The last sentence of the paragraph is revised to read the following: ''For examples of blocking and bracing in freight containers and transport vehicles, see the Intermodal Loading Guide for Products in Closed Trailers and Containers (see Table 1 to § 171.7 of this subchapter).''

[28] 63 FR 58460 (Oct. 30, 1998).

[29] 67 FR 51625 (Aug. 8, 2002).

[30] 68 FR 24653 (May 8, 2003).

[31] 69 FR 76044 (Dec. 20, 2004).

[32] 76 FR 5483 (Feb. 1, 2011).

[33] 76 FR 43510 (Jul. 20, 2011)

Section 174.67

This section provides the requirements for transloading operations by rail. The second sentence of § 174.67(a)(3) states in reference to securing access to railroad track: ''This requirement may be satisfied by lining each switch providing access to the unloading area against shifting and securing each switch with an effective locking device, or by using derails, portable bumper blocks, or other equipment that provides an equivalent level of safety.'' Use of the term ''shifting'' (as it applies to packages shifting in a freight container) in the context of securing access to the track has been a source of confusion among stakeholders. In final rule HM–260A,[34] PHMSA amended the HMR by clarifying the use of the term ''movement'' which, by definition in § 171.8, means the physical transfer of a hazardous material from one geographical location to another by rail, car, aircraft, motor vehicle, or vessel. Moreover, PHMSA explained that the term ''movement'' was not used appropriately regarding train securement and the safe handling or stowage of packages. PHMSA revised each instance of ''movement'' to either ''shifting'' or ''motion'' (as it applies to motion of rail cars on a track) where appropriate. However, when making changes to § 174.67(a)(3) in HM–260A, PHMSA inadvertently replaced the term ''movement'' with ''shifting'' instead of replacing the term ''movement'' with ''motion'' as explained in the discussion section ''Clarifying the Use of the Term ''Movement'' Within the HMR.'' Therefore, PHMSA is correcting this error by replacing the term ''shifting'' with the term ''motion'' to accurately represent the securement of the train on a rail track.

Section 174.101

This section provides the requirements for loading Class 1 (explosive) materials by rail. Section 174.101(h) provides instruction that for recommended methods of blocking and bracing, to see Bureau of Explosives Pamphlets No. 6 and 6A. PHMSA no longer recognizes these BOE pamphlets as sources for blocking and bracing methods for rail transportation, but instead references ''The Intermodal Loading Guide for Products in Closed Trailers and Containers'' listed in Table 1 to § 171.7—Materials Not Incorporated by Reference. Therefore, to ensure appropriate reference to blocking and bracing methods for safe rail transport, PHMSA is amending this section by removing the reference to BOE Pamphlet Nos. 6 and 6A in paragraph (h) and revising the third sentence to read as follows: ''For recommended methods of blocking and bracing, see the Intermodal Loading Guide for Products in Closed Trailers and Containers (see Table 1 to § 171.7 of this subchapter).''

Section 174.112

This section provides the requirements for loading Division 1.3 and Division 1.2 explosive materials by rail. In § 174.112(b), the last sentence of the paragraph states: ''For recommended methods of blocking and bracing see Bureau of Explosives Pamphlet No. 6.'' This reference is incorrect as PHMSA no longer recognizes this pamphlet. Rather, the recommended methods for blocking and bracing when transported by rail are in ''The Intermodal Loading Guide for Products in Closed Trailers and Containers,'' which is listed in Table 1 to § 171.7—Materials Not Incorporated by Reference. Therefore, PHMSA is amending paragraph (b) by removing the reference to BOE Pamphlet No. 6 and revising the last sentence to the following: ''For recommended methods of blocking and bracing see the Intermodal Loading Guide for Products in Closed Trailers and Containers (see Table 1 to § 171.7 of this subchapter).'' This amendment will ensure safe rail transport through recognized and recommended blocking and bracing methods.

Section 174.115

This section provides the requirements for loading Division 1.4 (explosive) material by rail. In § 174.115(a), the last sentence of the paragraph states: ''For methods of recommended loading and bracing see Bureau of Explosives Pamphlet No. 6.'' This reference is incorrect as PHMSA no longer recognizes this pamphlet. The methods for loading and bracing when transported by rail are located in ''The Intermodal Loading Guide for Products in Closed Trailers and Containers,'' which is listed in Table 1 to § 171.7—Materials Not Incorporated by Reference. Therefore, PHMSA is removing the reference to BOE Pamphlet No. 6 in paragraph (a) and revising the last sentence of the paragraph to the following: ''For methods of recommended loading and bracing see the Intermodal Loading Guide for Products in Closed Trailers and Containers (see Table 1 to § 171.7 of this subchapter).'' This amendment will ensure safe rail transport through use of recognized and recommended methods of blocking and bracing.

Section 174.290

This section provides the requirements for the rail transportation of materials extremely poisonous by inhalation shipped by, for, or to the Department of Defense. Section 174.290(h), references Sketch 1 in BOE Pamphlet No. 6. However, BOE Pamphlet No. 6 is no longer recognized by PHMSA as a valid source ''not incorporated by reference'' in § 171.7. Therefore, PHMSA is deleting reference to Sketch 1 to avoid confusion that BOE Pamphlet 6 is a source for proper methods of loading and bracing in paragraph (h).

Also, § 174.290(i), references Sketch 1 in BOE Pamphlet No. 6A. However, BOE Pamphlet No. 6A is also no longer recognized by PHMSA. Therefore, PHMSA is deleting the reference to Sketch 1 to avoid confusion that BOE Pamphlet 6A is a resource for proper methods of protecting doorways in paragraph (i).

G. Part 175

Section 175.1

This section provides the purpose, scope, and applicability of the HMR for the transportation of hazardous materials in commerce aboard an aircraft. There is a grammatical error in the section title in that a comma is missing after the word ''scope.'' Additionally, in the first sentence of paragraph (a), the word ''the'' is missing before the word ''requirements'' and the word ''an'' is missing before the word ''aircraft.'' Therefore, for improved readability and grammar, PHMSA is revising the title to § 175.1 and revising paragraph (a) to correct these errors. Additionally, there is an error in the second sentence of paragraph (b) where the first use of the term ''subchapter'' is incorrect in referencing applicability to persons performing functions subject to the subchapter. The term ''part'' should be used instead as in ''this part (*i.e.,* part 175—Carriage by Aircraft) applies to any person who performs, attempts to perform, or is required to perform any function subject to this subchapter.'' Therefore, in the second sentence of paragraph (b), PHMSA is replacing the first use of ''subchapter'' with ''part.''

Section 175.9

This section provides the requirements for special aircraft operations. There is a typographical error in the first sentence of paragraph (a). It states: ''This subchapter applies to rotorcraft external load operations transporting hazardous material on board, attached to, or suspended from an aircraft.'' The use of the term

[34] 85 FR 83366 (Dec. 21, 2020).

''subchapter'' is incorrect and instead, it should state ''section.'' PHMSA is replacing the term ''subchapter'' with the term ''section'' as appropriate.

Furthermore, paragraph (b) provides exceptions from HMR oversight. In final rule HM–218H,[35] PHMSA amended the HMR to make miscellaneous amendments to update and clarify certain regulatory requirements. One of the amendments made in § 175.9 was the removal of paragraph (b)(4), which excepted hazardous materials carried and used during dedicated air ambulance, firefighting, or search and rescue operations from being subject to the HMR when in compliance with applicable Federal Aviation Regulations (14 CFR) and any additional FAA requirements. At that time, PHMSA inserted paragraph (d) into § 175.1 with language to clarify that these types of air operations would otherwise be subject to the requirements in the HMR. However, the above revision left in place made an additional reference to an exception for firefighting and prevention, among other activities, in § 175.9(b)(6). The inclusion of firefighting and prevention in this exception is redundant because this aircraft operation activity is already covered under § 175.1(d) as not being subject to the HMR. Therefore, PHMSA is revising paragraph (b)(6) by removing reference to firefighting and prevention.

H. Part 177

Section 177.817

This section provides the requirements for shipping papers for hazardous materials transported by highway. Section 177.817(d) states: ''This subpart does not apply to a material that is excepted from shipping paper requirements as specified in § 172.200 of this subchapter.'' The use of the term ''subpart'' is not the most appropriate reference, as this would imply a hazardous material, which is excepted from shipping papers, would not be subject to all of subpart A of part 177. The appropriate term is ''section'' because the section prescribes the requirements for shipping papers for highway transportation; therefore, PHMSA is revising § 177.817(d) to read as follows: ''This section does not apply to a material that is excepted from shipping paper requirements as specified in § 172.200 of this subchapter.'' This amendment will ensure proper shipping papers and hazard information available for only the limited exception outlined in the section, which will support safe transportation of such hazardous materials.

Section 177.842

This section provides the requirements for Class 7 (radioactive) material transported by highway. Section 177.842(b)(2) provides instruction for the placement of certain radioactive material packages in a transport vehicle, storage location or in any other place according to the table found in paragraph (b)(2). Paragraph (b)(2) provides further instruction on how to handle and stow groups of packages when more than one is present in a storage location.'' However, the term ''stowed'' as used in paragraph (b)(2) is typically associated with vessel transport and not highway transport. The term ''stowage'' is defined in § 171.8 and means placing hazardous materials aboard a vessel and therefore, may be a source of confusion in this paragraph. PHMSA believes ''stored'' is the more appropriate term to use in the context of groups of packages present in one storage location. Therefore, PHMSA is revising the second sentence of § 177.842(b)(2) to the following: ''Each group of packages must be handled and stored together no closer than 6 m (20 feet) (measured edge to edge) to any other group. The following table is to be used in accordance with the provisions of paragraph (b) of this section:'' This amendment will alleviate any confusion on the method of transportation referenced and ensure safe transport of such radioactive material.

Section 177.848

This section provides the requirements for segregation of hazardous materials transported by highway. Specifically, § 177.848(e)(6) provides instruction for segregation of packages that display a subsidiary hazard label and uses the term ''stowed'' in the context of hazardous materials of the same class. However, the term ''stowed'' is typically associate with vessel transportation. Section 171.8 defines the term ''stowage'' as placing hazardous materials aboard a vessel. Furthermore, throughout every paragraph within § 177.848, the language ''loaded, transported, or stored together'' is used. Therefore, consistent with this language, PHMSA believes use of the term ''stored'' in § 177.848(e)(6) is more appropriate than ''stowed'' and is revising the second sentence of § 177.848(e)(6) accordingly. This amendment will alleviate any confusion regarding the method of transport applicable to this section.

I. Part 178

Section 178.50

This section provides the requirements for specification 4B welded or brazed steel cylinders. In final rule HM–220B,[36] RSPA amended the HMR by restructuring the cylinder specification requirements. The goal of the restructuring was to eliminate unnecessary pages within the HMR without substantially changing the regulatory requirements or affecting safety. Furthermore, the restructuring focused on these specific goals: (1) consolidating similar sections, (2) reformatting subpart C of part 178, and (3) revising section references throughout the HMR to correspond to revised sections. However, when RSPA restructured part 178, the language in § 178.50(a) was inadvertently changed and in doing so, gave the appearance that all specification 4B cylinders must have a longitudinal seam whereas the language in § 178.50(a) prior to HM–220B provided for specifications when cylinders have longitudinal seams. In addition, PHMSA issued a letter of interpretation [37] explaining this error and that PHMSA would correct the error in a future rulemaking. Therefore, PHMSA is revising the language from § 178.50(a) to be consistent with manufacturing of these cylinders where not all are made with longitudinal seams.

Section 178.337–1

This section provides the general requirements for specification MC 331 cargo tank motor vehicles. There is a typographical error in § 178.337–1(f) in the last sentence of the paragraph. It states: ''The post weld heat treatment must be as prescribed in Section VIII of the ASME Code, but in no event at less than 1,050 § F cargo tank metal temperature.'' The section symbol ''§ '' should instead read as the degree sign ''°.'' Therefore, PHMSA is revising this last sentence of paragraph (f) to include the temperature with the degree sign—1,050 °F.

Section 178.338–10

This section provides the accident damage protection requirements for specification MC–338 cargo tank motor vehicles. There is a typographical error in § 178.338–10(c)(2) where it states: ''Conform to the requirements of § 178.345–8(b).'' This is incorrect as § 178.345–8(b) is related to outlets for specification DOT 406, DOT 407, and DOT 412 cargo tank motor vehicles and

[35] 81 FR 35484 Jun. 2, 2016).

[36] 61 FR 25940 (May 23, 1996).

[37] Letter of Interpretation (Ref No. 15–0062).

not accident damage protection for specification MC–338 cargo tank motor vehicles. To clarify the correct citation, PHMSA is removing the reference to paragraph (b) and changing it to paragraph (d).

Section 178.601

This section provides the general requirements for specification packagings. The last sentence of § 178.601(g)(2)(vi) states, ''For packagings containing liquids, the absorbent material required in paragraph (g)(2)(v) of this section must be placed inside the means of containing liquid contents.'' The word ''as'' is missing before the second use of the word ''the'' that would give clearer context of the requirement that absorbent material required for packagings containing liquids must be placed inside as the means of containing the liquid contents rather than placing it inside the means of containing the liquid. Therefore, PHMSA is adding ''as'' to the sentence to read, ''For packagings containing liquids, the absorbent material required in paragraph (g)(2)(v) of this section must be placed inside as the means of containing liquid contents.''

