

(2) The owner, operator or employer must have a copy of the waiver approval letter available onboard the vessel as proof of waiver of the citizenship requirement for unlicensed seamen for that vessel.

§ 28.1115 Waiver request and approval records.

The Coast Guard will maintain a record of citizenship waiver requests and approvals. Approvals will be documented for the applicable vessel(s) in the Coast Guard's vessel information database.

Dated: August 9, 2011.

James A. Watson,

Rear Admiral, U.S. Coast Guard, Director of Prevention Policy.

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DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 171, 172, 173, 174, 179, and 180

[Docket No. PHMSA-2010-0018 (HM-216B)]

RIN 2137-AE55

Hazardous Materials: Incorporating Rail Special Permits Into the Hazardous Materials Regulations

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The Pipeline and Hazardous Materials Safety Administration is proposing to amend the Hazardous Materials Regulations to incorporate provisions contained in certain widely used or longstanding special permits that have general applicability and established safety records. Special permits allow a company or individual to package or ship a hazardous material in a manner that varies from the regulations provided that an equivalent level of safety is maintained. The revisions in this proposed rule are intended to provide wider access to the regulatory flexibility offered in special permits and eliminate the need for numerous renewal requests, thus reducing paperwork burdens and facilitating commerce while maintaining an appropriate level of safety. This rulemaking also proposes to respond to two petitions for rulemaking, P-1497 concerning the use of electronic shipping papers, and P-1567

concerning the removal of the Association of American Railroad's (AAR's) AAR-600 portable tank program for previously adopted standards that meet or exceed the AAR-600 requirements.

DATES: Written comments should be submitted on or before October 17, 2011.

ADDRESSES: You may submit comments identified by the docket number (PHMSA-2010-0018 (HM-216B)) 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. All comments received will be posted without change to the Federal Docket Management System (FDMS), including any personal information.

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*).

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 (Volume 65, Number 70; Pages 19477-78).

FOR FURTHER INFORMATION CONTACT: Eileen Edmonson or Steven Andrews, Standards and Rulemaking Division, Office of Hazardous Materials Safety, (202) 366-8553, Pipeline and Hazardous Materials Safety Administration (PHMSA), or Karl Alexy, Office of Safety Assurance and Compliance, (202) 493-6247, Federal Railroad Administration (FRA), 1200 New Jersey Avenue, SE., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

I. Background

II. Overview of Proposed Amendments
III. Regulatory Analyses and Notices

I. Background

Special Permits

The Pipeline and Hazardous Materials Safety Administration (PHMSA) is proposing to amend the Hazardous Materials Regulations (HMR; 49 CFR parts 171-180) to incorporate certain requirements based on existing special permits for transportation by railroad issued by PHMSA under 49 CFR part 107, subpart B (§§ 107.101 to 107.127). A special permit sets forth alternative requirements (variances) to the requirements in the HMR by means that achieve a safety level that at a minimum corresponds to the safety level required under the regulations and is consistent with the public interest. Congress expressly authorized DOT to issue these variances in the Hazardous Materials Transportation Act of 1975.

The HMR generally are performance-oriented regulations that provide the regulated community a certain amount of flexibility in meeting safety requirements. Even so, not every transportation situation can be anticipated and built into the regulations. Innovation is a strength of our economy, and the hazardous materials community is particularly strong at developing new materials and technologies as well as innovative ways of transporting materials. Special permits enable the hazardous materials industry to quickly, effectively, and safely integrate new products and technologies into the production and transportation streams. Thus, special permits provide a mechanism for testing new technologies, promoting increased transportation efficiency and productivity, and ensuring global competitiveness.

A special permit must achieve at least an equivalent level of safety to that specified in the HMR. Implementation of new technologies and operational techniques can enhance safety because the authorized operations or activities may achieve a greater level of safety than currently required under the regulations. Special permits also reduce the volume and complexity of the HMR by addressing unique or infrequent transportation situations that would be difficult to accommodate in regulations intended for use by a wide range of shippers and carriers.

PHMSA conducts ongoing reviews of special permits to identify widely used and longstanding special permits having general applicability with established safety records for adoption into regulations for broader applicability. To

obtain a special permit, interested parties must prepare and submit a detailed application that PHMSA reviews extensively. If granted and its use is needed after the expiration date assigned, the person authorized to use the special permit must submit an application to continue their use of it and undergo an extensive PHMSA renewal process. Converting these special permits into regulations reduces paperwork burdens and facilitates commerce while maintaining an acceptable level of safety. Additionally, adoption of special permits as rules of general applicability provides wider access to the benefits and regulatory flexibility of the provisions granted in the special permits. Factors that influence whether a specific special permit is a candidate for regulatory action include: the safety record for hazardous materials transported, or the transport operations conducted, under a special permit; the potential for broad application of a special permit; suitability of provisions in the special permit for incorporation into the HMR; rulemaking activity in related areas; and agency priorities. Special permits involving packaging used by a large number of persons—such as those issued to many persons with party status or issued to a manufacturer as a “manufacture, mark, and sell”—are potentially among the most suitable types of special permits for adoption into the HMR. Such special permits have broad applicability; moreover, many of them have been in effect for a number of years and have demonstrated safety records.

Further, although we make every effort to stay as true as possible to the conditions prescribed in each special permit when converting it to proposed regulatory text, PHMSA recognizes that sometimes, due to existing regulations or historical interpretations, provisions in a special permit may require revision to convert them into regulations of general applicability. In addition, when converting special permits we often have to modify the language to describe documents and procedures that are authorized under the special permit but not specifically described in it or to modify the language to comply with requirements for proposed regulatory text prescribed by this agency, the Department of Transportation, and the **Federal Register**.

This notice of proposed rulemaking (NPRM) proposes to incorporate seven (7) special permits that authorize tank car transportation operations not specifically permitted under the HMR. These special permits were initially issued to members of industry

associations or similar organizations.

They are DOT–SP:

1. 7616
2. 9388
3. 11184
4. 12095
5. 12905
6. 14333
7. 14622

These special permits have well-established safety records and, thus, are candidates for incorporation into the HMR. A few of the special permits in this NPRM have expired for various reasons, such as from delays that occur during the renewal process, or as a result of modifications to the HMR, packagings, processes, or other technologies that eliminate the need for the special permit. PHMSA has included them in this NPRM because both PHMSA and the Federal Railroad Administration (FRA) have determined these special permits also have well-established safety records and would benefit the regulated industry if incorporated into the HMR. Incorporating these special permits into the HMR would eliminate the need for over 250 current grantees to reapply for the renewal of these special permits every four years and for PHMSA to process the renewal applications.

Incorporation of these special permits into the HMR also eliminates a significant paperwork burden for the recipient. Unless otherwise excepted by this agency, a copy of each special permit must be: maintained at each facility where a packaging is manufactured under a special permit, maintained at each facility where a package is offered or re-offered for transportation under a special permit, carried on board each cargo vessel or aircraft, and, in some cases, carried on board each transport vehicle when used to transport a hazardous material under a special permit.

Petitions for Rulemaking

Two proposals PHMSA is addressing in this proposed rulemaking were also presented to PHMSA in petitions for rulemaking. A more detailed description of each is provided below.

Petition No. P–1497

The petition from the International Vessel Operators Hazardous Materials Association, Inc. (IVOHMA) (P–1497), dated March 15, 2007, is similar to relief authorized under DOT–SP 7616 in that it requests PHMSA allow shipping paper information required under 49 CFR Part 172, Subpart C (shipping papers) to be transmitted electronically by computer through use of electronic data interchange (EDI). The IVOHMA

states “differences in hazard communication or the interpretation of their application are a principle[sic] source of disharmony in intermodal and/or international transportation of [hazardous materials].” The IVOHMA also states “electronic data interchange has become a recognized method of efficient and accurate communication currently being used successfully throughout the industrialized world” that permits “immediate access to hazard communication by all those involved in the transportation infrastructure as well as by emergency responders equipped” with this technology. Further, the IVOHMA states in its petition that the proposals it submitted were vetted with its staff and members and determined to be opportunities for regulatory amendment to promote efficiencies in the modal interchange of these containers in both domestic and international transportation.

PHMSA and the FRA met with the IVOHMA, on January 17, 2007, to discuss several issues concerning the HMR and containerized hazardous materials cargo that the association and its members believe may be presenting operational difficulties, impediments, and obstacles to efficient and safe intermodal transportation. These issues included inconsistencies between the shipping paper requirements for each mode for documents that can be construed as meeting the HMR shipping paper requirements, “such as work orders, dock receipts or train consists,” and determining which shipping document is considered legally in control of the shipment. The IVOHMA also identified two problems associated with the train consist. The first problem is §§ 174.24 and 174.26 do not require that the agency or person be identified that corresponds to the emergency response information telephone number on the document. The HMR requires this information on a shipping paper document under § 172.604(b). The IVOHMA states “valuable time is often lost” while emergency responders using these telephone numbers or inspectors checking their validity track down the correct individual and/or organization associated with a specific telephone number. The IVOHMA also states a similar problem occurs when international telephone numbers are offered as the emergency response telephone number that provides access from the United States to the emergency responder, and includes delays that occur obtaining a telephonic connection while using the international access codes. The second problem is the

emergency response telephone number needs to be accessible by all the persons associated with the transport of the shipment, such as those carriers trying to obtain information to respond to a shipboard emergency.

To address these concerns, the IVOHMA submitted proposed regulatory language that would define the term "interlining carrier" in § 171.8, establish requirements for "interlining carrier documents" in a new § 172.206, and make several additional related revisions concerning shipping papers and emergency response information in §§ 172.204(d), 172.604(a), and 174.26(b). Although the petition the IVOHMA submitted primarily concerned the transportation of containerized hazardous materials between railcars and vessels, the regulatory language the IVOHMA proposed would apply to interlining carriers in all modes. This rulemaking applies to rail transportation only. Therefore, PHMSA determined proposing regulations that apply to carriers in all modes would exceed the scope of this rulemaking. PHMSA considered revising the IVOHMA's proposals to limit them to rail transport only with the possibility of considering their application to other modes of transport in a future rulemaking. However, FRA determined the IVOHMA's proposals are not needed because the language in existing § 174.24(a) applies to the transfer of all interlining documents. This section requires that each person accept a hazardous material for rail transportation or transport a hazardous material by rail only if that person has received a shipping paper for that material. If the material is excepted from the shipping paper requirements under the HMR, this section does not apply. PHMSA requests public comment not only on the proposals in this rulemaking, but on IVOHMA's suggestions not included in this rulemaking and on the possible effects EDI may have on distributing hazardous materials shipping paper information if its use is permitted in all modes of transport. Based on the comments received, PHMSA may consider the use of EDI in other modes of transport in a future rulemaking.

Petition No. P-1567

PHMSA adopted standards for portable tanks in container-on-flat-car (COFC) or trailer-on-flat-car (TOFC) service under § 174.63 and other sections of the HMR that meet or exceed the AAR-600 requirements. The petition from the Gold Tank Inspection Service, Inc. (P-1567), requests that PHMSA discontinue the AAR-600

program and amend § 174.63(c) to remove the requirement that portable tanks in COFC or TOFC service comply with the standard "AAR-600" of the Association of American Railroad's (AAR's) Specification for Tank Cars, entitled "Specifications for the Acceptability of Tank Containers," because: (1) The current HMR regulations exceed the AAR 600 requirements; (2) after January 1, 2003, all the specifications for original portable tank construction listed in the AAR 600 standard are not allowed to be built except DOT Specification 60 and International standard 1496-3 portable tanks, which are already covered under §§ 178.255 and 178.274, respectively, of the HMR; and (3) after January 1, 2010, the AAR 600 standard will no longer be needed since, in accordance with § 171.14, all portable tanks will have to meet or exceed the AAR 600 requirements and AAR 600 does not cover portable tank requirements. In a May 20, 2009 letter of clarification PHMSA issued to Robert E. Fronczak, Assistant Vice President, Environment and Hazardous Materials, Association of American Railroads, under Reference No. 09-0125, PHMSA states "most of the portable tanks listed in the AAR-600 standard are prohibited from new construction, although they may remain in service provided they continue to meet the applicable standard," and that "we intend to propose a revision to § 174.63(c) as soon as practicable." The changes Mr. Fronczak described have effectively made the HMR's reference to the AAR-600 standard outdated. Therefore, PHMSA proposes to revise § 173.63(c) to remove its reference to the AAR 600 standard and to require that portable tanks transported in COFC or TOFC service must conform to all HMR requirements applicable to portable tanks in this type of service.

