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DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

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

[Docket No. PHMSA-2013-0042 (HM-233F)]

RIN 2137-AF00

Hazardous Materials: Adoption of Special Permits (MAP-21) (RRR)

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

ACTION: Notice of Proposed Rulemaking (NPRM)

SUMMARY: As required by the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Pipeline and Hazardous Materials Safety Administration is proposing to amend the Hazardous Materials Regulations to adopt provisions contained in certain widely-used or long-standing special permits that have an established safety record. The proposed revisions 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. PHMSA conducted an extensive analysis of all active special permits and, in this rulemaking, those special permits deemed suitable are being proposed for adoption. PHMSA is inviting all interested persons to provide comments on both those special permits deemed suitable and proposed to be adopted into the HMR and those that are deemed not suitable for adoption. In addition, PHMSA is also requesting comments on a proposed requirement for special permit applicants to include regulatory text in their applications, when appropriate.

DATES: Comments must be received by [INSERT DATE 60 DAYS FROM PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments identified by the docket number PHMSA-2013-0042 (HM-233F) by any of the following methods:

- Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: 1-202-493-2251.
- Mail: Docket Management System; U.S. Department of Transportation, West Building, Ground Floor, Room W12–140, Routing Symbol M–30, 1200 New Jersey Avenue, S.E., Washington, DC 20590.
- Hand Delivery: To the Docket Management System; Room W12–140 on the ground floor of the West Building, 1200 New Jersey Avenue, S.E., 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. To avoid duplication, please use only one of these four methods. All comments received will be posted without change to http://www.regulations.gov and will include any personal information you provide. 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: In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to www.regulations.gov, as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at www.dot.gov/privacy.

FOR FURTHER INFORMATION CONTACT: Donald Burger, Office of Hazardous Materials Safety, Approvals and Permits Division, (202) 366-4535 or T. Glenn Foster, Office of Hazardous Materials Safety, Standards and Rulemaking Division, telephone (202) 366-8553, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Ave., S.E., Washington, DC 20590-0001.

SUPPLEMENTARY INFORMATION:

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I. Executive Summary

The Pipeline and Hazardous Materials Safety Administration (PHMSA) is proposing to amend the Hazardous Materials Regulations (HMR; 49 CFR Parts 171–180) by adopting requirements contained in 98 existing special permits (SP). This proposal is based on our review of all active SPs as of January 1, 2013, in which we identified 98 SPs containing requirements which appear suitable for adoption into the HMR as regulations of general applicability. Other SPs are not being proposed for adoption into the HMR because we concluded they contain requirements which (1) would not have, or are being applied in a manner which would not have, broad applicability; or (2) have already been adopted into the HMR, are covered by authorizations in the HMR, or are being addressed in other rulemakings.

We encourage all interested parties, particularly the holders of currently active SPs, to submit comments regarding the SPs we are proposing to adopt into the HMR, the SPs we are not presently proposing to adopt into the HMR, and our preliminary regulatory impact analysis.

II. Background

PHMSA is proposing to amend the Hazardous Materials Regulations (HMR; 49 CFR Parts 171–180) to adopt certain requirements based on existing SPs issued by PHMSA under 49

CFR Part 107, Subpart B (§§ 107.101 to 107.127). SPs set forth alternative requirements—or a variance—to the requirements in the HMR in a way that achieves a safety level at least equal to the safety level required under the regulations, or when the regulations do not establish a safety level, that is consistent with the public interest. Congress expressly authorized the Secretary of Transportation to issue these variances in the Hazardous Materials Transportation Act of 1975 (49 U.S.C. 5109) as amended.

On July 6, 2013 President Obama signed legislation entitled Moving Ahead for Progress in the 21st Century Act (MAP-21). Section 33012 of this legislation required PHMSA to review and analyze SPs that have been in continuous effect for a 10-year period to determine which ones may be converted into the HMR.[1] The legislation also required PHMSA to issue regulations to adopt any SPs identified as appropriate for adoption in a final rule by October 1, 2015. The legislation provides the following factors to consider during review and analysis to determine suitability for adoption into the HMR:

(1) The safety record of the hazardous materials (hazmat) transported under the SP;

(2) The application of a SP;

(3) The suitability of the provisions in the SP for incorporation into the hazmat regulations; and

(4) Rulemaking activity in related areas.

Prior to the passing of the MAP-21 legislation, PHMSA had completed numerous rulemaking actions, through an established and refined approach, to convert long-standing SPs with an established safety record into the HMR. Following the passage of the MAP-21

[1] Although MAP-21 only required PHMSA evaluate SPs that had been in continuous effect for a 10-year period, PHMSA reviewed all active SPs as of January 1, 2013.

legislation, PHMSA modified its approach to align with the requirements of this legislation. Specifically, PHMSA established terms of reference and baseline criteria for the review of long-standing SPs, created tracking tools to monitor progress, and adopted a methodology and timeline to evaluate SPs.

This Notice of Proposed Rulemaking (NPRM) provides an overview of the SP Program to date, a detailed review of the requirements of MAP-21 with regard to this initiative, and a comprehensive explanation of the rationale used to evaluate these SPs both prior to and after the implementation of MAP-21. Furthermore, based on this rationale, this NPRM details the SPs that are deemed not suitable for adoption into the HMR along with the corresponding reasoning, and proposes the adoption into the HMR of SPs that have been deemed suitable through this review. The proposals from all the SPs to be adopted have broad applicability, fit into the scope of the HMR, will increase flexibility in transportation, and provide an equivalent level of safety to the current regulations. PHMSA is inviting comments from all interested parties, particularly SP holders, on both those SPs deemed suitable and proposed to be adopted and those that are deemed not suitable for adoption.

III. Overview

A. SPs Program

PHMSA's Approvals and Permits Division[2] is responsible for the issuance of DOT SPs and Approvals. A SP sets forth alternative requirements, or variances, to the requirements in the HMR. Federal hazardous materials transportation law (49 U.S.C. §§ 5101-5128) authorizes PHMSA to issue such variances in a way that achieves a safety level that is at least equal to the

[2] http://www.phmsa.dot.gov/hazmat/permits-approvals/special-permits

safety level required under Federal hazmat law or is consistent with the public interest if a required safety level does not exist. SPs also address unique or infrequent transportation situations that would be difficult to accommodate in regulations intended for use by a wide range of shippers and carriers.

SPs are issued by PHMSA under 49 CFR Part 107, Subpart B (§§ 107.101 to 107.127). The HMR are generally performance-oriented regulations, and as such, provide the regulated community with some flexibility in meeting safety requirements. Even so, not every transportation situation can be anticipated and covered under the regulations. The hazardous materials community is at the cutting edge of developing new materials, new technologies, and innovative ways of moving hazardous materials. Innovation strengthens our economy, and some new technologies and operational techniques may enhance safety. Thus, while not compromising safety, SPs provide a mechanism for testing new technologies, promoting increased transportation efficiency and productivity, and ensuring global competitiveness. In addition, SPs enable the hazardous materials industry to safely, quickly, and effectively integrate new products and technologies into production and the transportation stream.

PHMSA conducts ongoing reviews of SPs to identify widely-used and long-standing SPs with established safety records for conversion into regulations of broader applicability. Converting these SPs into regulations reduces paperwork burdens for the government and applicants and facilitates commerce while maintaining safety. Additionally, adoption of SPs as rules of general applicability provides wider access to the benefits and regulatory flexibility of the provisions granted in the SPs. Factors that influence whether or not a specific SP is a candidate for regulatory action include: the safety record for hazardous materials transported or operations conducted under a SP; potential for broad application of a SP; suitability of the

provisions in the SP for adoption into the HMR; rulemaking activity in related areas; and agency priorities.

Since the inception of the SP program, PHMSA has periodically reviewed SPs and under various rulemaking actions certain widely-used or long-standing SPs that have an established safety record have been adopted or recently proposed for incorporation into the HMR. For example, PHMSA has adopted or proposed 94 SPs into the HMR since 2008. These 94 SPs represent a decrease of 13,947 holders of SPs. These rulemakings are noted in Table 1.

Table 1: Previous Rulemaking Actions[3]

Docket	Title	Purpose	Number of permits	Holders
Docket No. PHMSA–2006–25910 (HM–218E)	Miscellaneous Cargo Tank Motor Vehicle and Cylinder Issues; Petitions for Rulemaking	Amended the HMR to revise certain requirements applicable to the manufacture, maintenance, and use of DOT and MC specification cargo tank motor vehicles, DOT specification cylinders and UN pressure receptacles.	2	15
PHMSA–2008–0005 (HM-215J)	Revision to Requirements for the Transportation of Batteries and Battery-Powered Devices; and Harmonization with the UN Recommendations, IMDG Code, and ICAO Technical Instructions	Amended the HMR to maintain alignment with international standards by adopting various amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations, and vessel stowage requirements.	3	6
Docket No. PHMSA–2009–0151 (HM-218F)	Miscellaneous Amendments	Amended the HMR to make miscellaneous revisions to update and clarify certain regulatory requirements.	1	1
PHMSA–2009–0289 (HM-233A)	Incorporation of SPs into Regulations	Amended the HMR to adopt provisions contained in certain widely-used or long-standing SPs that have an established safety record.	44	510
PHMSA–2010–0017 (HM–245)	Incorporation of Cargo Tank SPs	Amended the HMR to adopt provisions contained in certain widely-used or long-standing cargo tank SPs that are granted to multiple parties and have established safety records.	6	Over 10,000

[3] This table represents only published rulemakings since January 1, 2008.

PHMSA–2010–0018 (HM–216B)	Incorporating Rail SPs	Amended the HMR to adopt SPs which authorized an alternative tank car qualification program, acceptance of shipping paper information by voice or electronic data interchange, provide alternative rail car segregation requirements for explosives, alternative tank car design requirements, and alternative unloading provisions for coupled tank cars.	7	250
PHMSA–2010–0201 HM-254	Approval and Communication Requirements for the Safe Transportation of Airbag Inflators, Airbag Modules, and Seat-belt Pretensioners	Amended the HMR applicable to airbag inflators, airbag modules and seat-belt pretensioners by authorizing an alternative review and verification process for these devices, and eliminating the current requirements to have hundreds of these devices approved by PHMSA prior to shipment.	2	2,131
PHMSA 2011-0138 (HM 218G)	Miscellaneous Amendments (RRR)	Amended the HMR by adopting SPs to authorize the transportation by motor vehicle of certain regulated medical wastes, designated as sharps, in non-DOT specification containers fitted into wheeled racks.	1	1
PHMSA–2011–0142 (HM–219)	Miscellaneous Petitions for Rulemaking (RRR)	Amended the HMR to no longer require re-application for a SP to place the Dangerous Cargo Manifest in locations designated by the master of the vessel besides ‘‘on or near the bridge’’ while the vessel is docked in a United States port while cargo unloading, loading, or handling operations are underway and the bridge is unmanned.	1	1
PHMSA–2011–0158 (HM–233C)	Incorporation of Certain SPs and Competent Authorities into Regulations	Amended the HMR to adopt provisions contained in several SPs that provide greater regulatory flexibility. The SPs in this action addressed a variety of alternative provisions, including alternative packaging authorizations for specific hazardous materials (HM), and would eliminate approval requirements for variances in the manufacture of fiberboard packagings.	18	466
PHMSA-2011-0345 (HM-233D) (NPRM)	Requirements for the Safe Transportation of Bulk Explosives (RRR)	Proposes to amend the HMR by establishing standards for the safe transportation of bulk explosives. This rulemaking would also be responsive to two petitions (P-1557, P-1583).	9	566
Total			**94**	**13,947**

B. MAP-21 Legislation

Section 33012 of the MAP-21 legislation modified § 5117 (f) of the Federal Hazardous Materials Transportation Law. Specifically, under the "SPs and exclusions" paragraph (f) was revised to read as follows:

> **"(f) Incorporation into regulations.**
>
> **(1)** IN GENERAL- Not later than 1 year after the date on which a SP has been in continuous effect for a 10-year period, the Secretary shall conduct a review and analysis of that SP to determine whether it may be converted into the hazardous materials regulations.
>
> **(2)** FACTORS- In conducting the review and analysis under paragraph (1), the Secretary may consider-
>
> **(A)** the safety record for hazardous materials transported under the special permit;
>
> **(B)** the application of a special permit;
>
> **(C)** the suitability of provisions in the special permit for incorporation into the hazardous materials regulations; and
>
> **(D)** rulemaking activity in related areas.
>
> **(3)** RULEMAKING- After completing the review and analysis under paragraph (1) and after providing notice and opportunity for public comment, the Secretary shall either institute a rulemaking to incorporate the special permit into the hazardous materials regulations or publish in the Federal Register the Secretary's justification for why the special permit is not appropriate for incorporation into the regulations."

This modification required PHMSA to review and analyze SPs that have been in effect for 10 years or more and determine which should be converted into regulations; set parameters for the review; and issue regulations to adopt any SPs identified as appropriate for adoption in a final rule by October 1, 2015. Following the publication of the final rule, this process would be completed annually to ensure appropriate SPs are converted into the HMR on a consistent basis.

The legislation also required PHMSA to address other issues related to the SP and approvals regulations and program processes. Specifically, PHMSA is required to issue regulations on standard operating procedures to support administration of the SP and approval programs. This requirement is being addressed under Docket PHMSA 2012-0260 (HM-233E) in a Notice of Proposed Rulemaking (NPRM) published on August 12, 2014 [79 FR 47047].

Table 2 summarizes all of the MAP-21 requirements related to the SP program, the corresponding rulemaking actions, and required completions dates:

Table 2: MAP-21 Summary

MAP-21 Citation	MAP-21 Requirement	Docket	Required Completion Date
§ 33012 (a)	Rulemaking mandate. PHMSA shall issue regulations that establish: (1) Standard operating procedures to support administration of the SP and approval programs; and (2) Objective criteria to support the evaluation of SP and approval applications.	PHMSA 2012-0260 (HM-233E)	Final rule due by 10/01/2014
(b)	Initial review and analysis of SPs that have been in continuous effect for a 10-year period to determine which ones may be converted into the hazmat regulations. Factors to consider: (1) The safety record of hazmat transported under the SP; (2) The application of a SP; (3) The suitability of provisions in the SP for incorporation into the hazmat regulations; and (4) Rulemaking activity in related areas.	PHMSA-2013-0042 (HM-233F)	Review and analysis due by 10/01/2013
(b)	Rulemaking mandate. Issue regulations to incorporate into the hazmat regulations any SPs identified in the initial review and analysis that PHMSA determines are appropriate for incorporation based on the review factors.	PHMSA-2013-0042 (HM-233F)	Final rule due by 10/01/2015
(c)	Ongoing review and analysis of SPs. Not later than 1 year after the date on which a SP has been in continuous effect for a 10-year period, PHMSA shall conduct a review and analysis of that SP to determine whether it may be converted into the hazmat regulations.	Continuous future rulemaking actions on a yearly basis	Review and analysis due by 10/01/2015 and to be completed on an annual basis

	Factors to consider: (1) The safety record of hazmat transported under the SP; (2) The application of a SP; (3) The suitability of provisions in the SP for incorporation into the hazmat regulations; and (4) Rulemaking activity in related areas.		
(d)	Rulemaking mandate. After completing the review and analysis of SPs that have been in continuous effect for a 10-year period, PHMSA shall either institute a rulemaking to incorporate the SP into the hazmat regulations or publish in the Federal Register its justification for why the SP is not appropriate for incorporation into the regulations.	Continuous future rulemaking actions on a yearly basis	Final rule or notice of no rulemaking decision due by 10/01/2016

C. SP Conversion Project Methodology

As previously stated, in the past, PHMSA has analyzed, evaluated, and adopted SPs into the HMR. In addition, PHMSA had already established an approach to adopt SPs into the HMR. However, the requirements contained in MAP-21 necessitated that PHMSA modify and formalize this approach. This section describes the SP Conversion Project (SPCP) and the methodology used to satisfy the requirements of MAP-21.

The following table summarizes the different phases of the SPCP. Specifically, this table briefly discusses the efforts of each phase and the timeframe in which it was completed. Furthermore, this table demonstrates how the entire project was divided into the two primary stages of analysis and rulemaking. Each phase of the SPCP is described in Table 3.

Table 3: SPCP Methodology

Phase		Description of Action	Timeframe
Analysis	Phase 1: Development of Methodology	The SPCP Management team developed a methodology to consistently evaluate SPs, a system to track this analysis, sub-teams and sub-topic areas used to group similar SPs to be reviewed by the appropriate subject matter experts, and timelines and milestones.	July 2012 – January 2013
	Phase 2: Preliminary	An initial review of all SPs was conducted. SPs were divided by topics and sub-topics and each transportation regulations	January 2013 – April 2013

	Analysis	specialist was assigned a grouping. These specialists reviewed each permit and made a determination as to an SP's suitability for adoption into the HMR based on guidance provided by the SPCP Management team.	
	Phase 3: Mentor Review	The members of the SPCP Management were assigned topics and conducted a second review of the SPs deemed either not suitable or flagged for further review.	April 2013 – May 2013
	Phase 4: Team Analysis	PHMSA then established rulemaking teams for each topic composed of a team leader, mentor, and team members from each PHMSA Division and our modal partners. These teams then conducted a second review of those SPs deemed suitable and those flagged for follow-up.	June 2013 – August 2013
Rulemaking	Phase 5: Drafting	For SPs deemed suitable, the team drafted regulatory text along with preamble language justifying inclusion into the HMR. The finalized draft of each topic was then submitted to the SPCP Management team for final review.	June 2013 – September 2013
	Phase 6: Consolidate Rulemaking	Following review by the SPCP Management team, the topic rulemakings were then combined into a master draft along with additional preamble language, regulatory analysis, and information collection activities.	September 2013 – November 2013
	Phase 7: Rulemaking Coordination	The master draft created was then vetted throughout the agency and with our modal partners. In addition, the rulemaking was coordinated with the Office of the Secretary of Transportation and the Office of Management and Budget.	December 2013 – October 2014
	Phase 8: Rulemaking Publication	Following concurrence from all entities, PHMSA submitted this rulemaking to the Federal Register for publication.	November 2014

Phase 1: Development of Methodology

As stated above, prior to the publication of MAP-21, PHMSA conducted reviews of SPs to identify widely-used and long-standing SPs with an established safety record for conversion into the HMR for broader applicability. The SPs suitable for adoption were predominantly identified by two methods: petitions for rulemaking submitted in accordance with § 106.105; and through a review of the SP application by the Approvals and Permits Division staff at the time of application. Specifically, during the evaluation of a SP application, the specialist reviewing the application could "tag" a SP as a future candidate for adoption into the regulations. At a later date after a positive safety record had been established, the SP would be proposed for adoption in

a future rulemaking. This method to adopt SPs, however, was not conducted on a defined and predictable schedule.

