Federal Communications Commission.

Gloria J. Miles,

Federal Register Liaison, Office of the Secretary, Office of Managing Director.

[FR Doc. 2013–31127 Filed 12–27–13; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 69

[WC Docket No. 05–25; RM–10593; Report No. 2995]

Petitions for Reconsideration of Action in Rulemaking Proceeding

AGENCY: Federal Communications Commission.

ACTION: Petition for reconsideration.

SUMMARY: In this document, Petitions for Reconsideration (Petitions) have been filed in the Commission's Rulemaking proceeding, one by Gerard J. Duffy of Blooston, Modkofsky, Dickens, Duffy & Prendergrast, LLP, on behalf of Blooston Private Microwave Licenses and a second by David L. Nace, of Lukas, Nace, Gutierrez & Sachs, LLP, on behalf of Small Purchasers Coalition.

DATES: Oppositions to the Petitions must be filed on or before January 14, 2014. Replies to an opposition must be filed on or before January 24, 2014.

ADDRESSES: Federal Communications Commission, 445 12th Street SW., Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Christopher Koves, Wireline Competition Bureau, phone: (202) 418–1520.

SUPPLEMENTARY INFORMATION: This is a summary of Commission's document, Report No. 2995, released December 19, 2013. The full text of Report No. 2995 is available for viewing and copying in Room CY–B402, 445 12th Street SW., Washington, DC or may be purchased from the Commission's copy contractor, Best Copy and Printing, Inc. (BCPI) (1–800–378–3160). The Commission will not send a copy of this *Notice* pursuant to the Congressional Review Act, 5 U.S.C. 801(a)(1)(A), because this *Notice* does not have an impact on any rules of particular applicability.

Subject: Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking To Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, published at 78 FR 67053, November 8, 2013, in WC Docket No. 05–25, RM–10593, and published pursuant to 47 CFR 1.429(e). *See also* § 1.4(b)(1) of the Commission's rules.

Number of Petitions Filed: 2.

Federal Communications Commission.

Gloria J. Miles,

Federal Register Liaison, Office of the Secretary, Office of Managing Director.

[FR Doc. 2013–31193 Filed 12–27–13; 8:45 am]

BILLING CODE 6712–01–P

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 171, 173, 178, and 180

[Docket Number PHMSA–2010–0019 (HM–241)]

RIN 2137–AE58

Hazardous Materials: Adoption of ASME Code Section XII and the National Board Inspection Code

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: PHMSA is proposing to amend the Hazardous Materials Regulations applicable to the design, construction, certification, recertification and maintenance of cargo tank motor vehicles, cryogenic portable tanks and multi-unit tank car tanks (ton tanks) in response to petitions for rulemaking from the American Society of Mechanical Engineers (ASME), the National Board of Boiler and Pressure Vessel Inspectors (National Board), and the Pressure Vessel Manufacturers Association (PVMA). Specifically, this NPRM proposes to allow the use of the 2013 edition of the ASME's *Boiler and Pressure Vessel Code, Section XII (Section XII)* for the design, construction, and certification of cargo tank motor vehicles, cryogenic portable tanks and ton tanks. PHMSA also proposes to authorize the use of the 2013 edition of the National Board of Boiler and Pressure Vessel Inspectors' *National Board Inspection Code (NBIC),* as it applies to the continuing qualification and maintenance of ASME constructed cargo tank motor vehicles, cryogenic portable tanks, and ton tanks constructed to standards in ASME's *Section XII,* and existing cargo tank motor vehicles and portable tanks constructed to *Section VIII, Division 1.* If adopted, these amendments will allow for regulatory flexibility, without compromising safety.

DATES: Submit comments by March 31, 2014. To the extent possible, PHMSA will consider late-filed comments as we determine whether additional rulemaking is necessary.

ADDRESSES: You may submit comments identified by the docket number (PHMSA–2010–0019; HM–241) by any of the following methods:

- Federal eRulemaking Portal: Go to *http://www.regulations.gov.* Follow the online instructions for submitting comments.
- Fax: 1–202–493–2251.
- Mail: Docket Operations, U.S. Department of Transportation, West Building, Ground Floor, Room W12–140, Routing Symbol M–30, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: To Docket Operations, Room W12–140 on the ground floor of the West Building, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays.

Instructions: All submissions must include the agency name and docket number for this notice at the beginning of the comment. Note that all comments received will be posted without change to the docket management system, including any personal information provided.

Docket: For access to the dockets to read background documents or comments received, go to *http://www.regulations.gov,* or DOT's Docket Operations Office (see **ADDRESSES**). To access ASME's Boiler and Pressure Vessel Code, Section XII (Section XII) go to: *https://shop.asme.org/PublicReview/.* To access the *National Board Inspection Code (NBIC), Part 2, Supplement 6:* Continued Service and Inspection of DOT Transport Tanks, and *Part 3, Supplement 6:* Repair, Alteration, and Modification of DOT Transport Tanks go to: *https://www.nationalboard.org/SiteDocuments/NBIC/DOT_NBIC_supplements.pdf.*

Privacy Act: Anyone is able to search the electronic form of any written communications and comments received into any of our dockets by the name of the individual submitting the document (or signing the document, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477) or you may visit *http://www.dot.gov/privacy.*

FOR FURTHER INFORMATION CONTACT: Lisa O'Donnell, Hazardous Materials Standards and Rulemaking Division, (202) 366–8553, or Stanley Staniszewski, Engineering and Research

Division, (202) 366–4492, Office of Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590.

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I. Executive Summary

In this NPRM, PHMSA (also ''we'' or ''us'') proposes to amend the Hazardous Materials Regulations (HMR; 49 CFR parts 171–180) in response to petitions submitted by industry representatives to incorporate *Section XII* and the 2013 edition of the *NBIC* as alternatives to *Section VIII, Division 1* and the current HMR requirements in part 178, for the design of cryogenic portable tanks and CTMVs, part 179 for the design of ton tanks, and part 180 for the continuing qualification and maintenance of CTMVs, cryogenic portable tanks and ton tanks. *Section XII* sets forth standards for construction [1] and continued service [2] of pressure vessels for transporting hazardous materials by highway, rail, air or water at pressures from close to 15 psig external pressure to 3,000 psig and volumes greater than 120 gallons. The 2013 edition of the *NBIC* provides rules and guidelines for installing, inspecting, repairing and altering boilers, pressure vessels and pressure relief devices. *Section XII* may be used for the following tanks:

TABLE 1—PROPOSED TANKS AUTHORIZED UNDER SECTION XII

Tank type	Specification
Cargo Tank Motor Vehicles (CTMVs).	MC331, 338, 406, 407, and 412.
Cryogenic Portable Tanks.	UN T75.
Ton Tanks	DOT–106A and 110AW.

If the proposed amendments are adopted, manufacturers could choose to build their tanks using either the specifications set forth in *Section XII* or those set forth in *Section VIII, Division 1.* While *Section VIII, Division 1* applies to construction of new tanks only, *Section XII* applies to both new construction and continued service. Further, as proposed, a manufacturer who builds a tank to *Section VIII, Division 1* would be authorized to use either the 1992 edition of the *NBIC* that is currently incorporated by reference or the 2013 edition of the *NBIC;* whereas manufacturers who choose to build tanks to *Section XII* would be required to use the 2013 edition of the *NBIC.*

Section XII and the 2013 edition of the *NBIC* include advancements in design, material, construction, repair and inspection of transport tanks. Incorporating *Section XII* and the 2013 edition of the *NBIC* by reference in the HMR, would allow manufacturers and owners of transport tanks to be flexible in the materials they use to build tanks, how they build tanks, and how they test and inspect tanks, while providing the same level of safety as that provided by *Section VIII, Division 1* for new construction and the HMR for continued qualification and maintenance.

The 2013 edition of the *NBIC* was developed in conjunction with *Section XII* to provide consistent, up-to-date standards for the lifespan of transport tanks. Both the *NBIC* and *Section XII* were developed as international standards, and were written to be compatible with UN recommendations. Further, these standards were developed by voluntary consensus standards-development organizations comprised of all stakeholders involved in the design, certification, continued qualification and maintenance of transport tanks, including manufacturers of tanks and PHMSA engineers. These individuals have expert knowledge of how to design, construct and maintain tanks to withstand the unique dynamic conditions and stresses of a transportation environment.

Several research and development projects support the adoption of both the 2013 edition of *NBIC* and *Section XII* (See Table 11 of Section VII of this document). These projects include studies on CTMV rollovers, design margins, and puncture resistance. They are discussed in Sections V and VII in this NPRM.[3] Furthermore, by providing the 2013 edition of the *NBIC* and *Section XII* as options, PHMSA would allow the regulated industry to choose from various materials of construction, that we believe provide equivalent safety, to accommodate each entity's preference (see part TM of *Section XII,* which specifies authorized materials). Use of the proposed voluntary standards could enable U.S. manufacturers to better compete internationally.

Manufacturers, tank owners and users, maintenance and repair entities, third-party inspectors, and public sector inspectors would incur costs under the proposed adoption of Section XII and the 2013 edition of the NBIC. Manufacturers who choose to build tanks to Section XII may have to purchase new equipment to manufacture tanks to accommodate the different metals authorized in Section XII and would have to purchase the standard; however, they would also have more flexibility in the materials they use to build the tank, and take advantage of the lower priced materials at the time of purchase. Tank owners would incur the initial cost of the new tank. However, users, most likely also the owners, in many cases, would be able to haul more material in one tank, which would reduce fuel costs. Entities that repair tanks and third-party inspectors would have to be trained in

[1] ''Construction'' is an all-inclusive term comprising materials, design, fabrication, examination, inspection, testing, certification, and over-pressure protection.

[2] ''Continued service'' is an all-inclusive term referring to inspection, testing, repair, alteration, and recertification of a transport tank that has been in service.

[3] See *www.regulations.gov,* Docket Nos. PHMSA–2010–0019–0010, PHMSA–2010–0019–0012, PHMSA–2010–0019–0013, PHMSA–2010–0019–0014, PHMSA–2010–0019–0015, PHMSA–2010–0019–0016, PHMSA–2010–0019–0017, PHMSA–2010–0019–0018, and PHMSA–2010–0019–0019.

and purchase both Section XII and the NBIC. Public sector inspectors would have to be trained, and state and local governments would have to purchase both *Section XII* and the NBIC. Due to PHMSA's three-year training cycle, all employees and inspectors will have been trained within three years, regardless of when or if they transition to HM–241. Once an entity converts to Section XII tanks, PHMSA assumes that the incremental training would be incorporated into regular training, and no further incremental expense would be incurred in future years. Annual benefits would continue to accrue.

Benefits associated with the use of *Section XII* and the 2013 edition of the *NBIC* include a savings in the cost to manufacture tanks. Various economic factors cause the cost of types of materials to fluctuate. Because *Section XII* allows a variety of newer materials to be used to build tanks, manufacturers may choose materials with the lowest cost to construct their tanks. Also, certain tanks built to *Section XII* would provide lower costs per mile due to the use of lighter-weight materials of construction and increased capacity to transport product. A review of previous research by PHMSA's Engineering and Research Division, as well as the independent research studies that are summarized in Section V and Table 11 of Section VII of this NPRM and can be found in the docket file (see *www.regulations.gov,* Docket Nos. PHMSA–2010–0019) indicated the *Section XII* standards provide an equivalent level of safety to the current standards. *Section XII* provides updated specifications for transport tanks. In most cases, due to substitution of material of construction, the thickness of the tanks would be reduced, permitting more material to be hauled, and reducing the number of tanks needed to handle the same volume of product.

These costs and benefits of *Section XII* and the 2013 edition of the *NBIC* would affect only individuals who choose to use the standards. Therefore, PHMSA does not believe adoption of Section XII would impose costs because each entity will choose to continue to use the existing Section VIII or convert to Section XII as their economic interests dictate. For example a manufacturer would not use *Section XII* to build a tank unless it believes it is net beneficial to do so. Since *Section XII* would allow manufacturers the flexibility to purchase the raw material that is least expensive at the time, this may reduce the cost to the manufacturer, who can then pass that discount on to the buyer of the tank. Manufacturers will only elect to utilize *Section XII* if it makes business sense.

II. Abbreviations and Terms Used in This Document

The table below provides a list of abbreviations or acronyms for the terms used in this NPRM.

TABLE 2—ABBREVIATIONS AND TERMS USED IN THIS DOCUMENT

AI:	Authorized Inspector
ANSI:	American National Standards Institute
ASME:	American Society of Mechanical Engineers
BPVC:	Boiler and Pressure Vessel Code
CI:	Certified Individual
CTMV:	Cargo Tank Motor Vehicle
DCE:	Design Certifying Engineer
FMCSA:	Federal Motor Carrier Safety Administration
HMR:	Hazardous Materials Regulations (49 CFR parts 171–180)
IMDG	International Maritime Dangerous Goods
IACS	International Association of Classification Societies Ltd
MAWP:	Maximum Allowable Working Pressure
NBIC:	National Board Inspection Code
PHMSA:	Pipeline and Hazardous Materials Safety Administration
PVMA:	Pressure Vessel Manufacturers Association
QI:	Qualified Inspector
RI:	Registered Inspector
Section VIII, *Division 1*	American Society Mechanical Engineers, Boiler and Pressure Vessel Code, Section VIII, *Division 1*
Section XII:	American Society Mechanical Engineers, Boiler and Pressure Vessel Code, Section XII

III. Background

The Federal hazardous materials transportation law (49 U.S.C. 5101 et seq.; Federal hazmat law) authorizes the Secretary of Transportation to regulate the safe and secure transportation of hazardous materials in commerce. In accordance with its delegated authority from the Secretary, PHMSA has established packaging requirements for the safe transportation of hazardous materials in commerce, including requirements for the design, construction, qualification, maintenance, certification and repair of bulk packagings such as CTMVs, portable tanks, and certain tank car tanks referred to as ton tanks.

Under 49 CFR 1.96, PHMSA is delegated the responsibility to enforce the HMR. In addition, under 49 CFR 1.88 and 1.86, the Federal Railroad Administration (FRA) and the Federal Motor Carrier Safety Administration (FMCSA) are delegated authority to enforce the HMR with particular emphasis on railroad and highway transportation, respectively. PHMSA, FRA and FMCSA work closely with the regulated industry through educational assistance activities and FRA's and FMCSA's compliance and enforcement programs.

Within the United States, the most common modes of transportation for the tanks affected by this NPRM are highway and rail. To clearly identify the differences and unique characteristics of the tanks addressed by this NPRM, we provide the following definitions.

TABLE 3—TANK TYPE DEFINITION

Cargo tank motor vehicle (CTMV) ..	Means a motor vehicle with one or more cargo tanks permanently attached to or forming an integral part of the motor vehicle.

TABLE 3—TANK TYPE DEFINITION—Continued

Portable tank[4]	Means a bulk packaging (except a cylinder having a water capacity of 1000 pounds or less) designed primarily to be loaded onto, or on, or temporarily attached to a transport vehicle or ship and equipped with skids, mountings, or accessories to facilitate handling of the tank by mechanical means. It does not include a CTMV, tank car, multi-unit tank car tank, or trailer carrying 3AX, 3AAX, or 3T cylinders.
UN portable tank	Means an intermodal tank having a capacity of more than 450 liters (118.9 gallons). It includes a shell fitted with service equipment and structural equipment, including stabilizing members external to the shell and skids, mountings or accessories to facilitate mechanical handling. A UN portable tank must be capable of being filled and discharged without the removal of its structural equipment and must be capable of being lifted when full. Cargo tanks, rail tank car tanks, non-metallic tanks, non-specification tanks, bulk bins, and IBCs and packagings made to cylinder specifications are not UN portable tanks.
Multi-unit tank car tank or ton tank	Means a flatcar railcar or flatbed trailer with up to 15 large cylindrical pressure tanks (DOT–106A and 110A tank car specification, see Part 179).

In this NPRM, PHMSA is proposing to amend the HMR applicable to the design, construction, certification, recertification and maintenance of cargo tank motor vehicles, cryogenic portable tanks ton tanks, to allow the use of *Section XII* for the design, construction, and certification of CTMVs, cryogenic portable tanks and ton tanks. PHMSA is also proposing to authorize the use of the 2013 edition of the NBIC, as it applies to *Section VIII, Division 1* or *Section XII.* These proposals are in response to petitions for rulemaking from ASME, the National Board of Boiler and Pressure Vessel Inspectors, and PVMA. This NPRM could affect the following entities that choose to follow Section XII and establishes the following requirements:

TABLE 4—AFFECTED ENTITIES

Affected entities	Proposed revisions
• Manufacturers of CTMVs, cryogenic portable tanks and ton tanks • Repairers of CTMVs, cryogenic portable tanks and ton tanks • Testers of CTMVs, cryogenic portable tanks and ton tanks • Carriers of bulk liquid hazardous materials • Inspectors of CTMVs, cryogenic portable tanks and ton tanks • Owners of CTMVs, cryogenic portable tanks and ton tanks • Federal, state and local enforcement officials	• Provides alternative design, construction, certification, recertification and maintenance to Section VIII, *Division 1* and HMR. • Establishes new alternative "T" stamp for transport tanks • Establish different levels of inspectors as set forth in Section XII.