II. Overview of Proposed Amendments

In this NPRM, PHMSA is proposing to incorporate into the HMR provisions that: (a) Establish an alternative tank car qualification program; (b) permit the electronic transmission of shipping paper information; (c) permit straight threads in the clean out and/or inspection port openings of a DOT Specification 110A500W multi-unit tank car tank; (d) permit alternative start-to-discharge pressure requirements for certain DOT Specification 105J500W tank cars containing chlorine; (e) permit alternative pressure relief requirements for pressure relief devices for DOT Specification 105J300W tank cars containing certain flammable liquids; (f) permit certain DOT and AAR specification tank cars with stainless

steel identification plates to have their specification and other required information stamped on the identification plate instead of the tank car head provided certain requirements are met; (g) permit liquefied anhydrous ammonia gas to be measured by a metering device when loaded into a tank car as an alternative to measuring the cars by weight; (h) revise § 179.13(b) to require that rail tank cars with a gross weight that exceeds 263,000 but not 286,000 pounds containing poisonous-by-inhalation (PIH) materials must be approved for use by the Federal Railroad Administration's (FRA's) Associate Administrator for Railroad Safety; and (i) eliminate use of the AAR 600 program concerning the FRA's approval of bulk packagings in COFC and TOFC service that is incorporated into § 174.63(c)(2). PHMSA invites comment on the potential costs and safety benefits associated with the proposals in this NPRM, including any information that may be used in a cost-benefit safety analysis. Each proposal is discussed in greater detail in the following preamble sections.

A. Alternative Tank Car Qualification Program

The FRA established the Alternative Tank Car Qualification Program, also known as TCQ-1, in 1998 in collaboration with the railroad industry and PHMSA under Special Permit DOT-SP 12095. The TCQ-1 program serves as a minimally acceptable framework for owners to qualify their DOT specification and non-specification tank cars and components using requirements in place of those prescribed in 49 CFR Part 180. The TCQ-1 program permits owners to develop tank car inspection requirements specific to their construction and use, provided the FRA has determined the new methods are as safe or safer than those prescribed in the HMR. FRA determined the new program is successful and its use has dramatically increased since its inception. In fact, FRA and PHMSA have determined the industry's use of the TCQ-1 program is so complete that it essentially is the only tank car inspection standard used today. Currently, 559 parties are operating under TCQ-1. PHMSA and FRA are not aware of any incidents that have occurred as a result of the issuance of special permits for the tank car qualification program.

PHMSA and FRA believe incorporating Special Permit DOT-SP 12095 into the HMR will provide an equivalent level of safety for the qualification of both specification and

non-specification rail tank cars, and will reduce the administrative burden of reapplying for this special permit. Therefore, in this NPRM, PHMSA and FRA are proposing to incorporate Special Permit DOT-SP 12095 into the

HMR. This proposal pertains to: marking and stamping; adding new definitions pertaining to tank cars; adding qualifications for tank car inspections and tests; revising the requirements for tank car repairs,

alterations, conversions, and modifications; clarifying recordkeeping requirements; and listing hazardous and other materials corrosive to tanks or service equipment. The following table summarizes the proposed changes:

Number	Section No.	Proposed change to 49 CFR part 180	Proposed change from DOT-SP 12095
1	180.501	Applicability	Existing paragraph (b) is now paragraph (c), and new paragraph (b) and (d) are added to clarify, respectively, the minimally acceptable framework each owner's tank car qualification program must have, and specifies that documents must be made available upon request to FRA or an authorized representative of the U.S. Department of Transportation.
2	180.503 (Definitions)	Bottom shell Corrosive to the tank or service equipment. Defects Design level of reliability and safety. Interior heating system Lining/Coating owner Maintenance Modification Objectively reasonable and articulable belief. Qualification Railworthy, Railworthiness Reactive to the tank or service equipment. Reinforced tank shell butt weld Reinforcing plate Reliability Representation Safety system Service equipment Service equipment owner Tank car owner Top shell Paragraph (b)(2) Paragraph (b)(5)	Not added. This definition already exists in § 171.8. No change. Added to eliminate industry confusion. Minor edits. No change. No change. Minor edits. Added to aid industry compliance. Added to explain the use of this term in § 180.509(b)(4). First sentence states what the term means instead of how to achieve it. Second sentence (essentially unchanged) states how to achieve qualification and emphasizes that "qualification" requires a representation that the process has been completed successfully. Explains the term. When FRA requires a recall of a tank car or series of tank cars it issues a "Railworthiness Directive." Adds reactivity language based on § 173.24(b)(2) and (3). No change. No change. No change. Reworded. No change. Minor edits. Added to clarify the party responsible and to accommodate a growing trend in the industry that the owner of the car may or may not own the service equipment. This is a codification of previous FRA interpretations and statements. Not added. This definition already exists in § 171.8. "Marked" replaces "stamped" to allow for flexibility with regulatory compliance. This TCQ-1 paragraph is omitted but language is used from existing § 180.507(b)(5).
3	180.507	Paragraph (a)(4)	Added last sentence to ameliorate a concern from tank car owners that modifications have been made to their cars without their knowledge; minor edits.
4	180.509	Paragraph (b)(4) Paragraph (c)(1) Paragraph (d) Paragraph (d)(2) Paragraph (d)(3) Paragraph (d)(5) Paragraph (d)(6) Paragraph (e)(1)	Replaced "probable cause" with the wording "objectively reasonable and articulable belief" because the former is a term of art in criminal law and is also used in FRA drug and alcohol regulations. The intent of § 180.509(b)(4) is to create a standard less strict than that of an emergency order, but rigorous enough to compel a tank car owner to reinspect and repair, if necessary, tank cars considered potential hazards irrespective of their periodic test and inspection requirements. Minor edits. Minor edits. Added last sentence for clarity. Added "Corrosion" as specific element for inspection. To insure inclusiveness, added "all closures" as substitute for specific item names. Dropped "operability" test of excess flow valves because it is not a practical test and a successful result might damage the excess valve seat and preclude seating in a future event. Replace "high-stressed structural elements" with the simpler words "structural elements."

Number	Section No.	Proposed change to 49 CFR part 180	Proposed change from DOT-SP 12095
		Paragraph (f)(1) Paragraph (f)(4)	Added the responsibility of the tank car owner for clarity. Added a general prohibition against operating overly thin tank cars; this responsibility is changed from putting it solely on tank car owners who often have no control over the day to day movements of their tank cars.
		Paragraph (g)	Minor edits; removes the language that implies only a "qualified individual" could find a thin tank car and invoke the restrictions in this paragraph.
		Paragraph (h)	No change.
		Paragraph (i)	Minor edits.
		Paragraph (j)	Minor edits; Replaced the wording "after reassembly of a tank car" from Part 180, Subpart F, and "installed on the tank car" with "installed, replaced, or reinstalled on the tank car."
		Paragraph (l)	Minor edits.
		Paragraph (m)	After 12/2010 the requirements of paragraph (m) should have been fulfilled. There may be late tank cars or tank cars with extended alternate inspection intervals; therefore, this provision will be retained for an additional 5-10 years.
5	180.511	Added minor edits; included those in Part 180, Subpart F, to capture requirements for qualifying service equipment.
6	180.513	Paragraph (a) Paragraph (b)	Reworded to encompass the entire AAR Tank Car Manual rather than certain appendices. Added for clarification and as a reminder that tank car or component owners are responsible for verifying compliance with the owner's maintenance instructions.
		Paragraph (c)	Is the same language as existing paragraph (b) from DOT-SP 12095. The last sentence was added for clarification.
7	180.515	Paragraph (a)	Added last sentence to clarify the primacy of dates marked in Appendix C of the AAR Tank Car Manual.
8	180.517	Revised to clarify that marking or retaining the specification on the tank, either after initial construction in paragraph (a) or subsequent qualification in paragraph (b), is the "representation" of "qualification" defined in § 180.503.

Additional provisions from Special Permit DOT-SP 12095 as proposed will be in §§ 179.201-10, 179.220-25, and 180.501, and 180.503, 180.507, 180.509, 180.511, 180.513, 180.515, 180.517, and Appendix D of part 180.

B. Telephone and Electronic Data Interchange Shipping Papers

Special Permit DOT-SP 7616 permits the transmission of shipping paper information by telephone and electronic data interchange (EDI). Special Permit DOT-SP 7616 is currently used by 626 parties. Prior to this special permit, shippers entered information on shipping papers by hand, typewriter, or with the use of a computer and then transmitted these documents by hand, railroad agent, facsimile, or postal system to a train crew or rail yard. These methods were very time consuming. This shipping information would then be entered into the receiver's tracking system, a process that resulted in a large number of key entry errors for hazardous materials shipments.

Starting in the 1960s, many companies began using in-house computer systems and networks to assist with preparing and tracking shipping information, but technological

limitations often prevented or restricted one company's system from communicating with another's. Rail companies and shippers attempting to address these issues and find solutions formed the Transportation Data Coordination Committee (TDCC) in 1968, and started publishing standards on EDI in 1975. In the mid-1970's, the U.S. Department of Transportation (USDOT) issued Exemption DOT-E 7616 to permit railroad companies to "certify" their shipping papers for hazardous materials by permitting the shipper to leave a "voice" message stating that a hazardous materials shipment loaded on a railcar was being offered for transportation. Eventually, the exemption was revised to allow an "electronic" shipping document to be faxed and later transmitted electronically from computer to computer. Today, EDI standards are used worldwide for most industries that rely on electronic data transfer of information, such as banks, medical institutions, and shipping companies outside of railroad-related businesses.

In consultation with USDOT, the TDCC evolved, and the EDI standards were published as guidelines on electronic data standards for the transportation industry. These

guidelines established format codes and protocols for communicating and verifying the accuracy of electronic information, including hazardous materials information on a shipping paper, for hazardous materials shippers and carriers. Currently, the Accredited Standards "X12" Committee (ACS) of the American National Standards Institute (ANSI) creates standards specifically for EDI. Industry organizations take these standards and modify them to fit the types of electronic transmissions and/or transactions needed by each industry. This is what is done in the railway industry. As a result, there is no one specific standard that includes all the electronic transmissions permitted as EDI.

Special Permit DOT-SP 7616 allows a carrier to accept shipping paper information via telephone (i.e., voice communications) for hazardous material shipments that have been transported by railroad, and authorizes several variations in the certification requirement when this information is transmitted telephonically or through EDI. The Federal Aviation Administration and Federal Motor Carrier Safety Administration have informed PHMSA and FRA that some

inconsistencies exist when these standards are applied between the different transportation modes. Therefore, in this NPRM, PHMSA and FRA are proposing to incorporate into the HMR the provisions for EDI prescribed in Special Permit DOT-SP 7616 and requested in Petition No. P-1497 for any hazardous materials shipment transported by rail only. This will exclude, for example, the use of voice communications as an authorized method for carriers to accept hazardous materials shipping paper information for transporting these shipments by aircraft or motor vehicle. Further, PHMSA and FRA are proposing to allow a signature in the signature block of an EDI form to represent completion of the shipper's certification prescribed under § 172.204. Users of EDI may wish to consult the ANSI's ACS X12 Committee for guidance on EDI transmissions and transactions for electronic shipping documents, along with any other guidance developed on this subject by the Department's agencies, such as the FRA.