After President Obama signed the MAP-21 legislation, PHMSA modified its SP conversion practices and developed an overall strategy to specifically address the aspects of the requirements of MAP-21 that were not reflected in current procedures. In an effort to address the specific requirements for SP conversion, PHMSA's Standards and Rulemaking Division created a SPCP management team. This SPCP management team developed a methodology to consistently evaluate SPs, a system to track the analysis, created rulemaking sub-teams, topics and sub-topic areas to combine similar SPs to be reviewed by the appropriate subject matter experts (SME) and teams, and established timelines and milestones.

As MAP-21 included specific deadlines for the various aspects of the SPCP, PHMSA created an overall project timeline. This timeline was established by utilizing the Standards and Rulemaking Division's knowledge of the current rulemaking process and working backwards from the deadlines required by MAP-21. The timeline was divided into two main parts; analysis (Phases 1-4) and rulemaking drafting and coordination (Phases 5-8). Each of these portions of the timeline included specific deliverables.

Each SP being analyzed was assigned to one of 6 topic areas. These topic areas were established to reflect the main utility and purpose of the SP. These topic areas of the SPs, an overview of each topic area, and the affected number of SP holders are displayed in Table 4.

	TABLE 4: TOPIC OVERVIEW	
Topic	**Overview**	**Holders [**Total # in grouping**]**
Cylinders - General	The SPs pertaining to cylinders that are proposed to be adopted into the HMR in this NPRM provide exceptions to existing general cylinder requirements.	721
Cylinders – NDT/Aerosols[4]	The SPs pertaining to acoustic emission (AE) and ultrasonic examination (UE) testing of cylinders and to aerosols that are proposed to be adopted into the HMR in this NPRM provide exceptions to existing cylinder requirements specific to cylinder non-destructive testing (NDT) and aerosols.	396
Cargo Tanks/Rail Cars/Portable Tanks	The SPs pertaining to cargo tanks, rail cars, and portable tanks that are proposed to be adopted into the HMR in this NPRM provide exceptions to existing cargo tanks, rail cars, and portable tanks requirements.	321
Operational Air/Vessel	The SPs pertaining to operational issues for aircraft or vessel transportation that are proposed to be adopted into the HMR in this NPRM provide exceptions to existing requirements for vessel and aircraft shipments.	207
Operational Highway/Rail/ Shipper/Other	The SPs pertaining to operational issues for highway or rail transport, shipper requirements, and other general areas that are proposed to be adopted into the HMR in this NPRM provide exceptions to existing highway and rail operations, shipper, and	1,226

[4] For the purposes of this rulemaking Non-Destructive Testing (NDT) includes Ultrasonic Examination (UE) and Acoustic Emission (AE).

	other general requirements.	
Non-Bulk Packaging Specifications/IBCs	The SPs pertaining to non-bulk packagings, IBCs, and packaging specifications that are proposed to be adopted into the HMR in this NPRM provide exceptions to the packaging specification requirements.	820
	Total	**3,691**

These topic areas were then used to develop teams to address each grouping of SPs. Each topic area was further broken down into sub-topic areas which reflected the specific area of transportation that the SP affected. These sub-topic areas included manufacturing, retest, and use. Breaking down the SPs into topics and sub-topics ensured that the appropriate SMEs would be reviewing SPs and allowed for more efficient delegation of the workload.

As mentioned above, teams were established based on topic areas to handle Phase 3 (Team Analysis) and Phase 4 (Drafting) of the SPCP. Teams were comprised of the appropriate SMEs from the Standards and Rulemaking Division, the Engineering and Research Division, the Approvals and Permits Division, Field Operations, the Program Development Division, the Office of Chief Counsel and our modal partners, the Federal Aviation Administration (FAA), the United States Coast Guard (USCG), the Federal Railroad Administration (FRA) and the Federal Motor Carrier Safety Administration (FMCSA). In addition, each team was assigned a team lead and a team mentor from the SPCP Management team. The teams met on a frequent basis throughout Phase 3 and Phase 4 to discuss progress on their assignments and to pinpoint and resolve issues with the SP conversion.

Throughout every phase of the SPCP, the status of all currently active SPs was tracked in a database designed specifically for this project. This database detailed the specialist and team assigned to the review of the SP, the current status of the SP and the code[5] it was assigned following completion of the review. This database also tracked the completion of the drafting of regulatory text for any given SP and provided a brief summary of the SP. In addition, the SPCP Management team closely monitored timelines and milestones in a database specifically tailored to the SPCP.

Phase 2: Preliminary Analysis

MAP-21 specifically mandated PHMSA issue regulations to adopt into the HMR any SPs that had been in continuous effect for a 10-year period and that PHMSA determined through its analysis are appropriate for adoption based on the review factors. While MAP-21 limited this analysis and review to SPs with a lifespan of greater than 10 years, PHMSA decided that an initial review of all active SPs would provide a greater benefit. A complete review of all SPs was conducted because many of the SPs are interconnected and interrelated. For example, some SPs are very similar with only minor differences between them and the inclusion of one SP may justify the inclusion of other similar SPs. In addition, PHMSA did not want to automatically disqualify a SP from consideration just because the SP was not in effect for 10 years. A SP may be extensively used and have an established history of safe use even if it is less than 10 years old. As MAP-21 also requires the periodic review of SPs over 10 years of age, PHMSA rationalized

[5] Each SP was assigned a code that represented a rationale for the SP being suitable or not suitable for adoption into the HMR. These codes were based on PHMSA's factors for suitability combined with the rationales provided in MAP-21.

that a larger initial review would considerably streamline and limit the number of SPs to be evaluated in future reviews.

In January 2013, PHMSA began a systematic review of 1,168 existing SPs utilizing the criteria required by the MAP-21 legislation to determine suitability for adoption into the HMR. Transportation Regulations Specialists within the Standards and Rulemaking Division were assigned groupings of SPs. Each specialist was given instructions on how to uniformly and consistently review a SP. For the groups of SPs assigned, each specialist was instructed to:

- Provide a brief summary of each SP;
- Identify the key/other regulatory sections of the HMR affected;
- Make a determination on the suitability for adoption (Guidance was provided on assigning each SP a code relating to its suitability. These codes are discussed in further detail later in this document);
- Assign the SP to a topic area;
- Provide rationale for their findings; and
- Account for any recordkeeping issue that they faced.

Specialists then reviewed the SPs and, based on the guidance developed by the SPCP management team, they made a determination of which code the SP would be assigned (See Table 5). If specialists had doubts or concerns about any particular SP, they would assign a proposed code and flag the SP in the tracking database for second level mentor review in Phase 3.

In April 2013, the preliminary analysis was completed with roughly 300 SPs deemed suitable for adoption. In addition, approximately 185 SPs were flagged for second level review by the SPCP management team in Phase 3.

Phase 3: Mentor Review: Review of SPs Flagged and Not Suitable

From April through May 2013, the rulemaking mentors for each topic team conducted a second review of all SPs deemed not suitable for adopting into the HMR (roughly 690 SPs) and those tagged for further review in the Phase 2 review (185 SPs). Specifically, the mentors divided the SPs in need of further review among themselves, evaluated each permit against the requirements of MAP-21, and made a determination on the SP when possible. If the mentors were unable to make a determination, the SP remained flagged and the SP topic team would make a group determination in Phase 4.

Phase 4: Team Analysis

PHMSA then utilized six rulemaking teams, one for each topic area. As previously stated, each team was composed of a team leader, mentor, and team members from each PHMSA Division and our modal partners (FAA, USCG, FRA and FMCSA). Team leaders were tasked with the overall completion of the topic and the distribution of work assignments. Mentors were charged with reviewing the teams' data, and providing edits to ensure the 6 topics were cohesive and would form a complete and understandable NPRM. The team leaders and mentors of each topic area were members of the Standards and Rulemaking Division. Each topic area was handled as if it were its own rulemaking project.

While each team leader approached the team analysis phase in their own manner, the team members were utilized consistently throughout the SPCP, regardless of project. For example, modal partners focused on aspects of proposed SPs specific to their mode of transportation or aspects of SPs that could have wider implications in their mode. Team members from the Standards and Rulemaking Division primarily drafted the regulatory text and rulemaking preamble language. The Engineering and Research Division focused primarily on the technical aspects of each SP, the evaluation and development of regulatory text, and the technical implications of the introduction of new technologies that a SP may provide. The Approvals and Permits Division focused primarily on the history of each SP, the evaluation and development of regulatory text and the suitability determinations of the SPs. PHMSA Field Operations provided a review of enforcement actions of the SPs that were deemed suitable and assisted in the incident data research of each SP. The Program Development Division assisted in the review of the incident data research of the SPs and the evaluation of the cost and benefit data for the SPs that were deemed suitable. Finally, the Office of Chief Counsel primarily dealt with the editing of regulatory text and rulemaking preamble language as well as providing assistance in completing the regulatory analysis.

Each topic team tracked its status in a database, specifically noting when regulatory text was completed. The teams also used this database to record information to be included in the preamble explanations for each SP. For the SPCP, all draft regulatory text was completed in September 2013, at which point the team mentors provided edits and worked with each team to formulate a final version of each topic. In addition, each team provided a completed document containing lists of all suitable SPs, all non-suitable SPs, and the assigned codes to explain why the non-suitable SPs would not be included.

Phase 5-8: Rulemaking: Drafting, Consolidation, Coordination, and Publication

As the final phase, PHMSA consolidated its analyses and conclusions, evaluated compliance with statutory requirements and governmental policies and procedures applicable to the regulatory process, and prepared this NPRM to address each topic area. These requirements include Executive Orders, Office of Management and Budget (OMB) Bulletins, DOT orders and procedures, the Administrative Procedures Act, and others. PHMSA uses a common process to identify, develop, track, prioritize, and implement regulatory changes in line with applicable DOT and Federal government policies and procedures. The Standards and Rulemaking Division has a Standard Operating Procedure (SOP) in place which is intended to outline and serve as a reference for persons engaged in the regulatory process and to ensure that all applicable requirements are met. This rulemaking was completed, as with all rulemakings, using this SOP.

For this rulemaking, due to the comprehensive nature of the project, it was broken down into topics with teams assigned to each topic. Each topic area was then handled as if it were its own rulemaking project. While Phases 1-4 represented the analysis portion of this project, Phases 5-8 encompassed the rulemaking portion. Following the completion of the team analysis in Phase 4, team mentors edited and compiled the topics into one master document.

Future Reviews

As required by MAP-21, PHMSA plans to conduct annual reviews of SPs which have been in effect for more than 10 years. These reviews and analysis of SPs will use the same methodology and tools as those used in this rulemaking. PHMSA anticipates future analysis and review will be streamlined due to the reduced number of SPs to be evaluated and the experience gained through this evaluation.

In addition, PHMSA is considering modifications to the manner in which it writes new SPs in order to more accurately reflect how the HMR is written. In this NPRM, PHMSA is requesting comments as it considers a future proposal to require an applicant to provide potential regulatory text when submitting an application for a SP in order to facilitate adoption of SPs into the HMR.

D. Petitions for Rulemaking

PHMSA also considered several petitions for rulemaking submitted in accordance with § 106.105 that may impact SPs reviewed in this rulemaking. These petitions are discussed below.

P-1607

The Council on the Safe Transportation of Hazardous Articles (COSTHA) submitted a petition for rulemaking under P-1607 to adopt the provisions of DOT SP-11458 that authorizes display packs of consumer commodity packages that exceed the 30 kg gross weight limitation. This petition has been accepted by PHMSA and is being proposed in this rulemaking. See the discussions in §§ 171.8 and 173.56 under the "Operational Highway/Rail/Shipper/Other" heading of this rulemaking.

P-1608

The Truck Trailer Manufacturers Association (TTMA) submitted a petition for rulemaking under P-1608 to adopt the provisions of DOT SP-11903 into the HMR. This petition requests that PHMSA propose to adopt standards for the construction and use of Fiber

Reinforced Plastic (FRP) Cargo Tanks. Currently, these tanks are constructed under DOT-SP 11903 and used under party status in DOT SP-9166. In addition to DOT SP-11903 and DOT SP-9166, there are other SPs that address these standards. PHMSA is not proposing to adopt these SPs at this time as there is not a uniform standard for FRP Cargo Tanks ready for adoption. However, PHMSA is working to develop a uniform standard for FRP cargo tanks and will address this issue in a future rulemaking.

P-1610

COSTHA submitted a petition for rulemaking under P-1610 to adopt the provisions of DOT-SP 11110 into the HMR. This SP authorizes cargo aircraft operators to load division 1.4S and Class 8, PG III materials in inaccessible cargo locations in excess of the limitations specified in § 175.75(c). This petition has been accepted by PHMSA for consideration in a future rulemaking. However, at this time PHMSA is not proposing to adopt this SP because of concern that more time is needed to research the potential impact of changes to § 175.75 and to coordinate this review with the appropriate parties, including our modal partners.

P-1611

COSTHA submitted a petition for rulemaking under P-1611 to adopt the provisions of DOT-SP 11470 into the HMR. This SP authorizes the transportation in commerce of shrink-wrapped pallets containing boxes of waste ORM-D materials with the word "WASTE" marked on the outside of the pallet instead of the individual box. This petition has been accepted by PHMSA and is being proposed in this rulemaking. See the discussion in § 173.12 under the "Operational Highway/Rail/Shipper/Other" heading of this rulemaking.

E. SP Evaluation Results

PHMSA is committed to the SP adoption process established by Congress in MAP-21. To ensure that the changes made under this action are as efficient and effective as possible, PHMSA solicits input from its stakeholders. We have used several tables throughout this rulemaking to clearly identify SPs that are suitable for adoption and those that have been deemed not suitable. As required by MAP-21 the initial review and analysis of SPs considered the following factors:

- The safety record of hazardous materials transported under the SP;
- The application of a SP;
- The suitability of provisions in the SP for adoption into the HMR; and
- Rulemaking activity in related areas.

Based on these factors, the SPCP team developed and assigned codes to each SP being reviewed. These codes represent the rationale for adopting or not adopting a SP into the regulations. Table 5 explains each code.

Table 5: SPCP Code Key

Code	Title	Explanation
Code 1	Suitable for Adoption	SPs suitable for adoption.
Code 2	Not Suitable for Adoption: The application of the SP.	SPs not suitable because of the manner in which applied. Because the purpose of the MAP-21 directive was to reduce need for SPs where widely-used, many of these SPs were not considered suitable for adoption because of their application; i.e., they were not widely-used, were too technical in nature, or were too specific to a SP holder. This Code was applied to both single and multiple holders of SPs.
Code 3	Not Suitable for Adoption: The suitability of the provision in the SP for adoption into the HMR.	SPs not suitable for adoption because of the lack of broad applicability. Similar to Code 2, many of these SPs were not considered suitable for adoption because of the specificity of the SP. The terms of these SPs often included an inability to provide the same exception in a

		broad manner applicable to certain geographical locations or safety controls. This Code was also applied to both single and multiple holders of SPs.
Code 4	Not Suitable for Adoption: Rulemaking activity in related areas.	SPs being addressed in other rulemakings.
Code 5	Already adopted or otherwise covered under current regulations.	SPs already adopted or authorizations already specified in the current HMR. For example, these SPs will be terminated as they are no longer necessary since the provisions contained within have already been adopted or have been covered under current regulations.

Evaluation Summary

After completion of the evaluation segment of the SPCP, PHMSA identified 98 currently-active SPs that were suitable to be proposed for adoption in this rulemaking action. The SPCP evaluated 1,168 permits that represented 3,691 holders of SPs that were active on January 1, 2013. The adoption of these 98 SPs would impact 728 SP holders, as shown in Table 6. If the SPs proposed for adoption into the HMR in this rulemaking were to be adopted in a final rule, there would be an approximate 8% reduction in the number of SPs and approximate 20% reduction in the number of holders of SPs. PHMSA anticipates the final number of SPs adopted in the final rule may vary from this original number based on input from public comments received in response to this rulemaking and ongoing SP activity.

Table 6: SPCP Impact

	SPs	Holders
SPs Proposed for Adoption in this Rulemaking Action	98	728
Total Number Evaluated	1,168	3,691
Percent Reduction	**8.39%**	**19.72%**

When combined with previous regulatory efforts to adopt SPs into the HMR, the impact is increased to 192 total SPs adopted since 2008, affecting 14,675 holders of SPs, as shown in Table 7.

Table 7: SPs Adopted and Affected Holders		
	SPs	**Holders**
SPs Eliminated in Previous Rulemaking actions since 2008	94	13,947
SPs Proposed for Adoption in this Rulemaking Action	98	728
Total	**192**	**14,675**

After this initial review of all SPs, PHMSA plans to annually review SPs that have been in effect for more than 10 years. PHMSA's ongoing review and analysis of SPs will use the same methodology and tools as in this rulemaking. PHMSA anticipates future analysis and review will be streamlined due to the reduced number of SPs to be evaluated and the experience gained through this evaluation.

Suitable for Adoption

The analysis phase of the SPCP identified 98 SPs (728 holders of SPs) that were deemed suitable for adoption. Table 8 summarizes the SPs deemed suitable, their assigned topic area, a summary of the permit, and the number of holders of SPs. All suitable SPs were deemed to be Code 1.