IV. Petitions for Rulemaking

The Administrative Procedure Act (APA) requires Federal agencies to give interested persons the right to petition an agency to issue, amend, or repeal a rule (5 U.S.C. 553(e)). 49 CFR 106.95, provides the process and procedures for persons to petition PHMSA to add, amend, or delete a regulation. In this NPRM, PHMSA is considering petitions for rulemaking from ASME, the National Board, and PVMA.

The following table provides a brief summary of the petitions addressed in this NPRM and affected sections:

TABLE 5—PETITION SUMMARY

Petition	Party submitting petition	Summary
P–1459	ASME	Requests PHMSA incorporate by reference the *ASME Boiler and Pressure Vessel Code, Section XII, Transport Tanks—2004 edition* (§§ 172.102; 173.5b; 173.24b; 173.32; 173.306; 173.315; 173.318; 173.420; 178.245–1; 178.245–3; 178.245–4; 178.245–6; 178.245–7; 178.255–1; 178.255–2; 178.255–14; 178.255–15; 178.270–2; 178.270–3; 178.270–7; 178.270–9; 178.270–11; 178.270–12; 178.271–1; 178.272–1; 178.273; 178.274; 178.276; 178.277; 178.320; 178.337–1; 178.337–2; 178.337–3; 178.337–4; 178.337–6; 178.337–16; 178.337–18; 178.338–1; 178.338–2; 178.338–3; 178.338–4; 178.338–5; 178.338–6; 178.338–13; 178.338–16; 178.338–18; 178.338–19; 178.345–1; 178.345–2; 178.345–3; 178.345–4; 178.345–7; 178.345–14; 178.345–15; 178.346–1; 178.347–1; 178.348–1; 179.400–3; 180.407).

[4] Only cryogenic portable tanks are involved in this NPRM.

TABLE 5—PETITION SUMMARY—Continued

Petition	Party submitting petition	Summary
P–1474	PVMA	Requests PHMSA incorporate by reference the *ASME Boiler and Pressure Vessel Code, Section XII, Transport Tanks—2004 edition* (§§ 172.102; 173.5b; 173.24b; 173.32; 173.306; 173.315; 173.318; 173.420; 178.245–1; 178.245–3; 178.245–4; 178.245–6; 178.245–7; 178.255–1; 178.255–2; 178.255–14; 178.255–15; 178.270–2; 178.270–3; 178.270–7; 178.270–9; 178.270–11; 178.270–12; 178.271–1; 178.272–1; 178.273; 178.274; 178.276; 178.277; 178.320; 178.337–1; 178.337–2; 178.337–3; 178.337–4; 178.337–6; 178.337–16; 178.337–18; 178.338–1; 178.338–2; 178.338–3; 178.338–4; 178.338–5; 178.338–6; 178.338–13; 178.338–16; 178.338–18; 178.338–19; 178.345–1; 178.345–2; 178.345–3; 178.345–4; 178.345–7; 178.345–14; 178.345–15; 178.346–1; 178.347–1; 178.348–1; 179.400–3; 180.407).
P–1502	National Board	Requests PHMSA incorporate by reference the *National Board Inspection Code—2007 Edition* in § 180.413.

P–1459

On May 10, 2005, ASME petitioned PHMSA to revise the HMR to incorporate by reference the *ASME Boiler and Pressure Vessel Code, Section XII, Transport Tanks—2004 edition. Section XII* of the BPVC provides requirements for construction and continued service of ASME pressure vessels for the transportation of dangerous goods with volumes greater than 450 liters (120 gallons) and design pressures appropriate for the particular transportation mode, i.e., highway, railway, air, and water. The construction requirements cover materials, design, fabrication, examination, inspection, testing, certification, and over-pressure protection. The requirements for continued service cover inspection, testing, repair, alteration, and recertification of in-service ASME constructed transport tanks. These transportation tank requirements include the pressure vessel, appurtenances, and additional components that are covered by Modal Appendices for the specific transport modes and unique service conditions of the specific application. The 2004 edition contains one Modal Appendix for portable tanks carrying cryogenic liquids. The 2007 edition was expanded to include the Modal Appendix for CTMVs. The 2010 edition was expanded to include the Modal Appendix for ton tanks. We are proposing to incorporate the latest edition, which was published in 2013. [This petition can be found at *www.regulations.gov* under Docket No. PHMSA–2005–21351].

P–1474

On February 27, 2006, PVMA also petitioned PHMSA to revise the HMR to incorporate by reference the *ASME Boiler and Pressure Vessel Code, Section XII, Transport Tanks—2004 edition.* PVMA is a trade association representing pressure vessel manufacturers, related component materials suppliers and regulatory organizations. Several of PVMA's member companies participated in the development of *Section XII,* which contains design requirements for tanks and pressure vessels that several of its members manufacture. PVMA reasoned that adoption of *Section XII* into the HMR would encourage uniform design requirements and manufacturing standards for these tanks, and support the safe construction practices of this industry. [This petition can be found at *www.regulations.gov* under Docket No. PHMSA–2006–24712].

P–1502

On July 12, 2007, the National Board of Boiler and Pressure Vessel Inspectors petitioned PHMSA to revise the HMR to incorporate by reference the *National Board Inspection Code—2007 Edition.* The *NBIC* contains rules for continued service inspections, repairs, and modifications of transport tanks, including methods to be used and criteria for inspections, reports, document control, and inspector duties and responsibilities. The term ''inspector'' includes Authorized Inspector (AI), Qualified Inspector (QI), Certified Individual (CI) or Registered Inspector (RI) to address all aspects of continued service.[5] While the petition asked that we incorporate the 2007 edition of the NBIC, we propose to incorporate the most up-to-date version, which is the 2013 edition. [This petition can be found at *www.regulations.gov* under Docket No. PHMSA–2007–28809].

V. ASME Section XII

Currently, the HMR incorporate by reference the 1998 edition of *Section VIII, Division 1* as part of the standards for the design and construction of cryogenic portable tanks and CTMVs. *Section VIII, Division 1* sets forth detailed criteria for the design, construction, certification, and marking of stationary boilers and pressure vessels. Tanks constructed and certified in accordance with Section VIII, *Division 1* are marked with a ''U'' stamp.

While stationary tanks and transportation tanks are both subject to many of the same influences, such as pressure, temperature changes, and atmospheric conditions, transportation tanks are subject to additional, unique dynamic load conditions and stresses; *Section VIII, Division 1* alone does not address the transportation conditions. To address these additional influences on tanks that are used in transportation, general operational requirements for CTMVs, portable tanks, and ton tanks, such as outage and filling limits and self-closing stop valves, are prescribed in 49 CFR part 173 subpart B. In addition, 49 CFR part 178, subpart H for specification 60, steel portable tanks, includes requirements for material construction (see § 178.255–2), expansion domes (see § 178.255–3), closures for manholes and domes (see § 178.255–4), loading and unloading accessories (see § 178.255–6), tank repair (see § 178.255–13, marking (see § 178.255–14), and reporting (see § 178.255–15). Subpart J for CTMVs and 49 CFR part 178, includes general requirements for all DOT specification cargo tank motor vehicles (see § 178.320), and then more specific requirements for types of CTMVs. For specification MC–331 tanks, requirements include, but are not limited to, structural integrity (see § 178.337–3), closures for manholes (see § 178.337–6), and accident damage protection (see § 178.337–10). For MC–338 insulated cargo tank motor vehicles, requirements include, but are not limited to, material (see § 178.338–2),

[5] The *NBIC* has updated the 2007 edition with a 2013 edition.

structural integrity (see § 178.338–3), and accident damage protection (see § 178.338–10). For ton tanks, 49 CFR part 179 subpart E prescribes additional design and construction requirements than those required for stationary tanks in *Section VIII, Division 1,* including but not limited to, protection of fittings (see § 179.300–12), more stringent welding (see § 178.300–9), and inspection (see § 179.300–19). Furthermore, continuing qualification and maintenance requirements, which include periodic tests and inspections, repairs, modifications, alterations, and conversions, are specified in 49 CFR part 180, subpart E for CTMVs, subpart F for ton tanks, and subpart G for portable tanks. It should be noted that design, construction and qualification of rail tank cars (49 CFR part 179 and part 180, subpart F) and non-specification cargo tanks (i.e., nurse tanks) are not being considered in this NPRM.

ASME is a not-for-profit membership professional organization that enables collaboration, knowledge-sharing, and skill development across all engineering disciplines. ASME is recognized globally for its leadership in providing the engineering community with technical content and a forum for information exchange. The Boiler and Pressure Vessel Committees of ASME meet quarterly; however, most of the work is done throughout the year through working groups and an electronic balloting process. The National Board meets biannually and also works throughout the year through working groups and the electronic balloting process. These committees consider revisions to the ASME codes and standards based on safety concerns, technological advances, new data, and changing environmental and industry needs. All meetings are free-of-charge and open to public participation. ASME subcommittees consider correspondence from the general public in the form of requests for interpretation and revision to existing codes, requests for code cases, and requests to develop new standards.

In 1995 the ASME Board on Pressure Technology Codes and Standards formed a committee on transport tanks (SC XII) to develop new standards to specifically address transport tanks. PHMSA actively participated in the committee. SC XII currently consists of a main committee and four subgroups identified as: (1) General Requirements, (2) Fabrication, Inspection and Continued Service, (3) Design and Materials, and (4) Non-Mandatory Appendices. SC XII developed and published in July of 2004 the *ASME BPVC Section XII, Rules for Construction and Continued Service of Transport Tanks* to address pressure vessels that are used in transportation. *Section XII* is based on the existing and long-established *Section VIII, Division 1. Section XII* consists of ten parts, four modal appendices written to address different tank types, sixteen mandatory appendices, and eight non-mandatory appendices. Transport tanks are divided into categories comparable to existing DOT specifications; for example, a DOT 406 CTMV is a Category 406 tank in Article 1 of Modal Appendix 1. The newest edition contains modal appendices for CTMVs, cryogenic portable tanks, and ton tanks.[6]

Section XII contains ten parts, in the following order:

TABLE 6—SECTION XII PART SUMMARY

Part heading	Part requirements
TG	General
TM	Material
TD	Design
TW	Tanks Fabricated by Welding
TF	Fabrication
TE	Examination
TT	Testing
TR	Pressure-relief Device
TS	Stamping, Marking, Certification Reports, and Records
TP	Repair, Alteration, Testing, and Inspection for Continued Service

Section XII requires newly constructed transport tanks to bear a ''T'' stamp. The ''T'' stamp is essentially equivalent to the current ''U'' stamp required for certain DOT CTMVs designed and constructed to *Section VIII, Division 1* standards, currently incorporated by reference in the HMR.

PHMSA is proposing to adopt *Section XII,* in its entirety, as an alternative to *Section VIII, Division 1* for the design and construction requirements for DOT specification tanks. A copy of *Section XII,* 2013 edition, is available for review at www.regulations.gov under Docket Number PHMSA–2010–0019 or DOT's Docket Operations Office (see **ADDRESSES**). The current price of *Section XII* in hard copy is $380.[7]

VI. NBIC

The National Board of Boiler and Pressure Vessel Inspectors was formed in 1921 and is an American National Standards Institute (ANSI) accredited standards development organization. The National Board follows an approved set of standards development procedures (NB–240, National Board Inspection Code Procedures; *http://www.nationalboard.org*) and is subject to regular audits by ANSI.

First published in 1946, the *NBIC* was established by the National Board to provide rules and guidelines for the repair, alteration, inspection, installation, maintenance, and testing of boilers, pressure vessels, and other pressure retaining items. The *NBIC* is developed and maintained by a consensus committee comprised of industry experts (the NBIC Committee). The NBIC Committee consists of a main committee, subcommittees, subgroups, and task groups of industry experts and has Federal representation by PHMSA. Participants meet biannually to consider revisions to the *NBIC* based on safety concerns, technological advances, new data, and industry needs. All meetings are free-of-charge and open to public participation. The *NBIC* subcommittees consider correspondence from the general public in the form of requests for interpretation, revision of existing standards, and requests to develop new standards. The standards-writing subcommittees, subgroups, and task groups are open to participation by representatives of groups that are materially affected by the code. Such groups include manufacturers, repair firms, authorized inspection agencies, and representatives of government agencies. Each year the *NBIC* Committee updates the *NBIC* and presents the updates on the National Board's Web site for public review in April-May and August-September. Updated editions are published biannually.

Section XII requires all alterations and repairs to the pressure vessel of a transport tank to be performed in accordance with the *NBIC* and requires an inspection to be performed by a National Board inspector. The *NBIC* Committee established a task group to develop requirements for continued service, repair, and alteration of *Section XII* transport tanks. The task group included PHMSA and industry representatives. The Committee's efforts culminated in the issuance of two new supplements to the *NBIC* code. While the NBIC code applies to boilers, pressure vessels, and pressure relief devices, these supplements were added to specifically address transport tanks. The first is *NBIC* Part 2, Section 6, Supplement 6, ''Continued Service and Inspection of DOT Transport Tanks.'' This document describes inspection of in-service transport tanks. The second is

[6] A rail tank car appendix may be developed in the future, and consequently, is not part of the scope of this NPRM.

[7] See: *http://www.asme.org/products/codes---standards/bpvc-xii---2013-bpvc-section-xii-rules-for-constru* (Accessed: March 27, 2013).

NBIC Part 3, Section 6, Supplement 6, ''Repair, Alteration, and Modification of DOT Transport Tanks.'' This document contains general requirements that apply to welding, repairs, alterations, modifications, examinations, etc., made to DOT transport tanks used for the transportation of hazardous materials. These supplements also specify the type of inspection to be performed and establish the criteria for inspections, reports, document maintenance, and inspector duties and responsibilities.

A copy of the 2013 edition of the *NBIC* is available for review at *www.regulations.gov* under Docket Number PHMSA–2010–0019 or DOT's Docket Operations Office (see **ADDRESSES** appearing earlier in this notice). The current cost of the complete NBIC set is $265 for either the hard copy or the Flash Drive edition.[8]

VII. Comparison of Section XII and Section VIII, Division 1 Supplemented by the Current HMR

Currently, the HMR incorporates *Section VIII, Division 1* of the ASME Code, which specifies the design and construction of stationary tanks. The HMR supplements *Section VIII, Division 1,* with added design, construction, certification, which are found in parts 178 and 179, and recertification and maintenance requirements, found in part 180, specific to transport tanks. *Section XII* and the 2013 edition of the NBIC have been developed specifically for design, construction, certification, recertification and maintenance of transport tanks. A review of differences between *Section VIII, Division 1* and *Section XII* can be very specific. However in this section we examine the broader philosophical differences between the way in which tanks may be designed in *Section VIII, Division 1* and the way tanks may be designed in *Section XII.* Two overarching differences in the two versions of the ASME standard are design margin allowances and design methodology; they are discussed below. Another difference between the current HMR and the *Section XII* is that when designing and constructing a tank to the requirements of *Section XII,* you *must* use the requirements in the 2013 edition of the *NBIC* for continued service of those tanks; whereas if you are using the HMR and *Section VIII, Division 1* you *may* use the NBIC, but are not required to do so.

Design Margin

The design margin, also known as factor of safety, is defined as the structural capacity of a system beyond the expected loads or actual loads. For the purposes of construction of transport tanks, the design margin is how much stronger than necessary we would require a tank to be built for an intended load. For example, a design margin of 3.5:1 means a tank must be built to withstand forces 3.5 times what it would be expected to endure in transportation. Meeting the required design margin exactly implies that the design meets the minimum allowable strength; however, a tank may be built to withstand greater forces than the design margin. Building a tank to withstand forces well over the required design factor sometimes implies ''over-engineering'' which can result in greater weight and/or cost.

Since the 1940's ASME's design margin for tanks has traditionally been 4.0:1 and, as far back as the 1950's, the HMR has incorporated *Section VIII, Division 1* and required the 4.0:1 design margin for transport tanks. In 1996, the ASME Pressure Vessel Research Committee instituted a research study in which it reviewed burst tests, failure data, failure modes—particularly fatigue and fracture and related toughness requirements, fabrication practices, improved materials, advances in welding, examination and testing. Notably, fracture mechanics did not exist as an engineering discipline when the design margin of 4 was established. Today, fracture mechanics allows an engineer to establish the minimum toughness required in a material based on the stress applied and the maximum credible size flaw.[9] The results of the 1996 study indicated that the design margin for pressure vessels could be safely reduced from 4.0:1 to 3.5:1.[10] Based on this study, and other research and data specific to transport tanks, ASME adopted a design margin of 3.5 on ultimate tensile strength in *Section XII* for the economic advantage of using higher allowable stresses and consequently thinner vessels.

The revised design margins under *Section XII* may have an effect on newly constructed transport tanks. For those tanks where the minimum thicknesses are controlled by pressure, they may be thinner and lighter than those constructed using a design margin of 4.0. PHMSA has issued several special permits allowing a 3.5:1 or a 3.0:1 design margin.[11] PHMSA has reviewed the incident data for these tanks and has not identified any incidents that would indicate a reduction in safety. Furthermore, PHMSA thoroughly evaluates the safety of any special permit before it is issued, and will only issue a permit if the level of safety provided is found to be equivalent to the HMR.