PHMSA and FRA are not aware of any incidents that have occurred as a result of the issuance of Special Permit DOT-SP 7616. PHMSA and FRA have also determined the overall effect of the special permit has improved the timely and accurate receipt of hazardous materials information, thereby improving safety. As mentioned earlier in this preamble, the IVOHMA also requested through a petition for rulemaking (P-1497) that PHMSA revise the HMR to include the transmission of shipping documents through EDI. PHMSA and FRA acknowledge that hazardous materials shipping document information is routinely transmitted by computer but no provision in the HMR specifically addresses this. PHMSA and FRA also note that the use of EDI to transmit this information does not eliminate the requirement for the printed copy of a shipping paper to accompany a hazardous materials shipment. PHMSA and FRA specifically request comments on the costs and safety benefits associated with these proposals, as well as the possible effects and/or modifications needed to permit EDI to transmit successfully the shipping paper information for hazardous materials in all transportation modes.

The provisions for Special Permit DOT-SP 7616 and Petition No. P-1497 are proposed in §§ 172.201, 172.202, 172.204, and 172.604. The changes that IVOHMA proposed for § 174.24 are also located in § 172.202; therefore, they are not needed in § 174.24 and we are not proposing to revise that section.

C. Straight Threads on Multi-Unit Tank Cars

Special Permit DOT-SP 14333 authorizes the manufacture, marking, sale and use of a non-DOT specification tank car conforming to all the regulations applicable to the DOT Specification 110A500W multi-unit tank car tank, except that the tank must be equipped with straight threads in the clean-out/inspection port openings instead of the National Gas Taper Threads. Four parties currently use this special permit.

This special permit also permits retrofitting. Section 179.300-13(b) requires that taper threads must be used on the valve opening. In the safety equivalency evaluation for Special Permit DOT-SP 14333, PHMSA and FRA determined that straight threads on the clean-out/inspection port opening would provide an equivalent level of safety. Tapered threads are designed to provide a seal when torqued. The seal is a result of the compression of the male and female threads. Because they compress, there is an inevitable degree of deformation. This deformation decreases the likelihood that a proper seal can be obtained upon subsequent applications. Straight threads are used on connections where a gasket is compressed to create a seal. Therefore, a seal can be obtained by repeated application as long as the gasket has not degraded. The clean-out/inspection port openings are used repeatedly and introduce an opportunity for leaks. The straight threads on these openings help to minimize leaking. Special Permit DOT-SP 14333 limits the use of the straight threads opening to certain high-hazard Division 2.3 (poisonous gas), Division 6.1 (poisonous), and Class 8 (corrosive) hazardous materials, as well as those materials authorized to be transported in DOT Specification 110A500W multi-unit tank car tanks. However, PHMSA and FRA believe straight threads in inspection ports can be used for all hazardous materials authorized to be transported in DOT Specification 110A multi-unit tank car tanks and are proposing this action in this NPRM.

PHMSA and FRA are not aware of any incidents that have occurred as a result of the issuance of this special permit, and believe these provisions, if adopted, will provide an adequate level of safety. Therefore, PHMSA and FRA are proposing to incorporate Special Permit DOT-SP 14333 into the HMR and further allowing straight threads in inspection ports to be used for all hazardous materials authorized to be transported in DOT Specification 110A

multi-unit tank car tanks. The provisions for this special permit are proposed in § 179.300-13(b) for DOT Specification 110A multi-unit tank cars only.

D. Alternative Start-to-Discharge Pressure Requirements for Tank Cars Containing Chlorine

Special Permit DOT-SP 14622 authorizes the transportation of certain DOT Specification 105J500W tank cars containing chlorine that have start-to-discharge settings that do not meet the regulatory requirements for pressure relief devices. Three parties currently use this special permit.

In its original application for this special permit, Occidental Chemical Corporation (OxyChem) requested relief from § 179.15(b) to allow tank cars in chlorine service to be equipped with combination pressure relief valves (PRV) with a set pressure of 360 pounds per square inch (psi) rather than the required set pressure of 356 psi. OxyChem justified its request based on its history of operating tank cars safely in a manner similar to what it was requesting. OxyChem also based its request on the HMR's regulatory history prior to the final rule issued under Docket No. HM-216, effective on October 1, 1996 (61 FR 28666; 61 FR 38642; 61 FR 50252), which permitted DOT Specification 105J500W tank cars used to transport chlorine to be equipped with a PRV with a set pressure of 356 psi.

The FRA conducted an evaluation of the level of safety provided by the terms and allowances of Special Permit DOT-SP 14622. As part of this evaluation, FRA staff contacted the Chlorine Institute, which represents all of the companies that are a party to this special permit. The Chlorine Institute reported it has not received a report of any incident related to the conditions allowed under Special Permit DOT-SP 14622. In addition, the Chlorine Institute found the PRV setting does not affect the standard start-to-discharge pressure that is the basis for the flow rating pressure. The flow rating pressure, in turn, is used to calculate the required PRV flow capacity. Therefore, the FRA finds the valve is sized appropriately for the required design conditions.

The FRA has one safety concern related to Special Permit DOT-SP 14622. If the relief discs or pins burst or break within their tolerances, there is the potential that the valve will be exposed to the lading and its vapor for an extended period of time. A rupture disc or breaking pin is used in conjunction with a reclosing PRV to

provide a barrier between the valve and its components from the lading and the vapor of the lading, as exposure to these can lead to corrosion and ultimately the malfunctioning of the valve.

Furthermore, the FRA believes it is important that combination PRVs are equipped with “tell-tale devices” located outboard (outside) of the rupture disc (or breaking pin) and inboard (inside) of the valve. When the disc or breaking pin is intact, the valve indicates no pressure. If the disc or pin has been compromised, the valve will show an elevated pressure. An operator inspecting the condition of the tell-tale device can determine if the rupture disc or breaking pin has been compromised.

A rupture disc has a rated pressure burst-pressure tolerance of $+/- 5$ percent. A breaking pin has a rated pressure burst-pressure tolerance of $+/- 10$ percent (see ASME Section VIII, UG-126 Pressure Relief Valves). An evaluation of the special permit relative to both the rupture disc and breaking pin is provided in the following paragraph.

Special Permit DOT-SP 14622 allows for the PRV to have a set pressure of 360 psi. The special permit allows the burst pressure of the relief device to be 96 percent of the start-to-discharge pressure rather than the required maximum of 95 percent. As stated earlier, the set pressure in SP-14622 is within the rated pressure burst tolerance of the rupture disc and rated pressure burst tolerance of the breaking pin described earlier in this paragraph. However, it is possible that a rupture disc could burst at the limit of its negative tolerance at 356 psi. In this case, the valve with a set pressure of 360 psi would be undetected and exposed to the lading or the vapor of the lading. While this sequence is possible, the negative effects to the valve are very limited. This can be demonstrated by reviewing the thermodynamic properties of chlorine and the time needed to increase the vapor pressure of the chlorine to the set pressure of the PRV. Based on the vapor pressure-temperature relationship of chlorine, the temperature of chlorine at a vapor pressure of 356 psi is approximately 165 °F and its temperature at 360 psi is approximately 170 °F. It is evident that as the temperature of chlorine increases, the vapor pressure of the chlorine also increases at a slightly faster rate.

A pool fire represents the only scenario in which the temperature of chlorine in a tank could reach 165 °F. In this scenario, the heat input is so great that the specific heat and heat of vaporization requirements would be met quickly and raise the temperature and

the respective vapor pressure of the chlorine in the tank car to a level that would actuate the PRV, causing the PRV to function and vent the pressure in the tank. Under these hazardous conditions, corrosion of the PRV body and components are very minor considerations.

Regarding the breaking pin, as stated earlier, the rated pressure tolerance is $+/- 10$ percent. Both the start-to-discharge pressure requested in Special Permit DOT-SP 14622 and required in the HMR are within the design tolerance of the breaking pin. As a result, neither poses a greater risk to the safe operation of the relief valve and tank car.

Based on this analysis, PHMSA and FRA believe operation of a tank car under the terms of Special Permit DOT-SP 14622 provides a level of safety that is equivalent to that of a similar tank car operated under the HMR. Therefore, we propose to adopt this requirement into the HMR. The provisions for this special permit are proposed in § 173.314(k)(2).

E. Alternative Pressure Relief Requirements for Pressure Relief Devices for Tank Cars Containing Certain Flammable Liquid Materials

Special Permit DOT-SP 11184 authorized the transportation in commerce of certain Class 3 materials in DOT Specification 105J300W tank cars with a pressure relief device rated at 25 percent of tank test pressure. The commodities authorized under this special permit were typically shipped in general purpose (GP) tank cars (e.g., DOT Specification 111A100W). In 1996, PHMSA, then known as the Research and Special Programs Administration, added § 179.15 to the HMR in a final rule it issued on June 5, 1996, under Docket No. HM-216 (61 FR 28666). In paragraph (b)(2)(i) of that section, the agency added the requirement that reclosing pressure relief devices in tank cars, other than DOT Class 106, 107, 110, and 113 tank cars, may not have a start-to-discharge pressure setting lower than 5.17 Bar (75 psig) or higher than 33 percent of the minimum tank burst pressure, a range that included the 25 percent of tank test pressure relief device rating required in paragraph 2.a of DOT-SP 11184. As a result, DOT-SP 11184 was no longer needed and PHMSA let it expire. When it was active, 21 parties used this special permit.

PHMSA and FRA are discussing DOT-SP 11184 in this NPRM to clarify that the rulemaking action issued under Docket No. HM-216 eliminated the need for this special permit, and to emphasize that this revision improved safety in two ways. First, it lowered the

start-to-discharge pressure for the PRV, which allowed the car to vent at lower pressures when in an overheated condition—such as a pool fire. Commodities listed in this special permit when exposed to extreme heat and pressure will undergo rapid polymerization that could result in an energetic and catastrophic failure of the tank car. Second, the DOT Specification 105J300W tank car’s thicker shell and head will result in the tank car having a significantly greater survivability than its GP tank car counterparts. PHMSA and FRA have determined these revisions to the HMR are performing satisfactorily; therefore, we are expiring this special permit. PHMSA and FRA are not aware of any incidents that have occurred as a result of the issuance of Special Permit DOT-SP 11184.

F. Transportation in Commerce of Certain Tank Cars With Identification Plates in Lieu of Stamping the Tank Car Heads

Special Permit DOT-SP 12905 permits certain DOT and AAR specification tank cars with stainless steel identification plates to have their specification and other required information stamped on the identification plate instead of the tank car heads if certain requirements are met. The AAR requires all cars built after December 31, 2003, to be equipped with identification plates as specified in Appendix C, paragraph 4.0. Additionally, for several years manufacturers have built portable tanks and cargo tanks with a data plate containing all pertinent information related to the construction of the tank. Incorporating Special Permit DOT-SP 12905 into the HMR will bring the railcar data identification in line with the AAR standards and the portable tank and cargo tank industries. Also, FRA acknowledges that stamping this information into the tank car wall may introduce a defect into its steel. Although minimal, stamping results in a stress concentration in the area of the stamp. Use of a data plate would eliminate this defect. Currently, 22 parties use this special permit.

PHMSA and FRA are not aware of any incidents that have occurred as a result of the issuance of Special Permit DOT-SP 12905. PHMSA and FRA believe that incorporating this special permit into the HMR will provide an equivalent level of safety for the qualification of both specification and non-specification rail tank cars. AAR tank cars are required to have an identification plate after December 31, 2011. Therefore, PHMSA and FRA are proposing to amend the HMR to require tank cars to

have a stamped identification plate one year after the publication date of the final rule issued as a result of this proposed rulemaking. We propose to adopt this requirement into new section § 179.24 and existing sections §§ 179.100–20, 179.200–24, 179.201–10, and 179.220–25 of the HMR.