J. Part 180

Section 180.507

This section provides the requirements for the qualification of tank cars. With regard to § 180.507(b), the title of paragraph (b), ''Tank car specifications no longer authorized for construction'' is misleading and a source of confusion as the title would imply that all specifications that follow in the paragraph are no longer authorized for construction, which is not the case. Rather, what follows is a table of tank car specifications that are no longer authorized for construction but allowed to remain in hazardous materials service if the tank cars adhere to the requirements of the HMR. Therefore, PHMSA is amending § 180.507(b)(1) to clarify that the tank specifications are no longer authorized, but tank cars built to the specifications may remain in hazardous materials service as long the requirements of the HMR are met. Additionally, PHMSA is amending the table in § 180.507(b)(1) to remove the very old ICC–105, 105A300, 105A400, 105A500, 105A600, ICC–27, BE–27, 106A500, and 106A800 specifications. These outmoded tanks were last authorized for construction over 50 years ago and are no longer in use in North America. Therefore, for clarity, we are removing these specifications from the table, as they would no longer be authorized for service. Similarly, we are removing Note 2, as no DOT–107A seamless steel tanks constructed between January 1, 1941, and December 31, 1955, are in service today.

Section 180.605

This section provides the requirements for periodic testing, inspection, and repair of portable tanks. Section 180.605(b)(5) provides one of five specified conditions that would require testing and inspection of a portable tank and states, ''The portable tank is in an unsafe operating condition based on the existence of probable cause.'' The terminology ''probable cause'' is typically reserved for criminal law and is inappropriate within the scope of conditions necessitating testing and inspection of a portable tank. Rather, the focus should be on the determination of unsafe operating conditions. Therefore, PHMSA is amending § 180.605(b)(5) by revising this paragraph to read, ''The portable tank is in an unsafe operating condition.''

V. Regulatory Analyses and Notices

A. Statutory/Legal Authority for This Rulemaking

This final rule is published under the authority of the Federal Hazardous Materials Transportation Act (HMTA; 49 U.S.C. 5101–5127). Section 5103(b) of the HMTA authorizes the Secretary of Transportation to ''prescribe regulations for the safe transportation, including security, of hazardous materials in intrastate, interstate, and foreign commerce.'' The Secretary has delegated the authority granted in the HMTA to the PHMSA Administrator at 49 CFR 1.97(b).

PHMSA finds it has good cause to make these changes without notice and comment pursuant to Section 553(b) of the Administrative Procedure Act (APA, 5 U.S.C., 551, *et seq.*). Section 553(b)(B) of the APA provides that, when an agency for good cause finds that notice and public procedure are impracticable, unnecessary, or contrary to the public interest, the agency may issue a rule without providing notice and an opportunity for public comment. As explained above, the editorial and ministerial amendments to these regulations make no substantive changes to the regulations, but merely facilitate further compliance with the existing regulations by correcting information (*e.g.,* mailing addresses) and otherwise providing increased clarity for certain provisions.

B. Executive Order 12866 and DOT Regulatory Policies and Procedures

Executive Order 12866 (''Regulatory Planning and Review'') [38] 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 regulations require that regulations issued by PHMSA and other DOT Operating Administrations ''should be designed to minimize burdens and reduce barriers to market entry whenever possible, consistent with the effective promotion of safety'' and should generally ''not be issued unless their benefits are expected to exceed their costs.'' This final rule does not impose new burdens as the amendments contained in this final rule are non-substantive changes that do not impose new requirements for hazardous materials shippers or carriers. Therefore, it is not necessary to prepare a regulatory impact analysis.

This final rule is not a significant regulatory action under section 3(f) of Executive Order 12866 and, therefore, was not reviewed by the Office of Management and Budget. Nor is this final rule considered a significant rulemaking under the DOT rulemaking procedures at 49 CFR part 5.

C. Executive Order 13132

This final rule has been analyzed in accordance with the principles and criteria in Executive Order 13132 (''Federalism'') [39] and its implementing Presidential Memorandum (''Preemption'').[40] 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 HMR amendments in this final rule are non-substantive changes that do not impose any new requirements and will not have 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. Nor do the HMR amendments in this final rule impose direct compliance costs on state and local governments. Therefore, the

[38] 58 FR 51735, (Oct. 4, 1993).

[39] 64 FR 43255 (Aug. 10, 1999).

[40] 74 FR 24693 (May 22. 2009).

consultation and funding requirements of Executive Order 13132 do not apply.

D. Executive Order 13175

PHMSA analyzed this final rule in accordance with the principles and criteria contained in Executive Order 13175 (''Consultation and Coordination with Indian Tribal Governments'') [41] 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 Indian 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 this final rule and determined that it does not significantly or uniquely affect tribal communities or Native American Tribal governments. The changes to the HMR as written in this final rule are facially neutral and have broad, national scope; PHMSA therefore expects this final rule not to affect tribal communities significantly or uniquely, much less impose substantial compliance costs on Native American Tribal governments or mandate tribal action. Because PHMSA expects this final rule will not adversely affect the safe transportation of hazardous materials generally, PHMSA does not expect it will entail disproportionately high adverse risks for tribal communities. For these reasons, PHMSA finds the funding and consultation requirements of Executive Order 13175 and DOT Order 5301.1 do not apply.

E. Regulatory Flexibility Act and Executive Order 13272

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires agencies to review regulations to assess their impact on small entities unless the agency head certifies that a 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'') [42] 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.[43]

This final rule 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. There are no costs to small entities associated with this final rule. This final rule makes non-substantive changes that do not impose new requirements; thus, there are no direct or indirect adverse economic impacts for small units of government, businesses, or other organizations. Consequently, PHMSA certifies that this final rule does not have a significant economic impact on a substantial number of small entities.

F. 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.

This final rule 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 and is the least burdensome alternative that achieves the objective of the rule.

G. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), no person is required to respond to any information collection unless it has been approved by OMB and displays a valid OMB control number. Section 1320.8(d) of 5 CFR requires that PHMSA provide interested members of the public and affected agencies an opportunity to comment on information and recordkeeping requests. There are no new or modified information collection requirements in this final rule.

H. Environmental Assessment

The National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq.*), and implementing regulations by the Council on Environmental Quality (40 CFR part 1500) requires federal agencies to consider the consequences of federal actions and prepare a detailed statement on actions that significantly affect the quality of the human environment. DOT Order 5610.1C, ''Procedures for Considering Environmental Impacts,'' establishes departmental procedures for evaluating environmental impacts under NEPA and its implementing regulations. The purpose of this final rule is to introduce non-substantive changes that do not impose new requirements. The intended effect of this rule is to enhance the accuracy and reduce misunderstandings of the regulations. Therefore, PHMSA has determined that implementing this final rule will not significantly impact the quality of the human environment.

I. Environmental Justice

Executive Orders 12898 (''Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations''),[44] 13985 (''Advancing Racial Equity and Support for Underserved Communities Through the Federal Government''),[45] 13990 (''Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis''),[46] 14008 (''Tackling the Climate Crisis at Home and Abroad''),[47] and DOT Order 5610.2C (''Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations'') require DOT agencies to achieve environmental justice as part of their mission by identifying and addressing, as appropriate, disproportionately high

[41] 65 FR 67249 (Nov. 9, 2000).

[42] 68 FR 7990 (Feb. 19, 2003).

[43] DOT, ''Rulemaking Requirements Related to Small Entities,'' *https://www.transportation.gov/regulations/rulemaking-requirements-concerning-small-entities* (last accessed June 17, 2021).

[44] 59 FR 7629 (Feb. 16, 1994).

[45] 86 FR 7009 (Jan. 20, 2021).

[46] 86 FR 7037 (Jan. 20, 2021).

[47] 86 FR 7619 (Feb. 1, 2021).

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.

PHMSA has evaluated this final rule under the above Executive Orders and DOT Order 5610.2C and does not expect the final rule 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 impact any particular population, region, or community adversely. Because PHMSA does not expect this final rulemaking to adversely affect the safe transportation of hazardous materials generally, and because the amendments in this final rule are non-substantive changes, 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.

J. Executive Order 13609 and International Trade Analysis

Under Executive Order 13609 (''Promoting International Regulatory Cooperation''),[48] agencies must consider whether the impacts associated with significant variations between domestic and international regulatory approaches are unnecessary or may impair the ability of American business to export and compete internationally. In meeting shared challenges involving health, safety, labor, security, environmental, and other issues, international regulatory cooperation can identify approaches that are at least as protective as those that are or would be adopted in the absence of such cooperation. International regulatory cooperation can also reduce, eliminate, or prevent unnecessary differences in regulatory requirements.

Similarly, the Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465) (as amended, the Trade Agreements Act), prohibits federal 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 establishing international standards to protect the safety of the American public. PHMSA has assessed the effects of the final rule to ensure that it does not cause unnecessary obstacles to foreign trade. The amendments contained in this rule are non-substantive changes and do not impose new requirements. Further, insofar as many of the amendments introduced by the final rule improve the clarity of the HMR for regulated entities or better align the HMR with international (*e.g.,* IAEA) standards, the final rule could reduce barriers to international trade. Therefore, this final rule does not present an obstacle to international trade, and accordingly, this final rule is consistent with Executive Order 13609 and PHMSA's obligations under the Trade Agreements Act.

List of Subjects

49 CFR Part 107

Hazardous Materials Program Procedures

49 CFR Part 110

Hazardous Materials Public Sector Training and Planning Grants

49 CFR Part 171

General Information, Regulations, and Definitions

49 CFR Part 172

Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans

49 CFR Part 173

Shippers—General Requirements for Shipments and Packagings

49 CFR Part 174

Carriage by Rail

49 CFR Part 175

Carriage by Aircraft

49 CFR Part 176

Carriage by Vessel

49 CFR Part 177

Carriage by Public Highway

49 CFR Part 178

Specifications for Packagings

49 CFR Part 180

Continuing Qualification and Maintenance of Packagings.

In consideration of the foregoing, 49 CFR chapter I is amended as follows:

PART 107—HAZARDOUS MATERIALS PROGRAM AND PROCEDURES

■ 1. The authority citation for part 107 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; Pub. L. 101–410 Section 4; Pub. L. 104–121 Sections 212–213; 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; 33 U.S.C. 1321.

■ 2. In § 107.109, revise paragraph (a)(4) to read as follows:

§ 107.109 Application for renewal.

* * * * *

(a) * * *

(4) The application must include either a certification by the applicant that the original application, as it may have been updated by any application for renewal, remains accurate (*e.g.,* all section references, shipping descriptions, email address, etc.) and complete; or include an amendment to the previously submitted application as is necessary to update and ensure the accuracy and completeness of the application, with certification by the applicant that the application as amended is accurate and complete.

* * * * *

■ 3. In Appendix A to subpart D of part 107, in section II, under the heading ''Offeror Requirements—All hazardous materials'':

■ a. Remove the entry A.1.d., ''Consumer Commodity, ORM–D'';

■ b. Revise the entry ''A.2'' violation description; and

■ c. Revise the entry ''G.1'' violation description.

The revisions read as follows:

Appendix A to Subpart D of Part 107—Guidelines for Civil Penalties

* * * * *

[48] 77 FR 26413 (May 4, 2012).

Violation description	Section or cite	Baseline assessment
* * * * * * *		
Offeror Requirements—All hazardous materials		
* * * * * * *		
A. * * * 2. Offering for transportation a hazardous material that is misclassified on the shipping paper, markings, labels, and placards:.		
* * * * * * *		
G. * * * 1. Failure to comply with package testing requirements for small quantities, excepted quantities, de minimis, materials of trade, and limited quantities.	173.4, 173.4a, 173.4b, 173.6, 173.156, 173.306.	$1,000 to $5,000.
* * * * * * *		

* * * * *

■ 4. In § 107.502, revise paragraph (d) to read as follows:

§ 107.502 General registration requirements.

* * * * *

(d) Registration statements must be in English, contain all the information required by this subpart, and be submitted to: FMCSA Hazardous Materials Division—MC–SEH, West Building, 1200 New Jersey Avenue SE, Washington, DC 20590.

* * * * *

PART 110—HAZARDOUS MATERIALS PUBLIC SECTOR TRAINING AND PLANNING GRANTS

■ 5. The authority citation for part 110 continues to read as follows:

Authority: 49 U.S.C. 5101–5128; 49 CFR 1.97.

■ 6. Revise § 110.7 to read as follows:

§ 110.7 Control number under the Paperwork Reduction Act.

The Office of Management and Budget control number assigned for the collection of information in § 110.30 is 2137–0586.

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

■ 7. 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.

■ 8. In § 171.6, revise paragraph (b)(2) introductory text and add an entry for ''2137–0628'' in numerical order to the table to read as follows:

§ 171.6 Control numbers under the Paperwork Reduction Act.

* * * * *

(b) * * *

(2) Table 1 to paragraph (b)(2):

Current OMB control No.	Title	Title 49 CFR part or section where identified and described
* * * * * * *		
2137–0628	Flammable Hazardous Materials by Rail Transportation	§§ 130.120, 171.16, 173.41, 173.145, 173.150, 174.310, 174.312.

■ 9. In § 171.7, revise paragraphs (b)(1), (n) introductory text, and (w)(22) to read as follows:

§ 171.7 Reference material.

* * * * *

(b) * * *

(1) ATA Specification No. 300 Packaging of Airline Supplies, Revision 19, July 31, 1996, into §§ 172.102, 173.168, 173.302, and 173.304.

* * * * *

(n) *Compressed Gas Association (CGA),* 8484 Westpark Drive, Suite 220, McLean, VA 22102.

* * * * *

(w) * * *

(22) ISO 4706:2008(E), Gas cylinders—Refillable welded steel cylinders—Test pressure 60 bar and below, First Edition, 2008–04–15, Corrected Version, 2008–07–01, into § 178.71.

* * * * *

■ 10. In § 171.8:

■ a. Revise the definition of ''Agricultural product''; and<

■ b. Remove the first definition of ''Oxidizing gas''.

The revision reads as follows:

§ 171.8 Definitions and abbreviations.

* * * * *

Agricultural product means a hazardous material, other than a hazardous waste, whose end use directly supports the production of an agricultural commodity including, but not limited to a fertilizer, pesticide, soil amendment or fuel. An *agricultural product* is limited to a material in Class 3, 8 or 9, Division 2.1, 2.2, 5.1, or 6.1.

* * * * *

■ 11. In § 171.12, revise paragraph (b)(4) to read as follows:

§ 171.12 North American Shipments.