Rational Design

Section VIII, Division 1 and the HMR prescribe tank designs intended for a variety of situations. This approach may be attractive to the designer of a tank, as the same design may be used in a variety of situations; however, generally, this approach to design results in large built-in, design margins, over-design, and use of excess material. Rational design involves the application of a systematic method for determining the design variables that optimize a specific objective while satisfying the constraints.[12] PHMSA, ASME, and industry have determined through cooperative research and development that tanks constructed using rational design methodology provide an equivalent level of safety to currently authorized tank designs, but are more efficient than currently authorized tanks. For this reason, *Section XII* incorporates the rational design method. When using the rational method of design, a tank designer seeks to determine, as comprehensive and rigorously as possible, the factors affecting the safety and performance throughout the life of the tank, to determine the most efficient safe design. This process involves more calculations than previous *Section VIII* design methodologies and can incorporate highly sophisticated computer modeling in developing tank designs. Rational design methodology enables tanks to be designed with greater efficiency and less need for high margins of safety. Rational design under *Section XII,* Appendix VIII has enabled non-circular shell and heads to be made of material with thicknesses up to 15% less than what tank manufacturers currently use. Such a difference results in a tank with at least 2% more payload capacity.

[8] See: *http://www.nationalboard.org/Index.aspx?pageID=14&ID=20* (Accessed March 27, 2013).

[9] ''Reduction of Design Margin in the ASME Boiler and Pressure Vessel Code in the 1999 Addenda,'' Walter J. Sperko, P.E., *available at: http://freepdfz.com/pdf/reduction-of-asme-design-margin-sperko-engineering-service-inc-5156113.html* (last accessed 9/30/13).

[10] See *www.regulations.gov* docket number PHMSA–2010–0019–0016.

[11] See DOT–SP 12628 and DOT–SP 14492 for 3.5:1 design margin; see DOT–SP 14483, DOT–SP 14572, DOT–SP 14578, DOT–SP 14616 and DOT–SP 15220 for 3.0:1 design margin.

[12] See ''A Practical Methods for the Rational Design of Ship Structures; Hughes, Mistree and Zanic; Journal of Ship Research, Vol 24, No. 2, June 1980, pp. 101–113.''

Design and Construction of CTMVs: Identified Differences Between HMR and Section XII Requirements

This section highlights some specific differences between the currently incorporated Section VIII that is supplemented by the HMR and Section XII. This is not an all-encompassing list of differences, and it is only meant to highlight areas in which Section XII has improved upon the current combination of Section VIII and the HMR.

Special Materials Testing and Fabrication Requirements for MC 331 Tanks

Section XII Modal Appendix 1—''Cargo Tanks'' discontinues certain obsolete requirements for construction of MC 331 cargo tanks that are still required in §§ 178.337–2 and 178.337–4. This revision modernizes material specification designations and eliminates obsolete material specifications. It also eliminates certain obsolete material impact test requirements, especially for quenched and tempered materials. PHMSA has issued several special permits allowing the use of the newer material specifications in the ASME Code for construction and repair. A review of historical incident data shows an acceptable safety history with no reported incidents.

Standardization of Allowable Peak Secondary Stresses for MC 331 Cargo Tanks

The requirements in Modal Appendix 1–3.5.5 and 1–3.5.1(a)(1)(b) of Section XII standardize the allowable peak secondary stress levels resulting from short interval, non-persistent loads to that permitted for lading surge loads for MC 331 cargo tanks by § 178.337–3(d). The Appendix also aligns the MC 331 cargo tank design with the design standard of the DOT 400-series cargo tanks for short interval peak loads.

Defined Incident Provisions Relating to Pressure Boundaries

Currently the HMR specifically requires defined incident protection (accident protection) for specification tanks throughout Part 178 subpart J. The Modal Appendix 1 Article 1–1.5 of Section XII specifies that tank attachment points shall be designed for accident protection and leakage prevention. ASME asserts that inclusion of these requirements in Section XII clarifies and improves the accident protection requirements.

New Requirements To Account for Fatigue Loading in MC 331 Tanks

Section XII includes a new requirement to account for fatigue loading due to dynamic loading and full pressure cycles in design of MC 331 cargo tanks. This consideration is a safety enhancement from the previous *Section VIII* and HMR combination and provides explicit criteria for fatigue failure avoidance. This requirement compensates for slightly reduced stiffness and increased elastic deflection due to thinner tank walls authorized by Section XII. Accounting for fatigue loading is also intended to provide specific design guidance that will help avoid the potential for stress corrosion cracking in tanks made of quenched and tempered steels.

Consolidation of DOT's Special Design Requirements for MC 331 Tanks

In Section XII, the Modal Appendix 1–3.11.1 [Construction Requirements for Cargo Tank Vessels Used to Transport Specific Hazardous Materials]; and 1–3.11.2 [Equivalent Material Thickness] consolidate special DOT design requirements [13] for certain MC 331 cargo tanks designed for certain specific ladings into a single place.

The benefit resulting from consolidating design and construction requirements for each special lading tank vessel into its own subparagraph is that it will prevent the cargo tank designer from overlooking design requirements essential to DOT compliance. 49 CFR § 178.337 distributes these requirements throughout that section according to the particular design feature. Many DOT requirements essential to vessel construction are not found in § 178.337, but in § 173.315, which in turn references other 49 CFR sections. Specifically, the requirements for construction to an equivalent metal thickness criterion are found several places. Modal Appendix 1–3.11.2 converts these specific requirements into a generic form where it can be conveniently located. The consolidation of these requirements in Section XII is viewed as a safety enhancement as it will provide easier understanding of the requirements.

Standardized Pressure Relief Devices for Both Portable and Cargo Cryogenic Tankage

Both cryogenic portable tanks and cargo tanks are similar in design and construction. Their pressure relief devices have the same function in protecting the pressure vessel against over pressure for all conditions of operation. They should be similarly specified, and this has been done in Section XII, with the exception of the pressure relief valve setting and the tag stamping of the burst disc for portable tanks.

Uniformity of Piping and Valving Requirements for Cargo and Portable Cryogenic Tankage

As has been done for the Pressure Relief Devices, piping, filling and discharge openings together with valve requirements have been standardized for portable and cargo cryogenic transport tanks in Section XII. The standardization of these requirements in Section XII is viewed as a safety enhancement.

Continued Service of CTMVs, Portable Tanks, and Ton Tanks: Roles of Inspectors

Part 180 of the HMR specifies continued service requirements for DOT and UN portable tanks and DOT specification and certain non-specification CTMVs. Specific requirements for the qualification, maintenance, repair, and testing of packagings are located in 49 CFR part 180: subpart E for CTMVs, subpart F for ton tanks, and subpart G for portable tanks.

Incorporating *Section XII* and the *NBIC* as an alternative for continued service requirements for these ASME stamped bulk packagings may impact the roles and responsibilities of persons who perform tests, inspections, modifications, alterations, and repairs.

To ensure that DOT specification CTMVs are designed, constructed, and maintained in accordance with the applicable specification, the HMR require that each person who certifies CTMV design, construction, repair, or testing meet certain minimum qualifications. The qualification criteria are based on the function performed. Professionals who meet the qualifications set forth currently in the HMR for Design Certifying Engineer (DCE), Authorized Inspector (AI), and Registered Inspector (RI) perform continued service functions that are specified in the table below.

[13] The consolidated 49 CFR requirements are: § 178.337–1(c)(2); § 178.337–1(e)(2); § 178.337–1(f); § 178.337–2(b); § 178.337–2(c); § 178.337–8(a)(5)(iii); § 178.337–8(b); § 178.337–8(c); § 178.337–9(a); § 173.24b(b); § 173.315.

TABLE 7—TYPES OF INSPECTORS CURRENTLY IN THE HMR

Type of Inspector	Qualifications
A Design Certifying Engineer (DCE)	• Is a person registered with the U.S. DOT in accordance with subpart F of part 107 of the HMR who has the knowledge and ability to perform stress analysis of pressure vessels and otherwise determine whether a cargo tank design and construction meets the applicable DOT specification. • Certifies each specification cargo tank or CTMV design type, including its required accident damage protection; the design of a modified, stretched, or rebarrelled CTMV; or mounting of a cargo tank on a motor vehicle chassis involving welding on the cargo tank head or shell or any change or modification of the methods of attachment. • Must fulfill the knowledge and ability requirements by meeting any one of the following qualifications: ○ Have an engineering degree and one year of work experience in cargo tank structural or mechanical design; ○ Be currently registered as a professional engineer by appropriate authority of a state of the United States or a province of Canada; or ○ Have at least three years' experience in performing the duties of a DCE prior to September 1, 1991.
An Authorized Inspector (AI)	• Is regularly employed by an ASME-accredited Authorized Inspection Agency (AIA), who has been qualified to ASME-developed criteria to perform inspections under the rules of any jurisdiction that has adopted the ASME Code. • Is not employed by the manufacturer. • Holds a valid Certificate of Competency (where required), as defined in National Board Rules for Commissioned Inspectors, and a valid National Board Commission with an ''A'' endorsement. • Has satisfactory expertise, experience, and background for the inspection of boilers and pressure vessels and demonstrate the ability to perform shop and field (on-site) inspections to the satisfaction of the AIA. • Has knowledge of applicable sections of the ASME Code, Quality Control Programs, and requirements for the maintenance and retention of in-transit and permanent records. • Has received a passing grade on an examination given by the National Board that evaluates the individual's knowledge of, and familiarity with, the ASME Code, and complies with the National Board's rules for commissioned inspectors.
An Authorized Inspection Agency (AIA).	• Is a jurisdiction that has adopted and administers one or more sections of the ASME Boiler and Pressure Vessel Code as a legal requirement and has a representative serving as a member of the ASME Conference Committee; or • Is an insurance company that has been licensed or registered by the appropriate authority of a State of the United States or a Province of Canada to underwrite boiler and pressure vessel insurance in such State or Province.
A Registered Inspector (RI)	• Is a person registered with the Department in accordance with subpart F of part 107 of this chapter who has the knowledge and ability to determine whether a cargo tank conforms to the applicable DOT specification. A Registered Inspector meets the knowledge and ability requirements of this section by meeting any one of the following requirements: • Has an engineering degree and one year of work experience relating to the testing and inspection of cargo tanks; • Has an associate degree in engineering and two years of work experience relating to the testing and inspection of cargo tanks; • Has a high school diploma (or General Equivalency Diploma) and three years of work experience relating to the testing and inspection of cargo tanks; or • Has at least three years' experience performing the duties of a Registered Inspector prior to September 1, 1991.

Section XII requires all alterations and repairs to the pressure vessel of a transport tank to be performed in accordance with the *NBIC* and requires an inspection to be performed by a National Board inspector. The inspector, depending on the class designation of the transport tank, must be an Authorized Inspector (AI), Qualified Inspector (QI), or Certified Individual (CI). The different levels of inspectors and their required qualifications are shown in the table below.

TABLE 8—TYPES OF INSPECTORS IN SECTION XII AND THE NBIC

Type of Inspector	Qualifications
An Authorized Inspector (AI)	• Is regularly employed by an ASME-accredited Authorized Inspection Agency (AIA), who has been qualified to ASME-developed criteria to perform inspections under the rules of any jurisdiction that has adopted the ASME Code. • Is not employed by the manufacturer. • Holds a valid Certificate of Competency (where required), as defined in National Board Rules for Commissioned Inspectors, and a valid National Board Commission with an ''A'' endorsement. • Has satisfactory expertise, experience, and background for the inspection of boilers and pressure vessels and demonstrate the ability to perform shop and field (on-site) inspections to the satisfaction of the AIA. • Has knowledge of applicable sections of the ASME Code, Quality Control Programs, and requirements for the maintenance and retention of in-transit and permanent records.

TABLE 8—TYPES OF INSPECTORS IN SECTION XII AND THE NBIC—Continued

Type of Inspector	Qualifications
A Qualified Inspector (QI)	• Has received a passing grade on an examination given by the National Board that evaluates the individual's knowledge of, and familiarity with, the ASME Code, and complies with the National Board's rules for commissioned inspectors. • Is an inspector regularly employed by an ASME Qualified Inspection Organization (QIO) who has been qualified to ASME-developed criteria by a written examination, to perform inspections under the rules of any jurisdiction that has adopted the ASME Code. • May not be in the employ of the manufacturer. • Holds a valid Certificate of Competency (where required), as defined in National Board Rules for Commissioned Inspectors, and a valid National Board certification as a Qualified Inspector. • Has satisfactory expertise, experience, and background for the inspection of boilers and pressure vessels and demonstrate the ability to perform shop and field (on-site) inspections to the satisfaction of the QIA. • Has knowledge of applicable sections of the ASME Code, Quality Control Programs, and requirements for the maintenance and retention of in-transit and permanent records. • Has received a passing grade on an examination given by the National Board that evaluates the individual's knowledge of, and familiarity with, the ASME Code. The Qualified Inspector must comply with the National Board's rules for qualified inspectors.
A Certified Individual (CI)	• Is an individual certified by an ASME accredited organization authorized to use ASME marks, as either a full-time or part-time employee or contractor to the ASME certificate holder. • Is neither an AI nor a QI and must be certified and qualified to perform inspections by the CI's employer. • May be employed by the manufacturer or assembler. • Has the following minimum qualifications: ○ Knowledge of the requirements of Section XII for application of the appropriate Code Symbol stamp; ○ Knowledge of the Manufacturer's or Assembler's Quality System Program; and ○ Training commensurate with the scope, complexity, or special nature of the activities to which oversight is to be provided. • Has a record maintained and certified by the manufacturer or assembler, containing objective evidence of the qualifications of the CI and training provided the CI's qualifications and duties are as required in the latest edition and addenda of ASME QA1–1, Qualifications for Authorized Inspection.

For continued service, under both the current HMR and *Section XII,* the *NBIC* authorizes owner/users who meet the requirements of NB–371, ''Accreditation of Owner, User, and Inspection Organizations'' to perform service inspections, including repairs and alterations, if the owner/user possesses a valid National Board Owner/User Certificate of Authorization. Inspectors employed by the Owner/User may perform continued service inspections, including repairs and alterations, if the individual possesses a National Board Owner/User commission. Currently, under the HMR and as proposed in this NPRM, motor carriers or CTMV owner/operators may perform annual external visual inspections and leakage tests, with certain limitations (see 49 CFR 180.409).

While *Section VIII,* Division 1 does not distinguish between types of tanks and levels of inspectors, *Section XII* assigns transport tanks to three separate classes depending on the design of the tank. Each class includes transport tank designs that generally correspond to existing DOT specifications. The *NBIC* inspection requirements correspond to the class of transport tank as assigned in the Modal Appendices.

In the table below, PHMSA lists each class of transport tank to be constructed or repaired and the type of inspector required to perform the inspection. Currently there are no specifications in either *Section VIII, Division 1* or *Section XII* for Class 2 tanks, which is the designation that the committee set aside originally for rail car tanks and non-cryogenic portable tanks. While the specifications for Class 2 tanks are expected to be developed and incorporated into future editions of *Section XII* and the *NBIC,* the current editions do not include them.

TABLE 9—ASME TRANSPORT TANK CLASSES

Class	Current specification in HMR	Type of inspector	
		Section VIII and the HMR	Proposed section XII
Class 1	UN cryogenic portable tanks (See § 178.277) DOT 407 MAWP > 35 psi (See § 178.347) DOT 412 MAWP > 15 psi (See § 178.348) MC 338 (See § 178.338) MC 331 (See § 178.337) DOT 106A and 110AW (See § 179.300).	Authorized Inspector	Authorized Inspector.
Class 2	To be developed in future editions	N/A	N/A.
Class 3	DOT 406 (See § 178.346) DOT 407 MAWP ≤ 35 psi (See § 178.347) DOT 412 MAWP ≤ 15 psi (See § 178.348).	Authorized Inspector	Certified Individual, Authorized Inspector, or Qualified Inspector.

Repairs and alterations must be performed by organizations holding a valid National Board ''TR'' certificate of Authorization and in possession of the appropriate National Board Code symbol stamp. Alternatively, organizations employing Owner/User/Inspectors and in possession of a valid Owner/User Certificate of Authorization

issued by the National Board may repair and perform alterations on transport tanks owned and operated by the Owner/User Certificate of Authorization holder.

The periodic inspection and test frequencies for cargo tanks are specified in Modal Appendix 1 of Section XII. Periodic inspection and test frequencies for cryogenic portable tanks are specified in Modal Appendix 3 of Section XII. The periodic inspection and test frequencies are consistent with those specified currently in the HMR for cargo tanks and portable tanks.

Summary and Supporting Research Initiatives

In this NPRM, PHMSA proposes to amend the HMR in response to petitions submitted by industry representatives to incorporate *Section XII* and the 2013 edition of the *NBIC* as alternatives to *Section VIII, Division 1* and the current HMR requirements in part 178, for the design of cryogenic portable tanks and CTMVs, part 179 for the design of ton tanks, and part 180 for the continuing qualification and maintenance of CTMVs, cryogenic portable tanks and ton tanks.

As mentioned previously, *Section XII* and the 2013 edition of the NBIC will be optional, and industry could choose to continue to use *Section VIII, Division 1* and the current HMR requirements. The table below provides an overview of the options available to design, construct, repair and inspect tanks for use should the proposals in this NPRM be finalized.