Table 8: SPs Suitable for Proposed Adoption			
Permit Number	**Category**	**Summary**	**Holders**
		Cylinders General	
SP6530	Cylinders General	Authorizes transportation in commerce of hydrogen and mixtures of hydrogen with helium, argon or nitrogen, in certain cylinders	26

		filled to 110% of their marked service pressures.	
SP8074	Cylinders General	Authorizes transportation in commerce of certain flammable and non-flammable gases in DOT specification 3E cylinders measuring 2 inches in diameter by 12 inches long without a safety relief device.	5
SP12084	Cylinders General	Authorizes use of certain DOT specification 4B, 4BA, or 4BW cylinders, which are protected externally by a suitable corrosion-resistant coating (such as galvanizing or painting), for transportation in commerce of certain gases when retested and marked in accordance with the requirements specified in §180.209(e). In lieu of a 5 year periodic hydrostatic test, or testing in accordance with § 173.213(c)(2), the prescribed cylinders may be retested and marked in accordance with § 180.209(e).	1
SP12301	Cylinders General	Authorizes transportation in commerce of chloropicrin and methyl bromide mixtures in a DOT specification 4BW cylinder having a capacity greater than that specified in § 173.193(b).	8
SP12782	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders, containing Divisions 2.1, 2.2 or 2.3 materials, equipped with plastic valve protection caps.	5
SP13318	Cylinders General	Authorizes transportation in commerce of DOT specification 39 cylinders of 75 cubic inches or less volume, except as specified, for transportation in commerce of certain hazardous materials.	2
SP13544	Cylinders General	Authorizes transportation in commerce of DOT specification 4BA240 cylinders containing liquefied petroleum gas (LPG) and/or residue of LPG without hazard warning labels when transported in a closed transport vehicle that is placarded.	1
SP13599	Cylinders General	Authorizes transportation in commerce of certain Division 2.2 materials in certain DOT specification seamless steel cylinders.	1
SP14251	Cylinders General	Authorizes transportation in commerce of overpacked cylinders containing Class 2 materials with CGA C-7 neck ring labels in lieu of the standard label.	6
SP14419	Cylinders General	Authorizes transportation in commerce of pyrophoric liquid n.o.s. in DOT specification 3AL cylinders that are not authorized for that material.	3
SP14937	Cylinders General	Authorizes transportation in commerce of certain cylinders that have requalification markings on a label embedded in epoxy in lieu of stamping for the transportation of various refrigerant gases.	1
		Cylinders – NDT/Aerosols	
SP7951	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain aerosols containing Division 2.2 materials, with a charge pressure not exceeding 150 psig at 75 °F when shipped in a refrigerated state.	5
SP8786	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of limited quantities of compressed gases, Division 2.2, in accumulators which deviate from the required retest parameters.	6
SP11296	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain waste aerosol cans containing flammable gas propellants, including isobutane and propane, overpacked in a UN1A2 steel drum or a UN1H2 plastic drum for disposal.	128

SP12573	Cylinders – NDT/Aerosols	Authorizes manufacture, marking, sale and use of a non-refillable, non-DOT specification inside metal container conforming with regulations applicable to DOT specification 2Q, for transportation in commerce of certain hazardous materials.	1
SP12995	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain DOT 2Q specification, non-refillable containers containing polyurethane foam or foam components that will be tested by other means in lieu of subjecting each container to a hot water bath.	1
SP13581	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of insecticide aerosol fogger in non-DOT specification non-refillable inside containers.	1
SP13601	Cylinders – NDT/Aerosols	Authorizes manufacture, marking, sale and use of non-DOT specification containers for transportation in commerce of certain non-flammable aerosols containing foodstuffs at pressures exceeding those authorized.	1
SP14429	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of a DOT specification 2P non-refillable aluminum in-side container which has been leakage tested by an automated in-line pressure check in lieu of the hot water bath specified in the HMR.	2
SP14440	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of Division 2.1 aerosols in certain non-refillable containers which have been tested by an alternative method in lieu of the hot water bath test.	1
SP14503	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of aerosol foodstuffs in a non-refillable metal container similar to DOT specification 2P and 2Q.	1
SP14544	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of Division 2.1 and 2.2 hazardous materials in certain non-DOT specification and DOT specification non-refillable aerosol containers which have been tested by an alternative method in lieu of the hot water bath test.	1
SP14623	Cylinders – NDT/Aerosols	Authorizes manufacture, marking, sale, and use of a bag-on-valve, non-refillable, aerosol container which has been tested by an alternative method in lieu of the hot water bath test. In lieu of the hot water bath, each container must be subject to an automated pressure test on the line.	1
SP14625	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of aerosols in certain non-refillable containers which have been tested by an alternative method in lieu of the hot water bath test. In lieu of the hot water bath, each container will be subject to an automated pressure test on the line.	1
SP14627	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of aerosols in certain non-refillable containers which have been tested by an alternative method in lieu of the hot water bath test. In lieu of the hot water bath, each container must be subject to an automated pressure test on the line.	1
SP14723	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of aerosols containing a Division 2.2 compressed gas in certain non-refillable aerosol containers which are not subject to the hot water bath test.	1
SP14724	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of an aerosol in certain non-refillable containers which have been tested by an alternative method in lieu of the hot water bath test. In lieu of the hot water bath, each container will be subject to an automated in-line pressure test.	1
SP14786	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of DOT specification 2P and 2Q aluminum non-refillable inside containers which are leak	1

		tested by an automated in-line pressure check in lieu of the hot water bath specified in the HMR.	
SP14842	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of consumer commodity (pressurized by nitrogen, compressed) and aerosols, non-flammable, (each not exceeding 1 L capacity) in DOT specification 2P non-refillable aluminum inside containers which have been tested by an alternative method in lieu of the hot water bath test. In lieu of the hot water bath, each container will be subject to an automated pressure test on the line.	1
SP14887	Cylinders – NDT/Aerosols	Authorizes transportation of aerosols and consumer commodities in commerce of DOT specification 2P and 2Q metal non-refillable inside containers and non-DOT specification metal inside containers which are leak tested by an automated in-line pressure check in lieu of the hot water bath specified in the HMR.	2
SP14953	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of DOT specification 2Q non-refillable aluminum inside containers which have been leakage tested by an 100% automated in-line pressure check in lieu of the hot water bath test.	1
SP15135	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain DOT 2P non-refillable metal containers (containing a laminate bag on valve system) which are leak tested by an automated in-line pressure check in lieu of the required hot water bath test.	1
SP15265	Cylinders – NDT/Aerosols	Authorizes manufacture, mark, sale and use of non-DOT specification bag-on-valve spray packaging similar to an aerosol container without requiring the hot water bath test conforming with all regulations applicable to a DOT specification 2P or 2Q, except as specified herein, for the transportation in commerce of certain hazardous materials.	1
SP15427	Cylinders – NDT/Aerosols	Authorizes manufacture, mark, sale and use of non-refillable inside containers which are leak tested by an automated in-line pressure check in lieu of the hot water bath specified in the HMR.	2
SP15792	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of DOT specification 2P non-refillable aluminum inside containers which have been tested by an alternative method in lieu of the hot water bath test. In lieu of the hot water bath, each container will be subject to an automated pressure test on the line.	1
		Cargo Tanks/Rail Cars/Portable Tanks	
SP12039	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of DOT 113C120W tank cars containing ethylene, refrigerated liquid, at an internal pressure of 20 psig instead of the maximum 10 psig.	3
SP12576	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification tanks conforming with all regulations applicable to a DOT specification MC 331 cargo tank, except as specified, for transportation in commerce of certain hazardous materials.	1
		Operational Air/Vessel	

SP11150	Operational Air/Vessel	Authorizes transportation in commerce of liquefied petroleum gas in DOT specification cylinders, secured to transport vehicles on passenger ferry vessels.	1
SP11691	Operational Air/Vessel	Authorizes transportation in commerce of certain flammable and corrosive liquids, which are the ingredients of soft drinks (beverages), not subject to the segregation requirements for vessel stowage when shipped in the same transport unit.	10
SP13213	Operational Air/Vessel	Authorizes stowage aboard passenger ferry vessels of private motor vehicles such as recreational vehicles, with attached cylinders of liquefied petroleum gas in addition to extra containers of gasoline (including camp stove or lantern fuel) and portable cylinders of liquefied petroleum gas.	1
SP14458	Operational Air/Vessel	Authorizes private motor vehicles such as recreational vehicles, with attached cylinders of liquefied petroleum gas in addition to extra containers of gasoline (including camp stove or lantern fuel) and portable cylinders of liquefied petroleum gas to be stowed aboard passenger ferry vessels.	1
		Operational Highway/Rail/Shipper/Other	
SP4850	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce by motor vehicle, rail freight, cargo vessel, and cargo aircraft of limited quantities of certain approved explosive articles (UN0237, charges, shaped, flexible, linear; and UN0104, cord, detonating, mild effect or fuse, detonating, mild effect metal clad) re-classed as Division 1.4D in prescribed packagings, subject to certain special provisions.	7
SP7991	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of railroad flagging kits of specified construction, containing certain Class 1.4 and 4.1 materials, not subject to the HMR.	37
SP8006	Operational Highway/Rail/ Shipper/Other	Authorizes certain articles, explosive, n.o.s., Division 1.4 (toy caps) to be offered for transportation in commerce without labels.	3
SP9610	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain empty packagings containing residues of Class 1 smokeless powders without complete shipping papers and placarding.	11
SP9874	Operational Highway/Rail/ Shipper/Other	Authorizes use of video cameras and monitors or instrumentation and signaling systems such as sensors, alarms, and electronic surveillance equipment, to observe the loading and/or unloading operations of hazardous materials from production control centers in lieu of personnel remaining within 25 feet of the cargo tanks.	1
SP10597	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking and sale of temperature controlled equipment for use in motor vehicles engaged in transportation in commerce of Class 3 liquids or Division 2.1 gases.	1
SP10705	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of packages containing acrolein, stabilized, Division 6.1, to be exempted from the segregation requirements, when shipped by highway.	2
SP10803	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of temperature controlled equipment for use in motor vehicles engaged in transportation of Class 3 and Class 2.1 materials.	1

SP10882	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of temperature controlled equipment for use in motor vehicles engaged in transportation of Class 3 and Class 2.1 materials.	1
SP11043	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of Division 2.3 materials on the same transport vehicle with materials classed as Division 2.1, Class 3, Class 4, Class 5, and Class 8.	79
SP11055	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials that meet the criteria for Division 6.1, PG I, Hazard Zone A in combination packages and provides relief from the segregation requirements.	8
SP11078	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain nickel-cadmium batteries each containing no more than 10 ml of liquid potassium hydroxide, a Class 8 material, as not subject to the HMR.	2
SP11151	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of combination packages containing hazardous wastes that are poisonous by inhalation, Division 6.1, PG I, Hazard Zone A, in the same transport vehicle with packages containing hazardous materials assigned to Class 3, Class 8 or Divisions 4.1, 4.2, 4.3, 5.1, 5.2.	1
SP11197	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce by private carrier of restricted quantities of hazardous materials that are authorized for exception in column 8A of the HMT, excluding Class 1, Class 7 and Divisions 6.1 and 6.2.	3
SP11202	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials across a public road, from one part of a plant to another, as essentially not subject to parts 172 and 173.	1
SP11352	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Class 3, Class 8 and Class 9 hazardous materials across a public road, from one part of a plant to another, as essentially not subject to the hazard communication requirements of part 172.	3
SP11356	Operational Highway/Rail/ Shipper/Other	Authorizes reassignment of certain high viscosity flammable liquids from Packing Group II to Packing Group III for packagings with a capacity greater than 30L.	3
SP11373	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of Division 4.2 (self-heating) materials in packing group II or III on the same transport vehicle with Class 8 liquids when the materials are appropriately separated.	29
SP11458	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of display packs of consumer commodity packages or limited quantities packages that exceed the 30 kg gross weight limit.	16
SP11470	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of shrink wrapped pallets containing boxes of waste ORM-D materials with the word "WASTE" marked on the outside of the pallet instead of on each individual box.	34
SP11666	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of green graphite products on open flat-bed truck trailers, rail flat cars, intermodal freight containers, and when unitized by banding to wooden runners or pallets.	13
SP11811	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of various household wastes without having the quantity and unit measurement shown on the shipping paper during local pick-up operations.	4
SP11984	Operational Highway/Rail/	Authorizes transportation in commerce of certain unapproved chemical oxygen generators with only one positive means of	17

	Shipper/Other	preventing unintentional actuation of the generator and without the required approval number marked on the outside of the package.	
SP12002	Operational Highway/Rail/ Shipper/Other	Authorizes unloading of tank cars containing Class 3 materials utilizing an alternate procedure to remove frozen liquid from bottom outlet valves.	1
SP12207	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials across a public road, from one part of a plant to another.	1
SP12306	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials across a public road, from a storage yard to a main plant, as not subject to the shipping paper and placarding requirements of the HMR.	1
SP13165	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials across public roads between company facilities, not subject to the shipping paper requirements of the HMR.	1
SP13190	Operational Highway/Rail/ Shipper/Other	Authorizes use of video cameras and monitors to observe the loading operations of anhydrous ammonia from a remote control station in place of personnel remaining within 7.62 meters (25 feet) of cargo tank motor vehicles.	1
SP13199	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of reconditioned (“used”) refrigeration units under the provisions of § 173.306(e).	1
SP13343	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain wetted Division 1.1D explosive substances in heated cargo vehicles when they would likely freeze during transport.	1
SP13424	Operational Highway/Rail/ Shipper/Other	Authorizes use of video cameras and monitors to observe the loading and unloading operations of various hazardous materials from a remote control station in place of personnel remaining within 7.62 meters (25 feet) of cargo tank motor vehicles.	2
SP13484	Operational Highway/Rail/ Shipper/Other	Authorizes DOT specification MC 330, MC 331 and MC 338 cargo tank motor vehicles to be loaded with certain Division 2.2 liquefied gases using specially designed hoses in lieu of full time attendance by a qualified person during loading operations.	2
SP13959	Operational Highway/Rail/ Shipper/Other	Authorizes use of a video camera and monitor to observe the loading incidental to movement or unloading incidental to movement of anhydrous ammonia from a remote control room in place of personnel remaining within 25 feet of the cargo tank motor vehicle.	1
SP14141	Operational Highway/Rail/ Shipper/Other	Authorizes use of video cameras and monitors to observe the loading incidental to movement or unloading incidental to movement of certain Class 3, 8, and 9 materials in place of personnel remaining within 25 feet of a cargo tank motor vehicle.	1
SP14150	Operational Highway/Rail/ Shipper/Other	Authorizes use of video cameras and monitors to observe the loading and unloading operations of certain Class 3 and Class 8 hazardous materials from a remote control station in place of personnel remaining within 7.62 meters (25 feet) of cargo tank motor vehicles.	1
SP14335	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of Division 2.3 Zone A materials on the same motor vehicle with DOT specification packagings containing the residues of Divisions 2.1, 2.3, 4.3, 5.1, and Classes 3 and 8 materials.	3
SP14447	Operational	Authorizes DOT specification cargo tank motor vehicles	1

	Highway/Rail/ Shipper/Other	containing certain Division 2.2; 5.1; and 6.1; Class 3 and 8 hazardous materials to be loaded/unloaded using specially designed hoses in lieu being attended by a qualified person during loading and unloading operations.	
SP14525	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain used diatomaceus earth filter material not subject to the HMR, except for shipping papers and certain marking requirements.	2
SP14618	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale, and use of temperature controlled equipment for use in motor vehicles engaged in the transportation in commerce of Class 3 liquids or Division 2.1 gases.	1
SP14680	Operational Highway/Rail/ Shipper/Other	Authorizes use of video cameras and monitors to observe the loading incidental to movement or unloading incidental to movement of spent sulfuric acid in place of personnel remaining within 25 feet of a cargo tank motor vehicle.	2
SP14726	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale, and use of temperature controlled equipment for use in motor vehicle transportation of Class 3 and Division 2.1 materials.	1
SP14822	Operational Highway/Rail/ Shipper/Other	Authorizes use of video cameras and monitors or instrumentation and signaling systems such as sensors, alarms, and electronic surveillance equipment, to observe the loading and unloading operations of hazardous materials from production control centers in lieu of personnel remaining within 25 feet of the cargo tanks.	1
SP14827	Operational Highway/Rail/ Shipper/Other	Authorizes use of video cameras and monitors to observe the loading incidental to movement or unloading incidental to movement of certain corrosive materials in place of personnel remaining within 25 feet of a cargo tank motor vehicle.	1
SP14840	Operational Highway/Rail/ Shipper/Other	Authorizes use of video cameras and monitors to observe the loading incidental to movement or unloading incidental to movement of certain Class 8 materials in place of personnel remaining within 25 feet of a cargo tank motor vehicle.	1
SP14945	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain diesel fuel and environmentally hazardous substances, liquid, n.o.s. across a public road without shipping papers, marking, labeling or placarding.	1
		Non-Bulk Packaging Specifications/IBCs	
SP6614	Non-Bulk Packaging Specifications/ IBCs	Authorizes use of polyethylene bottles placed in a polyethylene crate for transportation in commerce of certain Class 8 corrosive materials (NA1760, UN3266, UN3264, UN3265, UN1791, UN1789, UN2796).	11
SP8230	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of Packing Group I and II nitric acids in certain combination packagings.	4
SP11602	Non-Bulk	Authorizes transportation in commerce of certain Division 4.3	11

	Packaging Specifications/ IBCs	materials contained in sift-proof closed bulk packagings. Water reactive solid, n.o.s. (contains magnesium, magnesium nitrides) 4.3, UN2813, PG II or III.	
SP12030	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of battery fluid, acid, packaged with a dry storage battery in a UN4G fiberboard box with a maximum gross weight not over 37.0 kg which exceeds the weight limitation.	1
SP12335	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain Division 1.1D and 1.4D detonating cords without the ends being sealed in alternative packaging.	8
SP12920	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain pyrophoric materials in a combination package consisting of UN1A2 outer package and a UN1A1 inner package.	19
SP13217	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of gasoline in non-DOT specification packages known as gasoline dispensers.	1
SP13548	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of lead acid batteries and packages of battery acid (with two different UN numbers) on the same vehicle.	125
SP13796	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of phosphorus, yellow, under water in alternate packaging.	1
SP14137	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain hydrochloric acid solutions in UN31H1 or UN31HH1 intermediate bulk containers (IBCs).	1
SP14213	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of UN1H1 plastic drums to be used for transportation in commerce of nitric acid with not more than 40% nitric acid.	1
SP15373	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, mark, sale and use of the specially designed combination packagings for transportation in commerce of certain Class 4.3 materials without hazard labels or placards, with quantity limits not exceeding 25 grams.	1

Not Suitable for Adoption

The analysis phase of the SPCP identified 1,070 SPs that were deemed not suitable for adoption. Table 9 summarizes the SPs deemed not suitable, their assigned topic area, a summary of the permit, the number of SP holders, and the corresponding denial code.