* * * * *

(b) * * *

(4) Except as provided in paragraph (b)(5) of this section, the package must be labeled or placarded POISON GAS or POISON INHALATION HAZARD, as appropriate, in accordance with subparts E and F to part 172 of this subchapter.

* * * * *

■ 12. In § 171.15, revise paragraph (a) introductory text to read as follows:

§ 171.15 Immediate notice of certain hazardous materials incidents.

(a) *General.* As soon as practical but no later than 12 hours after the occurrence of any incident described in paragraph (b) of this section, each person in physical possession of the hazardous material must provide notice by telephone to the National Response Center (NRC) on 800–424–8802 (toll free) or 202–267–2675 (toll call). Each notice must include the following information:

* * * * *

PART 172—HAZARDOUS MATERIALS TABLE, SPECIAL PROVISIONS, HAZARDOUS MATERIALS COMMUNICATIONS, EMERGERNCY RESPONSE INFORMATION, TRAINING REQUIREMENTS, AND SECURITY PLANS

■ 13. 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.

■ 14. In § 172.101:

■ a. Revise paragraphs (f) and (i)(3); and

■ b. Amend the Hazardous Materials Table by removing the entries under ''[REMOVE],'' revising the entries under ''[REVISE]'', and adding in the appropriate alphabetical order the entries under ''[ADD].''

The revisions and additions read as follows:

§ 172.101 Purpose and use of hazardous materials table.

* * * * *

(f) *Column 5: Packing group.* Column 5 specifies one or more packing groups assigned to a material corresponding to the proper shipping name and hazard class for that material. Class 2, Class 7, and Division 6.2 do not have packing groups. Articles in classes other than Class 1 are not assigned to packing groups. For packing purposes, any requirement for a specific packaging performance level is set out in the applicable packing authorizations of part 173. Packing Groups I, II, and III indicate the degree of danger presented by the material is great, medium, or minor, respectively. If more than one packing group is indicated for an entry, the packing group for the hazardous material is determined using the criteria for assignment of packing groups specified in subpart D of part 173. When a reevaluation of test data or new data indicates a need to modify the specified packing group(s), the data should be submitted to the Associate Administrator. Each reference in this column to a material that is a hazardous waste or a hazardous substance, and whose proper shipping name preceded in Column 1 of the Table by the letter ''A'' or ''W,'' is modified to read ''III'' on those occasions when the material is offered for transportation or transported by a mode in which its transportation is not otherwise subject to requirements of this subchapter.

* * * * *

(i) * * *

(3) *Bulk packaging.* Column (8C) specifies the section in part 173 of this subchapter that prescribes packaging requirements for bulk packagings, subject to the limitations, requirements, and additional authorizations of Columns (7) and (8B). A ''None'' in Column (8C) means bulk packagings are not authorized, except as may be provided by special provisions in Column (7) and in packaging authorizations Column (8B). Additional authorizations and limitations for use of UN portable tanks are set forth in Column 7. For each reference in this column to a material that is a hazardous waste or a hazardous substance, and whose proper shipping name is preceded in Column 1 of the Table by the letter ''A'' or ''W'' and that is offered for transportation or transported by a mode in which its transportation is not otherwise subject to the requirements of this subchapter:

(i) The column reference is § 173.240 or § 173.241, as appropriate.

(ii) For a solid material, the exception provided in special provision B54 is applicable.

(iii) For a Class 9 material, which meets the definition of an elevated temperature material, the column reference is § 173.247.

* * * * *

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification numbers	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***)		(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	[REMOVE].												
	*	*			*	*	*		*	*			
G	Amine, liquid, corrosive, flammable, n.o.s. or Polyamines, liquid, corrosive, flammable, n.o.s..	8	UN2734	I	8, 3 ..	A3, A6, N34, T14, TP2, TP27.	None	201	243	0.5 L	2.5 L	A	52
				II	8, 3 ..	IB2, T11, TP2, TP27	154	201	243	1 L	30 L	A	52
	*	*			*	*	*		*	*			
D	Cartridges power device *(used to project fastening devices).*	ORM–D	.....	.....	None	222	63	None	None	30 kg gross	Forbidden ...	A	.....
	*	*			*	*	*		*	*			
D	Cartridges, small arms	ORM–D	.....	.....	None	222	63	None	None	30 kg gross	Forbidden ...	A	.....
	*	*			*	*	*		*	*			
D	Consumer commodity	ORM–D	.....	.....	None	22	156, 306	156, 306	None	30 kg gross	Forbidden ...	A	.....
	*	*			*	*	*		*	*			
	Hydrogen, peroxide, aqueous solutions with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary).	5.1	UN2014	II	5.1, 8	12, A60, B53, B80, B81, B85, IB2, IP5, T7, TP2, TP6, TP24, TP37.	152	202	243	Forbidden ...	Forbidden ...	D	25, 66, 75
	Hydrogen peroxide, aqueous solutions with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary).	5.1	UN2014	II	5.1, 8	A2, A3, A6, B53, IB2, IP5, T7, TP2, TP6, TP24, TP37.	152	202	243	1 L	5 L	D	25, 66, 75
	*	*			*	*	*		*	*			
	Paint *including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base.*	3	UN1263	I	3	367, T11, TP1, TP8, TP27.	150	201	243	1 L	30 L	E	.....
				II	3	149, 367, B52, B131, IB2, T4, TP1, TP8, TP28.	150	173	242	5 L	60 L	B	.....
				III	3	367, B1, B52, B131, IB3, T2, TP1, TP29.	150	173	242	60 L	220 L	A	.....
	*	*			*	*	*		*	*			
	Wheel chair, electric, see Battery powered vehicle *or* Battery powered equipment.												
	*	*			*	*	*		*	*			
	[REVISE].												
	*	*			*	*	*		*	*			
	Amyl mercaptan	3	UN1111	II	3	A3, IB2, T4, TP1	150	202	242	5 L	60 L	B	95, 102

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification numbers	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***)		(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	*	*	*		*	*	*		*	*			
	Antimony pentafluoride	8	UN1732	II	8, 6.1	A3, A7, A10, IB2, N3, N36, T7, TP2.	154	202	243	Forbidden	30 L	D	40, 44, 53, 58, 89, 100, 141
	*	*	*		*	*	*		*	*			
	Coating solution *(includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining).*	3	UN1139	I	3	T11, TP1, TP8, TP27.	150	201	243	1 L	30 L	E	
				II	3	149, 383, IB2, T4, TP1, TP8.	150	202	242	5 L	60 L	B	
				III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	*	*	*		*	*	*		*	*			
G	Corrosive liquids, flammable, n.o.s.	8	UN2920	I	8, 3	B10, T14, TP2, TP27.	None	201	243	0.5 L	2.5 L	C	25, 40
				II	8, 3	B2, IB2, T11, TP2, TP27.	154	202	243	1 L	30 L	C	25, 40
	*	*	*		*	*	*		*	*			
G	Corrosive solids, flammable, n.o.s.	8	UN2921	I	8, 4.1	IB6, T6, TP33	None	211	242	1 kg	25 kg	B	12, 25
				II	8, 4.1	IB8, IP2, IP4, T3, TP33.	154	212	242	15 kg	50 kg	B	12, 25
	*	*	*		*	*	*		*	*			
G	Corrosive liquids, oxidizing, n.o.s.	8	UN3093	I	8, 5.1	A7	None	201	243	Forbidden	2.5 L	C	89
				II	8, 5.1	A7, IB2	154	202	243	1 L	30 L	C	89
	*	*	*		*	*	*		*	*			
G	Corrosive solids, oxidizing, n.o.s.	8	UN3084	I	8, 5.1	T6, TP33	None	211	242	1 kg	25 kg	C	
				II	8, 5.1	IB6, IP2, T3, TP33	154	212	242	15 kg	50 kg	C	
	*	*	*		*	*	*		*	*			
	Dangerous goods in articles *or* Dangerous goods in machinery *or* Dangerous goods in apparatus.	9	UN3363		9	136, A105	None	222	None	*See* A105	*See* A105	A	
	*	*	*		*	*	*		*	*			
	Difluorophosphoric acid, anhydrous	8	UN1768	II	8	A7, B2, IB2, N5, N34, T8, TP2.	154	202	242	1 L	30 L	A	40, 53, 58
	*	*	*		*	*	*		*	*			
	Diethyl sulfide	3	UN2375	II	3	IB2, T7, TP1, TP13	150	202	243	5 L	60 L	E	
	*	*	*		*	*	*		*	*			
A, W	Fish meal, stabilized *or* Fish scrap, stabilized.	9	UN2216	III	None	155, B136, IB8, IP3, T1, TP33.	155	218	218	100 kg	200 kg	B	25, 88, 122, 128
	*	*	*		*	*	*		*	*			
G	Flammable solids, corrosive, organic, n.o.s..	4.1	UN2925	II	4.1, 8	A1, IB6, IP2, T3, TP33.	151	212	242	15 kg	50 kg	D	40
				III	4.1, 8	A1, IB6, T1, TP33	151	213	242	25 kg	100 kg	D	40

	*		*		*	*	*	*	*	*				
	Fluorophosphoric acid anhydrous	8	UN1776	II	8	A7, B2, IB2, N3, N34, T8, TP2.	154	202	242	1 L	30 L	A	53, 58
	*		*		*	*	*	*	*	*				
	Fluorosilicic acid	8	UN1778	II	8	A7, B2, B15, IB2, N3, N34, T8, TP2.	154	202	242	1 L	30 L	A	53, 58
	*		*		*	*	*	*	*	*				
	Hexafluorophosphoric acid	8	UN1782	II	8	A7, B2, IB2, N3, N34, T8, TP2.	154	202	242	1 L	30 L	A	53, 58
	*		*		*	*	*	*	*	*				
	Hexamethylenediamine solution	8	UN1783	II	8	52, IB2, T7, TP2	154	202	242	1 L	30 L	A	52
	*		*		*	*	*	*	*	*				
	Hydrobromic acid, *with more than 49 percent hydrobromic acid.*	8	UN1788	II	8	A3, B2, B15, IB2, N41, T7, TP2.	154	202	242	1 L	30 L	C	53, 58
				III	8	A3, IB3, T4, TP1	154	203	241	5 L	60 L	C	53, 58
	*		*		*	*	*	*	*	*				
	Hydrogendifluoride, solid, n.o.s.	8	UN1740	II	8	IB8, IP2, IP4, N3, N34, T3, TP33.	154	212	240	15 kg	50 kg	A	25, 40, 52, 53, 58
				III	8	53, 58, IB8, IP3, N3, N34, T1, TP33.	154	213	240	25 kg	100 kg	A	25, 40, 52
	*		*		*	*	*	*	*	*				
	Hydrogen peroxide and peroxyacetic acid mixtures, stabilized *with acids, water, and not more than 5 percent peroxyacetic acid.*	5.1	UN3149	II	5.1, 8	145, A2, A3, B53, IB2, IP5, T7, TP2, TP6, TP24.	152	202	243	1 L	5 L	D	25, 66, 75
	*		*		*	*	*	*	*	*				
	Mercaptans, liquid, flammable, toxic, n.o.s. *or* Mercaptan mixtures, liquid, flammable, toxic, n.o.s..	3	UN1228	II	3, 6.1	IB2, T11, TP2, TP27	150	202	243	Forbidden	60 L	B	40, 95, 102
				III	3, 6.1	B1, IB3, T7, TP1, TP28.	150	203	242	5 L	220 L	A	40, 95, 102
	*		*		*	*	*	*	*	*				
	Nitric acid *other than red fuming, with at least 65 percent, but not more than 70 percent nitric acid.*	8	UN2031	II	8, 5.1	B2, B47, B53, IB2, IP15, T8, TP2.	154	158	242	Forbidden	30 L	D	53, 58, 66, 74, 89, 90
	Nitric acid *other than red fuming, with more than 20 percent and less than 65 percent nitric acid.*	8	UN2031	II	8	A212, B2, B47, B53, IB2, IP15, T8, TP2.	154	158	242	Forbidden	30 L	D	44, 66, 53, 58, 74, 89, 90
	Nitric acid *other than red fuming with not more than 20 percent nitric acid.*	8	UN2031	II	8	B2, B47, B53, IB2, T8, TP2.	154	158	242	1 L	30 L	D	53, 58
	*		*		*	*	*	*	*	*				
G	Nitrites, inorganic, n.o.s.	5.1	UN2627	II	5.1	33, IB8, IP2, IP4, T3, TP33.	152	212	None	5 kg	25 kg	A	46, 56, 58, 133
	*		*		*	*	*	*	*	*				
G	Oxidizing liquid, corrosive, n.o.s.	5.1	UN3098	I	5.1, 8	62	None	201	244	Forbidden	2.5 L	D	13, 56, 58, 138
				II	5.1, 8	62, IB1	152	202	243	1 L	5 L	B	13, 56, 58, 138
				III	5.1, 8	62, IB2	152	203	242	2.5 L	30 L	B	13, 56, 58, 138