G. Measuring Liquefied Gases Loaded into a Tank Car With Metering Devices as an Alternative to Measuring These Cars by Weight

Special Permit DOT–SP 9388 authorizes the transportation in commerce of DOT specification tank cars that have “UN 1005, Ammonia, anhydrous, 2.2 (non-flammable gas)” liquefied gas measured by a metering device when loaded into the tank. Although anhydrous ammonia is defined as meeting both a Division 2.3 (poisonous gas) and Class 8 (corrosive) hazard class under the United Nations Recommendations on the Transport of Dangerous Goods, International Civil Aviation Organization Technical Instructions on the Transport of Dangerous Goods by Air, and International Maritime Dangerous Goods Code, the HMR permits anhydrous ammonia to be defined as meeting the Division 2.2 hazard class in domestic transportation only. For increased safety, DOT–SP 9388 requires that each of these tank cars must be loaded and unloaded using procedures that specify at a minimum: Employee safety equipment; proper signage; set brakes and installed wheel blocks; an examination of the tank and/or jacket, its undercarriage assembly, hoses, connections, valves, and accessories inside the loading dome for damage; recording of defects; certification of inspection and completion of loading and/or unloading procedures, as well as other recordkeeping requirements. PHMSA and FRA propose to incorporate these requirements in new § 173.314(e)(2)(i). Also, DOT–SP 9388 requires that one out of every 10 tanks cars must have the metered gauge verified with the tank car gauge in accordance with certain procedures to determine the current capacity of the car. PHMSA and FRA propose to incorporate these procedures in new § 173.314(e)(2)(ii). Although Special Permit DOT–SP 9388 is currently expired, 28 parties previously used it. Since the original issuance of DOT–SP 9388, flow meter technology is much more accurate and reliable.

PHMSA and FRA are not aware of any incidents that have occurred as a result of the issuance of this special permit. PHMSA and FRA believe that incorporating this special permit into

the HMR will provide an equivalent level of safety for the qualification of both specification and non-specification rail tank cars. Therefore, we propose to adopt this requirement, with the additions noted above, into § 173.314(e) of the HMR.

H. Approval for Gross Weight on Rail Tank Cars

Special Permits DOT–SP 11241, 11654, 11803, 12423, 12561, 12613, 12768, 12858, 12903, 13856, 13936, 14004, 14038, 14442, 14505, 14520, 14570, and 14619, allowed rail tank cars with a gross weight on rail that exceeded 263,000 pounds but not exceeding 286,000 pounds to be used to transport certain hazardous materials provided the tank car is approved by the FRA’s Associate Administrator for Railroad Safety. PHMSA adopted these special permits, along with several others, in a final rule issued under Docket No. PHMSA–2009–0289 (HM–233A; 75 FR 27205, 5/14/2010) because they were widely used and had established safety records. However, the final rule erroneously omitted from § 179.13(b) a provision to require FRA approval for those gross-weight-on-rail tank cars authorized to contain materials that are poisonous-by-inhalation. PHMSA is proposing to correct this omission in this rulemaking by revising § 179.13(b) to add the FRA approval statement.

I. Reference to the Association of American Railroads AAR 600 Program

The AAR Tank Car Committee and the AAR Hazardous Materials Committee have recommended the discontinuance of the AAR 600 program as incorporated in § 174.63(c)(2). Currently, this program requires that a bulk packaging, including a portable tank, transported in COFC or TOFC service must conform to the conditions specified in § 174.63 of the HMR. These regulations require approval by FRA’s Associate Administrator for Railroad Safety, unless, among other things, the tank conforms to requirements in AAR 600 of the AAR Specifications for Tank Cars, “Specifications for Acceptability of Tank Containers.” In accordance with AAR 600, approval and registration of compliant portable tanks is required based on a determination that the tank meets all applicable standards and payment of a registration fee.

Since incorporation of the AAR 600 standard into the HMR, PHMSA has adopted standards for portable tanks that meet or exceed the AAR 600 requirements. The AAR committees believe that the current HMR portable tank regulations have now exceeded the

AAR 600 requirements and that all of the specifications for original construction listed in the AAR 600 Standard were not allowed to be built after January 1, 2003, except for the DOT Specification 60 and other United Nations (UN) portable tanks that are authorized in the HMR. As stated earlier in this rulemaking, PHMSA agreed with the AAR proposal in a letter dated May 20, 2009 and stated we would propose a revision to § 174.63(c). As also discussed earlier in this preamble, PHMSA received a petition (P–1567) dated July 9, 2010, from Gold Tank Inspection Services, Inc., requesting the removal of the reference to the AAR 600 program in § 174.63 because the HMR now includes standards for portable tanks that meet or exceed AAR 600 requirements. Accordingly, in this NPRM, PHMSA is proposing to require that portable tanks transported in COFC or TOFC service must conform to all HMR requirements applicable to portable tanks. Consistent with this proposed revision, PHMSA is proposing to remove the reference in § 171.7(a)(3) to § 173.63 under the listing “AAR Manual of Standards and Recommended Practices, Section C–Part III, Specifications for Tank Cars, Specification M–1002, (AAR Specifications for Tank Cars), December 2000.”

III. Rulemaking Analyses and Notices

A. Statutory/Legal Authority for This Rulemaking

This NPRM is published under the authority of 49 U.S.C. 5103(b) which authorizes the Secretary to prescribe regulations for the safe transportation, including security, of hazardous material in intrastate, interstate, and foreign commerce. 49 U.S.C. 5117(a) authorizes the Secretary of Transportation to issue a special permit from a regulation prescribed in sections 5103(b), 5104, 5110, or 5112 of the Federal Hazardous Materials Transportation Law to a person transporting, or causing to be transported, hazardous material in a way that achieves a safety level at least equal to the safety level required under the law, or consistent with the public interest, if a required safety level does not exist. If adopted as proposed, the final rule would amend the regulations incorporating provisions from certain widely used and longstanding special permits that have established a history of safety and which may, therefore, be converted into the regulations for general use.

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

This proposed rule is not considered a significant regulatory action under section 3(f) and 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 Department of Transportation [44 FR 11034].

Executive Orders 12866 (“Regulatory Planning and Review”) and 13563 (“Improving Regulation and Regulatory Review”) 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.” In this notice, PHMSA proposes to amend the HMR by incorporating alternatives this agency has permitted under widely used and longstanding special permits with established safety records that we have determined meet the safety criteria for inclusion in the HMR. Incorporation of these special permits into regulations of general applicability will provide shippers and carriers with additional flexibility to comply with established safety requirements, thereby reducing transportation costs and increasing productivity. In addition, the proposals in this NPRM will reduce the paperwork burden on industry and this agency caused by continued renewals of special permits. The provisions of this proposed rule will promote the continued safe transportation of hazardous materials while reducing transportation costs for the industry and administrative costs for the agency. Therefore, the requirements of Executive Orders 12866 and 13563, and the DOT policies and procedures concerning these orders have been satisfied.

C. Executive Order 13132

This proposed rule was analyzed in accordance with the principles and criteria contained in Executive Order 13132 (“Federalism”). This proposed rule would 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 governments. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply. Federal hazardous material transportation law, 49 U.S.C. 5101, *et*

seq., contains an express preemption provision (49 U.S.C. 5125(b)) preempting state, local and Indian Tribe requirements on certain covered subjects. Covered subjects are:

- (1) The designation, description, and classification of hazardous material;
- (2) The packing, repacking, handling, labeling, marking, and placarding of hazardous material;
- (3) The preparation, execution, and use of shipping documents related to hazardous material and requirements related to the number, contents, and placement of those documents;
- (4) The written notification, recording, and reporting of the unintentional release in transportation of hazardous material; or
- (5) The designing, manufacturing, fabricating, marking, maintaining, reconditioning, repairing, or testing of a package, container or packaging component that is represented, marked, certified, or sold as qualified for use in transporting hazardous material in commerce.

This proposed rule addresses covered subject items (2), (3), and (5) and would preempt any State, local, or Indian Tribe requirements not meeting the “substantively the same” standard. Federal hazardous materials transportation law provides at 49 U.S.C. 5125(b)(2) that if PHMSA issues a regulation concerning any of the covered subjects, PHMSA must determine and publish in the **Federal Register** the effective date of Federal preemption. The effective date may not be earlier than the 90th day following the date of issuance of the final rule and not later than two years after the date of issuance. PHMSA proposes the effective date of Federal preemption be 90 days from publication of a final rule in this matter in the **Federal Register**.

D. Executive Order 13175

This proposed rule was analyzed in accordance with the principles and criteria contained in Executive Order 13175 (“Consultation and Coordination with Indian Tribal Governments”). Because this proposed rule does not have Tribal implications and does not impose substantial direct compliance costs on Indian Tribal governments, the funding and consultation requirements of Executive Order 13175 do not apply.

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

The Regulatory Flexibility Act (5 U.S.C. 601–611) requires each agency to analyze regulations and assess their impact on small businesses and other small entities to determine whether the

rule is expected to have a significant impact on a substantial number of small entities. The NPRM proposes to amend the HMR to incorporate provisions contained in seven widely used or longstanding railroad special permits that have an established safety record. Although many of the applicants may be small businesses or other small entities, PHMSA believes that the revisions in this proposed rule are intended to provide wider access to the regulatory flexibility offered in special permits and eliminate the need for numerous renewal requests, thus reducing paperwork burdens and facilitating commerce while maintaining an appropriate level of safety. Therefore, PHMSA certifies that the provisions of this NPRM would not have a significant economic impact on a substantial number of small entities.

This proposed rule has been developed in accordance with Executive Order 13272 (“Proper Consideration of Small Entities in Agency Rulemaking”) and DOT’s procedures and policies to promote compliance with the Regulatory Flexibility Act to ensure that potential impacts of draft rules on small entities are properly considered.

F. Paperwork Reduction Act

PHMSA has approved information collections under OMB Control Number 2137–0051, “Rulemaking, Special Permits, and Preemption Requirements,” OMB Control Number 2137–0557, “Approvals for Hazardous Materials,” and OMB Control Number 2137–0559, “(Rail Carriers and Tank Car Requirements) Requirements for Rail Tank Cars—Transportation of Hazardous Materials by Rail. This NPRM may result in a decrease in the annual burden and costs under OMB Control Number 2137–0051 and an increase in the annual burden and costs under OMB Control Number 2137–0557 and OMB Control Number 2137–0559 due to proposed changes to incorporate provisions contained in certain widely used or longstanding special permits that have an established safety record.

Under the Paperwork Reduction Act of 1995, no person is required to respond to an information collection unless it has been approved by OMB and displays a valid OMB control number. 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 and recordkeeping requests.

This notice identifies a revised information collection request that PHMSA will submit to OMB for approval based on the requirements in

this proposed rule. PHMSA has developed burden estimates to reflect changes in this proposed rule. PHMSA estimates that the information collection and recordkeeping burden as proposed in this rule is as follows:

OMB Control No. 2137-0051:	
Decrease in Annual Number of Respondents	255
Decrease in Annual Responses: ..	255
Decrease in Annual Burden Hours	255
Decrease in Annual Burden Costs	\$9,500
OMB Control No. 2137-0557:	
Increase in Annual Number of Respondents	200
Increase in Annual Responses:	200
Increase in Annual Burden Hours	50
Increase in Annual Burden Costs	\$1,100
OMB Control No. 2137-0559:	
Increase in Annual Number of Respondents	350
Increase in Annual Responses	350
Increase in Annual Burden Hours	350
Increase in Annual Burden Costs	\$10,500

PHMSA specifically requests comments on these information collections and recordkeeping burdens associated with developing, implementing, and maintaining these requirements for approval under this proposed rule.

Requests for a copy of this information collection should be directed to Deborah Boothe or Steven Andrews, Standards and Rulemaking Division, (PHH-10), Pipeline and Hazardous Materials Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590-0001, Telephone (202) 366-8553.

Address written comments to the Dockets Unit as identified in the **ADDRESSES** section of this rulemaking. We must receive comments regarding information collection burdens prior to the close of the comment period identified in the DATES section of this rulemaking. In addition, you may submit comments specifically related to the information collection burden to the PHMSA Desk Officer, Office of Management and Budget, at fax number 202-395-6974.

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 may be used to cross-reference this action with the Unified Agenda.