Table 9: SPs Not Suitable for Proposed Adoption				
Permit Number	**Category**	**Summary**	**Holders**	**Code**
		Cylinders General		
SP6626	Cylinders General	Authorizes a 10 year retest interval for certain DOT specification 3A or 3AA cylinders and ICC-3, 3A, or 3AA cylinders manufactured before December 31, 1945 for transportation in commerce of certain hazardous materials.	7	2
SP6691	Cylinders General	Authorizes 10 year requalification in accordance with § 180.209(b) for cylinders manufactured on or before December 31, 1945.	16	2
SP6946	Cylinders General	Authorizes use of DOT specification 3A or 3AA cylinders and ICC-3, 3A, or 3AA cylinders manufactured before December 31, 1945 to be retested every 10 years instead of 5 years for transportation in commerce of certain compressed gases.	1	2
SP970	Cylinders General	Authorizes transportation in commerce of diborane in DOT specification 3AA cylinders overpacked in certain insulated drums or wooden boxes as specified.	3	3
SP2787	Cylinders General	Authorizes transportation in commerce of certain Division 2.2 gases in a non-DOT specification pressure vessel. The packaging prescribed is a non-DOT specification pressure vessel equipped with a regulating valve, a pressure relief valve, and a squib actuated valve. Accumulators must be packed in a strong wooden, metal, or polystyrene container or installed in a certain missile body section overpacked in a strong wooden, metal, or polystyrene container.	2	2
SP3004	Cylinders General	Authorizes use of prescribed non-DOT specification sampling cylinders having a capacity not exceeding 373 cubic inches (6 Liters). Each sampling cylinder must be equipped with a frangible disc safety device. The sampling cylinders must be packed in formed fiberglass cases, cushioned with resilient packing material in strong outside boxes such as, but not limited to, wood, fiberboard, plastic or aluminum.	10	3
SP3302	Cylinders General	Authorizes transportation in commerce of certain non-flammable gases in non-DOT specification sampling bottles (cylinders).	1	2
SP4052	Cylinders General	Authorizes transportation in commerce of an aerosol formulation pressurized with nitrogen in a DOT 39 specification cylinder.	1	4
SP4661	Cylinders General	Authorizes transportation in commerce of certain hazardous materials in 4BA240 and 4BW240 cylinders that have been tested and inspected using alternative retest procedures instead of the internal visual inspection	1	3

		and pressure retest specified in § 180.205(f) and (g) and the marking prescribed in § 180.213.		
SP4844	Cylinders General	Authorizes transportation in commerce of oxygen in foreign manufactured non-DOT specification steel cylinders which are to be used as components in aircraft.	3	2
SP4884	Cylinders General	Authorizes transportation in commerce of certain Class 8 and Division 2.1, 2.2, 2.3 and 4.3 materials in non-DOT specification cylinders.	1	3
SP5600	Cylinders General	Authorizes transportation in commerce of samples of certain hazardous materials in non-DOT specification cylinders made to the DOT 3A specification, except Monel metal may be used rather than steel.	3	2
SP5967	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification cylinders conforming in part with DOT 3HT for shipment of a Division 2.2 gas. The packaging is a "cool gas generator".	2	2
SP6071	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming to all regulations applicable to DOT specification 4DA, except as specified.	1	2
SP6263	Cylinders General	Authorizes transportation in commerce of certain non-flammable gases in a non-DOT specification pressure vessel designed and constructed to the ASME Code.	1	2
SP6517	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification welded steel cylinders conforming with all regulations applicable to a DOT specification 4BW, except as specified, for transportation in commerce of acetylene.	1	2
SP6557	Cylinders General	Authorizes transportation in commerce of certain DOT-specification cylinders, used in the transportation of carbon dioxide and bromotrifluoromethane, to deviate from the requirements of the inspector's report.	27	3
SP6686	Cylinders General	Authorizes transportation in commerce of certain Division 2.1 gases in non-refillable steel cylinders made in compliance with DOT specification 39, except for the seams. Authorizes DOT 39 cylinders with brazed alloy seams.	2	3
SP6805	Cylinders General	Authorizes UN1953 (a Division 2.3 material) in 3A, 3AA and 3AAX manifolded cylinders.	4	3
SP6908	Cylinders General	Authorizes transportation in commerce of certain hazardous materials in non-DOT specification cylinders similar to DOT specification 39 cylinders.	1	3
SP7026	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification welded stainless steel cylinders conforming with DOT specification 4DS except for maximum charging pressure, material of construction, testing requirements and marking.	1	2
SP7413	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3E cylinder except as specified.	1	3
SP7458	Cylinders	Authorizes manufacture, marking, sale and use of non-	1	2

	General	DOT specification cylinders conforming in part with DOT specification 3E for shipment of certain hazardous materials (chlorine, UN1017; hydrogen chloride, UN1050; and those materials which are authorized for shipment in DOT specification 3E cylinders and that are compatible with the cylinders material of construction).		
SP7477	Cylinders General	The prescribed packagings are certain non-DOT specification seamless aluminum cylinder in conformance with DOT-3AL having a marked service pressure of 1800 psi 2015 psi, modified by enlarging the end opening.	3	2
SP7542	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4BW cylinder, except as specified, for acetylene, dissolved, UN1001.	1	2
SP7607	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder for transportation in commerce of hydrogen, compressed by passenger carrying aircraft. The packaging prescribed is a non-DOT specification seamless stainless steel cylinder of not more than 7.22 cubic inches water capacity and the cylinder is a component of a portable gas chromatograph.	1	3
SP7657	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification stainless steel cylinders conforming with all regulations applicable to a DOT specification 3E cylinder, except as specified.	1	2
SP7694	Cylinders General	Authorizes transportation in commerce of certain Division 2.2 gases in non-DOT specification cylinders made in compliance with DOT 39 with certain exceptions.	2	3
SP7708	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification small, high pressure cylinders of welded construction conforming with all regulations applicable to a DOT specification 3HT.	1	3
SP7721	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 39 cylinder, except smaller with higher pressure and steel used in DOT 3HT specification.	1	2
SP7737	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3E cylinder except that the packaging is made of aluminum and additional tests are required.	1	3
SP7765	Cylinders General	The packaging prescribed is a limited life, non-DOT specification packaging, described as a missile gas storage system, consisting of a welded steel sphere, and an electric squib containing a Division 1.4 explosive.	1	3
SP7767	Cylinders General	Authorizes use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4DS cylinder, except as specified, for	1	3

		transportation in commerce of compressed gas, n.o.s. (mixture of bromotrifluoromethane and nitrogen).		
SP7774	Cylinders General	Authorizes transportation in commerce of bromine trifluoride in certain non-DOT specification cylinders.	3	3
SP7823	Cylinders General	Authorizes transportation in commerce of certain hazardous materials in non-DOT specification cylinders conforming to DOT specification 4BW.	5	2
SP7879	Cylinders General	Authorizes use of non-DOT specification cylinders similar to DOT 3E cylinders for transportation in commerce of bromine trifluoride.	1	3
SP7945	Cylinders General	Authorizes use of a non-DOT specification cylinder conforming to all regulations applicable to DOT specification 4DS, except as specified, for transportation in commerce of compressed gas, n.o.s.	1	2
SP7954	Cylinders General	Authorizes transportation in commerce of certain compressed gases in manifolded DOT specification cylinders.	9	3
SP7971	Cylinders General	Authorizes use of non-DOT specification cylinders for transportation in commerce of a Division 2.2 compressed gas.	1	2
SP8009	Cylinders General	Authorizes use of a DOT 3AAX cylinder made of 4130X steel for the transport of methane, compressed or natural gas, compressed (with a high methane content).	7	2
SP8013	Cylinders General	Authorizes use of DOT specification 4E cylinders for transportation in commerce of certain Division 2.1, 2.2 and 2.3 gases.	3	3
SP8131	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification pressure vessels for the shipment of oxygen, compressed, Division 2.2.	1	2
SP8156	Cylinders General	Authorizes use of DOT specification 39 cylinders up to 225 cubic inches in volume for transportation in commerce of certain flammable or non-flammable compresses gases and carbon disulfide.	10	3
SP8178	Cylinders General	Authorizes use of non-DOT specification cylinders for transportation in commerce of oxygen, compressed.	1	3
SP8220	Cylinders General	Authorizes use of non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3HT cylinder, except as specified, for transportation in commerce of air, compressed and nitrogen compressed.	1	3
SP8221	Cylinders General	Authorizes use of non-DOT specification, high pressure cylinders of welded construction for military missile systems use only for transportation in commerce of air, compressed and nitrogen, compressed.	1	2
SP8239	Cylinders General	Authorizes use of non-DOT specification containers for transportation in commerce of boron trifluoride, compressed.	1	2
SP8255	Cylinders General	Authorizes use of a non-reusable (non-refillable) non-DOT specification welded steel cylinder conforming with all regulations applicable to a DOT specification 39 cylinder, except as specified, for transportation in commerce of air, compressed; argon, compressed; helium , compressed; and nitrogen, compressed.	1	2

SP8299	Cylinders General	Authorizes use of a non-DOT specification cylinder conforming to all regulations applicable to a DOT specification 3HT for transportation in commerce of helium, compressed and nitrogen, compressed.	1	3
SP8439	Cylinders General	Authorizes use of a non-DOT specification cylinder conforming to all regulations applicable to a DOT specification 4DS for transportation in commerce of UN1009, UN1956.	1	3
SP8495	Cylinders General	Authorizes use of a non-DOT specification cylinder conforming to all regulations applicable to a DOT 4DS cylinder for transportation in commerce of UN1044, UN1956, UN3163.	1	2
SP8561	Cylinders General	Authorizes use of a non-DOT specification cylinder conforming with all requirements for a DOT 3HT for transportation in commerce of oxygen, compressed.	1	3
SP8720	Cylinders General	Authorizes use of a non-DOT specification welded high-pressure, non-reusable cylinder in military weapons systems only for transportation in commerce of helium, compressed.	1	3
SP8750	Cylinders General	Authorizes use of non-DOT specification small, high pressure cylinders of welded construction for military weapons systems use, conforming with all regulations applicable to a DOT specification 3HT cylinder except as specified, for transportation in commerce of air, compressed and nitrogen, compressed.	1	3
SP8757	Cylinders General	Authorizes use of non-DOT specification stainless steel cylinders conforming with all regulations applicable to a DOT specification 3A cylinder except as specified, for transportation in commerce of various Division 2.1, 2.2 and 2.3 gases and Class 3 material.	1	2
SP8795	Cylinders General	Authorizes use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4B240ET, except as specified for transportation in commerce of UN1009 and UN1044.	1	3
SP8842	Cylinders General	Authorizes use of non-DOT specification small, high pressure cylinders of welded construction similar to DOT specification 3HT for aircraft use or military weapons systems only, to be used for the transportation in commerce of nitrogen, compressed.	1	3
SP8843	Cylinders General	Authorizes transportation in commerce of bromine trifluoride in non-DOT specification cylinders.	1	2
SP8915	Cylinders General	Authorizes transportation in commerce of certain manifolded DOT specification cylinders containing Division 2.1 and 2.2 gases.	14	5
SP8920	Cylinders General	Authorizes use of non-DOT specification welded, high pressure non-refillable cylinders in military weapons systems only for transportation in commerce of air, compressed; argon, compressed; helium, compressed; and nitrogen, compressed.	1	2
SP8927	Cylinders General	Authorizes transportation in commerce of helium, compressed in non-DOT specification, small, high pressure spheres of welded construction, in full compliance with DOT specification 3HT, except as	1	2

		specified, for military weapons use only.		
SP8962	Cylinders General	Authorizes use of non-DOT specification pressure vessels conforming to all regulations applicable to a DOT specification 3HT except as specified for the transportation in commerce of nitrogen, compressed.	1	3
SP8971	Cylinders General	Authorizes transportation in commerce of bromine trifluoride in certain non-refillable, non-DOT specification cylinders of equal or greater integrity than those currently authorized.	4	2
SP8990	Cylinders General	Authorizes transportation in commerce of a non-DOT specification cylinder containing certain Division 2.1 and 2.2 gases. The prescribed packaging is a non-DOT specification non-refillable steel inside cylinder and fabricated in conformance with DOT specification 39 cylinder.	1	2
SP9001	Cylinders General	Authorizes use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT 3T specification cylinder, except as specified, for transportation in commerce of UN1002, UN1006, UN1008, UN1013, UN1962, UN1046, UN1971, UN1065, UN1066, UN1070, and UN1072.	24	2
SP9034	Cylinders General	Authorizes use of DOT specification 3AL cylinders subject to certain limitations and requirements for transportation in commerce of certain gases or gas mixtures.	9	5
SP9036	Cylinders General	Authorizes use of billet pierced DOT 3AA cylinders that are made from parted billets which are not inspected by an independent inspector after parting. The cylinders are authorized for transportation in commerce of compressed or liquefied gases in Division 2.1 and 2.2 (flammable and non-flammable) and poisonous gases in Division 2.3 for which DOT 3AA cylinders are authorized in part 173.	1	2
SP9221	Cylinders General	Authorizes use of non-DOT specification stainless steel cylinders which are part of a military weapons system to be used for transportation in commerce of nitrogen, argon or helium.	1	2
SP9295	Cylinders General	Authorizes use of a non-DOT specification toroidal pressure vessel conforming with all regulations applicable to a DOT 39 cylinder, except as specified, for the transportation in commerce of air, compressed; argon, compressed; nitrogen, compressed; and helium, compressed.	1	3
SP9347	Cylinders General	Authorizes use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3E cylinder, except as specified, for the transportation in commerce of UN1203, UN1228, UN1267, UN1268, NA1270, UN1075, UN1978, UN1077, UN1971, UN1046, and UN1066.	1	3
SP9370	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder complying in part with the DOT 3T specification for transportation in commerce of those hazardous materials authorized in DOT 3T	2	3

		cylinders.		
SP9386	Cylinders General	Authorizes use of non-DOT specification welded stainless steel cylinder conforming with all regulations applicable to a DOT specification 3HT cylinder, except as specified, for transportation in commerce of nitrogen, compressed.	1	3
SP9393	Cylinders General	Authorizes use of a non-DOT specification, non-refillable cylinder for use in transporting certain Division 2.2 gases (UN1018, UN1956 and various 2.2 refrigerant gases).	1	3
SP9408	Cylinders General	Authorizes use of DOT 3AAX cylinders for transportation in commerce of silicon trifluoride. The packaging prescribed is a DOT specification 3AAX cylinder manufactured from alloy steel with minimum service pressure of 2200 psi. The cylinders are arranged in ISO modules.	1	2
SP9421	Cylinders General	Authorizes use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT-3AA specification cylinder, except as specified, for the transportation in commerce of gases or mixtures of gases authorized in the HMR to be shipped in DOT-3AA specification cylinders.	2	3
SP9450	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming with all regulations applicable to a DOT specification 4BW cylinder, except as specified, for transportation in commerce of Division 2.1 and Division 2.2 compressed or liquefied gases authorized in DOT 4BW cylinders	1	3
SP9478	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3AL cylinder for transportation in commerce of fire extinguishers (with bromotrifluoromethane, 2.2, UN1044).	1	3
SP9491	Cylinders General	Authorizes use of 3AL cylinders for transportation in commerce of UN1984 and UN2193. The liquid portion of trifluoromethane (UN1984) may completely fill the cylinder at or below 130 °F, provided the pressure at the critical temperature does not exceed one and one-fourth times the service pressure.	2	5
SP9508	Cylinders General	Authorizes transportation in commerce of certain Division 4.3 materials in DOT specification 4BW240 cylinders that are visually inspected externally instead of the required hydrostatic retest.	3	2
SP9609	Cylinders General	Authorizes manufacture, marking, sale and use of certain non-DOT specification pressure vessel, conforming with all regulations applicable to DOT specification 39, except as specified, for transportation in commerce of air, compressed; argon, compressed, helium, compressed; and nitrogen, compressed.	1	2
SP9706	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT-3AA specification	2	3

		cylinder, except as specified, for transportation in commerce of certain Division 2.1, 2.2 or 2.3 materials authorized to be shipped in a DOT 3AA specification cylinder.		
SP9729	Cylinders General	Authorizes transportation in commerce of certain corrosive materials (UN1732 and UN2495) in DOT specification 4BW cylinders manufactured with an alternative material of construction (stainless steel).	2	3
SP9761	Cylinders General	Authorizes manufacture, marking, sale and use of cylinders similar to the DOT specification 4DS cylinder, except the material is constructed of an alternative stainless steel.	1	3
SP9778	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification packagings (a specification equivalent to the DOT 3A seamless steel cylinder) containing the materials (sulfur hexafluoride, UN1080; radioactive material, excepted package-articles, UN2911; radioactive material, excepted package-articles, UN2910) which also contain an electronic device containing a small amount of radioactive material.	1	2
SP9790	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming with DOT 4L specification except that the container is made of Type 316L stainless steel for transportation of Class 2.2 gases (UN1877, nitrogen, refrigerated liquid).	1	2
SP9791	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming in part with the DOT-3AA specification, for use in transportation in commerce of certain non-flammable, non-liquefied compressed gases.	1	3
SP9830	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4BA cylinder, except as specified, for transportation in commerce of Division 2.1 and 2.2 material authorized in DOT 4BA cylinders, Class 3, Division 6.1 and Class 8 materials authorized in DOT 4BA cylinders.	1	3
SP9880	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification containers described as hermetically-sealed electron tube devices for the transportation in commerce of UN1006, UN1013, UN1046, UN1056, UN1065, UN1066, UN1956, UN1982, and UN2036.	1	5
SP9884	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with DOT specification 4L except as specified, for transportation in commerce of oxygen, refrigerated liquid.	1	3
SP9909	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT-3AA specification cylinder, except as specified for transportation in commerce of gases or mixtures of gases authorized in the HMR to be shipped in DOT-3AA specification	3	3