TABLE 10—SUMMARY OF STANDARDS OPTIONS AS PROPOSED IN THIS NPRM

Stamp	Standard used for:		
	Build	Repair	Inspect
Specification, Non-Stamped Transport tanks.	ASME Section VIII with 49 CFR Parts 173 and 178.	1992 Edition of the NBIC with 49 CFR Part 180 *or* 2013 Edition of the NBIC without Supplement 6 and 49 CFR Part 180.	1992 Edition of the NBIC with 49 CFR Part 180 *or* 2013 Edition of the NBIC without Supplement 6 and 49 CFR Part 180
"U" Stamp	ASME Section VIII with 49 CFR Parts 173 and 178.	1992 Edition of the NBIC with 49 CFR Part 180 *or* 2013 Edition of the NBIC without Supplement 6 and 49 CFR Part 180.	1992 Edition of the NBIC with 49 CFR Part 180 *or* 2013 Edition of the NBIC without Supplement 6 and 49 CFR Part 180
"T" Stamp	ASME Section XII as authorized by proposed 173.14.	2013 Edition of the NBIC with Supplement 6.	2013 Edition of the NBIC with Supplement 6

In developing Section XII, the SC XII committee on transport tanks, as well as other stakeholders, commissioned studies on materials used in the construction of tanks, components of tanks, and tanks themselves, to aid in developing safe specifications for transport tanks. The table below highlights studies that address issues relevant to this NPRM. This table is not meant to be a definitive list of the body of research available and serves as a supplement to this rulemaking effort. The following table summarize these studies and others that relate to this NPRM, and the results of these studies:

TABLE 11—SUMMARY OF SUPPORTING RESEARCH INITIATIVES

Study Title/Docket No.	Study summary	Relation to ASME Section XII
DOT sponsored research project PO—TRS56–02–P–7004 Dynamic Analysis of DOT 407/412 Cargo Tank Motor Vehicles. PHMSA–2010–0019–0010, PHMSA–2010–0019–0017, PHMSA–2010–0019–0018.	The study analyzed DOT 407/412 CTMVs subjected to dynamic loads. The loads were harmonically analyzed to determine critical factors to the dynamic design of the CTMVs.	Results showed that most severe dynamic stress conditions occur rarely enough that fatigue may not be a contributing factor and that current DOT regulations (Section VIII and the HMR) may be too conservative. It was determined that more realistic allowable stress values for dynamic loads should be used as an alternative to the HMR. The results of this study were used in developing Section XII.
ASME Standards Technical Report, STP–PT–032, Buckling of Cylindrical, Thin Wall Trailer Truck Tanks. PHMSA–2010–0019–0013	This study used a full-scale trailer truck tank to develop rules specific to the design of DOT cylindrical, thin wall tanks. Specifically, this study focused on buckling of cylindrical pressure vessels under axial compression and examined bending. These issues are normally evaluated using the axial compression stress evaluation design methods in ASME Section VIII, Division 1. However, this study sought to define new methods for determining allowable compressive stresses.	The results of this study noted that new specific criteria for fabrication such as straightness, out of roundness, weld location, and use of actual material properties, incorporated in Section XII, improves upon Section VIII, Division 1 and the HMR, and provides acceptable design basis for establishing buckling design criteria and shell stiffening details for transport tanks.

TABLE 11—SUMMARY OF SUPPORTING RESEARCH INITIATIVES—Continued

Study Title/Docket No.	Study summary	Relation to ASME Section XII
Evaluation of the Puncture Resistance for Stainless Steel and Carbon Steel Tank Heads. PHMSA–2010–0019–0012	This study conducted a series of puncture resistance tests on various tank heads. The head sections tested fabricated of stainless steel (SST) and carbon steel (CS) with nominal wall thickness of ¼ inch, ⅜ inch and ½ inch. The objective of the puncture resistance tests was to demonstrate that SST heads are more puncture resistant than CS heads.	The study indicated that SST heads had greater puncture resistance compared with CS heads. The results of this study were used in developing Section XII specifically determining types of materials authorized and additional safety requirements for materials authorized in Section XII.
Evaluation of the Puncture Resistance for Bare and Insulated Stainless Steel (ISO) Tank Heads. PHMSA–2010–0019–0015	This study conducted a series of puncture resistance tests on various types of ISO tank head sections with and without insulation and jackets. The head sections tested were SST with nominal wall thickness of ¼ inches to ⅜ inches. The objectives of the puncture resistance tests were to demonstrate that ⅜-inch-thick SST heads are equal to or more puncture resistant than ¼-inch-thick SST heads with 4¼-inch-thick insulation and a 20-gage aluminum jacket.	The results of this study indicated that ⅜-inch-thick SST heads are equal to or more puncture resistant than ¼-inch-thick SST heads with 4¼-inch-thick insulation and a 20-gage aluminum jacket. Section XII authorizes the use of ⅜-inch-thick SST heads; whereas, Section VIII and the HMR does not.
Evaluation of Design Margins for ASME Code Section VIII, Davison 1. PHMSA–2010–0019–0016	This report examines vessels designed to *Section VIII, Division 1.* The main issues affecting the safety of those vessels are ductile rupture and brittle fracture. Tests on vessels with different strain hardening exponents have demonstrated that ductile rupture is highly unlikely with reduced margin of 3.5 on ultimate tensile strength.	This study concludes that a reduction in the present design margins from 4 to about 3.5 at temperatures below the creep range would be justified based on the improvements in the Code rules and excellent past experience with vessels built to the Code rules.
3.5 Material Design Factor and other Recent Changes to the ASME Boiler and Pressure Code. PHMSA–2010–0019–0014	ASME Pressure Vessel Research Committee instituted a research study in which it reviewed burst tests, failure data, failure modes—particularly fatigue and fracture and related toughness requirements, fabrication practices, improved materials, advances in welding, examination and testing.	The results of the study indicated that the design margin for pressure vessels could be safely reduced from 4.0:1 to 3.5:1. This study observed that most failures were the results of poor notch toughness, service degradation and operating problems. The biggest change that justifies the change in design margin is advancements in materials and more thorough understanding of materials behavior.
WYKE Laboratories—Test Report PHMSA–2010–0019–0017	In this study a Cargo Tank was subjected to Mobility Testing. Specifically, CTMV was driven on public roads, and subjected to dynamic forces in transport. The study collected data under a broad range of transport conditions.	The results of the study were used to develop design criteria for transport tanks in *Section XII* that had not been considered in developing *Section VIII.*
Report of Cargo Tank Rollover Test on an MC 305 Aluminum Trailer. PHMSA–2010–0019–0019	In this study, MC305 cargo tanks were rolled over and dragged over a concrete surface. This study was designed to measure the cargo tanks response to such an incident.	The results demonstrated the weaknesses in the tank structure as a result of a roller. These results were used to develop built-in rollover protection in transport tanks in Section XII.
A Practical Methods for the Rational Design of Ship Structures; Hughes, Mistree and Zanic; Journal of Ship Research, Vol. 24, No. 2, June 1980, pp. 101–113.	Studies the use of Rational design in shipbuilding and examines the application of a systematic method for determining the design variables that optimize a specific objective while satisfying the constraints.	Demonstrates that rational design methodology often provides an equivalent or greater level of safety to typically used practical design methods

Discussion of Proposed Amendments and Applicable Comments

In the ANPRM that was published on December 23, 2010, titled ''Hazardous Materials: Adoption of ASME Code Section XII and the National Board Inspection Code'' (Docket No. PHMSA–2010–0019, (HM–241), 75 FR 80765), we asked a number of questions pertaining to the potential costs, burdens, or safety concerns associated with incorporating *Section XII* and the 2011 edition of the *NBIC* for the construction and continued service of cargo tank motor vehicles, cryogenic portable tanks and ton tanks. Specifically, in the ANPRM we asked for comments on the following:

- What are the differences between *Section XII* and the HMR requirements?
- What is the potential safety and economic impacts of adopting the new *Section XII* requirement allowing a 3.5:1 design margin?
- What are the safety and economic impacts of adopting the new *Section XII* requirements for the testing and fabrication of special materials for construction and repair of MC 331 cargo tanks?
- What are the safety and economic impacts of adopting the *Section XII* requirement for allowable peak secondary stresses for MC 331 cargo tanks?
- What are the safety and economic impacts of using minimum allowed thickness for pressure parts instead of

nominal thickness and corrosion allowance?

• Are there substantial differences between the construction and continued service requirements of the HMR and *Section XII* for cargo tanks? If so, what are the potential costs, burdens, or safety problems associated with incorporating *Section XII* and the *NBIC* for the construction and continued service of these tanks?

• For existing cargo tanks designed, constructed and stamped with *Section VIII, Division 1* ''U'' stamp, are there substantial differences between the continued service requirements of the HMR and the most recent edition of the *NBIC*? If so, what are the potential costs and burdens associated with incorporating the NBIC for existing ''U'' stamped bulk packagings?

• Should PHMSA adopt through incorporation by reference *Section XII* and the most recent edition of the *NBIC* for construction and continued service of cargo tanks? If so, which existing requirements of the HMR should be replaced with references to these consensus standards?

• Would incorporation of *Section XII* and the *NBIC* for construction and continued service of cargo tanks positively affect transportation safety, and/or reduce industry costs?

• If PHMSA incorporates *Section XII* and the *NBIC* for the construction and continued service of cryogenic portable tanks, how long of a transition period would be needed to train employees to use these consensus standards? What are the associated costs of training?

• Are *Section XII* and the *NBIC* rules of construction and continued service of cryogenic portable tanks consistent with current HMR requirements? If not, should PHMSA consider general adoption of the consensus standards while taking exception to specific portions of the standards?

• Are there any potential compliance issues related to incorporating by reference *Section XII* and the newest edition of the *NBIC* in the HMR for the construction and continued service of cryogenic portable tanks?

• Are there substantial differences between the construction and continued service requirements of the HMR and *Section XII* for multi-unit tank car tanks? If so, what are the potential costs, burdens, or safety problems associated with incorporating *Section XII* and the *NBIC* for the construction and continued service of these tanks?

• For existing multi-unit tank car tanks designed and constructed in accordance with the HMR, are there substantial differences between current continued service requirements and the *NBIC*? If so, what are the potential costs and burdens associated with incorporating the latest edition of the *NBIC*?

• Should PHMSA adopt through incorporation by reference *Section XII* and the most recent edition of the *NBIC* for construction and continued service of multi-unit tank car tanks? If so, which existing requirements of the HMR should be replaced with references to these consensus standards?

• Would incorporation of *Section XII* and the latest edition of the *NBIC* for construction and continued service of multi-unit tank car tanks positively affect transportation safety, and/or reduce industry costs?

• Are *Section XII* and the *NBIC* rules of construction and continued service of multi-unit tank car tanks consistent with current HMR requirements? If not, should PHMSA consider general adoption of the consensus standards while taking exception to specific portions of the standards?

• Are there any potential compliance issues related to incorporating by reference *Section XII* and the newest edition of the *NBIC* in the HMR for the construction and continued service of multi-unit tank car tanks?

The ANPRM generated comments from 32 stakeholders, many of whom submitted multiple comments–some on the length of the comment period and most on the substance of the ANPRM. The majority of the comments—40 different comments from 21 commenters—were in opposition to incorporating by reference the two sets of standards into the HMR.[14] The ANPRM was not specific as to potential future course of action. Specifically, the ANPRM did not explicitly state whether PHMSA was going to propose to replace *Section VIII, Division 1* and the HMR with *Section XII* and the *NBIC,* or if we were going to propose to allow *Section XII* and the *NBIC* to be used as alternatives. In the ANPRM, there were no proposals set forth regarding the method of incorporation into the regulations of *Section XII* and the *NBIC* (e.g. outright replacement of *Section VIII, Division 1* with *Section XII* and the *NBIC* or incorporation of *Section XII* and the *NBIC* as an alternative in addition to *Section VIII, Division 1*). For that reason, it was the assumption of many commenters that *Section XII* would outright replace *Section VIII, Division 1* and the HMR, and these commenters voiced their opposition to Section XII with the understanding that they would not have an option as to what requirements they would be able to use.

The comments are accessible by docket number at the following URL: *http://www.regulations.gov.* A listing of the commenters, including the docket number associated with the comment, is provided below (company or organization abbreviations used throughout the document are also provided):

TABLE 12—COMMENTERS

Commenter	Abbreviation	Docket No.
Alloy Custom Products		PHMSA–2010–0019–0049
Altom Transport		PHMSA–2010–0019–0003
American Society of Mechanical Engineers	ASME	PHMSA–2010–0019–0032
American Trucking Associations	ATA	PHMSA–2010–0019–0043
Asian Tank Container Organization		PHMSA–2010–0019–0060
Baltimore Cargo Tank Services, Inc.		PHMSA–2010–0019–0046
Bulk Truck & Transport Service, Inc.		PHMSA–2010–0019–0004
C & R Fleet Services, Inc.		PHMSA–2010–0019–0022
C & R Fleet Services, Inc.		PHMSA–2010–0019–0037
Commercial Vehicle Safety Alliance	CVSA	PHMSA–2010–0019–0056
Compressed Gas Association	CGA	PHMSA–2010–0019–0025
Compressed Gas Association	CGA	PHMSA–2010–0019–0048

[14] The 21 commenters in opposition were: Alloy Custom Products, Altom Transport, ATA, Asian Tank Container Organization, Baltimore Cargo Tank Services, Inc., C & R Fleet Services, Inc, CVSA, DGAC, David Fulbright/WRG, Eurotainer U.S. Inc., International Tank Container Organisation, J & S Transport Co, Inc., James K. Victory, Jerry White, NPGA, NTTC, Silver/CIMS LLC, Steigerwalt Associates Inc., Stolt Nielsen USA Inc., TTMA, and Vulcraft of New York.

TABLE 12—COMMENTERS—Continued

Commenter	Abbreviation	Docket No.
Container Technology Inc.	CTI	PHMSA–2010–0019–0059
Dangerous Goods Advisory Council	DGAC	PHMSA–2010–0019–0050
Dangerous Goods Advisory Council	DGAC	PHMSA–2010–0019–0061
David Fulbright/WRG		PHMSA–2010–0019–0023
Eurotainer U.S. Inc.		PHMSA–2010–0019–0054
Gardner Cryogenics		PHMSA–2010–0019–0057
Heil Trailer International		PHMSA–2010–0019–0036
International Tank Container Organisation		PHMSA–2010–0019–0055
J & S Transport Co, Inc.		PHMSA–2010–0019–0034
James K. Victory		PHMSA–2010–0019–0033
Jerry White		PHMSA–2010–0019–0029
John Counts		PHMSA–2010–0019–0007
Monte Ward		PHMSA–2010–0019–0040
Monte Ward		PHMSA–2010–0019–0041
National Board of Boiler and Pressure Vessel Inspectors	National Board	PHMSA–2010–0019–0051
National Propane Gas Association	NPGA	PHMSA–2010–0019–0028
National Propane Gas Association	NPGA	PHMSA–2010–0019–0053
National Tank Truck Carriers, Inc.	NTTC	PHMSA–2010–0019–0002
National Tank Truck Carriers, Inc.	NTTC	PHMSA–2010–0019–0058
Nicholas Paulick		PHMSA–2010–0019–0039
Nicholas Paulick		PHMSA–2010–0019–0052
Pressure Sciences Incorporated	PSI	PHMSA–2010–0019–0047
Silver/CIMS LLC		PHMSA–2010–0019–0044
Steigerwalt Associates Inc.		PHMSA–2010–0019–0042
Stolt Nielsen USA Inc.		PHMSA–2010–0019–0062
Truck Trailer Manufacturers Association	TTMA	PHMSA–2010–0019–0009
Truck Trailer Manufacturers Association	TTMA	PHMSA–2010–0019–0045
Vulcraft of New York		PHMSA–2010–0019–0006

Comments in Favor of Adopting Section XII and NBIC

Comments received to the HM–241 ANPRM in favor of incorporating *Section XII* and the latest *NBIC* can be grouped generally into three categories: (1) Use of the standards would be economically beneficial; (2) adoption of *Section XII* and the 2013 edition of the *NBIC* will enhance safety; and (3) the standards are internationally compatible. The categories in support of adopting the standards, comments that reflect the nature of the support, and our responses to the comments are as follows.

The Use of Section XII and the 2013 Edition of the NBIC Would Be Economically Beneficial

Comments received from Gardner Cryogenics and Pressure Sciences Incorporated (PSI) indicated that adoption of the two standards would be economically beneficial. Gardener Cryogenics comment pertained to benefits to industry and provided a list of examples of improvements provided in *Section XII,* including:

> Adoption of reference steel thickness and equivalent thickness gives design engineers the freedom to utilize the material properties like modulus of elasticity, tensile strength and poisson's ratio to optimize the design for tank wall/vacuum jacket wall penetration.

We agree with Gardner Cryogenics that adopting *Section XII* will provide flexibility in design and material construction of tanks that would enable U.S. manufacturers to compete internationally without compromising safety.

PSI also spoke to the benefits to manufacturers under *Section XII,* indicating that the standards, if adopted, would allow manufacturers the flexibility to purchase the raw material that is least expensive at the time. This flexibility may reduce the cost to the manufacturer, who can pass those reduced costs on to the buyer of the tank. We agree with PSI and believe that manufacturers would choose to build Section XII tanks only if it is economically beneficial.

Adoption of the Section XII Will Increase Safety

Both Thompson Tank, Inc. and Gardener Cryogenics indicated that tanks designed to *Section XII* would increase the safety of portable and cargo tanks. Thompson Tank, Inc. states that:

> ASME is an international non-profit organization of the best and brightest professional engineers who volunteer their time to protect public safely through good engineering and design practices. DOT presently refers to ASME Section VIII and requires ASME certification of the most dangerous and complicated DOT specification cargo tanks. ASME Section XII will specifically help address the additional loads and stresses encountered when traveling over the highway.