H. Unfunded Mandates Reform Act of 1995

This proposed rule does not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. It does not result in costs of \$141.3 million or more 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 hazardous materials regulatory system is a risk management system that is prevention oriented and focused on identifying a hazard and reducing the probability and quantity of a hazardous materials release. This rulemaking is concerned with the transportation of hazardous materials by rail, but is prepared with the understanding that these materials are often transported by aircraft, vessel, and highway before or after they are transported by rail. The need for hazardous materials to support essential services means transportation of highly hazardous materials is unavoidable. However, these shipments frequently move through densely populated or environmentally sensitive areas where the consequences of an incident could be loss of life, serious injury, or significant environmental damage. The ecosystems that also could be affected by a hazardous materials release during transportation include atmospheric, aquatic, terrestrial, and vegetal resources (for example, wildlife habitats). The adverse environmental impacts associated with releases of most hazardous materials are short-term impacts that can be greatly reduced or eliminated through prompt clean-up of the incident scene. In this NPRM, we are requesting comments on the potential environmental impacts of the proposals.

In all modes of transport, the potential for environmental damage or contamination exists when packages of hazardous materials are involved in transportation incidents. Most of the special permits considered in this rulemaking involve bulk packages of

hazardous materials in DOT specification and non-specification tank cars. While the volume of hazardous material present in these packagings has the potential to be released into the environment during a transportation incident, these packagings are constructed to withstand greater forces during impact and are also equipped with safety relief devices and valves specifically designed to maintain the containment ability of the tank car.

The purpose and need of this rulemaking is to incorporate widely used special permits or those with an established safety record into the HMR for universal use. More information about benefits of the proposed action can be found in the preamble (*i.e.*, "Overview of Proposed Amendments") to this rulemaking. The alternatives considered in the analysis include (1) the proposed action, that is, incorporation of the proposed special permits as amendments to the HMR; (2) incorporation of some subset of the proposed special permits (*i.e.*, only some of the proposed special permits) as amendments to the HMR; and (3) the "no action" alternative, meaning that none of the proposed special permits would be incorporated into the HMR. PHMSA believes that the each of these alternatives would result in equal environmental risk and/or impact because special permits are intended to offer equivalent safety and environmental protection as the HMR.

In considering the potential environmental impacts of the proposed action, PHMSA does not anticipate that the incorporation of the listed special permits will result in any significant impact on the human environment because the process through which special permits are issued requires the applicant to demonstrate that the alternative transportation method or packaging proposed provides an equivalent level of safety as that provided in the HMR. However, PHMSA welcomes and will consider and address comments about foreseeable environmental impacts or risk associated with the incorporation of any proposed special permit. The agencies and persons consulted in the development of this regulatory proposal include the International Vessel Operators Hazardous Materials Association, Inc.; Gold Tank Inspection Services, Inc.; Surface Deployment and Distribution Command (SDDC); Conrail; Agrium N.A. Wholesale Transportation Compliance; Koch Nitrogen Company; Columbiana Boiler Company; and subject matter expert staff in FRA and PHMSA.

Given that this rulemaking proposes to amend the HMR to incorporate provisions contained in certain widely used or longstanding railroad special permits that have an established safety record, these proposed change in regulation would increase safety and environmental protections. There are no significant environmental impacts associated with this proposed rule.

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 at <http://www.regulations.gov>.

List of Subjects

49 CFR Part 171

Exports, Hazardous materials transportation, Hazardous waste, Imports, Reporting and recordkeeping requirements.

49 CFR Part 172

Education, Hazardous materials transportation, Hazardous waste, Labeling, Markings, Packaging and containers, Reporting and recordkeeping requirements.

49 CFR Part 173

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

49 CFR Part 174

Hazardous materials transportation, Radioactive materials, Rail carriers, Railroad safety, Reporting and recordkeeping requirements.

49 CFR Part 179

Hazardous materials transportation, Railroad safety, Reporting and recordkeeping requirements.

49 CFR Part 180

Hazardous materials transportation, Motor carriers, Motor vehicle safety, Packaging and containers, Railroad safety, Reporting and recordkeeping requirements.

In consideration of the foregoing, we propose to amend 49 CFR Chapter I as follows:

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

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

Authority: 49 U.S.C. 5101–5128, 44701; 49 CFR 1.45 and 1.53; Pub. L. 101–410 section 4 (28 U.S.C. 2461 note); Pub. L. 104–134 section 31001.

§ 171.7 [Amended]

2. In the “Table of material incorporated by reference,” at § 171.7(a)(3), for the entry “AAR Manual of Standards and Recommended Practices, Section C—Part III, Specifications for Tank Cars, Specification M–1002, (AAR Specifications for Tank Cars), December 2000, the reference to § 174.63 is removed.

3. In § 171.8, the definition “Train consist” is added in alphabetical order to read as follows:

§ 171.8 Definitions and abbreviations.

* * * * *

Train consist means a written record of the contents and location of each rail car in a train.

* * * * *

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

4. The authority citation for part 172 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; 49 CFR 1.53.

5. In § 172.201, revise paragraph (a)(2) and add paragraph (a)(5) to read as follows:

§ 172.201 Preparation and retention of shipping papers.

(a) * * *

(2) The required shipping description on a shipping paper and all copies of the shipping paper used for transportation purposes must be legible and printed (manually or mechanically) in English.

* * * * *

(5) *Electronic shipping papers.* For transportation by rail, a rail carrier may accept shipping paper information either telephonically (*i.e.*, voice communications and facsimiles) or electronically (EDI) from an offeror of a hazardous materials shipment in accordance with the provisions in paragraphs (a)(5)(i) through (v) of this section. For the purposes of this section *electronic data interchange* (EDI) means

the computer-to-computer exchange of business data in standard formats. In EDI, information is organized according to a specific format (electronic transmission protocol) agreed upon by the sender and receiver of this information, and transmitted through a computer transaction that requires no human intervention or retyping at either end of the transmission.

(i) When the information applicable to the consignment is provided under this requirement the information must be available to the shipper and carrier at all times during transport, and the carrier must have and maintain a printed copy of this information until delivery of the hazardous materials on the shipping paper is complete. When a paper document is produced, the data must be presented as required by this subpart.

(ii) The offeror must forward the shipping paper (record) for a loaded movement to the carrier prior to shipment unless the carrier prepares the shipping paper on behalf of the offeror. The offeror is only relieved of the duty to forward the shipping paper once the offeror has received a copy of the shipping paper from the carrier;

(iii) A carrier that generates a residue shipping paper using information from the previous loaded movement of a hazardous materials packaging must ensure the description of the hazardous material that accompanies the shipment complies with the offeror's request;

(iv) *Verification.* The carrier and the offeror must have a procedure by which the offeror can verify accuracy of the transmitted hazard communication information that will accompany the shipment; and

(v) *Retention.* The shipping document that is generated must be retained in conformance with § 172.201(e).

* * * * *

6. In § 172.202, paragraph (b) is amended by adding a third sentence to read as follows:

§ 172.202 Description of hazardous material on shipping papers.

* * * * *

(b) * * * Shipping descriptions for hazardous materials offered or intended for transportation by rail that contain all the information required in this subpart and that are formatted and ordered in accordance with recognized electronic data interchange standards and, to the extent possible, in the order and manner required by this subpart are deemed to comply with this paragraph.

* * * * *

7. In § 172.204 paragraph (a) introductory text, a sentence is added to the end and paragraphs (a)(3) and (d)(3) are added to read as follows:

§ 172.204 Shipper's certification.

(a) * * * For transportation by rail only, the certification may be received verbally or with abbreviated written language in conformance with paragraphs (a)(3)(i) and (ii) of this section.

* * * * *

(3) *Rail only certifications.* For transportation by rail, the shipping paper certification may also be accomplished by one of the following methods:

(i) *Verbal certification.* When received telephonically, by the carrier reading the complete shipping description that will accompany the shipment to the offeror and receiving verbal acknowledgment that the description is as required. This verbal acknowledgement must be recorded, either on the shipping document or in a separate record, *e.g.*, the train consist, in accordance with § 174.24, and must include the date and name of the person who provided this information; or

(ii) *Written abbreviated certification.* When transmitted electronically, by including the following abbreviated certification, in lieu of the full certification: “* * *, on behalf of shipper [or “offeror”] avers [or “declares”] certification specified in § 172.204(a).” The name of the principal partner, officer, or employee of the offeror or his agent must be substituted for the asterisks;

* * * * *

(d) * * *

(3) For transportation by rail, when transmitted by telephone or electronically, the signature may be in one of the following forms: the name of the principal person, partner, officer, or employee of the offeror or his agent in a computer field defined for that purpose.

8. In § 172.604, paragraphs (a) introductory text and (a)(3)(ii) are revised to read as follows:

§ 172.604 Emergency Response Telephone Number.

(a) A person who offers a hazardous material for transportation must provide an emergency response telephone number, including the area code, for use in an emergency involving the hazardous material. For telephone numbers outside the United States, the international access code or the “+” (plus) sign, country code, and city code, as appropriate, that are needed to complete the call must be included. The telephone number must be—

* * * * *

(3) * * *

(ii) Entered once on the shipping paper in the manner prescribed in

paragraph (b) of this section in a prominent, readily identifiable, and clearly visible manner that allows the information to be easily and quickly found, such as by highlighting, use of a larger font or a font that is a different color from other text and information, or otherwise setting the information apart to provide for quick and easy recognition. This provision may be used only if the telephone number applies to each hazardous material entered on the shipping paper, and if it is indicated that the telephone number is for emergency response information (for example: “EMERGENCY CONTACT: * * *”).

* * * * *

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

9. The authority citation for part 173 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; 49 CFR 1.45, 1.53.

10. In § 173.314, paragraph (e) is redesignated as (e)(1) and its first sentence is revised, paragraph (k) is redesignated as (k)(1), and paragraphs (e)(2) and (k)(2) are added to read as follows:

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

* * * * *

(e) *Verification of content.* (1) The amount of liquefied gas loaded into each tank may be determined either by measurement or calculation of the weight, except that DOT specification tank car tanks authorized for the transportation of ammonia solution and anhydrous ammonia may have the amount of liquefied gas loaded into the tank car measured by a metering device in conformance with paragraph (e)(2) of this section. * * *

(2) *Metering device.* (i) *Loading procedures.* Tank cars loaded with a metering device in conformance with this section are not required to be weighed, but must have their outage measured with a magnetic gauging device to determine that the tank car is properly loaded in compliance with this subchapter. Each tank car using a metering device must be loaded using the following procedures. A copy of these procedures must be available at each location where such loading takes place. Certification in writing of the inspection and completion of these loading and/or unloading procedures must be maintained for each tank car loaded with a metering device and maintained in accordance with the recordkeeping requirements in

paragraph (e)(2)(iii) of this section, and all necessary records must be completed. At a minimum, these procedures will specify:

(A) The minimum safety equipment that must be worn by each employee performing a loading and unloading task under this paragraph (e)(2). The equipment must be designed to protect employees from the dangers associated with exposure to and contact with the hazardous material and must also comply with the laws of the Department of Labor's Occupational Safety and Health Administration, and the state and local laws of the jurisdiction where the task is being performed.

(B) That prior to loading a rail tank car all truck brakes must be set and chock blocks installed on one set of truck's wheels, and the rail tank car must be properly spotted and signed, and the tank visually inspected for any sign of damage in the—

- (1) Hoses, connections, and valves;
- (2) Truck and rail car under carriage assemblies;
- (3) Tank and/or jacket; and
- (4) Accessories inside of loading dome.

(C) Any defects found must be recorded, and the tank must not be loaded until the repairs to eliminate each defect are completed.

(D) The tank car must be allowed to sit undisturbed for at least 10 minutes after loading to allow material within the tank to settle. After this has occurred a final check for leaks must be conducted prior to closing the dome cover and properly inserting the dome pin.

(ii) *Verification.* One out of every 10 tank cars loaded by the use of the metering device must be gauged utilizing the fixed gauging equipment on the tank car to verify by calculation the amount of ammonia solution or anhydrous ammonia contained in the tank car.