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification numbers	PG	Label codes	Special provisions (§ 172.102)	(8) Packaging (§ 173.***)		(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	*	*	*		*	*	*		*	*			
G	Pesticides, liquid, flammable, toxic, *flash point less than 23 degrees C.*	3	UN3021	I	3, 6.1	B5, T14, TP2, TP13, TP27.	None	201	243	Forbidden	30 L	B	40
	*	*	*		*	*	*		*	*			
	Phosphorus tribromide	8	UN1808	II	8	A3, A7, B2, B25, IB2, N34, N43, T7, TP2.	154	202	242	Forbidden	30 L	C	40, 53, 58
	*	*	*		*	*	*		*	*			
	1,2-Propylenediamine	8	UN2258	II	8	A3, IB2, N34, T7, TP2.	154	202	243	1 L	30 L	A	40, 52
	*	*	*		*	*	*		*	*			
	Radioactive material, low specific activity (LSA–II) *non fissile or fissile-excepted.*	7	UN3321		7	325, A56, T5, TP4, W7.	421, 422, 428.	427	427			A	95, 129
	*	*	*		*	*	*		*	*			
+	Tetranitromethane	6.1	UN1510	I	6.1, 5.1.	2, B32, T20, TP2, TP13, TP38, TP44.	None	227	None	Forbidden	Forbidden	D	40, 66
	*	*	*		*	*	*		*	*			
	[ADD].												
	*	*	*		*	*	*		*	*			
G	Amine, liquid, corrosive, flammable, n.o.s. *or* Polyamines, liquid, corrosive, flammable, n.o.s..	8	UN2734	I	8, 3	A3, N34, T14, TP2, TP27.	None	201	243	0.5 L	2.5 L	A	52
				II	8, 3	IB2, T11, TP2, TP27	154	202	243	1 L	30 L	A	52
	*	*	*		*	*	*		*	*			
	Hydrogen peroxide, aqueous solutions *with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary).*	5.1	UN2014	II	5.1, 8	12, A60, B53, B80, B81, B85, IB2, IP5, T7, TP2, TP6, TP24, TP37.	152	202	243	Forbidden	Forbidden	D	25, 66, 75
	Hydrogen peroxide, aqueous solutions *with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary).*	5.1	UN2014	II	5.1, 8	A2, A3, B53, IB2, IP5, T7, TP2, TP6, TP24, TP37.	152	202	243	1 L	5 L	D	25, 66, 75
	*	*	*		*	*	*		*	*			
	Paint *(including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base).*	3	UN1263	I	3	367, T11, TP1, TP8, TP27.	150	201	243	1 L	30 L	E	
				II	3	149, 367, 383, B52, B131, IB2, T4, TP1, TP8, TP28.	150	173	242	5 L	60 L	B	

		III	3	367, B1, B52, B131, IB3, T2, TP1, TP29.	150	173	242	60 L	220 L	A
*	*	*	*	*	*	*				
Wheelchair, electric, see Battery powered vehicle *or* Battery powered equipment.										
*	*	*	*	*	*	*				

* * * * *

■ 15. In § 172.102:

■ a. Remove special provision ''222'' from the ''Code/Special Provisions'' table in paragraph (c)(1); and

■ b. Revise the entry for ''IP7'' in Table 2—IP Codes in paragraph (c)(4).

The revision reads as follows:

§ 172.102 Special provisions.

* * * * *

(c) * * *

(4) * * *

TABLE 2—IP CODES

IP code	
*	* * * * * * *
IP7	For UN identification numbers 1327, 1363, 1364, 1365, 1386, 1408, 1841, 2211, 2217, 2793 and 3314, IBCs are not required to meet the IBC performance tests specified in part 178, subpart N, of this subchapter.
*	* * * * * * *

* * * * *

■ 16. In § 172.200, revise paragraph (b)(3) to read as follows:

§ 172.200 Applicability.

* * * * *

(b) * * *

(3) A limited quantity package unless the material is offered for transportation by aircraft or vessel.

* * * * *

■ 17. In § 172.202, revise paragraph (a)(4) to read as follows:

§ 172.202 Description of hazardous material on shipping papers.

(a) * * *

(4) The packing group in Roman numerals, as designated for the hazardous material in Column (5) of the § 172.101 table. Class 1 (explosives) materials; self-reactive substances; Division 5.2 materials; and entries that are not assigned a packing group (*e.g.,* Class 7) are excepted from this requirement. The packing group may be preceded by the letters ''PG'' (for example, ''PG II''); and

* * * * *

■ 18. In § 172.203, revise paragraph (e)(2) to read as follows:

§ 172.203 Additional description requirements.

* * * * *

(e) * * *

(2) The description on the shipping paper for a tank car containing the residue of a hazardous material must include the phrase, ''RESIDUE: Last Contained * * *'' immediately before or after the basic shipping description or immediately preceding the proper shipping name of the material on the shipping paper.

* * * * *

■ 19. In § 172.204, revise paragraph (a)(3)(ii) to read as follows:

§ 172.204 Shipper's certification.

(a) * * *

(3) * * *

(ii) *Electronic certification.* When transmitted electronically, by completing the field designated for the shipper's signature with the name of the principal person, partner, officer, or employee of the offeror or their agent, the shipper is also certifying its compliance with the certification specified in this paragraph (a).

* * * * *

§ 172.315 [Amended]

■ 20. In § 172.315, remove and reserve paragraph (d).

§ 172.316 [Removed and Reserved]

■ 21. Remove and reserve § 172.316.

■ 22. In § 172.332, revise paragraph (d) to read as follows:

§ 172.332 Identification number markings.

* * * * *

(d) *Example.* Except for size and color, the display of an identification number on a placard shall be as illustrated for Acetone:

■ 23. In § 172.400, revise the table to paragraph (b) to read as follows:

§ 172.400 General labeling requirements.

(b) * * *

* * * * *

TABLE 1 TO PARAGRAPH (b)

Hazard class or division	Label name	Label design or section reference
1.1	EXPLOSIVES 1.1	172.411
1.2	EXPLOSIVES 1.2	172.411
1.3	EXPLOSIVES 1.3	172.411
1.4	EXPLOSIVES 1.4	172.411
1.5	EXPLOSIVES 1.5	172.411
1.6	EXPLOSIVES 1.6	172.411
2.1	FLAMMABLE GAS	172.417
2.2	NON–FLAMMABLE GAS	172.415
2.3	POISON GAS	172.416
3 Flammable Liquid (Combustible liquid)	FLAMMABLE LIQUID (none)	172.419
4.1	FLAMMABLE SOLID	172.420
4.2	SPONTANEOUSLY COMBUSTIBLE	172.422
4.3	DANGEROUS WHEN WET	172.423
5.1	OXIDIZER	172.426
5.2	ORGANIC PEROXIDE	172.427
6.1 (material poisonous by inhalation (see § 171.8 of this subchapter)).	POISON INHALATION HAZARD	172.429
6.1 (other than a material poisonous by inhalation)	POISON	172.430
6.1 (inhalation hazard, Zone A or B)	POISON INHALATION HAZARD	172.429
6.1 (other than inhalation hazard, Zone A or B)	POISON	172.430
6.2	INFECTIOUS SUBSTANCE	172.432
7 (see § 172.403)	RADIOACTIVE WHITE–I	172.436
7	RADIOACTIVE YELLOW–II	172.438
7	RADIOACTIVE YELLOW–III	172.440
7 (fissile radioactive material; see § 172.402)	FISSILE	172.441
7 (empty packages, see § 173.428 of this subchapter)	EMPTY	172.450
8	CORROSIVE	172.442
9	CLASS 9	172.446

§ 172.500 [Amended]

■ 24. In § 172.500, remove paragraph (b)(2) and redesignate paragraphs (b)(3) through (6) as paragraphs (b)(2) through (5) to read as follows:

■ 25. In § 172.504, in paragraph (e), designate table 1 as Table 1 to Paragraph (e) and revise table 2 to read as follows:

§ 172.504 General placarding requirements.

* * * * *

(e) * * *

TABLE 2 TO PARAGRAPH (e)

Category of material (hazard class or division number and additional description, as appropriate)	Placard name	Placard design section reference (§)
1.4	EXPLOSIVES 1.4	172.523
1.5	EXPLOSIVES 1.5	172.524
1.6	EXPLOSIVES 1.6	172.525
2.1	FLAMMABLE GAS	172.532
2.2	NON–FLAMMABLE GAS	172.528
3	FLAMMABLE	172.542
Combustible liquid	COMBUSTIBLE	172.544
4.1	FLAMMABLE SOLID	172.546
4.2	SPONTANEOUSLY COMBUSTIBLE	172.547
5.1	OXIDIZER	172.550
5.2 (Other than organic peroxide, Type B, liquid or solid, temperature controlled).	ORGANIC PEROXIDE	172.552
6.1 (other than material poisonous by inhalation)	POISON	172.554
6.2	NONE	
8	CORROSIVE	172.558
9	CLASS 9 (see § 172.504(f)(9))	172.560

* * * * *

■ 26. In § 172.512, revise paragraph (c) to read as follows:

§ 172.512 Freight containers and aircraft unit load devices.

* * * * *

(c) Notwithstanding paragraphs (a) and (b) of this section, packages containing hazardous materials offered for transportation by air in freight containers are subject to the inspection requirements of § 175.30 of this chapter.

■ 27. In § 172.519, revise paragraph (c)(1) to read as follows:

* * * * *

(c) * * *

(1) Each diamond (square-on-point) placard prescribed in this subpart must measure at least 250 mm (9.84 inches) on each side and must have a solid line inner border approximately 12.5 mm inside and parallel to the edge. The 12.5 mm measurement is from the outside edge of the placard to the outside of the solid line forming the inner border. For domestic transportation, a placard manufactured prior to January 1, 2017, in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life provided the color tolerances are maintained and are in accordance with the display requirements of this subchapter.

* * * * *

■ 28. In § 172.600, revise paragraph (d) to read as follows:

§ 172.600 Applicability and general requirements.

* * * * *

(d) *Exceptions.* The requirements of this subpart do not apply to hazardous material which is excepted from the shipping paper requirements of this subchapter.

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

■ 29. 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.

■ 30. Section 173.2 is revised to read as follows:

§ 173.2 Hazardous material classes and index to hazard class definitions.

The hazard class of a hazardous material is indicated by either the class or division number or the class name. The following table lists class numbers, division numbers, class or division names and those sections of this subchapter which contain definitions for classifying hazardous materials, including forbidden materials.

TABLE 1 TO § 173.2

Class No.	Division number (if applicable)	Name of class or division	49 CFR reference for definitions
None		FORBIDDEN MATERIALS	173.21
None		FORBIDDEN EXPLOSIVES	173.54
1	1.1	EXPLOSIVES (WITH A MASS EXPLOSION HAZARD)	173.50
1	1.2	EXPLOSIVES (WITH A PROJECTION HAZARD)	173.50
1	1.3	EXPLOSIVES (WITH PREDOMINATELY A FIRE HAZARD)	173.50
1	1.4	EXPLOSIVES (WITH NO SIGNIFICANT BLAST HAZARD)	173.50
1	1.5	VERY INSENSITIVE EXPLOSIVES; BLASTING AGENTS	173.50
1	1.6	EXTREMELY INSENSITIVE DETONATING SUBSTANCES	173.50
2	2.1	FLAMMABLE GAS	173.115
2	2.2	NON–FLAMMABLE COMPRESSED GAS	173.115
2	2.3	POISONOUS GAS	173.115
3		FLAMMABLE AND COMBUSTIBLE LIQUID	173.120
4	4.1	FLAMMABLE SOLID	173.124
4	4.2	SPONTANEOUSLY COMBUSTIBLE MATERIAL	173.124
4	4.3	DANGEROUS WHEN WET MATERIAL	173.124
5	5.1	OXIDIZER	173.127
5	5.2	ORGANIC PEROXIDE	173.128
6	6.1	POISONOUS MATERIALS	173.132
6	6.2	INFECTIOUS SUBSTANCE (ETIOLOGIC AGENT)	173.134
7		RADIOACTIVE MATERIAL	173.403
8		CORROSIVE MATERIAL	173.136
9		MISCELLANEOUS HAZARDOUS MATERIAL	173.140

■ 31. In § 173.4a, revise paragraph (g)(2) to read as follows:

§ 173.4a Excepted quantities.

* * * * *

(g) * * *

(2) The marking must be durable and clearly visible and in the form of a square. The hatching must be of the same color, black or red on white or a suitable contrasting background. The minimum dimensions must not be less than 100 mm (3.9 inches) by 100 mm (3.9 inches) as measured from the outside of the hatching forming the border. Where dimensions are not specified, all features shall be in approximate proportion to those shown. For domestic transportation, a packaging marked prior to January 1, 2017, and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

■ 32. In 173.6, revise paragraphs (a)(1) introductory text and (a)(1)(ii) to read as follows:

§ 173.6 Materials of trade exceptions.

* * * * *

(a) * * *

(1) A Class 3, 8, 9, Division 4.1, 5.1, 5.2, or 6.1 material contained in a packaging having a gross mass or capacity not over—

* * * * *

(ii) 30 kg (66 pounds) or 30 L (8 gallons) for a Packing Group II or Packing Group III material;

* * * * *

■ 33. In § 173.11, revise paragraph (b) to read as follows:

§ 173.11 Exceptions for shipment of light bulbs containing hazardous materials.

* * * * *

(b) Light bulbs each containing not more than 1 g of hazardous materials and packaged so that there is not more than 30 g of hazardous materials per package. Each light bulb must be packed in inner packagings separated by dividers or surrounded by cushioning material to protect the light bulbs and packed into strong outer packagings meeting the requirements of § 173.24(b) of this subpart and capable of passing a 1.2 m (4 feet) drop test.

* * * * *

■ 34. In § 173.12, revise paragraph (h) to read as follows:

§ 173.12 Exceptions for shipment of waste materials.

* * * * *

(h) *Shrink-wrapped or stretch-wrapped pallets of limited quantity waste.* Shrink-wrapped or stretch-wrapped pallets containing packages of waste limited quantity materials may be transported by motor vehicle and cargo vessel under the following conditions:

(1) The waste materials must be in their original undamaged packaging marked with the authorized limited quantity marking in conformance with § 172.315 of this subchapter, as appropriate. The word ''waste'' in association with the proper shipping name is not required on individual packages;

(2) Packages must be securely affixed to a pallet and shrink-wrapped or stretch-wrapped;

(3) The outside of the shrink-wrap or stretch-wrap must be marked on opposite sides with ''Waste, Limited Quantity.''

■ 35. In § 173.24a, revise paragraph (c)(1)(iii) to read as follows:

§ 173.24a Additional general requirements for non-bulk packagings and packages.