PHMSA agrees with Thompson Tank and Gardener Cryogenics that portable and cargo tanks designed to *Section XII* provide at least an equivalent level of safety to portable tanks and cargo tanks designed to *Section VIII.* Cargo tanks that are partially loaded with liquid cargo may become unstable during sudden starts or stops, on rough terrain, or when the vehicle is turning. The liquid will slosh and make the tank more likely to roll over. Further, cargo tanks that are frequently loaded and unloaded—called cyclic loading—such as cargo tanks used to transport hazardous materials, are more likely to become ''fatigued [15]'' and crack. The design incorporated in *Section XII,* slightly reduces stiffness and increases elastic deflection with thinner tank walls. *Section XII* also provides specific design guidance to help mitigate the potential for stress corrosion cracking in tanks made of quenched and tempered steels.

Additionally, in *Section XII,* design stress criteria is the same for different cargo tank specifications, provided the tanks are to subjected to identical loads. This consistent criteria potentially reduces the added cost and weight of

[15] Fatigue is the progressive and localized structural damage that occurs when a material is subjected to cyclic loading. (Kim, W.H; Laird, C. (1978). Crack Nucleation and State I Propagation in High Strain Fatigue-II Mechanism. Acta Metallurgica. p. 789–799.)

certain additional accident protection devices. As a result, it allows for use of thinner materials and enables tanks to have greater capacities than those built to the *Section VIII, Division 1* standards. As such, this could result in fewer tanks carrying hazardous materials on U.S. highways, which should translate to fewer hazardous materials incidents. Further, the research sponsored by the U.S. DOT and ASME, that is summarized in *Section V* and Table 11 of Section VII of this NPRM indicates that tanks built according to *Section XII* are as safe as tanks authorized currently.

The Standards Are Compatible Internationally

PSI indicated that tanks designed to *Section XII* would increase harmonization with international standards. They state:

> Section XII is written using terminology compatible with international standards such as UN standards and International Maritime Dangerous Goods Code (IMDG). Its intent is to be useable internationally; and several foreign manufacturers already possess the T-symbol stamp certifying their capability to manufacture vessels using the new code.

We agree with PSI that *Section XII* and the *NBIC* may be used internationally and are consistent with other international standards, including UN-based standards and regulations. Several foreign manufacturers already possess the T-symbol stamp certifying their capability to manufacture vessels using the new code.

Comments in Opposition to Adopting Section XII and NBIC

Comments in opposition to adopting the standards ranged in subject matter and can be grouped into five categories: (1) The costs are too high; costs include the cost of purchasing the standards, and training inspectors and enforcement personnel; (2) it would be difficult to comply with the standards; (3) it would be difficult to enforce the standards; (4) adopting the standards would not be in the interest of harmonization; and (5) adoption of the standards would be unsafe. The categories in opposition to adopting the standards, comments that reflect the nature of the support, and our responses to the comments are as follows.

The Cost of Purchasing Section XII and the NBIC Is Too High

Sixteen commenters [16] expressed concern with the costs of purchasing *Section XII* and the *NBIC.* Altom Transport indicated that they have 500 trailers maintained at 12 sites. They stated that ''We would not be able to afford to buy the manuals required to get maintenance and repair information.'' International Tank Container Organisation stated that ''the cost of ASME and NBIC codes is prohibitive in the international community as in certain locations that handle UN and IMO portable tanks, the combined cost of the two codes would exceed an individual's annual earnings.'' DGAC stated:

> We believe the cost of these documents, would limit their availability to those who are subject to and use the regulations, including tank manufacturers, shippers, and carriers, as well as, those in the enforcement community. While the requirements are now readily available in 49 CFR, which can be obtained at no cost electronically, adopting the requirements by reference would mean that anyone wishing to comply with the regulations would be required to purchase publications (and updates) that would cost in the range of $650.

NPGA's echoes other commenters on this subject. They state:

> NPGA believes that purchasing the ANPRM's referenced codes creates a hardship and financial barrier on small businesses and an impediment to the review of PHMSA's proposed regulations. Further, the initial cost of approximately $1.8 million associated with purchasing the ANPRM's referenced codes could actually double before a final rule is promulgated as these codes are in constant change by the very nature of the rules and regulations which govern their revision cycles.

As PHMSA is not proposing to require manufacturers to use *Section XII* and the 2013 edition of the *NBIC,* and to do so is completely voluntary, PHMSA is not imposing any additional costs on manufacturers. A manufacturer will not use *Section XII* to build a tank unless it believes it is net beneficial to do so. Those who choose to use Section XII and the 2013 edition of the *NBIC* will incur some cost and realize some benefits from the use of the new standard.

Cost of Training and Inspecting Tanks Too High

David Fulbright/WRG, NPGA, and Steigerwalt Associates Inc., commented on the costs incurred for training and inspections. NPGA stated:

> NPGA can estimate initial costs to our industry as follows. If approximately 2800 members of NPGA are retail marketers and only two-thirds of these marketers employ their own Registered Inspector, this represents approximately 1875 individuals who need to obtain NBIC certification. Testing costs, the frequency of testing, or an estimate of the cost to train employees on non-commodity specific transport maintenance is not provided. Given these uncertainties, NPGA estimates an initial cost to our members based solely on a test cost of $200 per R.I. would be in excess of $375,000.

Silver CIMS LLC commented and C & R Fleet Services, Inc., on the cost of training to comply with the new standards. Silver CIMS LLC states:

> Anyone that's already developed training and quality plans would redundantly be forced to prescribe to NBIC's training and certification scheme's (at great cost due to the redundant training, training fees charged and loss of earnings during the non-revenue generating man hours needed to complete the redundant training). As a small business, this would be an unnecessary financial burden.

And C & R Fleet Services, Inc., states:

> The purpose of the HMRs is to enhance the safe transportation of hazardous materials. Motor carrier compliance with the HMRs is necessary to protect the public. To ensure this compliance, motor carriers must be aware of the requirements set forth in the HMRs. Requiring motor carriers to purchase Industry Standards to ensure compliance is a serious safety breach, as some carriers may not be able to purchase copies of these regulations for each driver, maintenance professional, and operations staff. Over ninety-six percent of the trucking industry qualifies as a small business.

As stated previously, in this NPRM we are not proposing to require motor carriers to use or purchase tanks built to Section XII, so an owner or user of tanks would only choose to purchase or use a tank built to Section XII if it makes business sense to do so.

The cost of enforcing *Section XII* and the *NBIC* was a concern to also ATA, John Counts and TTMA. ATA states:

> PHMSA is dependent on literally hundreds of state troopers to enforce the HMRs during roadside inspections. How many states have the extra funds in their budget to purchase the copyrighted standards for each of their inspectors? If the cargo tank standards are copyrighted and not made available to these enforcement officials, how will they be upheld? The inability to enforce aspects of the HMRs could create a serious safety risk.

ATA is correct in that PHMSA regulations are enforced by hundreds of state troopers throughout the country. We understand that the cost of purchasing the standards for each inspector would be prohibitive for many state governments. It is our understanding that during roadside inspections, state officials are most often only concerned with identifying that the ASME mark is intended for the packaging on which it is stamped. This

[16] Altom Transport, ATA, Asian Tank Container Organization, CVSA, DGAC, David Fulbright/WRG, International Tank Container Organisation, James K. Victory, Jerry White, NPGA, NTTC, Silver/CIMS LLC, Steigerwalt Associates, Inc., Stolt Nielsen USA, Inc., TTMA, Vulcraft of New York.

would not require state governments to purchase copies of *Section XII* for every state trooper. Rather, the most in-depth inspection performed on a tank is handled by an independent third-party inspector, typically a National Board Commission Inspector from an insurance company. This would also apply to the repair of the ASME packaging using the NBIC, which also requires a marking. Furthermore, as engineers at PHMSA were instrumental in developing *Section XII* and the 2013 edition of the *NBIC,* they understand them and are available to help interpret the standards. As with other highly technical or scientific standards that we incorporate in the HMR, PHMSA's Hazardous Materials Information Center staff will have access to the engineers who helped develop the standards. Furthermore, ASME issues written replies to inquiries concerning interpretation of technical aspects of the Code.

PHMSA acknowledges the purchase of copies of *Section XII* may be cost prohibitive to certain entities. Therefore, PHMSA seeks comets on whether state and local governments will need to purchase the copies of *Section XII* for all applicable personnel or if interpretations issued by ASME or PHMSA will be sufficient.

Incorporating Section XII and the Latest NBIC Is Contrary to International Harmonization

The commenters who voiced their opposition to incorporating the standards for reasons pertaining to international harmonization, supply, use, or represent users or suppliers of cryogenic portable tanks. The commenters indicated that the vast majority of portable tanks are built and inspected in accordance with the IMDG, and the industry believes that switching to *Section XII* and the latest *NBIC* may impede international trade.

Asian Tank Container Organization stated:

> Adopting ASME XII and/or NBIC for in service or Continued Use Inspection would be counter to the efforts made internationally over the past 12 years by representatives of the various countries Competent Authorities. The UN Model Regulations for the Transport of Dangerous Goods is the international consensus standard for UN Portable tanks. This document now forms the basis for UN Portable tank regulations in IMDG, RID, ADR and 49 CFR parts 100·180, as applicable.

The comments provided by Eurotainer, a company that leases portable tanks to manufacturers for import and export bulk shipments of liquefied and cryogenic gases, characterize the comments provided by other portable tank stakeholders. Eurotainer ''would like to see a more harmonized adoption of global regulatory requirements for the design, construction and certification of UN and IM Portable tanks . . .'' They state:

> As Section XII is being proposed to apply to the Cryogenic Portable tank segment (IM 7 & UN T 75), Eurotainer sees this action as segregating an equipment type and applying specialized rules that hinder the equipment in international trade. Current construction of the UN T 75 tanks in the U.S. is governed by the 49 CFR sections which include the requirement of ASME Section VIII Division I and as such section is applied currently we feel SECTION XII would be another layer of regulation that is adding no additional margin of safety but would add another layer of regulatory burden to the global community.

The International Tank Container Organization states:

> We consider that any deviation away from the aforementioned International consensus standard would be a step backwards and a move away from the long desired goal of International Harmonization. Adopting ASME XII and/or NBIC for in-service or Continued Use Inspection would, we believe, be counter to the efforts made internationally over the past 12 years. The international consensus standards for UN Portable tanks is the aforementioned UN Model Regulations, which provides the basis for UN Portable tank requirements in set down RID, ADR, IMDG and 49 CFR parts 100–180, as applicable and not ASME XII or NBIC.

As with Section VIII, Division 1, the 1992 edition of the NBIC and the HMR, which are the current requirements for design and construction of transport tanks, Section XII and the 2013 edition of the NBIC are compatible with international recommendations and standards. PHMSA fully supports the goal of international harmonization through its work with stakeholders at the UN and IMDG. PHMSA also incorporates both of these international standards by reference within the HMR. Currently there is no universally agreed upon pressure vessel code that is recognized by the committee of experts represented at the UN; however, the UN Model Regulations defer to Competent Authorities to determine what pressure vessel code is to be used for the design and construction requirements. The United States has recognized the ASME Code (*Section VIII, Division 1*) as the pressure vessel code for design and construction through its incorporation by reference in the HMR since inception of the UN Model Regulations. As stated earlier in this NPRM, *Section XII* is being proposed as an alternative to existing requirements.

Eurotainer asked if a foreign approval agency [17] that tests a non-U-stamped IM or UN portable tank would be required to carry an NBIC registration and wondered, if so, whether the DOT or NBIC would be able to police those agencies. 49 CFR part 107, authorizes certification agencies to witness testing and examination of portable tanks on behalf of the DOT. They further questioned whether the owner or user of non-U-stamped portable tanks would be responsible for maintaining the NBIC registration of inspectors to meet the requirements of the NBIC code in foreign countries on tanks that may be imported into or exported out of the United States. The answer is no. As is currently required in the HMR, the Designated Approval Agency (DAA) (see 49 CFR part 107) would continue to authorize repairs and witness inspections (see 49 CFR part 180). If it needs to be repaired, the facility doing the repair would need authorization from the DAA for the repair (see 49 CFR 180.605(j)), with the appropriate Authorized Inspector verifying the repair is done in accordance with the NBIC, and the DAA witnesses the final hydrostatic or pneumatic test (see 49 CFR 180.605(h)(3)), in accordance with criteria set forth in the NBIC. For the ''T'' stamped tanks, this process is similar to that in the HMR, and is specified in the 2013 edition of the NBIC.

Eurotainer asked if owners and operators of the equipment would be allowed to perform their own inspections and testing per the CFR 49 § 180.605 with a staff member that is a registered NBIC inspector. If so, Eurotainer feels that ''the NBIC adoption will lower the safety margin that is now in place using uninterested third parties instead of a staff member to the company owning or operating the equipment.''

PHMSA is aware that there is always the potential that a person—either a third-party or an employee—may not comply with a requirement stipulated in a regulation, either set forth directly in the HMR or incorporated by reference in the HMR; however, a person who has function-specific training in inspecting tanks, regardless of their employer, should be able to perform the task to ensure that the tank is safe. PHMSA conducts regulatory enforcement and issues civil penalties to entities that fail

[17] A foreign approval agency is an entity outside of the U.S. that PHMSA has granted authority to perform a certain function required under the HMR. In this case, a foreign approval agency would test and certify that certain transport tanks meet the NBIC (see 49 CFR 107.402).

to perform inspections as required by the HMR.

Adopting the Standards Would Be Unsafe

Five commenters [18] indicated that adopting the standards would be unsafe. Asian Tank Container Organization states:

> The enforcement authorities and Port Authorities in most foreign countries ONLY recognize IACS [International Association of Classification Societies, Ltd.] member Approval Agencies due to their long standing involvement in the IMDG code. Speaking from recent Industry experience, tanks inspected by non-IACS members would be stopped in transit and dangerous goods would need to be trans-loaded to an approved portable tank. The trans-load costs and increased risks would make it impractical to ship product worldwide and this would prove a barrier to International trade which may harm both the USA and third party economies.

Similarly, the International Tank Container Organisation states:

> We anticipate that UN Portable tanks inspected by other non-IACS members would be stopped in transit and dangerous goods would need to be trans-loaded (as has been the case) to an approved portable tank (increasing both cost and risk, exponentially, as most incidents happen during load/unload operations).

PHMSA does not intend to change the established process of using IACS preferred member Approval Agencies [19] with regard to portable tanks, nor the HMR process of authorization for foreign approval agencies (see 49 CFR 107.402). As stated above, under this NPRM the inspection of a cryogenic portable tank, whether ASME ''U'' or ''T'' marked, would follow current HMR requirements in that the manufacture or repair of the pressure vessel would be subject to an Authorized Inspector in addition to the involvement of an Approval Agency.

PHMSA, by proposing to incorporate Section XII and the 2013 edition of the NBIC as alternatives to the current regulatory system is not lessening safety, or creating barriers to international trade that would harm U.S. or third-party economies. On the contrary, PHMSA believes that the proposed rulemaking will help the U.S. economy by allowing the manufacture and repair of an internationally competitive product.

Furthermore, the ASME standards have been deemed equivalent by PHMSA technical staff and have been proven to provide, through special permits, an equivalent level of safety to that of tanks constructed and designed according to the specifications currently provided in the HMR. For example, special permits SP–05749; SP–10481; and SP–12630, SP–14710, SP–14467, 14437, providing similar flexibility in materials of construction as provided by *Section XII,* allow reduced shell thickness and alternatives to the materials of construction specified in the HMR for portable tanks and cargo tanks. These permits have been in use for decades with over 13,000 shipments and no reported incidents.

Voluntary Consensus Standards Are Inherently Inconsistent With the Administrative Procedures Act

Nine additional commenters generally oppose the incorporation of voluntary consensus standards.[20] NPGA opposes ''DOT reliance on a third (3rd) party to write regulations that have such a profound impact on our industry.'' This sentiment is representative of the many commenters opposed to incorporation of the standards because they are developed by voluntary consensus organizations. The commenters are concerned that they would no longer have a voice in changes to the regulations. They also are concerned that the changes made would no longer be transparent. Silver/CIMS LLC states:

> The UN and IMO Portable tank Industry have had NO input in the development of ASME or NBIC proposed rules. USDOT should NOT adopt ASME Chapter XII or NBIC for any other purpose as the publications are NOT International Consensus Standards for UN Portable tank construction or use. If USDOT were to replace 49 CFR 100–180 with ASME and NBIC, the UN Portable tank Industry stakeholders would be hamstrung in their abilities to influence future rules and regulations.

While we understand the concerns regarding incorporating voluntary consensus standards, PHMSA and many other Federal agencies often incorporate by reference standards developed by industry experts. In fact, the National Technology Transfer and Advancement Act of 1995, Public Law 104–113, requires agencies to use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or is otherwise impractical. Public Law 104–113 requires Federal agencies to use industry consensus standards to the extent practical; it does not require Federal agencies to endorse a standard in its entirety. The law does not prohibit an agency from generally adopting a voluntary consensus standard while taking exception to specific portions of the standard if those provisions are deemed to be ''inconsistent with applicable law or otherwise impractical.'' Taking specific exceptions furthers the Congressional intent of Federal reliance on voluntary consensus standards because it allows the adoption of substantial portions of consensus standards without the need to reject the standards in their entirety because of limited provisions that are not acceptable to the agency.