(iii) *Recordkeeping.* The following information must be maintained and be made available to any representative of the DOT upon request for each tank car loaded with the use of a metering device:

- (A) Date loaded,
- (B) Date shipped,
- (C) Tank car reporting marks,
- (D) DOT Specification,
- (E) Tank car stenciled shell capacity (gallons),
- (F) Tank car stenciled tare weight (pounds),
- (G) Outage or innage table number,
- (H) Water capacity of tank car (pounds),

(I) Maximum permitted filling density (see § 173.314, Table note 1),

(J) Specific gravity of NH₃ (@105 °F = 0.5796 and @115 °F = 0.5706),

(K) Tank car outage (inches/gallons),

(L) Gallons of liquid ammonia in tank car,

(M) Quantity of vapor ammonia in tank car, and

(N) Total calculated ammonia (liquid & vapor) in tank car (pounds).

* * * * *

(k) * * *

(2) DOT105J500W tank cars may be used as authorized packagings, as prescribed in this subchapter for transporting "Chlorine, 2.3 (8), UN 1017, Poison Inhalation Hazard, Zone B, RQ," if the tank cars meet all DOT specification requirements and the tank cars are equipped with combination safety relief valves with a start-to-discharge pressure of 360 psi, rather than the 356 psi. The start-to-discharge pressure setting must be marked on the pressure relief device in conformance with the AAR Specification for Tank Cars (IBR, see § 171.7 of this subchapter).

* * * * *

PART 174—CARRIAGE BY RAIL

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

Authority: 49 U.S.C. 5101–5128; 49 CFR 1.53.

§ 174.63 [Amended]

12. In § 174.63(c)(2) is removed and reserved.

PART 179—SPECIFICATIONS FOR TANK CARS

13. The authority citation for part 179 is revised to read as follows:

Authority: 49 U.S.C. 5101–5128; 49 CFR 1.53.

14. In § 179.13, paragraph (b) is revised to read as follows:

§ 179.13 Tank car capacity and gross weight limitation.

* * * * *

(b) Tank cars containing poisonous-by-inhalation material meeting the applicable authorized tank car specifications listed in § 173.244(a)(2) or (3), or § 173.314(c) or (d) may have a gross weight on rail of up to 286,000 pounds upon approval by the Associate Administrator for Railroad Safety, FRA. Tank cars exceeding 263,000 pounds and up to 286,000 pounds gross weight on rail must meet the requirements of AAR Standard S–286, Free/Unrestricted Interchange for 286,000 lb Gross Rail Load Cars (IBR, see § 171.7 of this subchapter). Any increase in weight above 263,000 pounds may not be used

to increase the quantity of the contents of the tank car.

15. In Subpart B, add § 179.24 to read as follows:

§ 179.24 Stamping.

(a)(1) After December 31, 2011, to certify compliance with Federal requirements, the tank manufacturer must install two identical permanent identification plates, one located on both inboard surfaces of the "A" (*i.e.*, opposite) end of the tank car. One identification plate must be installed on the right side (AR) of the tank car, and the other must be installed on the back end left side (BL) body bolster webs so that each plate is readily accessible for inspection. The plates must be at least 3/32-inch thick and manufactured from corrosion resistant metal. When the tank jacket (flashing) covers the body bolster web and identification plates, additional identical plates must be installed on the AR and BL corners of the tank in a visible location. Tank cars built before December 31, 2011, may have the plate instead of or in addition to the stamping.

(2) Each plate must be stamped, embossed, or otherwise marked by an equally durable method in letters 3/16-inch high with the following information (parenthetical abbreviations may be used, and the AAR form reference is to the AAR Specifications for Tank Cars, December 2000 edition (IBR, see § 171.7 of this subchapter)):

(i) *Tank Manufacturer (Tank MFG)*: Full name of the car builder as shown on the certificate of construction (AAR form 4–2).

(ii) *Tank Manufacturer's Serial Number (SERIAL NO)*: For the specific car.

(iii) *AAR Number (AAR NO)*: The AAR number from line 3 of AAR Form 4–2.

(iv) *Tank Specification (SPECIFICATION)*: The specification to which the tank was built from line 7 of AAR form 4–2.

(v) *Tank Shell Material/Head Material (SHELL MATL/HEAD MATL)*: ASTM or AAR specification of the material used in the construction of the tank shell and heads from lines 15 and 16 of AAR Form 4–2. For Class DOT–113W, DOT–115W, AAR–204W, and AAR–206W, the materials used in the construction of the outer tank shell and heads must be listed. Only list the alloy (*e.g.*, 5154) for aluminum tanks and the type (*e.g.*, 304L or 316L) for stainless steel tanks.

(vi) *Insulation Material (INSULATION MATL)*: Generic names of the first and second layer of any thermal protection/insulation material applied.

(vii) *Insulation Thickness (INSULATION THICKNESS)*: In inches.

(viii) *Underframe/Stub Sill Type (UF/SS DESIGN)*: The design from Line 32 of AAR Form 4–2.

(ix) *Date of Manufacture (DATE OF MFR)*: The month and year of tank manufacture. If the underframe has a different built date than the tank, then show both dates.

(3) When a modification to the tank changes any of the information shown in paragraph (a)(2) of this section, the car owner or the tank car facility making the modification must install an additional variable identification plate on the tank in accordance with paragraph (a)(1) of this section showing the following information:

(i) *AAR Number (AAR NO)*: The AAR number from line 3 of AAR Form 4–2 for the alteration or conversion.

(ii) All items of paragraph (a)(2) of this section that were modified, followed by the month and year of modification.

(b) [Reserved]

16. In § 179.100–20, paragraph (b) is added to read as follows:

§ 179.100–20 Stamping.

* * * * *

(b) Authorized DOT tank cars with stainless steel identification plates must have their DOT Specification and other required information stamped plainly and permanently on their identification plate in conformance with the applicable requirements prescribed in § 179.24(a).

17. In § 179.200–24, paragraph (c) is added to read as follows:

§ 179.200–24 Stamping.

* * * * *

(c) Authorized DOT non-pressure tank car tanks with stainless steel identification plates may have their DOT Specification and other required information stamped plainly and permanently on their identification plate instead of into the metal of the tank in conformance with the applicable requirements prescribed in § 179.24(a).

18. In § 179.201–10, paragraph (b) is added to read as follows:

§ 179.201–10 Water capacity marking.

* * * * *

(b) After December 31, 2011, authorized DOT non-pressure tank cars that comply with this section and are equipped with stainless steel identification plates may have the water capacity of the tank in pounds prescribed in the first sentence of paragraph (a) of this section stamped plainly and permanently on their identification plate instead of into the

metal of the tank, or immediately below the stamped marks specified in § 179.200–24(a) in conformance with the applicable marking requirements prescribed in § 179.24(a).

19. In § 179.220–25, the existing text is redesignated as paragraph (a) and paragraph (b) is added to read as follows:

§ 179.220–25 Stamping.

* * * * *

(b) Authorized Class DOT–115 non-pressure tank car tanks with stainless steel identification plates may have their DOT Specification and other required information stamped plainly and permanently on their identification plate instead of into the metal of the tank in conformance with the applicable requirements prescribed in § 179.24(a).

20. In § 179.300–13, paragraph (b) is revised to read as follows:

§ 179.300–13 Venting, loading and unloading valves.

* * * * *

(b) Threads for openings must be National Gas Taper Threads (NGT) tapped to gauge, clean cut, even and without checks. Threads for the clean-out/inspection ports of DOT Specification 110A multi-unit tank car tanks may be straight threads instead of taper threads. The straight threads must meet the requirements of § 178.61(h)(3)(i) and (iii). Taper threads must comply with § 178.61(h)(3)(i) and (ii). Hex plugs may be secured to threaded boss ports using stainless steel safety wire of adequate strength and design for its intended use.

PART 180—CONTINUING QUALIFICATION AND MAINTENANCE OF PACKAGINGS

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

Authority: 49 U.S.C. 5101–5128; 49 CFR 1.53.

22. Revise § 180.501 to read as follows:

§ 180.501 Applicability.

(a) This subpart prescribes requirements, in addition to those contained in parts 107, 171, 172, 173, 174, and 179 of this subchapter, applicable to any person who manufactures, fabricates, marks, maintains, repairs, inspects, or services tank cars to ensure continuing qualification.

(b) This subpart also establishes the minimum acceptable framework for an owner’s qualification program for tank cars and components. Owners should follow this subpart in developing their written procedures (work instructions), as required under § 179.7(d), for use by tank car facility employees. The owner’s qualification program for each tank car, or a fleet of tank cars, must identify where to inspect, how to inspect, and the acceptance criteria. Tank car facilities must incorporate the owner’s qualification program in their quality assurance program, as required under § 179.7(a)(2), (b)(3), and (b)(5).

(c) Any person who performs a function prescribed in this part must perform that function in accordance with this part.

(d) Where, in this subpart, a person is required to make documents available to FRA upon request, such request means that credentialed FRA personnel or an authorized representative of the Department may view the documents and make copies of them. The document owner’s may seek confidential treatment of the documents presented. See § 105.30.

23. Revise § 180.503 to read as follows:

§ 180.503 Definitions.

The following definitions and those contained in §§ 171.8 and 179.2 of this subchapter apply:

Corrosive to the tank or service equipment means a material identified in Appendix D of this part or a material when in contact with the inner shell of the tank or service equipment may have a severe corrosion rate on steel or aluminum based on criteria in § 173.137(c)(2).

Defects mean abrasions; corrosion; cracks; dents; flaws in welds; distortions; erosion; missing, damaged, leaking or loose components and fasteners; and other conditions or imperfections that may make a tank car unsafe for transportation and/or require it to be removed from service.

Design level of reliability and safety means the level of reliability and safety built into the tank car and therefore inherent in its specification, design, and manufacture.

Interior heater system means a piping system located within the tank shell that uses a fluid medium to heat the lading for the purposes of unloading.

Lining/Coating owner means the person responsible for bearing the costs of maintaining the lining/coating.

Maintenance means inspection, upkeep, or preservation, including ordinary repairs necessary and proper.

Modification means any change to a tank car that affects the certificate of construction prescribed in § 179.5, including an alteration prescribed in § 179.6, or conversion.

Objectively reasonable and articulable belief means a belief based on particularized and identifiable facts that provide an objective basis to believe or suspect that a tank car or a class or design of tank cars may be in an unsafe operating condition.

Qualification, as relevant to a tank car, means the car conforms to the specification to which it was built or modified, to the requirements of this subpart, to the requirements of the AAR Tank Car Manual (IBR, see § 171.7 of this subchapter) and to the owner’s acceptance criteria. Qualification is accomplished by careful and critical examination using inspections and tests based on a written program that verifies conformance, followed by a written representation of that conformance. A tank car that passes the appropriate tests for its specification, has a signed test report, is marked to denote this passage, and is considered qualified for hazardous materials transportation under this subchapter.

Qualification of	Tests and Inspections	§ 180.509(*)
Tank	Visual Inspection	d
	Structural Integrity Inspection	e
	Thickness Test: Note 1	f
	Safety System Inspection	h
	Leakage Pressure Test	j
Service Equipment	Service Equipment	k
Lining/Coating	Linings and Coatings	i

Note 1: Paragraph (f)(2) in § 180.509 of this part may require thickness tests at an interval different from the other items for qualification of the tank.

Railworthy, Railworthiness for a tank car, means that the tank, service equipment, safety systems, and all other components are capable of performing their intended function until their next qualification.

Reactive to the tank or service equipment means a material that, in contact with the inner shell of the tank, or with the service equipment, may react to produce heat, gases, and/or pressure which could substantially reduce the effectiveness of the packaging or the safety of its use.

Reinforced tank shell butt weld means the portion of a butt weld covered by a reinforcing plate.

Reinforcing plate means an attachment welded directly to the tank supporting major structural components for the purpose of preventing damage to the tank through fatigue, overstressing, denting, puncturing, or tearing.

Reliability means the quantified ability of an item or structure to operate without failure for the specified period of its design life or until its next qualification.

Representation means attesting through documenting, in writing or by marking on the tank (or jacket), that a tank car is qualified and railworthy.