* * * * *

(c) * * *

(1) * * *

(iii) Corrosive materials in bottles are further packed in securely closed inner receptacles before packing in outer packagings; and

* * * * *

■ 36. In § 173.25, revise paragraph (a)(4) to read as follows:

§ 173.25 Authorized packagings and overpacks.

(a) * * *

(4) The overpack is marked with the word ''OVERPACK'' when specification packagings are required, or for Class 7 (radioactive) material when a Type A, Type B(U), Type B(M) or industrial package is required. The ''OVERPACK'' marking is not required when the required markings representative of each package type contained in the overpack are visible from outside of the overpack. The lettering on the ''OVERPACK'' marking must be at least 12 mm (0.5 inches) high. For domestic transportation, an overpack marked prior to January 1, 2017, and in conformance with the requirements of this paragraph in effect on December 31, 2014, may continue in service until the end of its useful life.

* * * * *

■ 37. In § 173.27:

■ a. Revise table 2 to paragraph (f); and

■ b. Amend table 3 to paragraph (f) by revising the entry for ''Division 4.2 (Primary or subsidiary)''.

The revisions read as follows:

§ 173.27 General requirements for transportation by aircraft.

* * * * *

(f) * * *

(3) * * *

TABLE 2 TO PARAGRAPH (f)—MAXIMUM NET CAPACITY OF INNER PACKAGING FOR TRANSPORTATION ON CARGO AIRCRAFT

Maximum net quantity per package from Column 9b of § 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	2.5 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

TABLE 3 TO PARAGRAPH (f)—MAXIMUM NET QUANTITY OF EACH INNER AND OUTER PACKAGING FOR MATERIALS AUTHORIZED FOR TRANSPORTATION AS LIMITED QUANTITY BY AIRCRAFT

Hazard class or division	Maximum authorized net quantity of each inner packaging		Maximum authorized net quantity of each outer package	Notes
	Glass, earthenware, or fiber Inner packagings	Metal or plastic inner packagings		
*	*	*	*	*
Division 4.2 (Primary or subsidiary).	Forbidden *	*	25 kg (net mass) *	
*	*	*	*	*

* * * * *

■ 38. In § 173.29, revise paragraph (b)(2)(iv)(A) to read as follows:

§ 173.29 Empty packagings.

* * * * *

(b) * * *

(2) * * *

(iv) * * *

(A) A limited quantity material; or

* * * * *

■ 39. In § 173.36, revise paragraph (h)(1)(iii) to read as follows:

§ 173.36 Hazardous materials in Large Packagings.

* * * * *

(h) * * *

(1) * * *

(iii) Corrosive materials in bottles are further packed in securely closed inner receptacles before packing in outer packagings; and

* * * * *

■ 40. In § 173.62, amend Table 1 to Paragraph (b) by adding an entry for ''UN0485'' in appropriate alphanumerical order to read as follows:

§ 173.62 Specific packaging requirements for explosives.

* * * * *

(b) * * *

TABLE 1 TO PARAGRAPH (b)—EXPLOSIVE TABLE

ID No.	PI
* * * *	
UN0485	101
* * * *	

■ 41. In § 173.63, revise paragraph (b) to read as follows:

§ 173.63 Packaging exceptions.

* * * * *

(b) *Limited quantities of Cartridges, small arms, Cartridges, power device, Cartridges for tools, blank, and Cases, cartridge, empty with primer.*

(1)(i) Cartridges, small arms, Cartridges, power device (used to project fastening devices), Cartridges for tools, blank, and Cases, cartridge, empty with primer that have been classed as Division 1.4S explosive may be offered for transportation and transported as limited quantities when packaged in accordance with paragraph (b)(2) of this section. Packages containing such articles may be marked with either the marking prescribed in § 172.315(a) or (b) of this subchapter and offered for transportation and transported by any mode. For transportation by aircraft, the package must conform to the applicable requirements of § 173.27 of this part. In addition, packages containing such articles offered for transportation by aircraft must be marked with the proper shipping name as prescribed in the § 172.101 Hazardous Materials Table of this subchapter. Packages containing such articles are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or is offered for transportation and transported by aircraft or vessel. Additionally, packages containing such articles are excepted from the requirements of subparts E (Labeling) and F (Placarding) of part 172 of this subchapter.

(ii) Cartridges, small arms, Cartridges, power device (*used to project fastening devices*), Cartridges for tools, blank, and Cases, cartridge empty with primer that may be shipped as a limited quantity are as follows:

(A) Ammunition for rifle, pistol or shotgun;

(B) Ammunition with inert projectiles or blank ammunition;

(C) Ammunition having no tear gas, incendiary, or detonating explosive projectiles;

(D) Ammunition not exceeding 12.7 mm (50 caliber or 0.5 inch) for rifle or pistol, cartridges or 8 gauge for shotshells;

(E) Cartridges for tools, blank; and

(F) Cases, cartridge, empty with primer.

(G) Cartridges, power device (*used to project fastening devices*).

(2) Packaging for Cartridges, small arms, Cartridges for tools, blank, Cases, cartridge empty with primer, and eligible Cartridges, power device as limited quantity must be as follows:

(i) Ammunition must be packed in inside boxes, or in partitions that fit snugly in the outside packaging, or in metal clips;

(ii) Primers must be protected from accidental initiation;

(iii) Inside boxes, partitions or metal clips must be packed in securely-closed strong outside packagings;

(iv) Maximum gross weight is limited to 30 kg (66 pounds) per package; and

(v) Cartridges for tools, blank, Cartridges, power devices which are used to project fastening devices, Cases, cartridge, empty with primer, and 22 caliber rim-fire cartridges may be packaged loose in strong outside packagings.

* * * * *

§ 173.144 [Removed and Reserved]

■ 42. Remove and reserve § 173.144.

§ 173.145 [Removed and Reserved]

■ 43. Remove and reserve § 173.145.

§ 173.150 [Amended]

■ 44. In § 173.150, remove and reserve paragraph (c).

§ 173.151 [Amended]

■ 45. In § 173.151, remove and reserve paragraph (c).

§ 173.152 [Amended]

■ 46. In § 173.152, remove and reserve paragraph (c).

§ 173.153 [Amended]

■ 47. In § 173.153, remove and reserve paragraph (c).

§ 173.154 [Amended]

■ 48. In § 173.154, remove and reserve paragraph (c).

§ 173.155 [Amended]

■ 49. In § 173.155, remove and reserve paragraph (c).

■ 50. In § 173.156, revise the section heading, add a paragraph (a) subject heading, and revise paragraphs (b) introductory text, (b)(2) introductory text, and (d) to read as follows:

§ 173.156 Exceptions for limited quantity materials.

(a) *Applicability.* * * *

(b) *Additional packaging exceptions.* Packagings for limited quantity materials are specified according to hazard class in §§ 173.150 through 173.155, 173.306, and 173.309(b). In addition to exceptions provided for limited quantity materials elsewhere in this part, the following are provided:

* * * * *

(2) The 30 kg (66 pounds) gross weight limitation does not apply to packages of limited quantity materials marked in accordance with § 172.315 of this subchapter when offered for transportation or transported by highway or rail between a manufacturer, a distribution center, and a retail outlet provided—

* * * * *

(d) *Exceptions for waste limited quantity materials.* Exceptions for certain waste limited quantity materials are prescribed in § 173.12(h).

§ 173.161 [Amended]

■ 51. In § 173.161, remove paragraph (d)(2) and redesignate paragraph (d)(3) as paragraph (d)(2).

§ 173.165 [Amended]

■ 52. In § 173.165, remove and reserve paragraph (d).

■ 53. In § 173.185, revise paragraphs (b)(5), (c)(3) introductory text, (d), and (e)(5) to read as follows:

§ 173.185 Lithium cells and batteries.

* * * * *

(b) * * *

(5) Lithium batteries that weigh 12 kg (26.5 pounds) or more and have a strong, impact-resistant outer casing may be packed in strong outer packagings; in protective enclosures (for example, in fully enclosed or wooden slatted crates); or on pallets or other handling devices, instead of packages meeting the UN performance packaging requirements in paragraphs (b)(3)(ii) and (iii) of this section. Batteries must be secured to prevent inadvertent shifting, and the terminals may not support the weight of other superimposed elements. Batteries packaged in accordance with this paragraph may be transported by cargo aircraft if approved by the Associate Administrator.

* * * * *

(c) * * *

(3) *Lithium battery mark.* Each package must display the lithium battery mark except when a package contains button cell batteries installed in equipment (including circuit boards), or no more than four lithium cells or two lithium batteries contained in equipment, where there are not more than two packages in the consignment.

* * * * *

(d) *Lithium cells or batteries shipped for disposal or recycling.* A lithium cell or battery, including a lithium cell or battery contained in equipment, that is transported by motor vehicle to a permitted storage facility or disposal site, or for purposes of recycling, is excepted—

(1) From the testing and record keeping requirements of paragraph (a) and the UN performance packaging requirements in paragraphs (b)(3)(ii), (b)(3)(iii) and (b)(6) of this section, when packed in a strong outer packaging conforming to the applicable requirements of subpart B of this part; and

(2) From subparts C through H of part 172 of this subchapter when the lithium cell or battery meets the size, packaging, and hazard communication conditions in paragraph (c)(1)–(3) of this section.

(e) * * *

(5) Lithium batteries, including lithium batteries contained in equipment, that weigh 12 kg (26.5 pounds) or more and have a strong, impact-resistant outer casing may be packed in strong outer packagings, in protective enclosures (for example, in fully enclosed or wooden slatted crates), or on pallets or other handling devices, instead of packages meeting the UN performance packaging requirements in paragraphs (b)(3)(ii) and (iii) of this section. The battery must be secured to prevent inadvertent shifting, and the terminals may not support the weight of other superimposed elements;

* * * * *

■ 54. In § 173.225, in table 1 to paragraph (c), revise the following entries to read as follows:

§ 173.225 Packaging requirements and other provisions for organic peroxides.

* * * * *

(c) * * *

TABLE 1 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)
* * *		*		*		*		*		
tert-Amyl peroxy-2-ethylhexanoate	UN3115	≤100					OP7	+20	+25	
* * *		*		*		*		*		
tert-Amyl peroxyneodecanoate	UN3115	≤77		≥23			OP7	0	+10	
tert-Amyl peroxyneodecanoate	UN3119	≤47	≥53				OP8	0	+10	
tert-Amyl peroxypivalate	UN3113	≤77		≥23			OP5	+10	+15	
tert-Amyl peroxypivalate	UN3119	≤32	≥68				OP8	+10	+15	
* * *		*		*		*		*		
tert-Butyl peroxydiethylacetate	UN3113	≤100					OP5	+20	+25	
tert-Butyl peroxy-2-ethylhexanoate	UN3113	>52 – 100					OP6	+20	+25	
tert-Butyl peroxy-2-ethylhexanoate	UN3117	>32 – 52		≥48			OP8	+30	+35	
tert-Butyl peroxy-2-ethylhexanoate	UN3118	≤52			≥48		OP8	+20	+25	
tert-Butyl peroxy-2-ethylhexanoate	UN3119	≤32		≥68			OP8	+40	+45	
* * *		*		*		*		*		
tert-Butyl peroxy-2-ethylhexanoate [and] 2,2-di-(tert-Butylperoxy)butane	UN3115	≤31 + ≤36		≥33			OP7	+35	+40	
* * *		*		*		*		*		
tert-Butyl peroxyisobutyrate	UN3111	>52 – 77		≥23			OP5	+15	+20	
tert-Butyl peroxyisobutyrate	UN3115	≤52		≥48			OP7	+15	+20	
* * *		*		*		*		*		
tert-Butyl peroxyneodecanoate	UN3115	>77 – 100					OP7	−5	+5	
tert-Butyl peroxyneodecanoate	UN3115	≤77		≥23			OP7	0	+10	
tert-Butyl peroxyneodecanoate [as a stable dispersion in water]	UN3119	≤52					OP8	0	+10	
tert-Butyl peroxyneodecanoate [as a stable dispersion in water (frozen)]	UN3118	≤42					OP8	0	+10	
tert-Butyl peroxyneodecanoate	UN3119	≤32	≥68				OP8	0	+10	
tert-Butyl peroxyneoheptanoate	UN3115	≤77	≥23				OP7	0	+10	
tert-Butyl peroxyneoheptanoate [as a stable dispersion in water]	UN3117	≤42					OP8	0	+10	
tert-Butyl peroxypivalate	UN3113	>67 – 77	≥23				OP5	0	+10	
tert-Butyl peroxypivalate	UN3115	>27 – 67		≥33			OP7	0	+10	