It has been PHMSA's practice to review new editions and addenda of the ASME *BPVC* and *NBIC* and periodically update § 171.7 to incorporate newer editions and addenda by reference. New editions of the subject codes will be issued every two years. The BPVC was last incorporated by reference into the regulations under Docket No. RSPA–99–6213 (HM–218) (August 18, 2000; 65 *FR* 50450). In that final rule, § 171.7 was revised to incorporate by reference the 1998 edition of Sections II (Parts A and B), V, VIII (Division I) and IX, of the BPVC. The NBIC 1992 Edition was incorporated by reference under Docket HM–183C (November 3, 1994; 59 FR 55162). We intend to continue to review these standards, and either incorporate them in their entirety, incorporate portions of these standards, or not incorporate them, depending on the outcome of our review. Furthermore, we intend to be active participants in the development of future editions of *Section XII* and the *NBIC.*

Alloy Custom Products, NPGA and NTTC expressed concern that interpretations of the standards would not be readily available through PHMSA. As stated earlier, engineers at PHMSA were instrumental in the development of the standards, they understand them, and are available to help interpret them. As with other highly technical or scientific standards that we incorporate in the HMR, PHMSA's Hazardous Materials Information Center staff will have access to the engineers who helped develop the standards. PHMSA seeks comment on the availability of interpretations of *Section XII* and the *NBIC, specifically, if*

[18] Asian Tank Container Organization, C & R Fleet Services, Inc, International Tank Container Organisation, Steigerwalt Associates Inc., and Stolt Nielsen USA Inc.

[19] IACS is a membership organization that endorses member foreign approval tank inspection agencies as ''preferred approval agencies.'' Foreign enforcement and port authorities recognize these inspection agencies over non- IACS preferred inspection agencies according to IACS.

[20] Baltimore Cargo Tank Services, Inc., Dangerous Goods Advisory Council, J & S Transport Company, Inc., Jerry White, National Propane Gas Association, National Tank Truck Carriers, Inc., Silver CIMS, LLC, Tank Truck Manufacturers Association, Vulcraft of New York.

access to interpretations through ASME and PHMSA would be sufficient.

Finally, as mentioned above the meetings of both ASME and the NBIC are free-of-charge and open to public participation. ASME subcommittees consider correspondence from the general public in the form of requests for interpretation and revision to existing codes, requests for code cases, and requests to develop new standards. The *NBIC* subcommittees consider correspondence from the general public in the form of requests for interpretation, revision of existing standards, and requests to develop new standards. The standards-writing subcommittees, subgroups, and task groups are open to participation by representatives of groups that are materially affected by the code. Each year the *NBIC* Committee updates the *NBIC* and presents the updates on the National Board's Web site for public review in April–May and August–September.

Miscellaneous Comments

In addition to the comments in support and in opposition to the ANPRM some comments were neither in support or opposed and offered other insights and suggestions. These comments are categorized and discussed further below.

Separate Section XII from the NBIC

CTI and Gardner stated that PHMSA should separate into two separate rulemakings the incorporation of the *NBIC* and that of *Section XII.* Gardner states that:

> Our reservations on NBIC are based on the difficulties in implementing two new items simultaneously. We would recommend that Section XII be adopted as soon as possible with the existing DOT Registered Engineers and Inspectors while giving the interested parties extended time to familiarize, discuss and comment on NBIC for eventual adoption in two to three years.

Since *Section XII* was developed to be used in conjunction with the *NBIC,* and that there would be no provision for continued maintenance or inspections of tanks built to *Section XII* in the HMR if the latest NBIC is not incorporated at the same time, we cannot incorporate them at separate times.

Standards Are Not Accurate

Alloy Custom Products voiced concern that ''the rules for ASME Sec XII and NBIC should not be adopted as presently written and they should be sent back to the respective organizations for correction and modification.'' There were no specific errors cited; however, the latest editions of both standards were published in 2013. They are up-to-date and correct typographical errors, and clarify and simplify the previous editions. As with most in-depth, detailed publications, later editions of these standards include updates and corrections.

Replacing Standards Would Create a Monopoly

James K. Victory and NTTC indicated that incorporating the standards would create a monopoly. Victory stated that ''the only profiteers from this being ASME and the National Board of Pressure Vessel Inspectors.'' PHMSA thanks James K. Victory and NTTC for their comments. We will take this view into consideration. However, as mentioned above, we are proposing to adopt *Section XII* and the 2013 edition of the *NBIC* as alternatives to *Section VIII, Division 1* and the HMR, stakeholders will be provided more options.

Adopt Standards As Alternative

Four commenters suggested that if we do incorporate *Section XII* and the *NBIC,* we should only do so as an alternative, not a replacement to *Section VIII, Division 1* and the HMR.[21] TTMA explains that:

> This approach will give the regulated community the option of employing the effective existing regulations, or these other publications. We anticipate the vast majority of industry stakeholders will choose the existing HMR for their code compliance basis.

We agree, and in this NPRM, we are proposing to take this suggested approach, and we believe this will diffuse much of the opposition to the new codes and allow manufacturers greater flexibility.

Proposed Amendments

In this NPRM, PHMSA is proposing to incorporate *Section XII,* with limited exceptions, as an alternative to existing standards for the following tanks: DOT Specification 331, 338, 406, 407, and 412 cargo tanks, cryogenic portable tanks, and ton tanks. *Section VIII, Division 1* applies to construction of new tanks only, and requires that they are marked with a ''U'' stamp to indicate that they constructed and certified in accordance with that section. *Section XII* applies to both new construction and continued service, and tanks constructed under this standard will be marked with a ''T.'' Tanks that are repaired under Section XII would be marked with the ''TR'' stamp. Further, PHMSA is proposing to adopt the 2013 edition of the *NBIC* for alterations, repairs and inspections performed on all ASME constructed tanks used for the transportation of hazardous materials as an alternative to the 1992 edition that is currently incorporated by reference. The 2013 *NBIC may* be used for tanks constructed to the specifications set forth in *Section VIII, Division 1.* While the use of the 2013 edition of the NBIC would be optional under this proposed rulemaking, PHMSA believes that most manufacturers building to Section VIII, Division 1 would choose to use the 2013 edition of the NBIC as it is more current. Under this proposed rule, the 2013 edition of the NBIC *must* be used for tanks constructed to the specification set forth in *Section XII.*

The research and development projects summarized in Section V and Table 11 of Section VII of this NPRM support the proposed codes and standards to be adopted in this rulemaking. These research and development projects are available in the public docket for this rulemaking. From the results of the studies and its own analysis, PHMSA has concluded that the proposed standards, as described in this NPRM, provide an equivalent level of safety to the current standards.

Furthermore, by providing the 2013 edition of the *NBIC* and *Section XII* as options, industry may choose modern materials to fabricate tanks, enabling the use of different, equally safe, materials predicated on market value.[22] The assortment of materials described in *Section XII* include different formulations of carbon steel and alloy/stainless steel, such as Chromium-Nickel Stainless Steel, Chromium-Molybdenum-Vanadium alloy steel, and titanium alloy. *Section XII* also includes specifications for steel fabrication and treatment, such as tempering, quenching, and forging (See *Section XII* Part TM). This variety of approved materials will enable U.S. manufacturers to better compete internationally. It will allow for greater capacity per tank, and reduce the number of tanks on highways in certain circumstances. This reduction of motor vehicles hauling hazardous materials on the highways would reduce the potential for hazardous material

[21] Heil, International Tank Container Organisation, Silver/CIMS LLC, and Truck Trailer Manufacturers Association.

[22] PHMSA has authorized through special permit some of these new materials authorized in ASME *Section XII* specifically Heat Resting Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels (DOT SP–14467) and Titanium and Titanium Alloy Strip, Sheet and Plate (DOT SP–14710) see *http://phmsa.dot.gov/hazmat/permits-approvals/special-permits.*

incidents, and consequently, improve safety.

Section By Section Review

The following is a section-by-section review of the amendments proposed in this rulemaking.

Part 107, Subpart F

This subpart establishes a registration procedure for persons who are engaged in the manufacture, assembly, inspection and testing, certification, or repair of a cargo tank or a cargo tank motor vehicle manufactured in accordance with a DOT specification under subchapter C of this chapter or under terms of a special permit issued under this part. In this NPRM, we are not proposing to revise this subpart, but we are referring to it in section 173.14, where we propose to add the terminology ''inspectors or their employer must be registered with DOT.''

Part 171

Section 171.7

This section lists material incorporated by reference into the HMR. This NPRM proposes to amend § 171.7, Matter incorporated by reference, to list the 2013 edition of ASME Boiler and Pressure Vessel Code, *Section XII* and the 2013 edition of the National Board of Boiler and Pressure Vessel Inspectors' *National Board Inspection Code (NBIC).* Specifically, § 171.7(g)(1) will be revised to include ASME Boiler and Pressure Vessel Code, *Section XII* in addition to the currently reference *Section VIII, Division 1.* The section references in this paragraph will remain the same. In addition, § 171.7(x)(1) and (2) will be revised to include the 2013 edition of NBIC. The section references in this paragraph will remain the same.

Part 173

Section 173.14

In this NPRM we are proposing to establish new Section 173.14 for authorization and conditions for the use of *Section XII.*

• This NPRM proposes to revise part 173 by adding § 173.14 to set forth the authorization for the use of *Section XII* of American Society of Mechanical Engineers Boiler and Pressure Vessel Code. Further, in proposed § 173.14 we are setting forth conditions for the use of *Section XII,* specifically with respect to continued service of transport tanks, where *Section XII* conflicts with the *NBIC.* Conditions for all tanks will be specified in paragraph (a)(1) and include: The 2013 edition of the National Board Inspection Code (NBIC) must be used for the design, construction, and certification qualification and maintenance of cargo tank motor vehicles, cryogenic portable tanks and multi-unit tank car tanks (ton tanks)

• ASME Section XII includes use of ASME Sections II Materials, Section V Nondestructive Examination, Section VIII, Division 1 for Parts only, Section VIII, Division 2 for fatigue analysis only, Section IX Welding and Brazing, and the NBIC Parts 1, 2 and 3, including Supplement 6 of Parts 2 and 3;

• Nameplate character markings must be a minimum 4 mm (5/32″), markings directly on the tank must be a minimum 8 mm (5/16″);

• Periodic test information must not be allowed on the ASME nameplate. Marking must be in accordance with the NBIC Part 2 or Part 3, Supplement 6;

• Inspection personnel must have qualifications as required by ASME Section XII, Article TG–4, and be qualified as evident by having a current NBIC commission with endorsement for the level/type of inspection to be performed or certification from their employer when applicable;

• Inspectors or their employer must be registered with DOT.

• Repairs must be performed by a facility holding a current NBIC certificate of authorization for the use of the National Board ''TR'' Stamp.

Conditions and requirements for cargo tanks will be specified in paragraph (a)(2) and must conform to all applicable requirements of part 173; and must meet ASME Section XII Modal Appendix 1, the appropriate Article for the category of cargo tank, all Mandatory Appendices and Non Mandatory Appendices A thru E and G thru H, except as follows:

• Repairs must be performed by a DOT-registered facility holding a current NBIC certificate of authorization for the use of the National Board ''TR'' Stamp.

• For Category 338 Cargo Tanks, ASME Section XII, Modal Appendix 1, Article 4, paragraph 1–4.4(g)(6) does not apply. A minimum jacketed thickness of 2.4 mm (0.0946 in) 12 gauge in the reference steel is permitted (IBR see § 171.7).

Conditions and requirements for cryogenic portable tanks will be set forth in paragraph (a)(3) and must conform to all applicable requirements of this Part; and must meet ASME Section XII Modal Appendix 3, Article 1, all Mandatory Appendices and Non Mandatory Appendices A thru E and G thru H, except as follows:

• External and internal visual inspection in accordance with NBIC Part 2 Supplement 6 are required in addition to ASME Section XII, Modal Appendix 3, Article 1, paragraph 3–1.10(b), and Article 1, 3–1.10(b)(5) (IBR see § 171.7);

• ASME Section XII, Modal Appendix 3, Article 1, paragraph 3–1.10(b)(6) does not apply. Periodic test information must not be allowed on the ASME nameplate. Marking must be in accordance with the NBIC Part 2 or Part 3, Supplement 6 as applicable. (IBR see § 171.7);

• ASME Section XII, Modal Appendix 3, Article 1, paragraph 3–1.10(d) must require inspection personnel to have qualifications as required by ASME Section XII, Article TG–4, as evident by having a current NBIC commission with endorsement for the level/type of inspection to be performed or certification from their employer when applicable. (IBR see § 171.7); and

• ASME Section XII, Modal Appendix 3, Article 1, paragraph 3–1.10 must require Repairs to be performed by a facility holding a current NBIC certificate of authorization for the use of the National Board ''TR'' Stamp. Records must be in accordance with the NBIC Part 2 or Part 3, Supplement 6 as applicable.(IBR see § 171.7).

Conditions and requirements for ton tanks will be set forth in paragraph (a)(4). Ton tanks must conform to all applicable requirements of part 173 and must meet Modal Appendix 4, Article 1, all Mandatory Appendices and Non Mandatory Appendices A thru E and G thru H except as follows:

• ASME Section XII, Modal Appendix 4, Article 1, paragraph 3–1.10 Manufacturer-certified fusible plugs, tested and qualified under the fuse plug manufacturers' written Quality Control system are required. (IBR see § 171.7);

• ASME Section XII, Modal Appendix 4, Article 1, paragraph 4–8 must allow non-ASME marked fusible plugs.;

• ASME Section XII, Modal Appendix 4, Article 1, paragraph 4–12(a) must require external and internal visual inspection in accordance with NBIC Part 2 Supplement 6, S6.15. (IBR see § 171.7);

• ASME Section XII, Modal Appendix 4, Article 1, paragraph 4–12(a)) does not apply. Periodic test information must not be allowed on the ASME nameplate. Marking must be in accordance with the NBIC Part 2 or Part 3, Supplement 6 as applicable.(IBR see § 171.7);

• ASME Section XII, Modal Appendix 4, Article 1, paragraph 4–12(e) must require records to be in accordance with the NBIC Part 2 or Part 3, Supplement 6 (IBR see § 171.7);

• Inspection personnel must have qualifications as required by ASME Section XII, Article TG–4, as evident by holding a current NBIC commission with endorsement for the level/type of inspection to be performed or certification from their employer when applicable;

• A ton tank that fails a prescribed test or inspection must be repaired as specified in the 2013 NBIC or removed from service;

• Repairs must be performed by a facility holding a current NBIC certificate of authorization for the use of the National Board ''TR'' Stamp.

Part 178

Section 178.200

In this NPRM we are proposing to establish a new § 178.200 for the authorization for the use of *Section XII* and the *NBIC* for cryogenic portable tanks.

Section 178.300

In this NPRM, we are proposing to establish a new § 178.300 for the authorization for the use of *Section XII* and the *NBIC* for cargo tank motor vehicles.

Part 179

Section 179.300

In this NPRM, we are proposing to revise § 179.300 to establish paragraphs (a) and (b). Paragraph (a) would continue to require that multi-unit tank car tanks must meet the requirements set forth in the HMR and paragraph (b) would provide a new authorization for multi-unit tank car tanks to be designed, constructed and certified in accordance with *Section XII* with the conditions and limitations set forth in § 173.14.

Part 180

Section 180.402

In this NPRM, we are proposing to add a new § 180.402 for authorization for the use of the 2013 Edition of the *NBIC* with *Section VIII, Division 1* for the qualification and maintenance of cargo tanks.

Section 180.502

In this NPRM, we are proposing to add a new § 180.502 for authorization for the use of the 2013 Edition of the *NBIC* with *Section VIII, Division 1* for the qualification and maintenance of tank cars.

Section 180.602

In this NPRM, we are proposing to add a new § 180.602 for authorization for the use of the 2013 Edition of the *NBIC* with *Section VIII, Division 1* for the qualification and maintenance of cryogenic portable tanks.

IX. Regulatory Analyses and Notices

A. Statutory/Legal Authority for This Rulemaking

This NPRM is published under the authority of the Federal Hazardous Materials Transportation Law, 49 U.S.C. 5101 *et seq.* Section 5103(b) authorizes the Secretary to prescribe regulations for the safe transportation, including security, of hazardous material in intrastate, interstate, and foreign commerce. This NPRM provides an alternative to the current process for the design, fabrication, maintenance and continued service of CTMVs, cryogenic portable tanks and ton tanks, without compromising safety.

The Administrative Procedure Act (APA) requires Federal agencies to give interested persons the right to petition an agency to issue, amend, or repeal a rule (5 U.S.C. 553(e)). 49 CFR 106.95, provides the process and procedures for persons to petition PHMSA to add, amend, or delete a regulation. In this NPRM, PHMSA is addressing this statutory requirement by considering petitions for rulemaking from ASME, the National Board, and PVMA.

B. Executive Order 13610, Executive Order 13563, Executive Order 12866, and DOT Regulatory Policies and Procedures

This NPRM is not considered a significant regulatory action under section 3(f) Executive Order 12866 and, therefore, was not reviewed by the Office of Management and Budget (OMB). The proposed rule is not considered a significant rule under the Regulatory Policies and Procedures order issued by the U.S. Department of Transportation (44 FR 11034).