		cylinders.		
SP9998	Cylinders General	Authorizes use of seamless steel hydraulic accumulators having a capacity of not more than 15 gallons, with a design pressure not exceeding 6,000 psig designed and fabricated in full compliance with Section VIII of the ASME Code for transportation in commerce of compressed nitrogen, UN1066 a Division 2.2 material.	1	3
SP10047	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT-3AA specification cylinder, except as specified, for transportation in commerce of gases or mixtures of gases authorized in the HMR to be shipped in DOT-3AA specification cylinders.	2	3
SP10064	Cylinders General	Authorizes manufacture, marking, sale and use of a non-refillable, non-DOT specification cylinder for transportation in commerce of air, compressed, UN1002; argon, compressed, UN1006; helium, compressed, UN1046; and nitrogen, compressed, UN1066.	1	3
SP10066	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming with all regulations applicable to a DOT Specification 39 cylinder, except as specified, for transportation in commerce of compressed gas, n.o.s. (carbon dioxide with a helium gas mixture); and life-saving appliances, self-inflating. The non-DOT specification cylinder may be transported by itself or incorporated into a self-inflating life raft assembly.	1	3
SP10180	Cylinders General	Authorizes manufacture, marking, sale and use of DOT specification cylinders, except they are equipped with pressure relief device systems other than as prescribed by the HMR, to be used for transportation in commerce of certain Division 2.2 materials.	1	2
SP10184	Cylinders General	Authorizes transportation in commerce of specific gas mixtures that are commercially free of corroding components in DOT specification 4B, 4BA or 4BW cylinders that are retested in accordance with § 180.209(e) and (g).	4	2
SP10232	Cylinders General	Authorizes manufacture, marking, sale, and use of a non-DOT specification packaging conforming in part with the DOT specification 2Q, except as specified, for transportation in commerce of UN1078, refrigerant gases, n.o.s. and UN3159, 1,1,1,2-tetrafluoroethane.	1	2
SP10279	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification steel water pump system tank with an outside diameter not exceeding 26 inches for the transportation of certain materials (UN1002, air, compressed; UN1066, nitrogen, compressed).	1	2
SP10319	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification pressure vessels (water pump system	1	2

		tank) for use in the transportation of certain Division 2.2 materials (UN1956, compressed gas; UN1066, nitrogen compressed).		
SP10320	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4BW cylinder, except as specified, for transportation in commerce of certain hazardous materials. The packaging as specified is comparable to DOT specification 8AL except for the steel shell.	1	2
SP10326	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3HT cylinder, except as specified, for transportation in commerce of helium, compressed, UN1046.	1	2
SP10370	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification aluminum cylinders conforming with all regulations applicable to a DOT specification 3E cylinder, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP10395	Cylinders General	Authorizes manufacture, marking, sale and use of a DOT specification 4L cylinder to be used for transportation in commerce of methane, refrigerated liquid, Division 2.1.	1	2
SP10424	Cylinders General	Authorizes transportation in commerce of a specific gas mixture in DOT specification 4BA240 cylinders retested in accordance with the provisions of § 180.209(e).	3	2
SP10440	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4DS cylinder, except as specified, for transportation in commerce of various Division 2.2 gases.	1	2
SP10511	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification stainless steel cylinders containing sulfur hexafluoride (SF6) classed as a Division 2.2 material.	2	2
SP10555	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4B cylinder.	1	2
SP10590	Cylinders General	Authorizes manufacture, marking, sale, and use of a non-DOT specification inside container, conforming with all regulations applicable to a DOT specification 2P, with the exception of the diameter and capacity, to be used for transportation in commerce of certain Division 2.1 gases.	1	2
SP10603	Cylinders General	Authorizes transportation in commerce of a non-DOT specification cylinder conforming with all regulations applicable to a DOT 3AA specification cylinder, except as specified, for transportation in commerce of certain non-liquefied compressed gases, or mixtures of such compressed gases, which are authorized in the HMR to be transported in DOT 3AA specification cylinders.	3	3

SP10646	Cylinders General	Authorizes transportation in commerce of flammable gases in a non-DOT specification cylinder.	1	2
SP10677	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification non-refillable inside container conforming with all regulations applicable to a DOT specification 2P inner non-refillable metal receptacle, except as specified, for transportation in commerce of UN1075 and UN2037.	1	2
SP10698	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4B, except as specified, for transportation in commerce of a Division 2.2 gas.	1	3
SP10776	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3E cylinder, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP10785	Cylinders General	Authorizes the manufacture, marking, sale and use of non-DOT specification cylinders containing certain Divisions 2.2 and 2.3 gases to be transported in radiation detectors rather than in DOT specification cylinders.	1	3
SP10788	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming to a DOT specification 39 cylinder, except as specified, for transportation in commerce of Division 2.1 and Division 2.2 gases authorized in DOT 39 cylinders.	1	3
SP10802	Cylinders General	Authorizes transportation in commerce of carbon monoxide and gas mixtures containing carbon monoxide in DOT specification 3AL cylinders charged to a pressure of 3,000 psig or less.	3	5
SP10850	Cylinders General	Authorizes transportation in commerce of certain cylinders subjected to a complete external visual inspection in lieu of the periodic hydrostatic retest.	1	3
SP10865	Cylinders General	Authorizes the rebuilding and selling of DOT specification 4B, 4BA and 4BW cylinders in accordance with certain procedures , for use in transportation of compressed gases, flammable liquids, corrosive materials and other hazardous material that are authorized to be shipped in DOT 4B, 4BA, and 4BW cylinders.	1	5
SP10867	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming to all regulations applicable to a DOT specification 3HT cylinder, except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP10869	Cylinders General	Authorizes manufacture, marking, sale, and use of a non-DOT specification cylinder which is constructed in conformance with all regulations applicable to a DOT specification 3AA cylinder.	1	2
SP10898	Cylinders General	Authorizes transportation in commerce of a Division 2.2 material (nitrogen) in diaphragm, bladder and piston type accumulators.	13	3

SP10914	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3HT cylinder for transportation in commerce of helium, compressed, UN1046.	1	3
SP10964	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4DS cylinder, except as specified, for transportation in commerce of compressed gas, n.o.s. (bromotrifluoromethane and nitrogen), UN1956.	1	3
SP11025	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming with all regulations applicable to a DOT specification 3HT cylinder, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP11032	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification, non-refillable cylinder conforming with all regulations applicable to a DOT specification 39 cylinder, except as specified, for transportation in commerce of oxygen, compressed, UN1072.	1	3
SP11044	Cylinders General	Authorizes transportation in commerce of up to 11.35 kg (25 pounds) of an organic phosphate compound (2,2 dichlorovinyl dimethylphosphate) in a DOT specification 4BA240, 4BW240, 3A and 3AA cylinder equipped with an eduction (dip) tube.	1	2
SP11054	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification stainless steel cylinders conforming with all regulations applicable to a DOT specification 3A cylinder, except as specified.	1	2
SP11057	Cylinders General	Authorizes use of a non-DOT specification cylinder for transportation in commerce of UN1956, Helium.	1	3
SP11147	Cylinders General	Authorizes transportation in commerce of aircraft safety equipment which utilizes non-DOT specification cylinders containing certain compressed gases, Division 2.2.	1	2
SP11173	Cylinders General	Authorizes transportation in commerce of certain hazardous materials in non-DOT specification stainless steel cylinders conforming, in part, with the specifications for a DOT 4BW cylinder.	4	2
SP11262	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4L cylinder, except as specified, for transportation in commerce of oxygen, refrigerated liquid.	1	3
SP11289	Cylinders General	Authorizes manufacture, marking, sale and use of DOT specification 39 cylinders which deviate from the visual inspection requirements.	1	2
SP11323	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders for transportation in commerce of hazardous materials authorized in DOT specification 39 cylinders.	1	3
SP11360	Cylinders	Authorizes transportation in commerce of certain non-	2	2

	General	DOT specification pressure vessels containing compressed hydrogen, which are component parts of a nickel-hydrogen battery.		
SP11378	Cylinders General	Authorizes use of stainless steel non-DOT specification cylinders conforming to all regulations applicable to DOT specification 4BW, except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP11379	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification pressure vessels for use as components of safety systems and explosive articles. The pressure vessels, charged with non-toxic, non-liquefied gases, are authorized for transportation in commerce.	1	2
SP11380	Cylinders General	Authorizes transportation in commerce of certain Division 2.1 gases in non-DOT specification cylinders.	1	2
SP11383	Cylinders General	Authorizes transportation in commerce of certain hazardous materials in non-DOT specification stainless steel cylinders conforming to all regulations applicable to DOT specification 4BW.	1	2
SP11394	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4BA cylinder, except as specified, for transportation in commerce of the materials authorized for transportation in DOT specification 4BA cylinders.	1	3
SP11447	Cylinders General	Authorizes transportation in commerce of a gas purification apparatus containing certain Division 4.1 (flammable solids) and Division 4.2 (spontaneously combustible solids) in non-DOT specification stainless steel pressure vessels.	3	2
SP11487	Cylinders General	Authorizes transportation in commerce of certain cylinder (bottle) assemblies containing Division 2.1 and Division 2.2 materials.	1	2
SP11494	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification pressure vessels for use as components of automobile vehicle safety systems (such as airbag inflators).	1	2
SP11506	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders (pressure vessels) for use as components of automobile vehicle safety systems. These pressure vessels may be charged with non-toxic, non-liquefied gases, or mixtures thereof and are authorized for transportation in commerce	1	2
SP11536	Cylinders General	Authorizes transportation in commerce of certain hazardous materials in non-DOT specification packagings (spacecraft) and limited quantities of Division 1.4S and 1.4C explosives secured within the spacecraft.	1	2
SP11548	Cylinders General	Authorizes transportation in commerce of certain solid polymer catalysts classified as Class 8, Division 4.1, Division 4.2, Division 4.3, and Division 6.1 in DOT specification cylinders except specification 8 and 3HT.	2	3

SP11580	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification stainless steel cylinders conforming to all regulations applicable to DOT specification 4BW.	1	2
SP11592	Cylinders General	Authorizes the manufacture, marking, sale and use of a non-DOT specification steel water pump system tank that exceeds the prescribed maximum outside diameter and wall stress used for transportation in commerce of compressed air or nitrogen.	1	2
SP11598	Cylinders General	Authorizes manufacture, marking, sale and use of DOT specification cylinders equipped with pressure relief device systems other than as prescribed to be used for transportation in commerce of certain Division 2.2 materials.	1	2
SP11620	Cylinders General	Authorizes manufacture, marking, sale and use of certain non-DOT specification inside metal containers conforming with all regulations applicable to a DOT specification 2Q inner non-refillable metal receptacle, except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP11644	Cylinders General	Authorizes manufacture, marking, sale and use of a non-refillable non-DOT specification inside metal container conforming in part with the DOT specification 2Q, for transportation in commerce of certain refrigerant gases.	1	2
SP11650	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification pressure vessels for use as components of automobile vehicle safety systems. The pressure vessels, charged with non-toxic, non-liquefied gases, are authorized for transportation in commerce subject to requirements and limitations specified.	1	3
SP11692	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming in part with DOT specification 3AA to be used for transportation in commerce of certain hazardous materials.	1	3
SP11721	Cylinders General	Authorizes manufacture, marking, sale and use of DOT specification 39 cylinders which deviate from the visual inspection requirements.	1	3
SP11722	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification spherical pressure vessels containing Division 2.1, 2.2 and 2.3 compressed gases.	1	2
SP11725	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification containers containing certain Division 2.1, 2.2, 2.3 liquefied and compressed gases and other hazardous materials for use in specialty cooling applications such as satellites and military aircraft.	6	2
SP11770	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming with all regulations applicable to a DOT specification 3E cylinder, except as specified, for transportation in commerce of those materials authorized in DOT specification 3E cylinders.	1	2
SP11777	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification pressure vessels for use as	1	4

		components of automobile vehicle safety systems.		
SP11780	Cylinders General	Authorizes manufacture, marking, sale and use of certain x-ray systems containing sulfur hexafluoride for transportation in commerce.	1	2
SP11782	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification pressure vessel conforming to the American Society of Mechanical Engineers (ASME) pressure vessel codes and standards, for transportation in commerce of a Division 4.2 material.	1	2
SP11791	Cylinders General	Authorizes transportation in commerce of a Division 2.1 material in a DOT specification 2Q non-refillable inner container which exceeds the authorized maximum charging pressure.	1	3
SP11859	Cylinders General	Authorizes manufacture, marking, sale and use of a missile gas storage system consisting of a non-DOT specification cylinder equipped with a pyrotechnic pressure relief device for transportation in commerce of nitrogen.	1	2
SP11914	Cylinders General	Authorizes transportation in commerce of a Division 2.1 material in a non-refillable, non-DOT specification inside container conforming in part with DOT specification 2P.	1	3
SP11917	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification, non-refillable, foam-filled cylinder conforming with all regulations applicable to a DOT specification 39 cylinder, except as specified, for transportation in commerce of certain hazardous materials. The prescribed packaging is a non-DOT specification, non-refillable steel cylinder consisting of a seamless shell with the bottom attached by a mechanical seam. The finished cylinder will contain a block of reticulated polyurethane foam that approximately fills the inside void of the cylinder and absorbs the gas into its cell structure.	1	2
SP11952	Cylinders General	Authorizes transportation in commerce of certain pressure metal containers containing limited quantities of compressed nitrogen.	2	2
SP11990	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification oil well sampling cylinders conforming with all regulations applicable to a DOT specification 3A cylinder, except as specified, for the transportation in commerce of certain hazardous materials.	2	3
SP11993	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders (pressure vessels) for use as components for safety systems and explosives articles.	1	2
SP12005	Cylinders General	Authorizes transportation in commerce of xenon gas in a non-DOT specification composite cylinder which is part of the International Space Station.	1	2
SP12007	Cylinders General	Authorizes transportation in commerce of DOT specification cylinders authorized for chloropicrin, for use by licensed fumigators, with closures that deviate from that required by the HMR.	3	2

SP12009	Cylinders General	Authorizes transportation in commerce of anhydrous ammonia in DOT specification cylinders being shipped to a disposal facility.	16	3
SP12014	Cylinders General	Authorizes transportation in commerce of certain reconditioned refrigeration units under the provisions of § 173.306(e).	1	2
SP12038	Cylinders General	Authorizes transportation in commerce of certain DOT specification 2Q containers containing liquefied petroleum gas.	1	3
SP12067	Cylinders General	Authorizes transportation in commerce of compressed gases, n.o.s., Division 2.2 materials, in a non-DOT specification pressure vessel used as a component in an aircraft evacuation slide.	1	3
SP12068	Cylinders General	Authorizes transportation in commerce of certain hazardous materials contained in a certain launch vehicle with and without a payload.	1	3
SP12079	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming in part with the DOT-3AA specification, except as specified, for transportation in commerce of certain hazardous he materials.	1	3
SP12087	Cylinders General	Authorizes manufacture, marking, sale and use of non-refillable, non-DOT specification cylinders for transportation in commerce of boron trifluoride. The cylinders are described as electron tubes that are part of radiation detectors.	1	4
SP12092	Cylinders General	Authorizes transportation in commerce of certain Division 4.3 materials in DOT specification 4BW cylinders which are visually inspected externally instead of the required hydrostatic retest.	1	2
SP12098	Cylinders General	Authorizes manufacture, marking, sale and use of a limited life, non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3HT cylinder for transportation in commerce of UN1072 and UN1980.	1	3
SP12112	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification cylinders which are used as components (fire extinguishers) in aircraft of foreign manufacture.	3	2
SP12116	Cylinders General	Authorizes transportation in commerce of certain hazardous materials, in non-DOT specification cylinders used for oil well sampling.	2	2
SP12122	Cylinders General	Authorizes manufacture, marking, sale, and use of non-DOT specification pressure vessels for use as components of automobile vehicle safety systems. The pressure vessels, charged with non-toxic, non-liquefied gases, or mixtures thereof, are authorized for transportation as specified.	1	3
SP12135	Cylinders General	Authorizes manufacture, marking, sale, and use of non-DOT specification cylinders (pressure vessels) for use as components of automobile vehicle safety systems.	1	2
SP12155	Cylinders General	Authorizes transportation in commerce of a non-DOT specification pressure vessel containing sulfur	1	3

		hexafluoride which is a component of an electric utility circuit interrupter unit.		
SP12178	Cylinders General	Authorizes transportation in commerce of certain Division 2.1 gases in a DOT 2Q container.	1	3
SP12187	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 39 cylinder, except as specified, for transportation in commerce of certain refrigerant gases; UN1956.	1	3
SP12196	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification stainless steel alloy cylinder conforming with all regulations applicable to a DOT specification 3AA cylinder, except as specified. The packaging prescribed is a welded non-DOT specification cylinder having a maximum capacity of 50 cubic inches, constructed of 15-5 precipitation hardened (PH) stainless steel.	1	3
SP12222	Cylinders General	Authorizes manufacture, marking, sale and use of a DOT specification 39 cylinder for transporting carbon dioxide (Division 2.2) with a maximum permitted filling density of 75 percent.	1	3
SP12274	Cylinders General	Authorizes transportation in commerce of Division 2.1 materials in a non-refillable, non-DOT specification inside container conforming in part with DOT specification 2P.	1	3
SP12297	Cylinders General	Authorizes manufacture, marking, sale and use of eight (8) non-DOT specification spherical pressure vessels conforming with all regulations applicable to a DOT specification 4DS cylinder, except as specified, for transportation in commerce of nitrogen, compressed, Division 2.2 under the terms and conditions specified.	1	3
SP12303	Cylinders General	Authorizes transportation in commerce of certain Division 2.1, 2.2 and Class 3 materials in a non-DOT specification cylinder used for oil well sampling.	1	2
SP12334	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification stainless steel cylinder conforming with all regulations applicable to a DOT specification 3A cylinder, except as specified, for transportation in commerce of certain compressed gases.	1	2
SP12341	Cylinders General	Authorizes transportation in commerce of a certain space satellite assembly containing non-DOT specification pressure vessels pressurized with certain Division 2.2 materials.	1	2
SP12384	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification hydraulic accumulators containing compressed nitrogen.	2	3
SP12391	Cylinders General	Authorizes transportation in commerce of certain Division 2.1 and 2.2 gases, in ICC specification 3, 3A or 3AA cylinders manufactured on or before December 31, 1945, and which have been retested at least every 10 years.	7	2
SP12398	Cylinders General	Authorizes transportation in commerce of certain DOT specification 3A and 3AA cylinders equipped with	1	5