TABLE 1 TO PARAGRAPH (c):—ORGANIC PEROXIDE TABLE—Continued

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)
tert-Butyl peroxypivalate	UN3119	≤27		≥73			OP8	+30	+35	
* * *	*		*		*		*			
Cumyl peroxypivalate	UN3115	≤77		≥23			OP7	−5	+5	
* * *	*		*		*		*			
Diacetone alcohol peroxides	UN3115	≤57		≥26		≥8	OP7	+40	+45	5
Diacetyl peroxide	UN3115	≤27		≥73			OP7	+20	+25	8,13
* * *	*		*		*		*			
Di-(4-tert-butylcyclohexyl)peroxydicarbonate	UN3114	≤100					OP6	+30	+35	
Di-(4-tert-butylcyclohexyl)peroxydicarbonate [as a stable dispersion in water]	UN3119	≤42					OP8	+30	+35	
Di-(4-tert-butylcyclohexyl)peroxydicarbonate [as a paste]	UN3116	≤42					OP7	+35	+40	
* * *	*		*		*		*			
Dicetyl peroxydicarbonate	UN3120	≤100					OP8	+30	+35	
Dicetyl peroxydicarbonate [as a stable dispersion in water]	UN3119	≤42					OP8	+30	+35	
* * *	*		*		*		*			
Di-2,4-dichlorobenzoyl peroxide [as a paste]	UN3118	≤52					OP8	+20	+25	
* * *	*		*		*		*			
Dicyclohexyl peroxydicarbonate	UN3112	>91−100					OP3	+10	+15	
Dicyclohexyl peroxydicarbonate	UN3114	≤91				≥9	OP5	+10	+15	
Dicyclohexyl peroxydicarbonate [as a stable dispersion in water]	UN3119	≤42					OP8	+15	+20	
Didecanoyl peroxide	UN3114	≤100					OP6	+30	+35	
* * *	*		*		*		*			
Di-(3-methoxybutyl) peroxydicarbonate	UN3115	≤52		≥48			OP7	−5	+5	
Di-(2-methylbenzoyl)peroxide	UN3112	≤87				≥13	OP5	+30	+35	
* * *	*		*		*		*			
Di-(3-methylbenzoyl) peroxide + Benzoyl (3-methylbenzoyl) peroxide + Dibenzoyl peroxide	UN3115	≤20 + ≤18 + ≤4		≥58			OP7	+35	+40	
* * *	*		*		*		*			
2,5-Dimethyl-2,5-di-(2-ethylhexanoylperoxy)hexane	UN3113	≤100					OP5	+20	+25	
* * *	*		*		*		*			
1,1-Dimethyl-3-hydroxybutylperoxyneoheptanoate	UN3117	≤52	≥48				OP8	0	+10	
Dimyristyl peroxydicarbonate	UN3116	≤100					OP7	+20	+25	
Dimyristyl peroxydicarbonate [as a stable dispersion in water]	UN3119	≤42					OP8	+20	+25	
* * *	*		*		*		*			
Di-n-nonanoyl peroxide	UN3116	≤100					OP7	0	+10	
Di-n-octanoyl peroxide	UN3114	≤100					OP5	+10	+15	
* * *	*		*		*		*			
Dipropionyl peroxide	UN3117	≤27		≥73			OP8	+15	+20	
* * *	*		*		*		*			
Disuccinic acid peroxide	UN3116	≤72				≥28	OP7	+10	+15	
Di-(3,5,5-trimethylhexanoyl) peroxide	UN3115	>52−82	≥18				OP7	0	+10	
Di-(3,5,5-trimethylhexanoyl)peroxide [as a stable dispersion in water]	UN3119	≤52					OP8	+10	+15	
Di-(3,5,5-trimethylhexanoyl) peroxide	UN3119	>38−52	≥48				OP8	+10	+15	
Di-(3,5,5-trimethylhexanoyl)peroxide	UN3119	≤38	≥62				OP8	+20	+25	
* * *	*		*		*		*			
tert-Hexyl peroxyneodecanoate	UN3115	≤71	≥29				OP7	0	+10	
tert-Hexyl peroxypivalate	UN3115	≤72		≥28			OP7	+10	+15	
3-Hydroxy-1,1-dimethylbutyl peroxyneodecanoate	UN3115	≤77	≥23				OP7	−5	+5	
3-Hydroxy-1,1-dimethylbutyl peroxyneodecanoate [as a stable dispersion in water]	UN3119	≤52					OP8	−5	+5	
3-Hydroxy-1,1-dimethylbutyl peroxyneodecanoate	UN3117	≤52	≥48				OP8	−5	+5	
* * *	*		*		*		*			
Methylcyclohexanone peroxide(s)	UN3115	≤67		≥33			OP7	+35	+40	
* * *	*		*		*		*			
Peroxylauric acid	UN3118	≤100					OP8	+35	+40	

TABLE 1 TO PARAGRAPH (c):—ORGANIC PEROXIDE TABLE—Continued

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)
* *	*	*		*		*		*		
1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate	UN3115	≤100					OP7	+15	+20	
1,1,3,3-Tetramethylbutyl peroxyneodecanoate	UN3115	≤72		≥28			OP7	−5	+5	
1,1,3,3-Tetramethylbutyl peroxyneodecanoate [as a stable dispersion in water]	UN3119	≤52					OP8	−5	+5	
1,1,3,3-tetramethylbutyl peroxypivalate	UN3115	≤77	≥23				OP7	0	+10	
* *	*	*		*		*		*		

* * * * *

§ 173.230 [Amended]

■ 55. In § 173.230, remove and reserve paragraph (h).

■ 56. In § 173.244, revise paragraph (a)(2) introductory text to read as follows:

§ 173.244 Bulk packaging for certain pyrophoric liquids (Division 4.2), dangerous when wet (Division 4.3) materials, and poisonous liquids with inhalation hazards (Division 6.1).

* * * * *

(a) * * *

(2) For materials poisonous by inhalation, until December 31, 2027, single unit tank car tanks built prior to March 16, 2009, and approved by the Tank Car Committee for transportation of the specified material. Except as provided in paragraph (a)(3) of this section, tank cars built on or after March 16, 2009, used for the transportation of the PIH materials listed below, must meet the applicable authorized tank car specification listed in the following table:

* * * * *

■ 57. In § 173.301, revise paragraph (f)(5) to read as follows:

§ 173.301 General requirements for shipment of compressed gases and other hazardous materials in cylinders, UN pressure receptacles and spherical pressure vessels.

* * * * *

(f) * * *

(5) A pressure relief device is not required on—

(i) A cylinder 305 mm (12 inches) or less in length, exclusive of neck, and 114 mm (4.5 inches) or less in outside diameter, except when the cylinder is filled with a liquefied gas for which this part requires a service pressure of 1800 psig or higher or a nonliquefied gas to a pressure of 1800 psig or higher at 21 °C (70 °F);

(ii) A cylinder with a water capacity of less than 454 kg (1000 lbs.) filled with a nonliquefied gas to a pressure of 300 psig or less at 21 °C (70 °F), except for a DOT 39 cylinder or a cylinder used for acetylene in solution;

(iii) A cylinder containing a Class 3 or a Class 8 material without pressurization, unless otherwise specified for the hazardous material; or

(iv) A UN pressure receptacle transported in accordance with paragraph (k) or (l) of this section.

* * * * *

■ 58. In § 173.303, revise paragraph (f)(1)(i) to read as follows:

§ 173.303 Charging of cylinders with compressed gas in solution (acetylene).

* * * * *

(f) * * *

(1) * * *

(i) Each UN acetylene cylinder must conform to ISO 3807:2013(E): (IBR, see § 171.7 of this subchapter), have a homogeneous monolithic porous mass filler and be charged with acetone or a suitable solvent as specified in the standard. UN acetylene cylinders must have a minimum test pressure of 52 bar and may be filled up to the pressure limits specified in ISO 3807:2013(E). The use of UN tubes and MEGCs is not authorized.

* * * * *

■ 59. In § 173.304a, revise (a)(2) to read as follows:

§ 173.304a Additional requirements for shipment of liquefied compressed gases in specification cylinders.

(a) * * *

(2) For the gases named, the requirements in table 1 to paragraph (a)(2) apply (for cryogenic liquids, *see* § 173.316):

TABLE 1 TO PARAGRAPH (a)(2)

Kind of gas	Maximum permitted filling density (percent) (see Note 1)	Packaging marked as shown in this column or of the same type with higher service pressure must be used, except as provided in §§ 173.301(l), 173.301a(e), and 180.205(a) (see the following notes after the table)
Anhydrous ammonia	54	DOT–3A480; DOT–3AA480; DOT–3A480X; DOT–4AA480; DOT–3; DOT–3E1800; DOT–3AL480.
Bromotrifluoromethane (R–13B1 or H–1301).	124	DOT–3A400; DOT–3AA400; DOT–3B400; DOT–4AA480; DOT–4B400; DOT–4BA400; DOT–4BW400; DOT–3E1800; DOT–39; DOT–3AL400.
Carbon dioxide (see Notes 4, 7, and 8).	68	DOT–3A1800; DOT–3AX1800; DOT–3AA1800; DOT–3AAX1800; DOT–3; DOT–3E1800; DOT–3T1800; DOT–3HT2000; DOT–39; DOT–3AL1800.
Carbon dioxide (see Notes 4, 7, and 8).	70.3	DOT–3A2000, DOT–3AA2000, DOT–3AX2000, DOT–3AAX2000, DOT–3T2000.
Carbon dioxide (see Notes 4, 7, and 8).	73.2	DOT–3A2265, DOT–3AA2265, DOT–3AX2265, DOT–3AAX2265, DOT–3T2265.
Carbon dioxide (see Notes 4, 7, and 8).	74.5	DOT–3A2400, DOT–3AA2400, DOT–3AX2400, DOT–3AAX2400, DOT–3T2400.

TABLE 1 TO PARAGRAPH (a)(2)—Continued

Kind of gas	Maximum permitted filling density (percent) (see Note 1)	Packaging marked as shown in this column or of the same type with higher service pressure must be used, except as provided in §§ 173.301(l), 173.301a(e), and 180.205(a) (see the following notes after the table)
Carbon dioxide, refrigerated liquid (see *paragraph (e)* of this section).	.....	DOT–4L.
Chlorine (see Note 2)	125	DOT–3A480; DOT–3AA480; DOT–3; DOT–3BN480; DOT–3E1800.
Chlorodifluroethane or 1-Chloro-1, 1-difluoroethane (R–142b).	100	DOT–3A150; DOT–3AA150; DOT–3B150; DOT–4B150; DOT–4BA225; DOT–4BW225; DOT–3E1800; DOT–39; DOT–3AL150.
Chlorodifluoromethane (R–22) (see Note 8).	105	DOT–3A240; DOT–3AA240; DOT–3B240; DOT–4B240; DOT–4BA240; DOT–4BW240; DOT–4B240ET; DOT–4E240; DOT–39; DOT–3E1800; DOT–3AL240.
Chloropentafluorethane (R–115).	110	DOT–3A225; DOT–3AA225; DOT–3B225; DOT–4BA225; DOT–4B225; DOT–4BW225; DOT–3E1800; DOT–39; DOT–3AL225.
Chlorotrifluoromethane (R–13) (see Note 8).	100	DOT–3A1800; DOT–3AA1800; DOT–3; DOT–3E1800; DOT–39; DOT–3AL1800.
Cyclopropane (see Notes 8 and 9).	55	DOT–3A225; DOT–3A480X; DOT–3AA225; DOT–3B225; DOT–4AA480; DOT4B225; DOT–4BA225; DOT–4BW225; DOT–4B240ET; DOT–3; DOT–3E1800; DOT–39; DOT–3AL225.
Dichlorodifluoromethane (R–12) (see Note 8).	119	DOT–3A225; DOT–3AA225; DOT–3B225; DOT–4B225; DOT–4BA225; DOT–4BW225; DOT–4B240ET; DOT–4E225; DOT–39; DOT–3E1800; DOT–3AL225.
Dichlorodifluoromethane and difluoroethane mixture (constant boiling mixture) (R–500) (see Note 8).	Not liquid full at 131 °F.	DOT–3A240; DOT–3AA240; DOT–3B240; DOT–3E1800; DOT–4B240; DOT–4BA240; DOT–4BW240; DOT–4E240; DOT–39.
1,1-Difluoroethane (R–152a) (see Note 8).	79	DOT–3A150; DOT–3AA150; DOT–3B150; DOT–4B150; DOT–4BA225; DOT–4BW225; DOT–3E1800; DOT–3AL150.
1,1-Difluoroethylene (R–1132A).	73	DOT–3A2200; DOT–3AA2200; DOT–3AX2200; DOT–3AAX2200; DOT–3T2200; DOT–39.
Dimethylamine, anhydrous	59	DOT–3A150; DOT–3AA150; DOT–3B150; DOT–4B150; DOT–4BA225; DOT–4BW225; ICC–3E1800.
Ethane (see Notes 8 and 9).	35.8	DOT–3A1800; DOT–3AX1800; DOT–3AA1800; DOT–3AAX1800; DOT–3; DOT–3E1800; DOT–3T1800; DOT–39; DOT–3AL1800.
Ethane (see Notes 8 and 9).	36.8	DOT–3A2000; DOT–3AX2000; DOT–3AA2000; DOT–3AAX2000; DOT–3T2000; DOT–39; DOT–3AL2000
Ethylene (see Notes 8 and 9)..	31.0	DOT–3A1800; DOT–3AX1800; DOT–3AA1800; DOT–3AAX1800; DOT–3; DOT–3E1800; DOT–3T1800; DOT–39; DOT–3AL1800.
Ethylene (see Notes 8 and 9).	32.5	DOT–3A2000; DOT–3AX2000; DOT–3AA2000; DOT–3AAX2000; DOT–3T2000; DOT–39; DOT–3AL2000.
Ethylene (see Notes 8 and 9).	35.5	DOT–3A2400; DOT–3AX2400; DOT–3AA2400; DOT–3AAX2400; DOT–3T2400; DOT–39; DOT–3AL2400.
Hydrogen chloride, anhydrous.	65	DOT–3A1800; DOT–3AA1800; DOT–3AX1800; DOT–3AAX1800; DOT–3; DOT–3T1800; DOT–3E1800.
Hydrogen sulfide (Note 10)	62.5	DOT–3A; DOT–3AA; DOT–3B; DOT–4B; DOT–4BA; DOT–4BW; DOT–3E1800; DOT–3AL.
Insecticide, gases liquefied (see Notes 8 and 12).	Not liquid full at 131 °F.	DOT–3A300; DOT–3AA300; DOT–3B300; DOT–4B300; DOT–4BA300; DOT–4BW300; DOT–3E1800.
Liquefied nonflammable gases, other than classified flammable, corrosive, toxic & mixtures or solution thereof filled w/ nitrogen, carbon dioxide, or air (see Notes 7 and 8)..	Not liquid full at 131 °F.	Specification packaging authorized in *paragraph (a)(1)* of this section and DOT–3HT; DOT–4D; DOT–4DA; DOT–4DS.
Methyl acetylene and propadiene mixtures, stabilized; (see Note 5)..	Not liquid full at 131 °F.	DOT–4B240 without brazed seams; DOT–4BA240 without brazed seams; DOT–3A240; DOT–3AA240; DOT–3B240; DOT–3E1800; DOT–4BW240; DOT–4E240; DOT–4B240ET; DOT–3AL240.
Methyl chloride	84	DOT–3A225; DOT–3AA225; DOT–3B225; DOT–4B225; DOT–4BA225; DOT–4BW225; DOT–3; DOT–3E1800; DOT–4B240ET. Cylinders complying with DOT–3A150; DOT–3B150; and DOT–4B150 manufactured prior to Dec. 7, 1936 are also authorized.
Methyl mercaptan	80	DOT–3A240; DOT–3AA240; DOT–3B240; DOT–4B240; DOT–4B240ET; DOT–3E1800; DOT–4BA240; DOT–4BW240.
Nitrosyl chloride	110	DOT–3BN400 only.
Nitrous oxide (see Notes 7, 8, and 11).	68	DOT–3A1800; DOT–3AX1800; DOT–3AA1800; DOT–3AAX1800; DOT–3; DOT–3E1800; DOT–3T1800; DOT–3HT2000; DOT–39; DOT–3AL1800.
Nitrous oxide (see Notes 7, 8, and 11).	70.3	DOT–3A2000, DOT–3AA2000, DOT–3AX2000, DOT–3AAX2000, DOT–3T2000.
Nitrous oxide (see Notes 7, 8, and 11).	73.2	DOT–3A2265, DOT–3AA2265, DOT–3AX2265, DOT–3AAX2265, DOT–3T2265.
Nitrous oxide (see Notes 7, 8, and 11).	74.5	DOT–3A2400, DOT–3AA2400, DOT–3AX2400, DOT–3AAX2400, DOT–3T2400.