Executive Order 13563 is supplemental to and reaffirms the principles, structures, and definitions governing regulatory review that were established in Executive Order 12866 Regulatory Planning and Review of September 30, 1993. Executive Order 13563, issued January 18, 2011, notes that our nation's current regulatory system must not only protect public health, welfare, safety, and our environment but also promote economic growth, innovation, competitiveness, and job creation.[23] Further, this executive order urges government agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public. In addition, federal agencies are asked to periodically review existing significant regulations, retrospectively analyze rules that may be outmoded, ineffective, insufficient, or excessively burdensome, and modify, streamline, expand, or repeal regulatory requirements in accordance with what has been learned.

Executive Order 13610, issued May 10, 2012, urges agencies to conduct retrospective analyses of existing rules to examine whether they remain justified and whether they should be modified or streamlined in light of changed circumstances, including the rise of new technologies.[24]

By building off of each other, these three Executive Orders require 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.''

PHMSA believes that if *Section XII* and the 2013 edition of the *NBIC* are incorporated as alternatives to *Section VIII, Division 1* and the HMR, tank manufacturers would be given more flexibility in their choice of material and design, allowing carriers of bulk liquid hazardous materials to purchase lighter-weight, higher-capacity tanks capable of transporting more material per shipment. Tanks built to the design and construction requirements in *Section XII* have been tested by ASME to ensure that they withstand conditions and stresses unique to transportation, such as rollovers, bottom damage, or piping damage. The flexibility in selection of ASME standards will facilitate international competitiveness for the transport of hazardous materials and eliminate barriers to U.S. manufacturers transporting goods internationally that are created by the rigid material construction requirements in Section VIII, Division 1 and the HMR. Further, the ASME standards have been deemed equivalent by PHMSA technical staff and have been proven to provide, through special permits, an equivalent level of safety to that of tanks constructed and designed according to the specifications currently provided in the HMR.

As PHMSA is not proposing to require manufacturers to use *Section XII* and the 2013 edition of the *NBIC,* and to do so is completely voluntary, PHMSA is not imposing any additional costs. A manufacturer will not use *Section XII* to build a tank unless it believes it is net beneficial to do so. Since *Section XII*

[23] See *http://www.whitehouse.gov/the-press-office/2011/01/18/improving-regulation-and-regulatory-review-executive-order.*

[24] See *http://www.gpo.gov/fdsys/pkg/FR-2012-05-14/pdf/2012-11798.pdf.*

would allow manufacturers the flexibility to purchase the raw material that is least expensive at the time, this may reduce the cost to the manufacturer, who can then pass on that discount to the buyer of the tank. We know that any rational manufacturer will not avail itself to this option unless it makes business sense.

While we don't believe that this rule imposes any new costs, we request comments, including specific data if possible, concerning the costs and benefits that may be associated with revisions to the HMR based on the issues presented in this notice.

C. Executive Order 13132

This proposed rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13132 (''Federalism''), and the President's memorandum on ''Preemption'' published in the **Federal Register** on May 22, 2009 (74 FR 24693). This proposed rule will preempt State, local, and Indian tribe requirements but does not propose any regulation that has substantial direct effects on the States, the relationship between the national government and the States, or the distribution of power and responsibilities among the various levels of government. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

The Federal hazardous materials transportation law, 49 U.S.C. 5101–5128, contains an express preemption provision (49 U.S.C. 5125(b)) that preempts State, local, and Indian tribe requirements on the following subjects:

(1) The designation, description, and classification of hazardous materials;

(2) The packing, repacking, handling, labeling, marking, and placarding of hazardous materials;

(3) The preparation, execution, and use of shipping documents related to hazardous materials and requirements related to the number, contents, and placement of those documents;

(4) The written notification, recording, and reporting of the unintentional release in transportation of hazardous material; and

(5) The design, manufacture, fabrication, marking, maintenance, recondition, repair, or testing of a packaging or container represented, marked, certified, or sold as qualified for use in transporting hazardous material.

This proposed rule addresses packaging for hazardous materials, covered in number 2 above. If adopted as final, this rule will preempt any State, local, or Indian tribe requirements concerning packaging for hazardous materials unless the non-Federal requirements are ''substantively the same'' as the Federal requirements. Furthermore, this proposed rule is necessary to update, clarify, and provide relief from regulatory requirements.

Incorporation of new consensus standards by reference in the HMR may impact state and local CTMV enforcement programs. Potential impacts include the cost of purchasing the new Section XII consensus standards and training employees in the use of this consensus standard. However, PHMSA notes that currently many of state enforcement personnel are not equipped with *Section VIII, Division 1* and must use outside sources to reference this standard. It is our understanding that during roadside inspections, state officials are most often concerned with identifying that the ASME mark is intended for the packaging on which it is stamped. This would not require state governments to purchase copies of *Section XII* for every state trooper. Rather, the most in-depth inspection performed on a tank is handled by an independent third-party inspector, typically a National Board Commission Inspector from an insurance company. This would also apply to the repair of the ASME packaging using the NBIC, which also requires a marking. Furthermore, as engineers at PHMSA were instrumental in developing *Section XII* and the 2013 edition of the *NBIC,* they understand them and are available to help interpret the standards. As with other highly technical or scientific standards that we incorporate in the HMR, PHMSA's Hazardous Materials Information Center staff will have access to the engineers who helped develop the standards. We invite state and local governments with an interest in this rulemaking to comment on any effect that revisions to the HMR to address the issues outlined in this proposed rule may cause.

D. Executive Order 13175

E.O. 13175 requires agencies to assure meaningful and timely input from Indian tribal government representatives in the development of rules that ''significantly or uniquely affect'' Indian communities and that impose ''substantial and direct compliance costs'' on such communities. PHMSA is not aware of any significant or unique effects or substantial direct compliance costs on the communities of the Indian tribal governments. Therefore, we conclude that the funding and consultation requirements of Executive Order 13175 do not apply. We invite Indian tribal governments to provide comments if they believe there will be an impact.

E. Regulatory Flexibility Act, Executive Order 13272, and DOT Policies and Procedures

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires an agency to review regulations to assess their impact on small entities unless the agency determines that a rule is not expected to have a significant impact on a substantial number of small entities. This notice has been developed in accordance with Executive Order 13272 (''Proper Consideration of Small Entities in Agency Rulemaking'') and DOT's procedures and policies to promote compliance with the Regulatory Flexibility Act to ensure that potential impacts of draft rules on small entities are properly considered.

The adoption of *Section XII* should not have any impact on small businesses, given that the standard is optional. After reviewing the safety records of both current tanks and new models of tanks constructed under special permit, PHMSA analysts found no disparities between the safety records.

We estimate that there are 5,166 businesses likely to be affected by this rule. The Small Business Administration (SBA) uses industry-specific standards to estimate which of those are ''small businesses'', which could be based on employment or revenue. PHMSA assumes that a significant number of businesses within the regulatory scope (nearly all) are small.

Based on our analysis, the three major industries—manufacturers, third party inspection agencies, and tank repair services—could, at their discretion—conform to the new standards. Manufacturers could introduce new materials. Third party inspectors would conduct tests under more current, meaningful testing relevant to more modern designs. Tank repair services could expand to accommodate the new standards.

Given the expected service life of about 30 years, we assume that only 1/30 of all tanks will be replaced each year. Given the optional nature of the rule, the new tanks will consist of some newer *Section XII* tanks and some *Section VIII* tanks. Any manufacturer would build tanks according to the needs of the customer, including price. At the same time, the small number of *Section XII* tanks entering the market each year will allow repairers and inspectors to transition their workforce smoothly.

Based upon the above estimates and assumptions, PHMSA certifies that the proposals in this NPRM will not have a significant economic impact on a substantial number of small entities. In this notice, PHMSA is soliciting comments on the preliminary conclusion that the proposals in this NPRM will not cause a significant economic impact on a substantial number of small entities.

F. Paperwork Reduction Act

Section 1320.8(d), Title 5, Code of Federal Regulations requires that PHMSA provide interested members of the public and affected agencies an opportunity to comment on information collection and recordkeeping requests. The recordkeeping requirements in *Section XII* and the 2013 edition of the *NBIC* are analogous; the recordkeeping costs of complying with *Section XII* and the 2013 edition of the *NBIC* are not significantly different than those currently required under the current regulatory scheme.

G. Regulation Identifier Number (RIN)

A regulation identifier number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN contained in the heading of this document can be used to cross-reference this action with the Unified Agenda.

H. Unfunded Mandates Reform Act

This final rule does not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. It does not result in costs of $141,300,000 or more to either state, local, or tribal governments, in the aggregate, or to the private sector, and is the least burdensome alternative that achieves the objective of the rule.

I. Environmental Assessment

The National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321–4347), and implementing regulations by the Council on Environmental Quality (40 CFR part 1500) require 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.

The Council on Environmental Quality (CEQ) regulations order Federal agencies to conduct an environmental review considering (1) the need for the proposed action, (2) alternatives to the proposed action, (3) probable environmental impacts of the proposed action and alternatives, and (4) the agencies and persons consulted during the consideration process (see 40 CFR 1508.9(b)).

Description of Action

PHMSA is considering the following alternatives: Alternative 1 is to take no action; Alternative 2 is to incorporate ASME Section XII and NBIC 2013 by reference and remove Section VIII; Alternative 3 is to allow tank manufacture and use of Section XII as an alternative to Section VIII. Use of the 2013 NBIC for continued service under Section VIII is optional, while use of the 2013 NBIC with Section XII is required; and Alternative 4 is to withdraw the rulemaking action and allow use of the standards through Special Permit. Each alternative presented below represents different levels of adoption of the new *Section XII* code, from Alternative 1 (0%) to Alternative 2 (100%). Alternatives 3 and 4 may result in a proportion between and including these extremes—i.e., Alternative 3 may result in all or no manufacturers choosing to use the *Section XII* specifications. Similarly, reliance on the special permit process could result in all or none of the manufacturers requesting a special permit. At this point, it is difficult to find a basis to project future, based on market activity. However, PHMSA believes that the adoption of the new standard would yield substantial savings to both the manufacturer and the user of the tanks.

Alternative 1: No action. This is not the preferred alternative. This would continue the incorporation by reference of *Section VIII, Division 1* for design and construction of cryogenic portable tanks and CTMVs (The reference to NBIC 1992 for the continued use would also remain unchanged). Though *Section VIII, Division 1* sets forth detailed criteria for the design, construction, certification, and marking of stationary boilers and pressure vessels, it does not address unique conditions and stresses encountered by tanks in the transportation environment. The HMR addresses this deficiency by adding requirements to account for conditions and stresses likely to occur in transportation. This alternative would not impose any costs, but it would prevent the opportunity to realize any efficiency benefits.

Alternative 2: Incorporate ASME *Section XII* and *NBIC* 2013 by reference and remove *Section VIII, Division 1.* This is not the preferred alternative. It would promote more current design standards, by ridding the HMR of outdated information and incorporating standards that address modern manufacturing and welding methods. Efficiency improvements would provide manufacturers more flexibility in design, and allow for lighter-weight tanks that would use less fuel to transport, with larger capacities. *Section XII* would also provide for more uniform enforcement over time. However, it may preclude a normal market-based transition from one standard to another and force manufacturers to incur investments and staffing changes to comply with new standards. Many commenters expressed concern that they would be unduly burdened either immediately or in the future by ASME standards that they have no recourse to appeal. The costs would be the purchase of *Section XII;* the minimal facility transition costs discussed above; and the initial training that may occur before the usual three-year cycle.

Alternative 3: Allow tank manufacture and use under *Section XII* as an alternative to *Section VIII, Division 1* and the applicable *NBIC* for continued use. This option is the preferred alternative, because it would provide regulatory flexibility, without imposing burdensome costs. It would also leave the manufacturers and buyers to negotiate which design best meets their needs, in terms of cost, resilience, and operations. Lastly, it would authorize the use of the 2013 edition of the *NBIC* as it applies to existing tanks and would require its use for those tanks built to *Section XII* specifications. It may, however, create inefficiencies among in-house, third-party and state inspectors, because inspectors would have to be trained to two distinct standards. This alternative would provide regulatory flexibility, without diminishing safety from current levels. It would also leave the manufacturers and buyers to negotiate which design best meets their needs, in terms of cost, resilience, and operations.

Alternative 4: Withdraw the Rulemaking Action and Allow Use of Standards through Special Permit. This is not the preferred alternative. This option would grant permission to produce, use, and maintain tanks manufactured to *Section XII* through a special permit. This would allow PHMSA to promote technological advancement while maintaining the ability to closely monitor performance. PHMSA has already issued one competent authority approval and one special permit related to *Section XII.* This option would require positive action by manufacturers to apply for a special permit and meet PHMSA's standards for fitness. While this may be a more cautious approach, each special

permit application, including technical drawings and costs associated with party-to applications, such as proof of fitness, would be incurred under this option. PHMSA estimates that the typical special permit application costs $45 to the applicant and $3,000 for PHMSA to evaluate. A full analysis of the advantages and disadvantages and the cost and benefits associated with each alternative can be found in the regulatory evaluation in the docket for this rulemaking.

PHMSA is proposing Alternative 3, as it was found to be the most optimal. Benefits associated with the rule include lower manufacturing costs and higher capacities for shippers. Costs to industry are minimal and incurred only when the manufacturer decides to fabricate tanks to the *Section XII* standards.

Environmental Consequences

When developing potential regulatory requirements, PHMSA evaluates those requirements to consider the environmental impact of each amendment. Specifically, PHMSA evaluates the: risk of release and resulting environmental impact; risk to human safety, including any risk to first responders; longevity of the packaging; and if the proposed regulation would be carried out in a defined geographic area, the resources, especially any sensitive areas, and how they could be impacted by any proposed regulations.

Of the regulatory changes proposed in this rulemaking, the non-editorial amendments are discussed in further detail and evaluated based on their overall environmental impact as follows.

Environmental benefits result from the fact that fewer CTMVs, ton tanks and cryogenic tanks will be required to transport the same quantities of hazardous materials. In most cases, due to substitution of material of construction, the thickness of the tanks would be reduced, permitting more material to be hauled, and reducing the number of tanks needed to handle the same volume of product.[25] As supported by the studies referenced in Table 11 of Section VII and based on the analysis of both versions of the ASME codes, PHMSA's Engineering and Research Division asserts that despite the reduction in the design margin between Section VIII and Section XII, the standards provide an equivalent level of safety. As the proposed alternatives would provide the same level of safety as the currently authorized tanks, the risk of incidents is reduced proportionately to the reduction of the number of tanks in commerce.

- Add a new section to part 173 that will provide authorization and conditions for the use of 2013 edition of the *NBIC* in conjunction with *Section VIII, Division 1* as an alternative. The levels of inspectors set forth in the 2013 edition of the *NBIC* provide the same level of oversight as those set forth in the currently incorporated 1992 edition of the *NBIC* combined with the specifications set forth in the HMR. For that reason, PHMSA anticipates that use of the 2013 edition of the NBIC compared to use of the 1992 edition and the HMR will not result in any significant impact to the human environment.

Federal Agencies Consulted

In an effort to ensure all appropriate federal stakeholders are provided a chance to provide input on potential rulemaking actions, PHMSA as part of its rulemaking development consults other federal agencies that could be potentially affected. In developing this rulemaking action PHMSA consulted the Federal Motor Carrier Safety Administration (FMCSA), Federal Railroad Administration (FRA), Environmental Protection Agency (EPA), and Occupational Safety and Health Administration (OSHA).

Conclusion

This NPRM proposes to incorporate by reference *Section XII* and the *NBIC* as alternatives to *Section VIII, Division 1* and the HMR. As discussed above PHMSA believes standards provide an equivalent level of safety and the proposals in this NPRM are environmentally neutral. In fact, dependent on the level of usage of Section XII and subsequent reduction of the number of tanks needed to handle the same volume of product this rule may prove environmentally beneficial over time. However, PHMSA welcomes any data, information, or comments related to environmental impacts that may result from the proposal discussed in this notice.

J. Privacy Act

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78) or you may visit *http://www.dot.gov/privacy.*

K. International Trade Analysis

The Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465), prohibits Federal agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. For purposes of these requirements, Federal agencies may participate in the establishment of international standards, so long as the standards have a legitimate domestic objective, such as providing for safety, and do not operate to exclude imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. PHMSA participates in the establishment of international standards in order to protect the safety of the American public, and we would assess the effects of any rule to ensure that it does not exclude imports that meet this objective. *Section XII* is written using terminology compatible with international standards such as UN standards and IMDG. Its intent is to be useable internationally; and several foreign manufacturers already possess the T-symbol stamp certifying their capability to manufacture vessels using the new code. Accordingly, incorporating *Section XII* and the *NBIC* as alternatives to *Section VIII, Division 1* and the HMR would be consistent with PHMSA's obligations under the Trade Agreement Act, as amended.

List of Subjects

49 CFR Part 171

Applicability, General Requirements, North American shipments, Exports, Hazardous materials transportation, Imports, Incorporated by reference, Definitions.

49 CFR Part 173

Hazardous materials transportation, Packaging and containers, Reporting and recordkeeping requirements.

49 CFR Part 180

Qualification and maintenance of cargo tanks, tank cars and portable tanks.

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

[25] For example, a MC 331 propane tank manufactured according to the *Section XII* would have a 12.5% reduction in wall thickness when compared to *Section VIII, Division 1.* This reduction would lead to at least a 2% increase in product capacity while maintaining the current level of safety.