		alternative pressure relief devices and containing at least 165 pounds of certain hazardous materials.		
SP12405	Cylinders General	Authorizes transportation in commerce of certain hazardous materials in certain DOT specification seamless steel cylinders. UN1050, UN2193 and UN1080 is authorized for transportation in liquid full DOT specification 3A, 3AA, 3AX, 3AAX, or 3T cylinders.	5	2
SP12431	Cylinders General	Authorizes transportation in commerce of non-DOT specification cylinders conforming with all regulations applicable to a DOT 4BA specification, except as specified, for transportation in commerce of certain Division 2.2 materials.	2	3
SP12448	Cylinders General	Authorizes transportation in commerce of anhydrous ammonia in DOT specification cylinders which are not authorized by the HMR for transportation of anhydrous ammonia. The cylinders are being transported to a disposal facility.	1	2
SP12479	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification fiberglass hoop wrapped cylinders for transportation in commerce of certain hazardous materials. The cylinders are authorized for self-contained underwater breathing apparatus (SCUBA) use.	1	2
SP12499	Cylinders General	Authorizes intrastate transportation in commerce of liquefied petroleum gas in certain non-DOT specification cargo tanks.	1	2
SP12506	Cylinders General	Authorizes transportation in commerce of fifteen non-DOT specification cylinders conforming with all regulations applicable to a DOT specification 4DS cylinder, except as specified, for transportation in commerce of bromotrifluoromethane under the terms and conditions specified.	1	2
SP12521	Cylinders General	Authorizes transportation in commerce of certain DOT specification and cylinders manufactured to a foreign specification which are charged for export only.	1	2
SP12526	Cylinders General	Authorizes manufacture, marking, sale and use of a gas purification apparatus containing a non-DOT specification stainless steel pressure vessel for transportation in commerce of certain hazardous materials.	1	3
SP12531	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 4BW cylinder, except as specified for transportation in commerce of certain hazardous materials.	1	3
SP12532	Cylinders General	Authorizes manufacture, marking, sale and use of a non-refillable, non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 39 cylinder, except as specified, for transportation in commerce of helium. Each cylinder is equipped with a pyrotechnic relief device and is part of a gas storage	1	3

		system.		
SP12562	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification non-refillable inside container conforming with all regulations applicable to a DOT specification 2P inner non-refillable metal receptacle except for size, testing requirements, and marking as specified, for transportation in commerce of certain hazardous materials.	1	3
SP12571	Cylinders General	Authorizes transportation in commerce of nitrogen trifluoride and nitrogen trifluoride mixtures in certain DOT specification cylinders that are not equipped with pressure relief devices.	5	2
SP12580	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification foreign cylinders which are charged for export only.	1	3
SP12589	Cylinders General	Authorizes transportation in commerce of tungsten hexafluoride in certain DOT 3BN specification cylinders that previously contained hydrogen fluoride.	1	2
SP12599	Cylinders General	Authorizes transportation in commerce of silicon tetrafluoride, Division 2.3, in certain manifolded DOT specification 3AA and 3AAX cylinders.	1	3
SP12643	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification refrigeration systems described as pulse tube coolers containing helium.	1	2
SP12679	Cylinders General	Authorizes manufacture, marking, sale and use of a non-refillable, non-DOT specification steel cylinder conforming with all regulations applicable to a DOT specification 39 cylinder, except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP12716	Cylinders General	Authorizes transportation in commerce of certain DOT specification 3AAX cylinders containing chlorine.	1	3
SP12726	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification and DOT-4DA and 4DS specification cylinders, used as fire suppression systems in aircraft to be shipped, as fire extinguishers.	18	2
SP12783	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification, non-refillable, containers containing certain Division 2.2 materials, classed as ORM-D.	1	2
SP12818	Cylinders General	Authorizes transportation in commerce of certain foreign manufactured non-DOT specification steel cylinders which are used as components (fire extinguishers) in aircraft.	5	3
SP12855	Cylinders General	Authorizes one-way transportation in commerce by highway motor vehicle of non-DOT specification pressure vessels (stainless steel heat and/or carbon steel heat exchangers) containing the residue of a Class 3 material.	1	3
SP12865	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders and cylinders manufactured to a foreign specification which are charged for export only.	1	3
SP12866	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification cylinders containing a Division 2.2	1	3

		material, manufactured in accordance with DOT specification 3HT that have been marked with a steel stamp other than the low stress stamp required by the HMR.		
SP12868	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders and cylinders manufactured to a foreign specification which are charged for export only.	1	3
SP12869	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders and cylinders manufactured to a foreign specification which are charged for export only.	1	3
SP12899	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3A cylinder, except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP12929	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders manufactured to a foreign specification which are charged for export only.	6	3
SP12955	Cylinders General	Authorizes transportation in commerce of non-DOT specification fiber reinforced plastic (FRP), full composite (FC), compressed gas cylinders which are used as components in aircraft.	8	3
SP12972	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders and non-DOT specification cylinders manufactured to a foreign specification which are charged for export only.	1	3
SP12994	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders and non-DOT specification cylinders manufactured to a foreign specification which are charged for export only.	3	3
SP13032	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification, non-refillable, composite pressure vessels for transportation in commerce of certain hazardous materials.	1	2
SP13036	Cylinders General	Authorizes transportation in commerce of DOT specification 3E cylinders containing hydrogen in metal hydride as an integral part of a hydrogen maser (atomic clock).	1	3
SP13107	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders as part of a Portable Emission Measurement System, that release a controlled amount of certain Division 2.1 materials during transportation under the terms and conditions specified.	1	3
SP13112	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification, non-refillable pressure vessels for transportation in commerce of certain hazardous materials.	1	3
SP13135	Cylinders General	Authorizes transportation in commerce of a certain space satellite assembly containing non-DOT specification pressure vessels pressurized with certain Division 2.2 materials up to 2,000 psig.	1	3
SP13163	Cylinders General	Authorizes transportation in commerce of certain infectious substances in special packagings.	1	3

SP13167	Cylinders General	Authorizes transportation in commerce of cylinders authorized under SP 11725 which contain anhydrous ammonia and are installed in a device as part of an environmental conditioning system.	2	3
SP13182	Cylinders General	Authorizes transportation in commerce of phosphine in certain DOT specification and non-DOT specification cylinders.	3	3
SP13201	Cylinders General	Authorizes transportation in commerce of certain fire extinguisher tubes containing liquefied gas that exceed the prescribed size limitations.	1	2
SP13220	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification welded pressure vessels containing certain compressed gases and liquid adsorbed onto a microporous substrate.	1	3
SP13229	Cylinders General	Authorizes transportation in commerce of phosphine in certain DOT specification and non-DOT specification cylinders.	3	3
SP13230	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming with all regulations applicable to a DOT specification 3AA or 3AAX cylinder except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP13232	Cylinders General	Authorizes manufacture, marking, sale and use of cylinders conforming with all regulations applicable to a DOT specification 3AA, 3AAX and DOT 3T cylinders except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP13249	Cylinders General	Authorizes transportation in commerce of sodium in DOT specification 4BW240 or DOT-4BW260 cylinders that are visually inspected externally instead of the required hydrostatic requalification.	1	2
SP13250	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification fully wrapped carbon fiber reinforced brass lined cylinders for transportation in commerce of certain hazardous materials.	1	2
SP13259	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming with all regulations applicable to a DOT specification 3E cylinder, except as specified, for transportation in commerce of those materials authorized in DOT specification 3E cylinders.	1	3
SP13269	Cylinders General	Authorizes one-way transportation in commerce of ammonia, anhydrous in a DOT specification cylinder that has developed a leak. The cylinder is equipped with an emergency kit to prevent leakage during transportation.	1	3
SP13270	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification pressure vessels for use as components of safety systems. The pressure vessels, charged with non-toxic, non-liquefied gases, are authorized for transportation in commerce as specified.	1	3
SP13312	Cylinders General	Authorizes transportation in commerce of certain DOT-3, 3A, and 3AA cylinders in chlorine and silane service	2	2

		with a pressure relief device that does not meet the requirements of § 173.301(f)(3).		
SP13317	Cylinders General	Authorizes transportation in commerce of certain DOT specification 3AL cylinders, containing diborane and diborane mixtures.	5	5
SP13323	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification cylinders containing samples of methane hydrate (frozen methane gas).	1	3
SP13325	Cylinders General	Authorizes transportation in commerce of certain compressed gases in DOT 3A and 3AA specification cylinders which are equipped with a CG-4 pressure relief device (PRD) set at 3,360 psig.	4	3
SP13330	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3A cylinder, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP13336	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3E cylinder, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP13359	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification spherical pressure vessels containing boron trifluoride.	1	3
SP13483	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming in part with DOT-3AA specification, for use in transportation in commerce of certain non-flammable, non-liquefied compressed gases.	1	3
SP13485	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT-3AA specification cylinder, except as specified, for transportation in commerce of certain hazardous materials.	3	2
SP13488	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming in part with the DOT-3AA specification, for use in transportation in commerce of certain non-flammable, non-liquefied compressed gases.	1	2
SP13582	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders and cylinders manufactured to a foreign specification which are charged for export only.	1	3
SP13598	Cylinders General	Authorizes manufacture, marking, sale and use of hydrogen storage systems for use in fuel cells to power portable devices. The hydrogen storage systems utilize non-DOT specification cylinders containing hydrogen absorbed in metal hydride.	1	3
SP13616	Cylinders General	Authorizes transportation in commerce of helium, compressed in DOT specification cylinders which are manifolded and permanently mounted in a protective frame.	1	2
SP13977	Cylinders	Authorizes transportation in commerce of a non-DOT	1	3

	General	specification fiber reinforced plastic (FRP), full composite (FC), compressed gas cylinder which are used as components in aircraft.		
SP13999	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification fully-wrapped fiberglass composite cylinder with seamless, non-load sharing blow-molded thermoplastic liner for transportation in commerce of certain hazardous materials.	1	2
SP14157	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming in part to the DOT-3AA specification, for use in transportation in commerce of certain non-flammable, non-liquefied compressed gases.	1	3
SP14163	Cylinders General	Authorizes transportation in commerce of certain Division 2.2 liquefied compressed gases in DOT specification cylinders that are not equipped with an individual shutoff valve.	3	3
SP14171	Cylinders General	Authorizes transportation in commerce of nitrogen, compressed in non-DOT specification fully wrapped carbon fiber reinforced aluminum lined cylinders that are an integral part of a pressure system classified as a corrosive.	1	3
SP14209	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification fully wrapped carbon composite cylinder with seamless, non-load sharing plastic liner for transportation in commerce of the certain hazardous materials. The cylinders are authorized for self-contained underwater breathing apparatus (SCUBA) or self-contained breathing apparatus (SCBA) use.	2	3
SP14232	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with ISO Standard 11119-2, except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP14237	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders and non-DOT specification pressure vessels for Division 2.3 materials by motor vehicle, cargo vessel, and cargo aircraft.	2	4
SP14338	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 39 cylinder, for transportation in commerce of certain hazardous materials. The cylinder is authorized for limited refills.	1	3
SP14341	Cylinders General	Authorizes manufacture, marking, sale and use of 4BW240 cylinders for transportation of acrolein, Division 6.1 by motor vehicle and cargo vessel.	2	3
SP14348	Cylinders General	Authorizes transportation in commerce of certain Division 2.3 hazardous materials in DOT specification cylinders that may not have pressure relief devices.	4	3
SP14349	Cylinders General	Authorizes transportation in commerce of a non-DOT specification full opening head, steel salvage cylinder with a water capacity of more than 450L (119 gallons) for use in transporting damaged, leaking or improperly	1	3

		filled cylinders containing various hazardous materials.		
SP14356	Cylinders General	Authorizes transportation in commerce of certain Division 4.2 organometallic liquids in a non-DOT specification pressure vessel designed, constructed and "U" stamped in accordance with the Section VIII, Div. 1 of the ASME Code.	1	3
SP14372	Cylinders General	Authorizes transportation in commerce of certain foreign manufactured non-DOT specification steel cylinders which are used as components (fire extinguishers) in aircraft.	1	2
SP14374	Cylinders General	Authorizes transportation in commerce of a Division 4.3 material in a non-DOT specification pressure vessel.	4	2
SP14382	Cylinders General	Authorizes transportation in commerce of certain DOT specification 3BN nickel cylinders in dedicated, interchangeable tungsten hexafluoride/hydrogen fluoride service that are requalified using external visual inspection in lieu of hydrostatic pressure test and internal visual inspection.	3	2
SP14384	Cylinders General	Authorizes transportation in commerce of propylene in DOT 3AA or 3AL specification cylinders fitted with a CG-1 pressure relief device (rupture disk) in lieu of the required CG-7 pressure relief device.	4	3
SP14396	Cylinders General	Authorizes transportation in commerce for export only of arsine in certain DOT specification and non-DOT specification cylinders.	1	3
SP14399	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming to all regulations applicable to a DOT specification 39 cylinder, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP14402	Cylinders General	Authorizes the manufacture, marking, sale, and use of a non-DOT specification fully wrapped fiber reinforced composite gas cylinder with a non-load sharing plastic liner that meets the ISO 11119-3 Standard except for the design water capacity and service pressure.	1	3
SP14410	Cylinders General	Authorizes transportation in commerce of certain Division 2.1 and Class 3 materials in DOT specification 4BW cylinders that are periodically requalified using external visual inspection in lieu of the required hydrostatic requalification.	1	3
SP14445	Cylinders General	Authorizes manufacture, marking, sale and use of a non-refillable, non-DOT specification inside metal container conforming in part with DOT specification 2Q, for transportation in commerce of certain refrigerant gases.	1	3
SP14457	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification fully-wrapped fiberglass composite cylinder with a welded carbon steel liner for transportation in commerce of certain hazardous materials.	1	3
SP14469	Cylinders General	Authorizes transportation in commerce of specific space satellites containing non-DOT specification pressure vessels pressurized with anhydrous ammonia with pressures up to 2,000 psig.	1	2

SP14476	Cylinders General	Authorizes transportation in commerce of non-DOT specification pressure vessels (any combination of stainless steel, carbon steel, brass, copper, or nickel heat exchangers or tubes bundles) containing the residue of certain Class 3 or Class 8 materials by motor vehicle.	1	3
SP14480	Cylinders General	Authorizes transportation in commerce of certain DOT specification cylinders and non-DOT specification cylinders manufactured to a foreign specification which are charged for export only.	1	2
SP14496	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder, used for oil well sampling, conforming with all regulations applicable to a DOT specification 3A cylinder, except as specified, for transportation in commerce of certain hazardous materials.	2	3
SP14526	Cylinders General	Authorizes transportation in commerce of a Division 2.2 compressed gas in non-refillable, non-DOT specification cylinders similar to DOT-39 that are used as components in military vehicles.	1	3
SP14543	Cylinders General	Authorizes manufacture, marking, sale and use of a DOT specification 39 cylinder for transporting carbon dioxide (Division 2.2) with a maximum permitted filling density of 75 percent.	1	3
SP14550	Cylinders General	Authorizes filling, for export only, of non-DOT specification pressure vessels containing a liquefied flammable gas, and the return of the pressure vessels to the United States, for purposes of refilling for export only, when containing a residue of the hazardous material.	1	2
SP14591	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification insulated cryogenic cylinder conforming with all regulations applicable to a DOT specification 4L cylinder for transportation in commerce of oxygen, refrigerated liquid.	1	3
SP14601	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification spherical pressure vessels for transportation in commerce of boron trifluoride.	1	3
SP14602	Cylinders General	Authorizes transportation in commerce of anhydrous ammonia in non-DOT specification packaging.	1	2
SP14624	Cylinders General	Authorizes foreign manufacture, marking, sale and use of non-DOT specification fiber reinforced plastic (FRP) full composite (FC) cylinders for transportation in commerce of certain Division 2.1 and 2.2 compressed gases.	1	3
SP14631	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders (pressure vessels) for use as components of automobile vehicle safety systems.	1	3
SP14636	Cylinders General	Authorizes transportation in commerce of certain DOT specification 3AA and 3T cylinders that are past the test date for requalification. The prescribed packagings are tube trailers containing DOT specification 3AA or 3T cylinders.	2	2
SP14638	Cylinders	Authorizes transportation in commerce of up to two	1	2

	General	non-DOT specification pressure vessels containing magnesium or magnesium alloys under an argon gas blanket further packaged in a non-DOT specification wooden box capable of meeting the performance requirements for PG II.		
SP14651	Cylinders General	Authorizes transportation in commerce of silicon tetrafluoride, 2.3 Hazard Zone B, in bundles of manifolded DOT specification 3A and 3AA cylinders.	1	2
SP14683	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification steel water pump system tanks that exceed the prescribed maximum outside diameter and wall stress used for the transportation in commerce of compressed air.	1	3
SP14700	Cylinders General	Authorizes transportation in commerce of certain fully wrapped fiber-reinforced composite cylinders containing compressed air under the exception provided for water pump system tanks in § 173.306(g).	1	3
SP14744	Cylinders General	Authorizes transportation in commerce of manifolded DOT and ICC specification 3A, 3AA and 3AL cylinders containing nitrogen, compressed without pressure relief devices and a non-DOT specification refrigeration system described as pulse tube coolers containing helium.	1	3
SP14763	Cylinders General	Authorizes manufacture, marking, sale, and use of a non-DOT specification packaging conforming in part with the DOT specification 3A, except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP14778	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification welded steel cylinders containing a Division 2.2 compressed gas for export only.	1	3
SP14781	Cylinders General	Authorizes transportation in commerce of compressed hydrogen in manifold and framed non-DOT specification seamless steel cylinders originally certified as specification DOT-107A seamless steel tank car tanks.	1	3
SP14782	Cylinders General	Authorizes transportation in commerce of sulfur hexafluoride in a non-DOT specification pressure vessel which is a component of an electric utility circuit interrupter unit.	1	2
SP14796	Cylinders General	Authorizes transportation in commerce of non-DOT specification cylinders containing bromine trifluoride.	1	2
SP14799	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder (pressure vessel) as a component of automobile safety systems. The pressure vessel, charged with non-toxic, non-liquefied gases, is authorized for transportation in commerce subject to the requirements and limitations specified.	1	2
SP14803	Cylinders General	Authorizes foreign manufacture, marking, sale, and use of non-DOT specification fully wrapped carbon-fiber reinforced aluminum lined cylinders for transportation in commerce of certain hazardous materials.	1	3
SP14808	Cylinders	Authorizes manufacture, marking, sale and use of non-	2	2