Safety system means one or more of the following: thermal protection systems, insulation systems, tank head puncture resistance systems, coupler vertical restraint systems, and systems used to protect discontinuities (e.g., skid protection and protective housings) as required under the HMR.

Service equipment means equipment used for loading and unloading (including an interior heating system), sampling, venting, vacuum relief, pressure relief, and measuring the amount of lading or the lading temperature.

Service equipment owner means the party responsible for bearing the cost of the maintenance of the service equipment.

Tank car owner means the person to whom a rail car's reporting marks are assigned, as listed in the Universal Machine Language Equipment Register (UMLER).

24. In § 180.507, the first sentence in paragraph (b)(2) is revised to read as follows:

§ 180.507 Qualification of tank cars.

* * * * *

(b) * * *

(2) For each tank car conforming to and used under a special permit (exemption) issued before October 1, 1984, which authorized the transportation of a cryogenic liquid in a tank car, the owner or operator must remove the exemption number stenciled on the tank car and mark the tank car with the appropriate Class DOT-113 specification followed by the applicable Special Permit (DOT SP) number. * * *

* * * * *

25. Amend § 180.509 as follows:

a. Revise paragraphs (a), (b)(1), (2), and (4), (c) introductory text heading, and (c)(3);

b. Add paragraphs (d)(1)(i) and (ii);

c. Revise paragraphs (d)(2) through (6);

d. Add paragraph (d)(7);

e. Revise paragraphs (e) and (f);

f. Redesignate paragraph (g)(1) as (g) and revise it;

g. Revise paragraphs (h) through (l); and

h. Add paragraph (m).

The revisions and additions read as follows:

§ 180.509 Requirements for qualification of specification tank cars.

(a) *General.* Each tank car owner must ensure that a tank car facility:

(1) Inspects and tests each item according to the requirements specified in this section;

(2) Evaluates each item according to the acceptable results of inspections and tests specified in § 180.511;

(3) Marks each tank car as specified in § 180.515 for each item that successfully passes an inspection and test, and

(4) Prepares the documentation as required by § 180.517 for each item qualified under this section. A copy of the documentation required by § 180.517 must be sent to the builder or owner as appropriate and according to the builder's or owner's instructions.

(b) *Conditions requiring inspection and test of tank cars.* Without regard to the qualification compliance date requirements of any paragraph of this section, an owner of a tank car or a lining or coating must have an appropriate inspection and test according to the type of defect and the type of maintenance or repair performed if:

(1) The tank car shows evidence of abrasion, corrosion, cracks, dents, distortions, defects in welds, or any other condition that may make the tank car unsafe for transportation,

(2) The tank car was in an accident and shows evidence of damage to an extent that may adversely affect its capability to retain its contents or to otherwise remain railworthy.

* * * * *

(4) The Associate Administrator for Railroad Safety, FRA, requires it based on the existence of an objectively reasonable and articulable belief that a tank car or a class or design of tank cars may be in an unsafe operating condition.

(c) *Frequency of qualification.* * * *

(3) Fusion welded tank cars must be inspected and tested to be qualified and maintained in accordance with the following table. All qualification requirements need not be done at the same time or at the same facility.

Frequency of qualification inspection and tests.

Section 180.509(*)	Description	Maximum interval
d	Visual inspection	10 years.
e	Structural integrity inspection	10 years.
f	Thickness test	See § 180.509(f).
h	Safety Systems	10 years.
i	Lining or coating (for materials corrosive or reactive to the tank) (See definitions at § 180.503)	See § 180.509(i).
j	Leakage pressure test	After reassembly.
k	Service equipment (including pressure relief device)	See § 180.509(k).

(d) * * *
(1) * * *

(i) Except in areas where tank structure, insulation, head protection, thermal protection, internal linings or coatings preclude it, an internal and

external inspection of the tank shell and heads for abrasion, corrosion, cracks, dents, distortions, flaws in welds, or any other condition that may make the tank car unsafe for transportation; and

(ii) For DOT 115 class tank cars, an internal inspection of the inner container and external inspection of the outer shell and heads for defects in welds, or any other condition that may

make the tank car unsafe for transportation;

(2) When a lining, coating, head protection, insulation, or thermal protection is removed in part or in whole, the exposed surface, *i.e.*, internal and external, of the tank must be visually inspected for defects in welds, or any other condition that may make the tank car unsafe for transportation. This inspection must precede any application or reapplication of a lining or coating.

(3) An inspection of the service equipment, including gaskets, for indications of corrosion and other conditions that may make the tank car unsafe for transportation;

(4) An inspection for missing or loose bolts, nuts, or elements that may make the tank car unsafe for transportation;

(5) An inspection of all closures on the tank car for conditions that may make the tank car unsafe for transportation, including an inspection of the protective housings for proper condition;

(6) An inspection of excess flow valves with threaded seats for tightness; and

(7) An inspection of the required markings on the tank car for legibility.

(e) *Structural integrity inspections and tests.* (1) Each tank car owner must ensure the structural elements on the tank car qualify with the applicable requirements of this subchapter. At a minimum, the structural integrity inspection and test must include:

(i) All transverse fillet welds greater than 0.64 cm (0.25 inch) within 121.92

cm (4 feet) of the bottom longitudinal centerline except body bolster pad attachment welds;

(ii) The termination of longitudinal fillet welds greater than 0.64 cm (0.25 inch) within 121.92 cm (4 feet) of the bottom longitudinal centerline; and

(iii) The tank shell butt welds within 60.96 cm (2 feet) of the bottom longitudinal centerline, unless the tank car owner can determine by analysis (*e.g.*, finite element analysis, damage-tolerance analysis, or service reliability assessment) that the structure will not develop defects that reduce the design level of safety and reliability or fail within its operational life or prior to the next required inspection. The owner must maintain all documentation used to make such determination at its principal place of business and make the data available to FRA or an authorized representative of the Department upon request.

(2) For DOT 115 class tanks, paragraphs (e)(1)(i—iii) of this section apply only to the outer shell fillet welds and to the non-reinforced exposed outer shell butt welds.

(3) The inspection requirements of paragraph (e)(1)(iii) of this section do not apply to reinforced tank shell butt welds until the time of lining removal or application for tank cars with an internal lead, glass, or rubber lining.

(4) Each tank car facility must inspect and test the elements identified in paragraph (e)(1) of this section by one or more of the following methods:

(i) Dye penetrant testing (PT);

(ii) Radiographic examination (RT);
 (iii) Magnetic particle testing (MT);
 (iv) Ultrasonic testing (UT); and
 (v) Direct, remote, or enhanced visual inspection, using, for example, magnifiers, fiberscopes, borescopes, and/or machine vision technology (VT).

(f) *Thickness tests.* (1) The tank car owner must ensure that each tank car facility measures the thickness of the tank car shell, heads, sumps, domes, and nozzles on each tank car by using a device capable of accurately measuring the thickness to within ± 0.05 mm (± 0.002 inch).

(2) The tank car owner must ensure that each tank car has a thickness test measurement:

(i) At the time of an internal lining or coating application or replacement, or

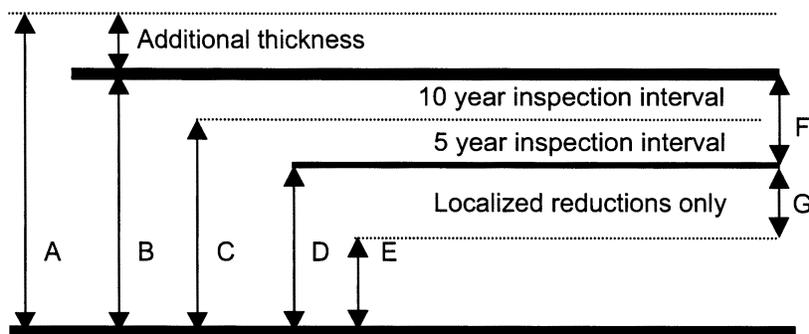
(ii) At least once every ten (10) years for a tank that does not have an internal lining or coating, or

(iii) At least once every five (5) years for a tank that does not have an internal lining or coating when:

(A) The tank is used to transport a material that is corrosive or reactive to the tank (see Appendix D of this part) or service equipment as defined § 180.503, and

(B) The remaining shell and head thickness is at or below line C in Figure A of this paragraph.

Figure A
Tank and Shell Thickness Qualification Frequencies



Where:

A As-built tank shell or head thickness with additional thickness.

B Required minimum tank shell or head thickness after forming per part 179.

C Inspection frequency adjustment point (design minimum shell or head thickness, minus $\frac{1}{2}$ of the table value in paragraph (g) of this section).

D Condemning limit for general corrosion (required minimum shell or head thickness, minus the value in paragraph (g) of this section).

E Condemning limit for localized corrosion (required minimum shell or head thickness, minus the table value in paragraph (g) of this section, minus 1.58 mm ($\frac{1}{16}$ -inch)). See Note 1 in paragraph (g) of this section for diameter limitations and minimum separation distances.

F Allowable shell or head thickness reduction (table value in paragraph (g) of this section).

G Additional thickness reduction for localized areas in paragraph (g) of this section.

(3) For a localized repair of an internal lining or internal coating where a material corrosive to the tank or service equipment as defined § 180.503 has contacted the tank, a qualified individual must verify conformance with paragraph (g) of this section by measuring the shell or head in the area of the repair. The thickness test applies only to the non-lined or coated repaired area, and is not a qualification event.

Modification of the tank stencil is not required.

(4) Operation of a tank car below the condemning limit for general corrosion or the condemning limit for localized corrosion (as shown in Figure A of this section) is prohibited.

(5) For sumps, domes, nozzles, and nozzle reinforcements, the tank car owner must determine if any reduction in wall thickness affects the design levels of reliability and safety built into sump, dome, nozzle, or nozzle reinforcement. Each tank car owner

must maintain at its principal place of business documentation describing the allowable thickness reductions for sumps, domes, and nozzles, and nozzle reinforcements. This documentation must be made available to FRA or an authorized representative of the Department upon request.

(6) After repairs, alterations, conversions, modifications, or blasting of tank car that results in a reduction of the tank's thickness, a qualified individual must measure the thickness of the tank in the area of reduced

thickness to ensure that the thickness of the tank conforms to paragraph (g) of this section.

(g) *Service life thickness allowance.* A tank car found with a thickness below the required minimum thickness after forming for its specification, as stated in part 179 of this subchapter, may continue in service if any reduction in the required minimum thickness is not more than that provided in the following table:

ALLOWABLE SHELL THICKNESS REDUCTIONS

Marked tank test pressure	Top shell and tank head	Bottom shell
60 psig < 200 psig	3.17 mm	1.58 mm
	1/8 inch	1/16-inch
≥200 psig	0.79 mm	0.79 mm
	1/32 inch	1/32-inch

Note 1. A tank car owner may add an extra 1.58 mm (1/16 inch) to the values in the table for local reductions. Local reductions are those that do not exceed 20.32 linear centimeters (8 linear inches) measured at the longest diameter, and are separated from the other local reductions by at least 40.64 cm (16 inches).

Note 2. Any reduction in the tank car shell thickness may not affect the structural strength of the tank car to the extent that the tank car no longer conforms to Section 6.2 of the AAR Specifications for Tank Cars (IBR, see § 171.7 of this subchapter).

Note 3. For DOT 115 class tank cars, shell thickness reductions apply only to the outer shell of the tank car. There is no shell or head thickness reduction authorized for the inner tank.

(h) *Safety system inspections.* Each tank car owner must ensure qualification of the tank car safety systems. However, inspections of foam or cork insulation systems are not required.

(i) *Lining and coating inspection and test.* (1) At a minimum, the owner of a lining or coating applied to protect a tank used to transport a material that is corrosive or reactive to the tank must ensure accomplishment of an inspection adequate to detect defects or other conditions that could reduce the reliability of the tank. In addition, the owner of a lining of tank cars used to transport hazardous materials must ensure the lining complies with § 173.24(b)(2) and (3) of this subchapter.