TABLE 1 TO PARAGRAPH (a)(2)—Continued

Kind of gas	Maximum permitted filling density (percent) (see Note 1)	Packaging marked as shown in this column or of the same type with higher service pressure must be used, except as provided in §§ 173.301(l), 173.301a(e), and 180.205(a) (see the following notes after the table)
Nitrous oxide, refrigerated liquid (see *paragraph (e)* of this section.).	.....	DOT–4L.
Refrigerant gas, n.o.s. or Dispersant gas, n.o.s. (see Notes 8 and 13).	Not liquid full at 130 °F.	DOT–3A240; DOT–3AA240; DOT–3B240; DOT–3E1800; DOT–4B240; DOT–4BA240; DOT–4BW240; DOT–4E240; DOT–39; DOT–3AL240.
Sulfur dioxide (see note 8)	125	DOT–3A225; DOT–3AA225; DOT–3B225; DOT–4B225; DOT–4BA225; DOT–4BW225; DOT–4B240ET; DOT–3; DOT–39; DOT–3E1800; DOT–3AL225.
Sulfur hexafluoride	120	DOT–3A1000; DOT–3AA1000; DOT–AAX2400; DOT–3; DOT–3AL1000; DOT–3E1800; DOT–3T1800.
Sulfuryl fluoride	106	DOT–3A480; DOT–3AA480; DOT–3E1800; DOT–4B480; DOT–4BA480; DOT–4BW480.
Tetrafluoroethylene, stabilized.	90	DOT–3A1200; DOT–3AA1200; DOT–3E1800.
Trifluorochloroethylene, stabilized.	115	DOT–3A300; DOT–3AA300; DOT–3B300; DOT–4B300; DOT–4BA300; DOT–4BW300; DOT–3E1800.
Trimethylamine, anhydrous	57	DOT–3A150; DOT–3AA150; DOT–3B150; DOT–4B150; DOT–4BA225; DOT–4BW225; DOT–3E1800.
Vinyl chloride (see Note 5)	84	DOT–4B150 without brazed seams; DOT–4BA225 without brazed seams; DOT–4BW225; DOT–3A150; DOT–3AA150; DOT–3E1800; DOT–3AL150.
Vinyl fluoride, stabilized	62	DOT–3A1800; DOT–3AA1800; DOT–3E1800; DOT–3AL1800.
Vinyl methyl ether, stabilized (see Note 5).	68	DOT–4B150, without brazed seams; DOT–4BA225 without brazed seams; DOT–4BW225; DOT–3A150; DOT–3AA150; DOT–3B1800; DOT–3E1800.

Note 1 to paragraph (a)(2): ''Filling density'' means the percent ratio of the weight of gas in a packaging to the weight of water that the container will hold at 16 °C (60 °F). (1 lb. of water = 27.737 in^3 at 60 °F).

Note 2 to paragraph (a)(2): Cylinders purchased after Oct. 1, 1944, for the transportation of chlorine must contain no aperture other than that provided in the neck of the cylinder for attachment of a valve equipped with an approved pressure relief device. Cylinders purchased after November 1, 1935, and filled with chlorine may not contain over 68.04 kg (150 lb.) of gas.

Note 4 to paragraph (a)(2): Special carbon dioxide mining devices containing a heating element and filled with not over 2.72 kg (6 lb.) of carbon dioxide may be filled to a density of not over 85 percent, provided the cylinder is made of steel with a calculated bursting pressure in excess of 39,000 psig, fitted with a frangible disc that will operate at not over 57 percent of that pressure, and is able to withstand a drop of 10 feet when striking crosswise on a steel rail while under a pressure of at least 3,000 psig. Such devices must be shipped in strong boxes or must be wrapped in heavy burlap and bound by 12-gauge wire with the wire completely covered by friction tape. Wrapping must be applied so as not to interfere with the functioning of the frangible disc pressure relief device. Shipments must be described as ''liquefied carbon dioxide gas (mining device)'' and marked, labeled, and certified as prescribed for liquefied carbon dioxide.

Note 5 to paragraph (a)(2): All parts of the valve and pressure relief devices in contact with contents of cylinders must be of a metal or other material, suitably treated, if necessary, that will not cause the formation of any acetylides.

Note 7 to paragraph (a)(2): Specification 3HT cylinders for aircraft use only, having a maximum service life of 24 years. Authorized only for nonflammable gases. Cylinders must be equipped with pressure relief devices of the frangible disc type that meet the requirements of § 173.301(f). Each frangible disc must have a rated bursting pressure that does not exceed 90 percent of the minimum required test pressure of the cylinder. Discs with fusible metal backing are not permitted. Cylinders may be offered for transportation only when packaged in accordance with § 173.301(a)(9).

Note 8 to paragraph (a)(2): See § 173.301(a)(9).

Note 9 to paragraph (a)(2): When used for shipment of flammable gases, the internal volume of a specification 39 cylinder must not exceed 75 cubic inches.

Note 10 to paragraph (a)(2): Each valve outlet must be sealed by a threaded cap or a threaded solid plug.

Note 11 to paragraph (a)(2): Must meet the valve and cleaning requirements in § 173.302(b).

Note 12 to paragraph (a)(2): For an insecticide gas that is nontoxic and nonflammable, see § 173.305(c).

Note 13 to paragraph (a)(2): For a refrigerant or dispersant gas that is nontoxic and nonflammable, see § 173.304(d).

* * * * *

■ 60. In § 173.306, revise paragraphs (a)(1), (b) introductory text, (h)(2)(i), and (i) to read as follows:

§ 173.306 Limited quantities of compressed gases.

(a) * * *

(1) When in containers of not more than 4 fluid ounces capacity (7.22 cubic inches or less) except cigarette lighters. Additional exceptions for certain compressed gases in limited quantities are provided in paragraph (i) of this section.

* * * * *

(b) *Exceptions for foodstuffs, soap, biologicals, electronic tubes, and audible fire alarm systems.* Limited quantities of compressed gases (except Division 2.3 gases) for which exceptions are provided as indicated by reference to this section in § 172.101 of this subchapter, when in conformance with one of the following paragraphs, are excepted from labeling, except when offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter. For transportation by aircraft, the package must conform to the applicable requirements of § 173.27 and only packages of hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments are not subject to subpart F (Placarding) of part 172 of this subchapter, to part 174 of this subchapter, except § 174.24, and to part 177 of this subchapter, except § 177.817. Additional exceptions for certain compressed gases in limited quantities

are provided in paragraph (i) of this section.

* * * * *

(h) * * *

(2) * * *

(i) For other than transportation by aircraft, exceptions for certain compressed gases in limited quantities are provided in paragraph (i) of this section.

* * * * *

(i) *Limited quantities.* A limited quantity that conforms to the provisions of paragraph (a)(1), (a)(3), (a)(5), (b) or, except for transportation by aircraft, paragraph (h) of this section is excepted from labeling requirements, unless the material is offered for transportation or transported by aircraft, and the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. Packages must be marked in accordance with § 172.315(a) or (b), as appropriate. Packages of limited quantities intended for transportation by aircraft must conform to the applicable requirements (*e.g.,* authorized materials, inner packaging quantity limits, and closure securement) of § 173.27 of this part. A limited quantity package that conforms to the provisions of this section is not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or is offered for transportation and transported by aircraft or vessel and is eligible for the exceptions provided in § 173.156 of this part. Outside packagings conforming to this paragraph are not required to be marked ''INSIDE CONTAINERS COMPLY WITH PRESCRIBED REGULATIONS.'' In addition, packages of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight.

* * * * *

■ 61. In § 173.313, revise the introductory text to read as follows:

§ 173.313 UN Portable Tank Table for Liquefied Compressed Gases and Chemical under Pressure.

The UN Portable Tank Table for Liquefied Compressed Gases and chemical under pressure is referenced in § 172.102(c)(7)(iii) of this subchapter for portable tanks that are used to transport liquefied compressed gases and chemicals under pressure. The table applies to each liquefied compressed gas and chemical under pressure that is identified with Special Provision T50 in Column (7) of the Hazardous Materials Table in § 172.101. In addition to providing the UN identification number and proper shipping name, the table provides the minimum design pressures, bottom opening requirements, pressure relief device requirements, and degree of filling requirements for liquefied compressed gases and chemicals under pressure permitted for transportation in a T50 portable tank. In the minimum design pressure column, ''small'' means a portable tank with a diameter of 1.5 meters or less when measured at the widest part of the shell, ''sunshield'' means a portable tank with a shield covering at least the upper third of the shell, ''bare'' means no sunshield or insulation is provided, and ''insulated'' means a complete cladding of sufficient thickness of insulating material necessary to provide a minimum conductance of not more than 0.67 w/m2/k. In the pressure relief requirements column, the word ''Normal'' denotes that a frangible disc as specified in § 178.276(e)(3) of this subchapter is not required.

* * * * *

■ 62. In § 173.314, revise notes 1 through 12 to Table 1 to Paragraph (c) to read as follows:

§ 173.314 Compressed gases in tank cars and multi-unit tank cars.

* * * * *

(c) * * *

Table 1 to Paragraph (c)

* * * * *

Notes to table 1 to paragraph (c): 1. The filling density percentage for liquefied gases is hereby defined as the percent ratio of the mass of gas in the tank to the mass of water that the tank will hold. For determining the water capacity of the tank in kilograms, the mass of 1 L of water at 15.5 °C in air is 1 kg (the mass of one gallon of water at 60 °F in air is 8.32828 pounds).

2. The liquefied gas must be loaded so that the outage is at least two percent of the total capacity of the tank at the reference temperature of 46 °C (115 °F) for a non-insulated tank; 43 °C (110 °F) for a tank having a thermal protection system incorporating a metal jacket that provides an overall thermal conductance at 15.5 °C (60 °F) of no more than 10.22 kilojoules per hour—per square meter—per degree Celsius (0.5 Btu per hour/per square foot/per degree F) temperature differential; and 41 °C (105 °F) for an insulated tank having an insulation system incorporating a metal jacket that provides an overall thermal conductance at 15.5 °C (60 °F) of no more than 1.5333 kilojoules per hour—per square meter—per degree Celsius (0.075 Btu per hour/per square foot/per degree F) temperature differential.

3. The requirements of § 173.24b(a) apply.

4. The gas pressure at 54.44 °C (130 °F) in any non-insulated tank car may not exceed 7/10 of the marked test pressure, except that a tank may be charged with helium to a pressure of 10 percent in excess of the marked maximum gas pressure at 54.44 °C (130 °F) of each tank.

5. The liquid portion of the gas at −17.77 °C (0 °F) must not completely fill the tank.

6. The maximum permitted filling density is 125 percent. The quantity of chlorine loaded into a single unit-tank car may not be loaded in excess of the normal lading weights nor in excess of 81.65 Mg (90 tons).

7. 89 percent maximum to 80.1 percent minimum at a test pressure of 6.2 bar (90 psig).

8. 59.6 percent maximum to 53.6 percent minimum at a test pressure of 7.2 bar (105 psig).

9. For a liquefied petroleum gas, the liquefied gas must be loaded so that the outage is at least one percent of the total capacity of the tank at the reference temperature of 46 °C (115 °F) for a non-insulated tank; 43 °C (110 °F) for a tank having a thermal protection system incorporating a metal jacket that provides an overall thermal conductance at 15.5 °C (60 °F) of no more than 10.22 kilojoules per hour—per square meter—per degree Celsius (0.5 Btu per hour/per square foot/per degree F) temperature differential; and 41 °C (105 °F) for an insulated tank having an insulation system incorporating a metal jacket that provides an overall thermal conductance at 15.5 °C (60 °F) of no more than 1.5333 kilojoules per hour—per square meter—per degree Celsius (0.075 Btu per hour/per square foot/per degree F) temperature differential.