	General	DOT specification cylinders, similar to a DOT 4BA, except as specified, for transportation in commerce of certain hazardous materials.		
SP14811	Cylinders General	Authorizes manufacture, marking, sale, and use of a DOT specification 3AA cylinder manufactured using a bend test in lieu of a flattening test.	1	2
SP14818	Cylinders General	Authorizes manufacture, marking, sale, and use of certain fully wrapped fiber reinforced composite cylinders containing compressed air under the exception provided for water pump system tanks in 173.306(g).	1	3
SP14831	Cylinders General	Authorizes use of DOT specification 3A or 3AA cylinders for transportation in commerce of certain compressed gases.	1	3
SP14833	Cylinders General	Authorizes foreign manufacture, marking, sale and use of a non-DOT specification cylinder (pressure vessel) charged with a non-toxic, non-liquefied gas and is used as a component of an automobile safety system and transported in commerce.	1	3
SP14839	Cylinders General	Authorizes transportation in commerce of air, compressed; argon, compressed; helium, compressed; neon, compressed; nitrogen, compressed; or oxygen, compressed in DOT specification 3A and 3AA cylinders with maximum water capacity of 125 pounds that have been tested every 15 years instead of every 10 years. Cylinders must have a minimum marked service pressure of 1800 psig and be star (*) marked.	1	2
SP14864	Cylinders General	Authorizes transportation in commerce of ethylene in non-DOT specification containers, most comparable to the DOT-2Q, and allows for the controlled release of the hazardous material for the purposes of ripening produce.	1	3
SP14919	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder (pressure vessel) for use as a component of automobile safety systems.	1	3
SP14932	Cylinders General	Authorizes foreign manufacture, marking, sale and use of non-DOT specification fully wrapped carbon fiber reinforced aluminum lined cylinders for transportation in commerce of certain hazardous materials.	1	2
SP14950	Cylinders General	Authorizes rebuilding or modification and sale of certain DOT specification 4B, 4BA, and 4BW cylinders, by replacing or adding openings for outlet fittings on the upper head for use in transportation in commerce of certain hazardous materials.	1	3
SP14951	Cylinders General	Authorizes manufacture, marking, sale, and use of a non-DOT specification fully wrapped fiber reinforced composite gas cylinder with a non-load sharing plastic liner that meets the ISO 11119- 3 Standard except for the design water capacity and working pressure for transportation in commerce of argon, compressed; helium, compressed; hydrogen, compressed; neon, compressed; nitrogen, compressed; and methane, compressed or natural gas, compressed (with high methane content).	1	2
SP14952	Cylinders	Authorizes transportation in commerce of methyl	1	2

	General	bromide and chloropicrin and methyl bromide mixtures in non-DOT specification cylinders by motor vehicle and cargo vessel for export only.		
SP14966	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification, pre-braided fully wrapped carbon composite (PBFWCC) gas cylinder with a non-metallic and non-load sharing plastic liner for transportation in commerce of air, compressed (containing up to 39% by volume oxygen).	2	2
SP14971	Cylinders General	Authorizes controlled release of nitrogen and air from cylinders during transportation to maintain an inert atmosphere in a shipping container which is required to protect the specialized electronic sensors.	2	3
SP14977	Cylinders General	Authorizes transportation in commerce of silane in certain DOT specification cylinders that are not equipped with pressure relief devices.	5	3
SP14981	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders containing compressed gas n.o.s. (containing nitrogen and helium) and phosphorus tribromide for use as fire extinguishing canisters installed on aircraft.	1	3
SP14984	Cylinders General	Authorizes use of non-DOT specification foreign cylinders containing dichlorosilane for transportation in commerce by motor vehicle and cargo vessel.	1	3
SP15002	Cylinders General	Authorizes transportation in commerce of DOT specification cylinders containing liquefied petroleum gas (LPG) and/or residue of LPG without hazard warning labels when transported in a transport vehicle that is placarded.	1	3
SP15070	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification fully wrapped carbon-fiber reinforced brass lined cylinders for transportation in commerce of certain hazardous materials.	1	2
SP15077	Cylinders General	Authorizes transportation in commerce of certain cylinders of compressed gases with a subsidiary hazard of Division 5.1, when other means of transportation are impracticable, without their outer packaging being capable of passing the Flame Penetration and Resistance Test and the Thermal Resistance Test.	1	3
SP15110	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders (fire extinguishers) that are used as components on military vehicles and commercial buses for transportation in commerce of compressed gases.	1	2
SP15132	Cylinders General	Authorizes use of non-DOT specification cylinders similar to DOT specification 4D cylinders for transportation in commerce of certain Division 2.1 and 2.2 gases by motor vehicle.	1	2
SP15163	Cylinders General	Authorizes transportation in commerce of certain cylinders of compressed gases with a subsidiary hazard of Division 5.1, when other means of transportation are impracticable, without their outer packaging being capable of passing the Flame Penetration and Resistance	1	3

		Test and the Thermal Resistance Test.		
SP15164	Cylinders General	Authorizes transportation in commerce of certain cylinders of compressed gases with a subsidiary hazard of Division 5.1, when other means of transportation are impracticable, without their outer packaging being capable of passing the Flame Penetration and Resistance Test and the Thermal Resistance Test.	1	3
SP15233	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification and DOT specification 4DA and 4DS cylinders, used as fire suppression systems in aircraft to be shipped, as fire extinguishers.	1	2
SP15237	Cylinders General	Authorizes certain non-DOT specification and DOT specification 4DA and 4DS cylinders, used as fire suppression systems in aircraft to be shipped, as fire extinguishers. The cylinders must contain bromotrifluoromethane or refrigerant gas, R 13B1, 2.2, UN1009 used in dedicated service.	1	2
SP15277	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification and DOT-4DA and 4DS specification cylinders, used as fire suppression systems in aircraft to be shipped as fire extinguishers.	1	2
SP15347	Cylinders General	Authorizes transportation in commerce of a compressed gas, n.o.s. (tetrafluoromethane and argon), Division 2.2, in non-DOT specification packagings described as a coolant supply assembly.	2	3
SP15372	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders (pressure vessels) for use as components of safety systems. The cylinders charged with non-toxic, non-liquefied gases are authorized for transportation in commerce of certain hazardous materials.	1	2
SP15389	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming to all regulations applicable to DOT specification 39 cylinders, except as specified, for transportation in commerce of compressed oxygen and certain flammable or non-flammable gases.	1	3
SP15404	Cylinders General	Authorizes transportation in commerce of certain hazardous materials in non-DOT specification cylinders used for oil well sampling.	1	2
SP15428	Cylinders General	Authorizes transportation in commerce of a space capsule containing non-DOT specification packagings of certain hazardous materials.	1	2
SP15442	Cylinders General	Authorizes transportation in commerce of hydrogen fluoride, anhydrous in a non-DOT specification cylinder.	1	3
SP15458	Cylinders General	Authorizes transportation in commerce of specially designed non-DOT specification pressure vessels containing compressed sulfur hexafluoride. The pressure vessels are described as epoxy interrupter housings, used in the electrical utility industry.	1	2
SP15461	Cylinders General	Authorizes transportation in commerce of non-DOT specification cylinders containing certain Division 2.2	1	2

		gases for the purpose of conducting testing in the United States.		
SP15466	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification and DOT specification 4DA and 4DS cylinders, used as fire suppression systems in aircraft to be shipped, as fire extinguishers.	1	2
SP15483	Cylinders General	Authorizes transportation in commerce of certain Division 2.2 compressed gases in non-DOT specification cylinders to support the International Space Station.	1	2
SP15491	Cylinders General	Authorizes transportation in commerce of certain non-DOT specification cylinders manufactured to a foreign specification which are charged with a Division 2.2 gas for export only.	1	3
SP15493	Cylinders General	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming to all regulations applicable to a DOT specification 39, except as specified, for transportation in commerce of a Division 2.2 material.	1	3
SP15507	Cylinders General	Authorizes the manufacture, marking, sale and use of a non-refillable, non-DOT specification inside metal container conforming with all regulations applicable to a DOT specification 2Q, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP15509	Cylinders General	Authorizes transportation in commerce of a Division 2.2 compressed gas in a non-DOT specification cylinder which is a component of a pressurized flight vehicle.	1	2
SP15515	Cylinders General	Authorizes a specification carbon composite overwrapped pressure vessel further packed in an ATA-300 Category-1 outer packaging.	1	3
SP15531	Cylinders General	Authorizes transportation in commerce of a small amount of propane gas (Division 2.1) in a non-DOT specification container.	1	3
SP15532	Cylinders General	Authorizes one-time, one-way transportation in commerce for disposal of a non-DOT specification, irregularly shaped, sodium dispersion vessel in alternative outer packaging.	1	2
SP15536	Cylinders General	Authorizes use of DOT-107A tank car tanks (tubes) for transportation in commerce of certain gases.	1	2
SP15555	Cylinders General	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders for use in oil well sampling.	1	3
SP15566	Cylinders General	Authorizes transportation in commerce of certain cylinders of compressed oxygen, when ground and vessel transportation is unavailable and no other practical means of transportation exist, without their outer packaging being capable of passing the Flame Penetration and Resistance Test and the Thermal Resistance Test.	1	3
SP15593	Cylinders General	Authorizes manufacture, marking, sale, and use of non-DOT specification non-refillable inside containers to be used for transportation in commerce of certain Division	1	3

		2.1 gases.		
SP15610	Cylinders General	Authorizes transportation in commerce of certain gases in DOT 3A, 3AA, 3AX, 3AAX and 3T cylinders.	1	2
SP15634	Cylinders General	Authorizes use of used DOT 3AL cylinders for transportation in commerce of carbon dioxide.	1	3
SP15665	Cylinders General	Authorizes transportation in commerce of a DOT specification 4AA cylinder containing anhydrous ammonia that developed a leak and is equipped with a Chlorine Institute Kit "A" to prevent leakage during transportation.	1	2
		Cylinders – NDT/Aerosols		
SP8944	Cylinders – NDT/Aerosols	Authorizes use of AE/UE in place of the internal visual inspection and hydrostatic retest required by § 180.205 for DOT 3A, 3AX, 3AA, 3AAX and 3T cylinders.	1	4
SP9758	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of a Division 2.1 material in a non-refillable, non-DOT specification inside container conforming to DOT specification 2P except for size, testing requirements, wall thickness, marking and material requirements.	2	3
SP9847	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain gases in DOT 3A, 3AA, 3AX, 3AAX, 3T cylinders, non-DOT cylinders made under SPs 13230, 13258 and UN cylinders made in accordance with ISO 11120. The cylinders (tubes) are retested by AE/UE in place of the internal visual inspection and the hydrostatic retest required in § 180.205.	1	4
SP10704	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain DOT specification 2Q containers with Division 2.2 materials. Uses for the gas include but are not limited to: calibration and functional checks of environmental quality monitors, medical analyzers, or medical monitors.	13	3
SP10922	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3A, 3AA, 3AX, 3AAX and 3T cylinders or DOT UN refillable pressure receptacles for transportation in commerce of certain compressed gases.	1	4
SP11516	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain DOT specification 2Q containers containing hazardous materials (i.e., UN1030, UN1954, and UN1956).	30	3
SP11526	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3A, 3AA, cylinders and cylinders manufactured under SPs 9370 and 9909 for transportation in commerce of liquefied or non-liquefied compressed gases, or mixtures of such compressed gases when retested by a 100% UE of the sidewall in lieu of the internal visual and the hydrostatic retest.	3	4
SP11667	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain gases in DOT 3AX, 3AAX, 3T, 3AA and 3A cylinders. The cylinders (tubes) are retested by AE/UE in place of the internal visual inspection and the hydrostatic retest	1	4

		required in § 180.205.		
SP11798	Cylinders – NDT/Aerosols	Authorizes a 10-year retest interval for specification DOT 3A and 3AA cylinders used for transportation in commerce of certain Division 2.1 and Division 2.2 gases.	7	4
SP11826	Cylinders – NDT/Aerosols	Authorizes DOT specification 3AL cylinders, with specially treated interiors to prevent chloride/aluminum interaction, to be used for transportation in commerce of the compressed gas mixtures.	6	4
SP12022	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3A, 3AA, 3BN cylinders and cylinders manufactured under SPs 9421, 9706, 9909 and 10047 for transportation in commerce of the compressed gases. The cylinders are retested by a one hundred percent (100%) UE in lieu of the internal visual and the hydrostatic retest required in § 180.205.	2	4
SP12184	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain gases in DOT specification 3A, 3AA, 3AX, 3AAX, and 3Tcylinders. The cylinders (tubes) are retested by AE/UE in place of the internal visual inspection and the hydrostatic retest required in § 180.205.	1	4
SP12247	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3A, 3AA, 3AX, 3AAX, 3T cylinders and cylinders manufactured under SPs 9001, 9370, 9421, 9706, 9909, 9791, 10047, 10869 and 11692 for transportation in commerce of the compressed gases. The cylinders are retested by a 100% UE in lieu of the internal visual and the hydrostatic retest required in § 180.205.	1	4
SP12399	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3AL cylinders and aluminum cylinders manufactured under SP 12440 used for transportation in commerce of liquefied or non-liquefied compressed gases, or mixtures of such compressed gases, classed as Division 2.1, (flammable gas) Division 2.2, (non-flammable gas) or Division 2.3, (gases which are toxic by inhalation (TIH)) when retested by a one hundred percent (100%) UE in lieu of the internal visual and the hydrostatic retest required in § 180.205.	1	4
SP12552	Cylinders – NDT/Aerosols	Authorizes manufacture, marking, sale and use of certain DOT specification 2Q, non-refillable, aerosol containers filled with a propellant gas and a non-hazardous material as specified herein for transportation in commerce.	1	3
SP12574	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain compressed gases in manifolded and framed non-DOT specification seamless steel cylinders. The cylinders are retested by AE and UE in place of the internal visual inspection and the hydrostatic retest required in § 180.205.	1	4
SP12607	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3AL cylinders used for transportation in commerce of the compressed gases, when retested by a 100% UE in lieu of the internal visual and the hydrostatic retest required	1	4

		in § 180.209.		
SP12629	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain gases in DOT 3AX, 3AAX, 3T, 3AA and 3A cylinders. The cylinders (tubes) are retested using AE/UE in place of the internal visual inspection and the hydrostatic retest required in § 180.205.	1	4
SP12690	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of chlorine in a DOT specification 3AA steel cylinder containing over 150 pounds of chlorine gas and UE as an alternative method for requalification in lieu of internal visual inspection and hydrostatic pressure testing in § 180.205.	4	4
SP12718	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3AL cylinders used for transportation in commerce of the compressed gases, when retested by a 100% UE in lieu of the internal visual and the hydrostatic retest.	1	4
SP12838	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain gases in DOT 3AX, 3AAX, 3T, 3AA and 3A cylinders. The cylinders (tubes) are retested by AE/UE in place of the internal visual inspection and the hydrostatic retest required in § 180.205.	1	4
SP13208	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain DOT specification 2Q containers containing only a Division 2.2 material for use in medical treatment.	2	3
SP13292	Cylinders – NDT/Aerosols	Authorizes manufacture, marking, sale and use of non-DOT specification, non-refillable plastic containers for transportation in commerce of a Division 2.2 gas and a non-hazardous material.	1	1
SP13961	Cylinders – NDT/Aerosols	Authorizes use of DOT specification 3AL cylinders for transportation in commerce of certain compressed gases, when retested by a 100% UE in lieu of the internal visual and the hydrostatic retest.	1	4
SP13998	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3A, 3AA, 3BN cylinders and cylinders manufactured under certain SPs for transportation in commerce of the compressed gases, when retested by a one hundred percent (100%) UE in lieu of the internal visual and the hydrostatic retest.	1	4
SP14149	Cylinders – NDT/Aerosols	Authorizes use of DOT specification 3AL cylinders and cylinders manufactured under SP 12440 for transportation in commerce of the compressed gases, when retested by a 100% UE in lieu of the internal visual and the hydrostatic retest.	1	4
SP14175	Cylinders – NDT/Aerosols	Authorizes a 10-year retest interval for certain DOT specification 3A and 3AA cylinders used for transportation in commerce of certain Division 2.1 and Division 2.2 gases in bundles of up to 24 cylinders.	118	4
SP14206	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3A, 3AA, 3BN cylinders and cylinders manufactured under SPs 9001, 9421, 9370, 9706, 9791, 9909, 10047, 10869 and 11692 for transportation in commerce of compressed gases, when retested by a one hundred percent (100%) UE in lieu of the internal visual and the hydrostatic retest.	1	4