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

■ 1. The authority citation for part 171 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; Pub. L. 101–410 section 4 (28 U.S.C. 2461 note); Pub. L. 104–134, section 31001; 49 CFR 1.81 and 1.97.

Subpart A—Applicability, General Requirements, and North American Shipments

■ 2. In § 171.7, paragraphs (g)(1), (x)(1), and (x)(2) are revised to read as follows:

§ 171.7 Reference material.

* * * * *

(g) * * *

(1) 'ASME Code'; ASME Code, Sections II (Parts A and B), V, VIII (Division 1), and IX of 1998 Edition of American Society of Mechanical Engineers Boiler and Pressure Vessel Code, into §§ 172.102; 173.5b; 173.24b; 173.32; 173.306; 173.315; 173.318; 173.420; 178.255–1; 178.255–2; 178.255–14; 178.255–15; 178.272–1; 178.273; 178.274; 178.276; 178.277; 178.320; 178.337–1; 178.337–2; 178.337–3; 178.337–4; 178.337–6; 178.337–16; 178.337–18; 178.338–1; 178.338–2; 178.338–3; 178.338–4; 178.338–5; 178.338–6; 178.338–13; 178.338–16; 178.338–18; 178.338–19; 178.345–1; 178.345–2; 178.345–3; 178.345–4; 178.345–7; 178.345–14; 178.345–15; 178.346–1; 178.347–1; 178.348–1; 179.400–3; 180.407 and Section XII of the 2013 Edition of American Society of Mechanical Engineers Boiler and Pressure Vessel Code into § 173.14, § 178.200, § 178.300, § 179.301(b).

* * * * *

(x) * * *

(1) NB–23, National Board Inspection Code, A Manual for Boiler and Pressure Vessel Inspectors, 1992 Edition, into § 180.413.

(2) National Board Inspection Code, A Manual for Boiler and Pressure Vessel Inspectors, 2013 Edition, into § 180.402; § 180.602, and § 180.502.

* * * * *

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

■ 3. 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.

■ 4. Add § 173.14 to subpart A to read as follows:

§ 173.14 Authorization and conditions for the use of Section XII of American Society of Mechanical Engineers Boiler and Pressure Vessel Code.

(a) This section authorizes, with certain conditions and limitations, the use of Section XII of American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code Section XII) (IBR *see* § 171.7) as an alternative to ASME Code Section VIII, Division 1 (IBR, *see* § 171.7).

(b) Limitations on the use of the ASME Code Section XII for cargo tank motor vehicles, cryogenic portable tanks, and multi-unit tank car tanks (ton tanks) designed, constructed, and certified qualified and maintained in accordance with ASME Code Section XII authorized in paragraph (a) of this section—

(1) *Conditions and requirements for all tanks.* (i) The 2013 edition of the National Board Inspection Code (NBIC) (IBR, *see* § 171.7) must be used for the design, construction, and certification qualification and maintenance of cargo tank motor vehicles, cryogenic portable tanks and multi-unit tank car tanks (ton tanks).

(ii) ASME Section XII must include use of ASME Sections II Materials, Section V Nondestructive Examination, Section VIII, Division 1 for Parts only, Section VIII, Division 2 for fatigue analysis only, Section IX Welding and Brazing, and the NBIC Parts 1, 2 and 3, including Supplement 6 of Parts 2 and 3;

(iii) Nameplate character markings must be a minimum 4 mm (5/32″), markings directly on the tank must be a minimum 8 mm (5/16″);

(iv) Periodic test information is not permitted on the ASME nameplate. Marking must be in accordance with the NBIC Part 2 or Part 3, Supplement 6;

(v) Inspection personnel must have qualifications as required by ASME Section XII, Article TG–4, and be qualified as evident by holding a current NBIC commission with endorsement for the level/type of inspection to be performed or certification from their employer when applicable;

(vi) Inspectors or their employer must be registered with DOT;

(vii) Repairs must be performed by a facility holding a current NBIC certificate of authorization for the use of the National Board ''TR'' Stamp.

(2) *Conditions and requirements for cargo tanks.* Cargo tanks must conform to all applicable requirements of this Part; and must meet ASME Section XII Modal Appendix 1, the appropriate Article for the category of cargo tank, all Mandatory Appendices and Non Mandatory Appendices A thru E and G thru H, except as follows:

(i) Repairs must be performed by a DOT-registered facility holding a current NBIC certificate of authorization for the use of the National Board ''TR'' Stamp.

(ii) For Category 338 Cargo Tanks, ASME Section XII, Modal Appendix 1, Article 4, paragraph 1–4.4(g)(6) does not apply. A minimum jacketed thickness of 2.4 mm (0.0946 in) 12 gauge in the reference metal is permitted (IBR *see* § 171.7).

(3) *Conditions and requirements for cryogenic portable tanks.* Cryogenic portable tanks must conform to all applicable requirements of this Part; and must meet ASME Section XII Modal Appendix 3, Article 1, all Mandatory Appendices and Non Mandatory Appendices A thru E and G thru H, except as follows:

(i) External and internal visual inspection in accordance with NBIC Part 2 Supplement 6 are required in addition to ASME Section XII, Modal Appendix 3,Article 1, paragraph 3–1.10(b), and Article 1, 3–1.10(b)(5) (IBR *see* § 171.7);

(ii) ASME Section XII, Modal Appendix 3, Article 1, paragraph 3–1.10(b)(6) does not apply. Periodic test information is not permitted on the ASME nameplate. Marking must be in accordance with the NBIC Part 2 or Part 3, Supplement 6 as applicable. (IBR *see* § 171.7);

(iii) ASME Section XII, Modal Appendix 3, Article 1, paragraph 3–1.10(d) requires inspection personnel to have qualifications set forth in ASME Section XII, Article TG–4, as evident by having a current NBIC commission with endorsement for the level/type of inspection to be performed or certification from their employer when applicable. (IBR *see* § 171.7); and

(iv) ASME Section XII, Modal Appendix 3, Article 1, paragraph 3–1.10 requires repairs to be performed by a facility holding a current NBIC certificate of authorization for the use of the National Board ''TR'' Stamp. Records must be in accordance with the NBIC Part 2 or Part 3, Supplement 6 as applicable. (IBR *see* § 171.7).

(4) *Conditions and requirements for ton tanks.* Ton tanks must conform to all applicable requirements of this Part and must meet Modal Appendix 4, Article 1, all Mandatory Appendices and Non Mandatory Appendices A thru E and G thru H except as follows:

(i) ASME Section XII, Modal Appendix 4, Article 1, paragraph 3–1.10) Manufacturer-certified fusible plugs, tested and qualified under the fuse plug manufacturers' written

Quality Control system are required. (IBR *see* § 171.7);

(ii) ASME Section XII, Modal Appendix 4, Article 1, paragraph 4–8 must allow Non ASME marked fusible plugs;

(iii) ASME Section XII, Modal Appendix 4, Article 1, paragraph 4–12(a) must require external and internal visual inspection in accordance with NBIC Part 2 Supplement 6, S6.15. (IBR *see* § 171.7);

(iv) ASME Section XII, Modal Appendix 4, Article 1, paragraph 4–12(a)) does not apply. Periodic test information is not allowed on the ASME nameplate. Marking must be in accordance with the NBIC Part 2 or Part 3, Supplement 6 as applicable (IBR see § 171.7);

(v) ASME Section XII, Modal Appendix 4, Article 1, paragraph 4–12(e) must require records to be in accordance with the NBIC Part 2 or Part 3, Supplement 6 (IBR *see* § 171.7);

(vi) Inspection personnel must have qualifications as required by ASME Section XII, Article TG–4, as evident by having a current NBIC commission with endorsement for the level/type of inspection to be performed or certification from their employer when applicable;

(vii) A ton tank that fails a prescribed test or inspection must be repaired or removed from service;

(viii) Repairs must be performed by a facility holding a current NBIC certificate of authorization for the use of the National Board ''TR'' Stamp.

PART 178—SPECIFICATIONS FOR PACKAGINGS

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

Authority: 49 U.S.C. 5101–5128, 44701; 49 CFR 1.81, 1.96 and 1.97.

■ 6. Add § 178.200 to subpart H to read as follows:

§ 178.200 Authorization for the use of Section XII of American Society of Mechanical Engineers Boiler and Pressure Vessel Code and the National Board, National Board Inspection Code for cryogenic portable tanks.

As alternative to ASME Code Section VIII, Division 1 (IBR, see § 171.7) and the requirements of this subpart, UN T75 cryogenic portable tanks may be designed, constructed and certified in accordance with Section XII of American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code Section XII) (IBR see § 171.7), with the conditions and limitations set forth in § 173.14.

■ 7. Add § 178.300 to subpart J to read as follows:

§ 178.300 Authorization for the use of Section XII of American Society of Mechanical Engineers Boiler and Pressure Vessel Code and the National Board, National Board Inspection Code for cargo tank motor vehicles.

As alternative to ASME Code Section VIII, Division 1 (IBR, see § 171.7) and the requirements of this subpart, DOT Specification cargo tank motor vehicles may be designed, constructed and certified in accordance with Section XII of American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code Section XII) (IBR see § 171.7), with the conditions and limitations set forth in § 173.14.

PART 179—SPECIFICATIONS FOR TANK CARS

■ 7. The authority citation for part 179 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; 49 CFR 1.81, 1.96 and 1.97.

■ 8. Revise § 179.300 to read as follows:

§ 179.300 General specifications applicable to multi-unit tank car tanks designed to be removed from car structure for filling and emptying (Classes DOT–106A and 110AW).

(a) Multi-unit tank car tanks must meet the requirements set forth in this subpart; or

(b) Multi-unit tank car tanks may also be designed, constructed and certified in accordance with Section XII of American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code Section XII) (IBR see § 171.7), with the conditions and limitations set forth in § 173.14

PART 180—CONTINUING QUALIFICATION AND MAINTENANCE OF PACKAGINGS

■ 9. The authority citation for part 180 is revised to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; 49 CFR 1.81, 1.96 and 1.97.

■ 10. Add § 180.402 to subpart E to read as follows:

§ 180.402 Authorization for the use of the 2013 Edition of the National Board, National Board Inspection Code with Section VIII, Division 1 of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code.

This section authorizes, with certain conditions and limitations set forth in § 173.14, the use of the 2013 edition of the National Board Inspection Code (NBIC) (IBR, *see* § 171.7) for the maintenance of cargo tanks constructed to Section VIII, Division 1 of the 1998 Edition of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code. DOT Specification cargo tanks constructed to the 1998 Edition of the ASME Code Section VIII, Division 1 that bear a U Stamp may be examined, inspected, and tested under Part 180 Subpart E and the NBIC Parts 1, 2, and 3, excluding Supplement 6 of Parts 2 and 3. The 2013 edition of the National Board Inspection Code (NBIC) (IBR, *see* § 171.7) must be used for the maintenance of cargo tanks constructed to ASME Code Section XII as set forth in § 178.300.

■ 11. Add § 180.502 to subpart F to read as follows:

§ 180.502 Authorization for the use of the 2013 Edition of the National Board, National Board Inspection Code with Section VIII, Division 1 of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code.

This section authorizes, with certain conditions and limitations set forth in § 173.14, the use of the 2013 edition of the National Board Inspection Code (NBIC) (IBR, *see* § 171.7) for the maintenance of ton tanks constructed to Section VIII, Division 1 of the 1998 Edition of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code. The 2013 edition of the National Board Inspection Code (NBIC) (IBR, *see* § 171.7) must be used for the maintenance of ton tanks constructed to ASME Code Section XII as set forth in § 178.200.

■ 12. Add § 180.602 to subpart G to read as follows:

§ 180.602 Authorization for the use of the 2013 Edition of the National Board, National Board Inspection Code with Section VIII, Division 1 of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code.

This section authorizes, with certain conditions and limitations set forth in § 173.14, the use of the 2013 edition of the National Board Inspection Code (NBIC) (IBR, *see* § 171.7) for the maintenance of cryogenic portable tanks constructed to Section VIII, Division 1 of the 1998 Edition of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code. Portable tanks designed, fabricated, examined, inspected, and tested to Section VIII, Division 1 of the ASME Code may be used with the NBIC Parts 1, 2 and 3, excluding Supplement 6 of Parts 2 and 3. The 2013 edition of the National Board Inspection Code (NBIC) (IBR, *see* § 171.7) must be used for the maintenance of cryogenic portable tanks constructed to ASME Code Section XII as set forth in § 178.200.

* * * * *

Issued in Washington, DC, under authority delegated in 49 CFR part 1.97(b).

Magdy El-Sibaie,

Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration.

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 665

RIN 0648–BD46

Western Pacific Pelagic Fisheries; Catch and Effort Limits for the U.S. Participating Territories

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

ACTION: Notice of availability of fishery ecosystem plan amendment; request for comments.

SUMMARY: NMFS announces that the Western Pacific Fishery Management Council proposes to amend the Fishery Ecosystem Plan for Pelagic Fisheries of the Western Pacific Region. If approved, Amendment 7 would establish a management framework and process for specifying fishing catch and effort limits and accountability measures for pelagic fisheries in the U.S. Pacific territories (American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands). The framework would authorize the government of each territory to allocate a portion of its specified catch or effort limit to a U.S. fishing vessel or vessels through a specified fishing agreement, and establish criteria, which a specified fishing agreement must satisfy. The framework also includes measures to ensure accountability for adhering to fishing catch and effort limits.

DATES: NMFS must receive comments on the proposed amendment and the included environmental assessment by February 28, 2014.

ADDRESSES: You may send comments on the proposed amendment and environmental assessment, identified by NOAA–NMFS–2012–0178, to either of the following addresses:

- *Electronic Submission:* Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2012-0178,* click the ''Comment Now!'' icon, complete the required fields, and enter or attach your comments.
- *Mail:* Send written comments to Michael D. Tosatto, Regional Administrator, NMFS Pacific Islands Region (PIR), 1601 Kapiolani Blvd., Suite 1110, Honolulu, HI 96814–4700.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter ''N/A'' in the required fields if you wish to remain anonymous), and will accept attachments to electronic comments in Microsoft Word, Excel, or Adobe PDF file formats only.

The Western Pacific Fishery Management Council (Council) prepared Amendment 7 to the Fishery Ecosystem Plan for Pelagic Fisheries of the Western Pacific Region (Pelagics FEP), including an environmental assessment and regulatory impact review, that provides background information on the proposed action. The amendment is available from *www.regulations.gov* or the Council, 1164 Bishop St., Suite 1400, Honolulu, HI 96813, tel 808–522–8220, fax 808–522–8226, *www.wpcouncil.org.*

FOR FURTHER INFORMATION CONTACT: Adam Bailey, Sustainable Fisheries Division, NMFS PIR, 808–944–2248.

SUPPLEMENTARY INFORMATION: NMFS and the Council manage the pelagic fisheries of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI) and Hawaii under the Pelagics FEP. Typically, the Council recommends conservation and management measures for NMFS to implement under the authority of Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act (16 U.S.C. 1801 *et seq.*)). Certain pelagic fish stocks, including tunas, are also subject to conservation and management measures cooperatively agreed to by the Western and Central Pacific Fisheries Commission (WCPFC), an international regional fisheries management organization that has jurisdiction over fisheries harvesting highly migratory species in the western and central Pacific Ocean (WCPO, generally west of 150° W. longitude). Although NMFS often implements these decisions directly under the authority of the Western and Central Pacific Fisheries Convention Implementation Act, the Council may also recommend conservation and management measures applicable to the U.S. component of internationally-managed fisheries for implementation by NMFS under the Magnuson-Stevens Act.

In 2008, the WCPFC adopted Conservation and Management Measure (CMM) 2008–01, ''Conservation and Management Measure for Bigeye and Yellowfin Tuna in the Western and Central Pacific Ocean,'' which established an annual bigeye tuna catch limit for longline fisheries of the United States operating in the WCPO, as well separate longline bigeye tuna catch limits for the U.S. participating territories to the WCPFC, which are American Samoa, Guam, and the CNMI. The annual bigeye tuna catch limit for the United States (U.S. bigeye tuna limit) established through CMM 2008–01 was 3,736 mt, which NMFS implemented in fishing years 2009, 2010, and 2011 (December 7, 2009, 74 FR 63999). This limit applied only to the Hawaii-based longline fisheries or longline vessels based on the West Coast of the United States that fish in the WCPO; the limit did not apply to longline fisheries of the U.S. participating territories. CMM 2008–01 also provided that members and participating territories that caught less than 2,000 mt of bigeye tuna in 2004 would be subject to an annual limit of 2,000 mt, except that Small Island Developing States and Participating Territories of the WCPFC undertaking responsible development of their fisheries would not be subject to individual annual limits for bigeye tuna. The three U.S. participating territories fell into this category.

The WCPFC extended the U.S. bigeye tuna limit for 2012 through CMM 2011–01 (August 27, 2012, 77 FR 51709), and for fishing year 2013 through CMM 2012–01 (September 23, 2013, 78 FR 58240). In addition, under CMM 2012–01, Small Island Developing States and Participating Territories of the WCPFC, including American Samoa, Guam, and the CNMI, were not subject to individual longline limits for bigeye tuna for fishing year 2013. Subsequently, in December 2013, the WCPFC adopted a new tropical tuna conservation and management measure, which maintain the U.S. longline bigeye tuna catch limit of 3,763 mt for 2014, and reduces the limit to 3,554 mt in 2015 and 2016, and to 3,345 mt for 2017. CMM 2013–01 further provides that members that caught less than