10. For liquefied petroleum gas and anhydrous ammonia, during the months of November through March (winter), the following reference temperatures may be used: 38 °C (100 °F) for a non-insulated tank; 32 °C (90 °F) for a tank having a thermal protection system incorporating a metal jacket that provides an overall thermal conductance at 15.5 °C (60 °F) of no more than 10.22 kilojoules per hour—per square meter—per degree Celsius (0.5 Btu per hour/per square foot/per degree F) temperature differential; and 29 °C (85 °F) for an insulated tank having an insulation system incorporating a metal jacket and insulation that provides an overall thermal conductance at 15.5 °C (60 °F) of no more than 1.5333 kilojoules per hour—per square meter—per degree Celsius (0.075 Btu per hour/per square foot/per degree F) temperature differential. The winter reference temperatures may only be used for a tank car shipped directly to a consumer for unloading and not stored in transit. The offeror of the tank must inform each customer that the tank car was filled based on winter reference temperatures. The tank must be unloaded as soon as possible after March in order to retain the specified outage and to prevent a release of hazardous material, which might occur due to the tank car becoming liquid full at higher temperatures.

11. For materials poisonous by inhalation, until December 31, 2027, the single unit tank car tanks authorized are only those cars approved by the Tank Car Committee for

transportation of the specified material and built prior to March 16, 2009. After December 31, 2027, all single unit tank cars used in PIH/TIH service must meet the requirements of Note 12.

12. Except as provided in paragraph (d) of this section, for materials poisonous by inhalation, fusion-welded tank car tanks built on or after March 16, 2009, used for the transportation of the PIH materials noted, must meet the applicable authorized tank car specification and must be equipped with a head shield as prescribed in § 179.16(c)(1).

* * * * *

§ 173.315 [Amended]

■ 63. In § 173.315, redesignate paragraph (j)(3) as paragraph (j)(1)(iv).

PART 174—CARRIAGE BY RAIL

■ 64. The authority citation for part 174 continues to read as follows:

Authority: 49 U.S.C. 5101–5128; 33 U.S.C. 1321; 49 CFR 1.81 and 1.97.

■ 65. Revise § 174.5 to read as follows:

§ 174.5 Carrier's materials and supplies.

This subchapter applies to the transportation of a carrier's materials and supplies moving by rail, except that the shipper's certification is not required when these materials and supplies are being transported by the carrier who owns them. The requirements of this subchapter do not apply to railway torpedoes or railroad safety flares (*i.e.,* fusees) when carried in engines or rail cars. Railway torpedoes must be in closed metal boxes when not in use.

■ 66. In § 174.55, revise paragraph (a) to read as follows:

§ 174.55 General requirements.

(a) Each package containing a hazardous material being transported by rail in a freight container or transport vehicle must be loaded so that it cannot fall or slide and must be safeguarded in such a manner that other freight cannot fall onto or slide into it under conditions normally incident to transportation. When this protection cannot be provided by using other freight, it must be provided by blocking and bracing. For examples of blocking and bracing in freight containers and transport vehicles, see the Intermodal Loading Guide for Products in Closed Trailers and Containers (see table 1 to § 171.7 of this subchapter).

* * * * *

■ 67. In § 174.67, revise paragraph (a)(3) to read as follows:

§ 174.67 Tank car unloading.

* * * * *

(a) * * *

(3) Each hazmat employee who is responsible for unloading must secure access to the track to prevent entry by other rail equipment, including motorized service vehicles. This requirement may be satisfied by lining each switch providing access to the unloading area against motion and securing each switch with an effective locking device, or by using derails, portable bumper blocks, or other equipment that provides an equivalent level of safety.

* * * * *

■ 68. In § 174.82, revise paragraph (a) to read as follows:

§ 174.82 General requirements for the handling of placarded rail cars, transport vehicles, freight containers, and bulk packages.

(a) Unless otherwise specified, this subpart does not apply to the handling of rail cars, transport vehicles, freight containers, or bulk packagings, which contain Division 1.6, combustible liquids, Division 6.1 PG III materials, or Class 9 materials.

* * * * *

■ 69. In § 174.101, revise paragraph (h) to read as follows:

§ 174.101 Loading Class 1 (explosive) materials.

* * * * *

(h) Packages containing any Division 1.1 or 1.2 (explosive) materials for (see § 174.104), detonators, detonator assemblies, or boosters with detonators must be securely blocked and braced to prevent the packages from changing position, falling to the floor, or sliding into each other, under conditions normally incident to transportation. Class 1 (explosive) materials must be loaded so as to avoid transfer at stations. For recommended methods of blocking and bracing, see the Intermodal Loading Guide for Products in Closed Trailers and Containers (see Table 1 to § 171.7 of this subchapter). Heavy packages or containers must be trucked, rolled, or moved by skids, fork trucks, or other handling devices and may not be dropped from trucks, platforms, or cars. Planks for rolling trucks from platforms to cars must have beveled ends. Loading platforms and the shoes of each workman must be free from grit. All possible precautions must be taken against fire. Class 1 (explosive) materials must be kept in a safe place and inaccessible to unauthorized persons while being held by a carrier for loading or delivery.

* * * * *

■ 70. In § 174.112, revise paragraph (b) to read as follows:

§ 174.112 Loading Division 1.3 materials and Division 1.2 (explosive) materials (Also see § 174.101).

* * * * *

(b) Except as provided in § 174.101(b), (n), or (o), Division 1.3 materials and Division 1.2 (explosive) materials must be transported in a closed car or container car which is in good condition, and into which sparks cannot enter. The car does not require the car certificates prescribed in § 174.104(c) through (f). If the doors are not tight, they must be stripped to prevent the entrance of sparks. Wood floored cars must be equipped with spark shields (*see* § 174.104). Packages of Division 1.3 materials and Division 1.2 (explosive) materials must be blocked and braced to prevent their shifting and possible damage due to shifting of other freight during transportation. For recommended methods of blocking and bracing see the Intermodal Loading Guide for Products in Closed Trailers and Containers (*see* Table 1 to § 171.7 of this subchapter).

* * * * *

■ 71. In § 174.115, revise paragraph (a) to read as follows:

§ 174.115 Loading Division 1.4 (explosive) materials.

(a) Division 1.4 (explosive) materials may be loaded into any closed car in good condition, or into any container car in good condition. Car certificates are not required. Packages of Division 1.4 (explosive) materials must be blocked and braced to prevent their shifting and possible damage due to shifting of other freight during transportation. For methods of recommended loading and bracing see the Intermodal Loading Guide for Products in Closed Trailers and Containers (see Table 1 to § 171.7 of this subchapter).

* * * * *

■ 72. In § 174.290, revise paragraphs (h) and (i) to read as follows:

§ 174.290 Materials extremely poisonous by inhalation shipped by, for, or to the Department of Defense.

* * * * *

(h) When a material extremely poisonous by inhalation is transported in drums in a boxcar, they must be loaded from ends of the car toward the space between the car doors, and there braced by center gates and wedges.

(i) The doorways of a boxcar in which a material poisonous by inhalation is being transported must be protected.

PART 175—CARRIAGE BY AIRCRAFT

■ 73. 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.

■ 74. In § 175.1, revise the section heading and paragraph (a) to read as follows:

§ 175.1 Purpose, scope, and applicability.

(a) This part prescribes the requirements that apply to the transportation of hazardous materials in commerce aboard (including attached to or suspended from) an aircraft. The requirements in this part are in addition to other requirements contained in parts 171, 172, 173, 178, and 180 of this subchapter.

* * * * *

■ 75. In § 175.9, revise paragraph (a) and paragraph (b)(6) introductory text to read as follows:

§ 175.9 Special aircraft operations.

(a) This section applies to rotorcraft external load operations transporting hazardous material on board, attached to, or suspended from an aircraft. Operators must have all applicable requirements prescribed in 14 CFR part 133 approved by the FAA Administrator prior to accepting or transporting hazardous material. In addition, rotorcraft external load operations must be approved by the Associate Administrator prior to the initiation of such operations.

(b) * * *

(6) Hazardous materials that are loaded and carried on or in cargo only aircraft, and that are to be dispensed or expended during flight for weather control, environmental restoration or protection, forest preservation and protection, flood control, avalanche control, landslide clearance, or ice jam control purposes, when the following requirements are met:

* * * * *

PART 176—CARRIAGE BY VESSEL

■ 76. The authority citation for part 176 continues to read as follows:

Authority: 49 U.S.C. 5101–5128; 44701; 49 CFR 1.81 and 1.97.

§ 176.11 [Amended]

■ 77. In § 176.11, remove and reserve paragraph (e).

PART 177—CARRIAGE BY PUBLIC HIGHWAY

■ 78. The authority citation for part 177 continues to read as follows:

Authority: 49 U.S.C. 5101–5128; 44701; sec. 112 of Pub. L. 103–311, 108 Stat. 1673, 1676 (1994); sec. 32509 of Pub. L. 112–141, 126 Stat. 405, 805 (2012); 49 CFR 1.81 and 1.97.

■ 79. In § 177.817, revise paragraph (d) to read as follows:

§ 177.817 Shipping papers.

* * * * *

(d) *Applicability.* This section does not apply to a material that is excepted from shipping paper requirements as specified in § 172.200 of this subchapter.

* * * * *

■ 80. In § 177.835, revise the section heading to read as follows:

§ 177.835 Class 1 (explosive) materials.

* * * * *

■ 81. In § 177.837, revise the section heading to read as follows:

§ 177.837 Class 3 (flammable liquid) materials.

* * * * *

■ 82. In § 177.841, revise the section heading to read as follows:

§ 177.841 Division 6.1 (poisonous) materials and Division 2.3 (poisonous gas) materials.

* * * * *

■ 83. In § 177.842, revise paragraph (b)(2) introductory text to read as follows:

§ 177.842 Class 7 (radioactive) material.

* * * * *

(b) * * *

(2) Where more than one group of packages is present in any single storage location, a single group may not have a total transport index greater than 50. Each group of packages must be handled and stored together no closer than 6 m (20 feet) (measured edge to edge) to any other group. The following table is to be used in accordance with the provisions of paragraph (b) of this section:

* * * * *

■ 84. In § 177.848, revise paragraph (e)(6) to read as follows:

§ 177.848 Segregation of hazardous materials.

* * * * *

(e) * * *

(6) When the § 172.101 table or § 172.402 of this subchapter requires a package to bear a subsidiary hazard label, segregation appropriate to the subsidiary hazard must be applied when that segregation is more restrictive than that required by the primary hazard. However, hazardous materials of the same class may be stored together without regard to segregation required for any secondary hazard if the materials are not capable of reacting dangerously with each other and causing combustion or dangerous evolution of heat, evolution of flammable, poisonous, or asphyxiant gases, or formation of corrosive or unstable materials.

* * * * *

PART 178—SPECIFICATIONS FOR PACKAGINGS

■ 85. The authority citation for part 178 continues to read as follows:

Authority: 49 U.S.C. 5101–5128; 44701; 49 CFR 1.81 and 1.97.

■ 86. In § 178.50, revise paragraph (a) to read as follows:

§ 178.50 Specification 4B welded or brazed steel cylinders.

(a) *Type, size, pressure, and application.* A DOT 4B is a welded or brazed steel cylinder with water capacity (nominal) not over 1,000 pounds and a service pressure of at least 150 but not over 500 psig. Longitudinal seams must be forged lap-welded or brazed. Cylinders closed in by spinning process are not authorized.

* * * * *

■ 87. In § 178.337–1, revise the last sentence of paragraph (f) to read as follows:

§ 178.337–1 General requirements.

* * * * *

(f) * * * The postweld heat treatment must be as prescribed in Section VIII of the ASME Code, but in no event at less than 1,050 °F cargo tank metal temperature.

* * * * *

■ 88. In 178.338–10, revise paragraph (c)(2) to read as follows:

§ 178.338–10 Accident damage protection.

(c) * * *

(2) Conform to the requirements of § 178.345–8(d).

* * * * *

■ 89. In 178.601, revise paragraph (g)(2)(vi) to read as follows:

§ 178.601 General requirements.

* * * * *

(g) * * *

(2) * * *

(vi) When the outer packaging is intended to contain inner packagings for liquids and is not leakproof or is intended to contain inner packagings for solids and is not siftproof, a means of containing any liquid or solid contents in the event of leakage must be provided in the form of a leakproof liner, plastic bag, or other equally efficient means of

containment. For packagings containing liquids, the absorbent material required in paragraph (g)(2)(v) of this section must be placed inside as the means of containing liquid contents; and

* * * * *

PART 180—CONTINUING QUALIFICATION AND MAINTENANCE OF PACKAGINGS

■ 90. The authority citation for part 180 continues to read as follows:

Authority: 49 U.S.C. 5101–5128; 44701; 49 CFR 1.81 and 1.97.

■ 91. In § 180.507, revise paragraph (b) to read as follows:

§ 180.507 Qualification of tank cars.

* * * * *

(b)(1) Tank cars prescribed in the following table are no longer authorized for construction but may remain in hazardous materials service provided they conform to all applicable safety requirements of this subchapter:

TABLE 1 TO PARAGRAPH (b)(1)

Specification prescribed in the current regulations	Other specifications permitted	Notes
105A200W	105A100W	1
105A200ALW	105A100ALW	1

Note 1 to Table 1 to paragraph (b)(1): Tanks built as Specification DOT 105A100W or DOT 105A100ALW may be altered and converted to DOT 105A200W and DOT 105A200ALW, respectively.

(2) [Reserved]

(3) Specification DOT–113A175W, DOT–113C60W, DOT–113D60W, and DOT–113D120W tank cars may continue in use, but new construction is not authorized.

(4) Class DOT 105A and 105S tank cars used to transport hydrogen chloride, refrigerated liquid under the terms of DOT–E 3992 may continue in service, but new construction is not authorized.

(5) Specification DOT–103A–ALW, 103AW, 103ALW, 103ANW, 103BW, 103CW, 103DW, 103EW, and 104W tank cars may continue in use, but new construction is not authorized.

■ 92. In § 180.605, revise the section heading and paragraph (b)(5) to read as follows:

§ 180.605 Requirements for periodic testing, inspection, and repair of portable tanks.

(b) * * *

(5) The portable tank is in an unsafe operating condition.

* * * * *

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Tristan H. Brown,

Deputy Administrator, Pipeline and Hazardous Materials Safety Administration.

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