(2) The owner of the lining or coating must establish and maintain a record of the service life of the lining or coating and commodity combination, that is, the specific hazardous materials that were loaded into a tank and the lining or coating in place at the time of loading. The owner of the lining or coating must use its knowledge of the service life of each lining or coating and commodity combination to establish an appropriate inspection interval for that lining or coating and commodity combination. This interval must not exceed eight (8) years, unless the lining or coating owner can establish, document, and show that the service history or scientific analysis of the lining or coating and commodity pairing supports a longer inspection

interval. The owner must maintain at its principal place of business a written procedure for collecting and documenting the life of the lining or coating applied within the tank car. The lining or coating owner must provide this documentation, including inspection and test, repair, removal, and application procedures, to the FRA or car owner upon request. In addition, any person who offers a loaded tank car into transportation must provide commodity information to the car owner and the owner of the lining or coating upon request.

(3) The owner of the lining or coating must provide the test method and acceptance criteria for the lining or coating to the tank car owner and to the person responsible for qualifying the lining or coating. The tank car facility inspecting and testing the lining or coating must follow the inspection and test requirements, including the acceptance requirements, established by the lining or coating owner.

(j) *Leakage pressure test.* Unless the design of the service equipment arrangement precludes it (e.g., there is no fitting to pressurize the tank), each owner of a tank car must ensure that the tank, service equipment, and closures installed, replaced, or reinstalled on the tank car are leak tested. The test may be conducted with the lading in the tank. When the test pressure exceeds the start-to-discharge or burst pressure of a pressure relief device, the device must

be rendered inoperative. The written procedures and test method for leak testing must ensure for the sensitivity and reliability of the test method and for the serviceability of components to prevent premature failure. This section does not apply to facilities that remove closures for the sole purpose of loading or unloading the lading (e.g., blind flanges, pipe plugs, etc.).

(k) *Service equipment inspection and test.* (1) Each tank car owner must ensure for the qualification of tank car service equipment at least once every ten (10) years. The tank car owner must analyze the service equipment inspection and test results for any given lading and, based on the analysis, adjust the inspection and test frequency to ensure that the design level of reliability and safety of the equipment is met. The owner must maintain at its principal place of business all supporting documentation used to make such analyses and inspection and test frequency adjustments. The supporting documentation must be made available to FRA or an authorized representative of the Department upon request.

(2) Each tank car facility must qualify service equipment, including reclosing pressure relief devices and interior heater systems in accordance with Appendix D of the AAR Specifications for Tank Cars (IBR, see § 171.7 of this subchapter).

(l) *Alternative inspection and test procedures.* When approved by the

Associate Administrator for Railroad Safety, FRA, a tank car owner, or a lining or coating owner may use an alternative inspection and test procedure or interval based on a damage-tolerance analysis (that must include a determination of the probable locations and modes of damage due to fatigue, corrosion, and accidental damage), or based on a service reliability assessment (that must be supported by analysis of systematically collected data) in lieu of the other requirements of this section.

(m) *Qualification compliance date for tank cars.* (1) After July 1, 2000, each tank car with a metal jacket or with a thermal protection system must have an inspection and test conforming to this section no later than the date the tank car requires a periodic hydrostatic pressure test (*i.e.*, the marked due date on the tank car for the hydrostatic test).

(2) For insulated or jacketed tank cars on a 20-year periodic hydrostatic pressure test interval (*i.e.*, Class DOT 103W, 104W, 111A60W1, 111A100W1, and 111A100W3 tank cars), the next inspection and the test date is the midpoint between the compliance date in paragraph (m)(1) of this section and the remaining years until the tank would have had a hydrostatic pressure test.

26. In § 180.511, revise the introductory text and paragraphs (d) and (g) and add paragraph (h) to read as follows:

§ 180.511 Acceptable results of inspections and tests.

Provided it conforms to other applicable requirements of this subchapter, a tank car is qualified for use if it successfully passes the inspections and tests set forth below conducted in accordance with this subpart. A representation of that qualification must consist of marking the tank in accordance with § 180.515.

* * * * *

(d) *Safety system inspection.* A tank car successfully passes the safety system inspection when each thermal protection system, tank head puncture resistance system, coupler vertical restraint system, and system used to protect discontinuities (*e.g.*, breakage grooves on bottom outlets and protective housings) on the tank car conform to this subchapter and show no indication of a defect that may reduce reliability before the next inspection and test interval.

* * * * *

(g) *Hydrostatic test.* A Class 107 tank car, the inner tank of a Class 115 tank car, or a riveted tank car successfully passes the hydrostatic test when it

shows no leakage, distortion, excessive permanent expansion, or other evidence of weakness that might render the tank car unsafe for transportation service.

(h) *Service equipment.* A tank car successfully passes the service equipment inspection and test when this equipment conforms to this subchapter and AAR Appendix D (IBR, see § 171.7 of this subchapter) and shows no indication of a defect that may reduce reliability before the next inspection and test interval.

27. Revise § 180.513 to read as follows:

§ 180.513 Repairs, alterations, conversions, and modifications.

(a) To work on tank cars, a tank car facility must comply with the applicable requirements of this subpart, the AAR Specifications for Tank Cars (IBR, see § 171.7 of this subchapter), and the owner's requirements.

(b) An owner of a tank car or component is responsible for ensuring that each tank car facility complies with the owner's maintenance program by conducting periodic analyses and surveillance activities.

(c) Unless the exterior tank car shell or interior tank car jacket has a protective coating, after a repair that requires the complete removal of the tank car jacket, the exterior tank car shell and the interior tank car jacket must have a protective coating applied to prevent the deterioration of the tank shell and tank jacket. Previously applied coatings that still provide effective protection need not be covered over.

(d) After repair, replacement, or qualification of tank car service equipment, the tank service equipment must successfully pass the leak test prescribed in § 180.509(j).

28. Revise § 180.515 to read as follows:

§ 180.515 Markings.

(a) When a tank car passes the required inspection and test with acceptable results, the tank car facility must mark the date of the inspection and test and the due date of the next inspection and test qualified on the tank car in accordance with Appendix C of the AAR Specifications for Tank Cars (IBR, see § 171.7 of this subchapter). When a tank car facility performs multiple inspections and tests at the same time, one date may be used to satisfy the requirements of this section. One date also may be shown when multiple inspections and test have the same due date. Dates displayed on the "consolidated stencil" (see Appendix C of the AAR specifications for Tank Cars) take precedence over dates modified,

and not stenciled, pursuant to interval adjustments for service equipment, linings, and granted alternative inspection intervals.

(b) Converted DOT 105, 109, 112, 114, or 120 class tank cars must have the new specification and conversion date permanently marked in letters and figures at least 0.95 cm (0.375 inch) high on the outside of the manway nozzle or the edge of the manway nozzle flange on the left side of the car. The marking may have the last numeral of the specification number omitted (*e.g.*, "DOT 111A100W" instead of "DOT 111A100W1").

(c) When qualified within six months of installation and protected from deterioration, the test date marking of a reclosing pressure relief device is the installation date on the tank car.

29. In § 180.517, revise paragraph (a), paragraph (b) introductory text, and paragraphs (b)(3), (4), and (7), and add paragraph (b)(8) to read as follows:

§ 180.517 Reporting and record retention requirements.

(a) *Certification and representation.* Each owner of a specification tank car must retain the certificate of construction (AAR Form 4–2) and related papers certifying that the manufacture of the specification tank car identified in the documents is in accordance with the applicable specification. The builder's signature on the certificate of construction, and the marking of the tank car with the tank specification is the representation that all of the appropriate inspections and tests were successfully performed to qualify the tank for use. The owner must retain the documents throughout the period of ownership of the specification tank car and for one year thereafter. Upon a change of ownership, the requirements in Section 1.3.15 of the AAR Specifications for Tank Cars (IBR, see § 171.7 of this subchapter) apply. The builder of the car or a facility performing work on the car may retain copies of relevant records.

(b) *Inspection and test reporting.* Each tank car that is inspected and tested as specified in § 180.509 must have a written report, in English, prepared according to this paragraph. For qualification inspections and tests performed after initial service, marking the tank car with the specification (or retaining the specification marking on the tank) is the representation that all of the appropriate inspections and tests were successfully performed to qualify the car for continued use. The report may be created and retained electronically, but, upon request by FRA for a copy of the report, it must be made

available in common readable form. The owner must retain a copy of the inspection and test reports until successfully completing the next inspection and test of the same type. The inspection and test report must include the following:

* * * * *

(3) Tank car reporting mark and number;

(4) Tank car specification;

* * * * *

(7) The name and address of the tank car facility and the name and signature of inspector; and

(8) The unique code (station stencil) identifying the facility.

30. Add Appendix D to Part 180 to read as follows:

Appendix D to Part 180—Hazardous Materials Corrosive to Tanks or Service Equipment

This list contains materials identified either by proper shipping name in 49 CFR 172.101 or shipped under an “n.o.s.” shipping description that, under certain conditions, can corrode carbon steel tanks or service equipment at a rate that will reduce the design level of reliability and safety of the tank or equipment to an unsafe level before the next qualification. Materials identified on this list are considered corrosive to the tank or service equipment.

While every effort was made to identify materials deemed corrosive to the tank or service equipment, owners and operators are cautioned that this list may not be inclusive. Tank car owners and operators are reminded of their duty to ensure that no in-service tank will deteriorate below the specified

minimum thickness requirements in this subchapter. See § 180.509(f)(3). In addition, FRA states a tank car owner must designate an interior coating or lining appropriately based on their knowledge of the chemical and not rely simply on this list. Regarding future thickness tests, this list may also be modified based on an analysis of the test results by the car owner, the Department of Transportation, or the Association of American Railroads’ Tank Car Committee.

Hazardous Materials Table Proper Shipping Names (See § 172.101)

Acetic acid, glacial *or* Acetic acid solution
 Aluminum chloride, solution
 Arsenic acid, liquid
 Arsenic acid, solid
 Butyric acid
 Ferric chloride, solution
 Fertilizer ammoniating solution (*Nitrogen fertilizer solution*)
 Fluoroboric acid
 Fluorosilicic acid
 Formaldehyde, solutions, flammable
 Formaldehyde, solutions
 Hydrobromic acid
 Hydrochloric acid Hydrochloric acid solution
 Hydrofluoric acid and Sulfuric acid mixtures
 Hydrofluoric acid
 Hydrogen peroxide and peroxyacetic acid mixtures, stabilized
 Hydrogen, peroxide, aqueous solutions
 Hydrogen peroxide, stabilized *or* Hydrogen peroxide aqueous solutions, stabilized
 Hypochlorite solutions
 Methyl methacrylate monomer, stabilized
 Nitric acid
 Phenyl phosphorus dichloride
 Phenyl phosphorus thiodichloride
 Phosphoric acid solution
 Phosphoric acid, solid
 Phosphorus trichloride (*Phosphorus chloride*)

Sodium chlorate
 Sodium chlorate, aqueous solution
 Sodium hydrosulfide
 Sulfur, molten
 Sulfuric acid
 Sulfuric acid, fuming
 Sulfuric acid, spent
 Zinc chloride, anhydrous
 Zinc chloride, solution

Materials Transported Under an “N.O.S.” Description

Benzoic acid (Environmentally hazardous substance, liquid, n.o.s., (RQ 5,000 pounds)
 Bisulphites, aqueous solution, n.o.s. (Ammonium bisulfide)
 Black liquor (Corrosive liquids, n.o.s. (contains sulfuric acid))
 Calcium lignosulfonate (not regulated under this subchapter)
 Hexanoic acid (Corrosive liquids, n.o.s. (contains hexanoic acid))
 Lignin liquor (not regulated under this subchapter)
 Lithium chloride (not regulated under this subchapter)
 Sodium polyacrylate (not regulated under this subchapter)
 Titanium sulfate solution (Corrosive liquids, n.o.s. (contains sulfuric acid))
 White liquor (not regulated under this subchapter)

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R. Ryan Posten,

Senior Director for Hazardous Materials Safety.

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