SP14239	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain gases in DOT 3A, 3AX, 3AAX, 3AA and 3T cylinders. The cylinders (tubes) are retested by AE/UE in place of the internal visual inspection and the hydrostatic retest required in § 180.205.	1	4
SP14254	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of aerosols with a capacity of 50 ml (1.69 fluid ounces) or less containing Division 2.2 material and no other hazardous materials as not subject to the HMR.	1	5
SP14289	Cylinders – NDT/Aerosols	Authorizes a 10-year retest interval for certain DOT 3AX, 3AAX, 3T, 3AA and 3A cylinders (tubes) used for transportation in of certain Division 2.1 and Division 2.2 gases. The cylinders are retested by AE/UE in place of the hydrostatic retest required in § 180.205.	1	4
SP14298	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain Division 2.1 and 2.2 materials in DOT specification 3A, 3AA, 3AX, 3AAX and 3T cylinders (tubes) having a water capacity over 125 lbs that are requalified (using AE/UE or 100% UE methods in lieu of hydrostatic testing and visual inspection) every 10 years rather than every 5 years. The 3AX, 3AAX, and 3T cylinders (tubes) must be mounted in an ISO frame or on a trailer frame.	1	4
SP14313	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3A, 3AA, and 3AL cylinders and cylinders manufactured under certain SPs for transportation in commerce of the compressed gases, when retested by a one hundred percent (100%) UE in lieu of the internal visual and the hydrostatic retest required in 49 CFR § 180.205.	2	4
SP14453	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain Division 2.1 and Division 2.2 materials in DOT specification 3A, 3AA, 3AX, 3AAX and 3T cylinders having a water capacity over 125 lbs that are requalified every 10 years rather than every 5 years when requalified by 100% UE.	1	4
SP14507	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3AL cylinders made of aluminum alloy for transportation in commerce of the compressed gases, when retested by a 100% UE in lieu of the internal visual and the hydrostatic retest.	1	4
SP14508	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3A, 3AA, 3BN cylinders and cylinders manufactured under SPs 9001, 9370, 9421, 9706, 9791, 9909, 10047, 10869 and 11692 for transportation in commerce of the compressed gases, when retested by a one hundred percent (100%) UE in lieu of the internal visual and the hydrostatic retest.	1	4
SP14546	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain hazardous materials in DOT specification 3AL cylinders manufactured from aluminum alloy that are requalified every 10 years rather than every 5 years using 100% UE.	2	4
SP14584	Cylinders –	Authorizes transportation in commerce of certain gases	1	4

	NDT/Aerosols	in DOT 3A, 3AA, 3AX, 3AAX and 3T cylinders that are retested by AE/UE in lieu of the internal visual inspection and the hydrostatic retest required in § 180.205.		
SP14617	Cylinders – NDT/Aerosols	Authorizes use of DOT specification 3A, 3AA or 3AL cylinders for transportation in commerce of certain compressed gases. The cylinders are retested by utilizing the 100% UE procedures in place of the internal visual inspection and the hydrostatic retest required in § 180.205.	1	4
SP14661	Cylinders – NDT/Aerosols	Authorizes use of DOT specification 3A, 3AA, 3AX, 3AAX and 3T cylinders having a water capacity over 125 lbs. that are periodically requalified every 10 years rather than every 5 years for transportation in commerce of certain Division 2.1 and 2.2 materials. AE/UE is authorized in lieu of hydrostatic testing and visual inspection.	1	4
SP14692	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain Division 2.1 and 2.2 materials in DOT specification 3A, 3AA, 3AX, 3AAX and 3T cylinders having a water capacity over 125 lbs that are periodically requalified (using UE in lieu of hydrostatic testing and visual inspection) every 10 years rather than every 5 years. The cylinders must be horizontally mounted on a motor vehicle (trailer chassis) or in an ISO frame or other framework of equivalent structural integrity.	1	4
SP14784	Cylinders – NDT/Aerosols	Authorizes use of DOT specification 3A, 3AA, 3AX, 3AAX and 3T cylinders having a water capacity over 125 lbs. that are periodically requalified every 10 years rather than every 5 years for transportation in commerce of certain Division 2.1 and 2.2 materials. AE/UE is authorized in lieu of hydrostatic testing and visual inspection.	1	4
SP14798	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3A or 3AA cylinders for transportation in commerce of certain compressed gases when retested by utilizing the one hundred percent (100%) UE procedures described in paragraph 7, in lieu of the required internal visual inspection and the hydrostatic retest.	1	4
SP14854	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain hazardous materials in DOT specification 3AL cylinders manufactured from aluminum alloy that are requalified every 10 years rather than every 5 years using 100% UE.	1	4
SP14855	Cylinders – NDT/Aerosols	Authorizes use of DOT specification 3A, 3AA, 3AX, 3AAX and 3T cylinders having a water capacity over 125 lbs. that are periodically requalified (using AE/UE or 100% UE methods in lieu of hydrostatic testing and visual inspection) every 10 years rather than every 5 years for transportation in commerce of certain Division 2.1 and 2.2 materials.	1	4
SP14856	Cylinders – NDT/Aerosols	Authorizes use of DOT specification 3A, 3AA, 3AX, 3AAX and 3T cylinders having a water capacity over	1	4

		125 lbs. that are periodically requalified (using AE/UE or 100% UE methods in lieu of hydrostatic testing and visual inspection) every 10 years rather than every 5 years for transportation in commerce of certain Division 2.1 and 2.2 materials.		
SP14857	Cylinders – NDT/Aerosols	Authorizes use of DOT specification 3A, 3AA, 3AX, 3AAX and 3T cylinders having a water capacity over 125 lbs. that are periodically requalified (using AE/UE or 100% UE methods in lieu of hydrostatic testing and visual inspection) every 10 years rather than every 5 years for transportation in commerce of certain Division 2.1 and 2.2 materials.	1	4
SP14897	Cylinders – NDT/Aerosols	Authorizes use of DOT specification 3A, 3AA, 3AX, 3AAX and 3T cylinders having a water capacity over 125 lbs. that are periodically requalified (using AE/UE or 100% UE methods in lieu of hydrostatic testing and visual inspection) every 10 years rather than every 5 years for transportation in commerce of certain Division 2.1 and 2.2 materials.	1	4
SP14920	Cylinders – NDT/Aerosols	Authorizes use of certain DOT specification 3A, 3AA, 3AL, SP9001, SP9370, SP9421, SP9706, SP9791, SP9909, SP10047, SP10869, and SP11692 cylinders when retested by a 100% UE in lieu of the internal visual and the hydrostatic retest required in § 180.205 for transportation in commerce of certain compressed gases.	1	4
SP15096	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain DOT-3AA, 3AAX and 3T cylinders charged with a compressed gas. The cylinders (tubes) are retested by AE/UE in place of the internal visual inspection and hydrostatic test required by § 180.205.	1	2
SP15258	Cylinders – NDT/Aerosols	Authorizes use of use of certain DOT specification 3A, 3AA and 3AL cylinders for transportation in commerce of the compressed gases. The cylinders are retested by utilizing the 100% UE in lieu of the internal visual inspection and the hydrostatic retest as required in § 180.205.	1	4
SP15322	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain gases in DOT 3AX, 3AAX, 3T, 3AA and 3A cylinders. The cylinders (tubes) are retested by using modal AE and follow-up AE/UE in place of the internal visual inspection and the hydrostatic retest required in § 180.205.	1	4
SP15451	Cylinders – NDT/Aerosols	Authorizes transportation in commerce of certain Division 2.1 and 2.2 materials in DOT 3A, 3AA, 3AX, 3AAX and 3T cylinders having a water capacity over 125 lbs to be periodically requalified (using AE/UE or 100% UE methods in lieu of hydrostatic testing and visual inspection) every 10 years instead of every 5 years.	1	4
SP15660	Cylinders – NDT/Aerosols	Authorizes use of DOT specification 3AL cylinders, manufactured from aluminum alloy, that are requalified using 100% UE every 10 years rather than every 5 years	1	4

		for the dedicated service transportation in commerce of certain hazardous materials.		
		Cargo Tanks/Rail Cars/Portable Tanks		
SP3121	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of specification MC 338 cargo tanks for transportation in commerce of certain poisonous hazardous materials.	2	3
SP3216	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification multi-unit tank car tanks to transport certain hazardous materials.	7	3
SP5600	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes non-DOT-specification cylinders made to the DOT 3A specification, except Monel metal may be used rather than steel.	1	2
SP5643	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of helium, refrigerated liquid, in a non-DOT specification portable tank.	1	2
SP5749	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of an insulated nickel-steel DOT specification MC-331 cargo tank for transportation in commerce of 60% tetrafluoroethylene/40% hydrogen chloride gas mixture classed as a Division 2.3 material.	1	2
SP6016	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification portable tanks for transportation in commerce of certain Division 2.2 materials.	2	3
SP6349	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain refrigerated, liquefied gases (helium, refrigerated liquid (cryogenic liquid), 2.2, UN1963 and hydrogen, refrigerated liquid (cryogenic liquid), 2.1, UN1966) in a non-DOT specification portable tank.	1	2
SP6443	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain MC 331 cargo tanks for transportation in commerce of liquefied hydrogen sulfide, classed as Division 2.3 material.	1	3
SP6610	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of DOT specification MC 312 or DOT 412 cargo tank motor vehicles and DOT specification IM 101 portable tanks with polyethylene saddles which are inspected at a frequency other than as specified in the HMR for transportation in commerce of tertiary butyl hydroperoxide.	2	2
SP6611	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification portable tanks for transportation in commerce of certain non-flammable cryogenic liquids.	4	3
SP6765	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of insulated non-DOT specification portable tanks for transportation in commerce of Divisions 2.1 and 2.2 cryogenic liquids.	11	3
SP6769	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of DOT specification tank cars and cargo tanks for transportation in commerce of certain Division 2.1 and 2.2 gases.	1	2
SP6922	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of DOT 106A500-X and DOT 110A800-W multi-unit tank car tanks that are not equipped with safety relief devices for transportation in commerce of a Division 2.3 material.	1	3
SP7041	Cargo Tanks/	Authorizes use of prescribed non-DOT specification	1	3

	Rail Cars/ Portable Tanks	cargo tanks with agitators for transportation in commerce of certain waste organometallic compound dispersions and hydrocarbon solvent.		
SP7073	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification portable tanks for transportation in commerce of certain hazardous materials.	2	3
SP7274	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain refrigerated gases (argon UN1951; nitrogen, UN1977; oxygen, UN1073) in non-DOT portable tanks.	1	2
SP7594	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of methyl bromide in a non-DOT specification portable tank.	1	2
SP8125	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification IMO Type 5 portable tanks for transportation in commerce of certain Division 2.1 (flammable) and 2.2 (non-flammable) gases and a Class 3 material.	3	3
SP8196	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain non-DOT specification IMO Type 5 portable tanks, each mounted in an ISO frame, for transportation in commerce of certain compressed gases in Division 2.1, 2.2 and 2.3 and Class 3 materials.	1	3
SP8232	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification portable tanks for transportation in commerce of certain Division 2.1 and Division 2.2 materials and a Class 3 material.	2	3
SP8354	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification portable tanks for transportation in commerce of certain Division 2.1 gases.	1	3
SP8523	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification IMO Type 5 portable tanks for transportation in commerce of certain Division 2.1, 2.2 and 2.3 materials.	1	3
SP8556	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of super-insulated non-DOT specification portable tanks for transportation in commerce of certain hazardous materials.	8	3
SP8627	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of multiple non-DOT specification portable tanks manifolded together within a frame and securely mounted on a truck chassis for transportation in commerce of Class 3, Division 6.1, and Class 8 materials.	10	3
SP8650	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification steel portable tanks for transportation in commerce of certain hazardous materials.	2	3
SP8698	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification vacuum insulated portable tanks for transportation in commerce of certain hazardous materials.	1	3
SP8939	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of six (6) non-DOT specification portable tanks manifolded together within a frame and securely mounted on a truck chassis for transportation in commerce of certain flammable and corrosive liquids.	1	3
SP9023	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain non-DOT specification IMO Type 5 portable tanks for transportation in commerce of certain hazardous materials.	1	3
SP9024	Cargo Tanks/	Authorizes use of non-DOT specification portable tanks	2	3

	Rail Cars/ Portable Tanks	for transportation in commerce of certain Division 2.1 and 2.2 materials.		
SP9067	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of multiple non-DOT specification portable tanks manifolded together within a frame and securely mounted on a truck chassis to be used for transportation in commerce of certain Class 3 and Class 8 materials.	1	3
SP9166	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-specification glass fiber reinforced plastic (GFRP) cargo tanks for the transportation in commerce of certain hazardous materials.	17	4
SP9228	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification cargo tanks for transportation in commerce of certain Class 8 and 9 materials.	1	3
SP9266	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification IMO Type 5 portable tanks for transportation in commerce of certain Division of 2.1, 2.2 and 2.3 gases.	5	3
SP9317	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification skid mounted portable tanks for transportation in commerce of a non-flammable gas, subject to the limitations and special requirements specified.	1	2
SP9401	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification IMO Type 5 portable tanks for transportation in commerce of certain Division 2.1 and 2.2 gases.	1	2
SP9418	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification portable tank assemblies manifolded together within a frame and securely mounted on a truck chassis, to be used for transportation in commerce of certain hazardous materials.	1	3
SP9462	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification portable tanks manifolded together within a frame and securely mounted on a truck chassis for the transportation in commerce of certain Class 3 and Class 8 materials.	1	3
SP9490	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification IMO Type 5 portable tanks for transportation in commerce of certain Division 2.1 and 2.2 gases.	1	3
SP9530	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification IMO Type 5 portable tanks for transportation in commerce of certain Division 2.1 and 2.2 gases.	1	3
SP9548	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of a non-DOT specification IMO Type I portable tank for transportation in commerce of certain hazardous materials.	2	2
SP9579	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification motor vehicles for transportation in commerce of certain oxidizers.	1	3
SP9596	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification insulated portable tanks for transportation in commerce of helium, refrigerated liquid.	1	3
SP9819	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification steel portable tanks comparable to a DOT specification 57, except for capacity for transportation in commerce of certain Class 3 and 8 liquids to be discharged without removing the	1	3

		tanks from the vehicle on which it is transported.		
SP9832	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a vacuum insulated, non-DOT specification portable tank to be used for transportation in commerce of certain hazardous materials.	1	3
SP10031	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification, insulated portable tanks for transportation in commerce of liquefied helium.	2	3
SP10049	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of a polyurethane insulated cargo tank conforming with MC 331 built prior to 1984 to transport certain hazardous materials.	2	2
SP10146	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a vacuum-insulated non-DOT specification portable tank for shipment of helium, refrigerated liquid.	1	2
SP10457	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of chlorine contained in MC 331 cargo tanks equipped with angle valves, excess flow valves and pressure relief valves not presently authorized in the HMR.	6	2
SP10480	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification vacuum insulated portable tanks for transportation in commerce of helium, refrigerated liquid.	1	3
SP10481	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale, and use of a non-DOT specification vacuum insulated portable tank in an ISO frame conforming with all regulations applicable to a DOT specification MC-338 cargo tank motor vehicle, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP10517	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of those hazardous materials authorized for transportation in DOT specification 57 portable tanks and UN 31A intermediate bulk containers (IBCs) which are retested at least once every 5 years.	1	5
SP10631	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain hazardous materials (dimethylhydrazine, unsymmetrical, 6.1, UN1163, I; hydrazine, anhydrous, 8, UN2029, I; methylhydrazine, 6.1, UN1244, I; Toxic by Inhalation liquid, flammable, n.o.s., 6.1, UN3384, I, Hazard Zone B) in DOT specification MC338 cargo tanks.	3	2
SP10709	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain materials (UN2920 and UN2924) in stainless steel DOT specification 57 portable tanks.	1	2
SP10756	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a vacuum insulated, non-DOT specification portable tank in an ISO frame for transportation in commerce of certain Division 2.2 materials.	1	2
SP10772	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, mark, sale and use of three cargo tank motor vehicles with a sump location which does not meet the requirements of § 178.338-4(c).	1	3
SP10878	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification fiberglass reinforced plastic (FRP) cargo tank motor vehicles for transportation in commerce of certain Class 8 liquids.	1	4

SP10887	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of dinitrogen tetroxide in specially designed DOT specification 51 portable tanks.	1	3
SP11073	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of chlorosulfonic acid in DOT Class 112S tank cars constructed of ASTM 240-70, Type 304L stainless steel, equipped with 1/2 inch thick full head shields.	1	2
SP11178	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of bromine, Class 8, Hazard Zone A, in a non-DOT specification portable tank constructed of 1/4 inch thick mild steel with 1/4 inch lead lining.	1	2
SP11186	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification vacuum insulated portable tank conforming with all requirements applicable to a DOT specification MC 338 cargo tank motor vehicle for transportation in commerce of certain compressed gases.	1	2
SP11253	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes continued transportation in commerce of sulfur dioxide in certain DOT specification MC-331 cargo tanks.	5	3
SP11281	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of uninsulated DOT specification cargo tanks and portable tanks for transportation in commerce of certain Class 8 and Division 6.1 materials, which are toxic by inhalation.	1	2
SP11318	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain un-insulated DOT specification 51 portable tanks that are currently authorized for certain hazardous materials, except that the portable tanks do not meet the provisions of § 172.102 special provision B14 or TP38.	1	2
SP11321	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-insulated packagings for transportation in commerce of titanium tetrachloride (PIH).	1	2
SP11388	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of DOT specification 57 portable tanks made of stainless steel, containing certain dual hazard liquids (UN2734, UN2920, UN2357, UN2924).	1	2
SP11517	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain Class 3 and Class 8 materials in multiple non-DOT specification portable tanks manifolded together within a frame and securely mounted on a truck chassis.	1	3
SP11565	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification cargo tank motor vehicle for transportation in commerce of certain Class 8 materials.	1	2
SP11596	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain non-DOT specification pressure vessels (receptacles) without pressure relief devices, which have been approved by the German Competent Authority and are similar in design to a multi-unit tank car tank, containing hydrogen sulfide for export only.	1	2
SP11660	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of two (2) non-DOT specification cargo tanks containing hydrochloric acid.	1	2
SP11714	Cargo Tanks/ Rail Cars/	Authorizes transportation in commerce of certain non-DOT specification cargo tanks used for roadway	1	2

	Portable Tanks	striping.		
SP11733	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of specially modified DOT specification cargo tank motor vehicles for transportation in commerce of organic peroxide, type F.	1	2
SP11759	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of hydrogen fluoride, a Class 8 material poisonous by inhalation in certain DOT specification tank cars equipped with alternative pressure relief devices and without metal jackets.	9	3
SP11808	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders (pressure vessels) for transportation in commerce of chlorine, as specified.	2	2
SP11860	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain hazardous materials, in certain DOT specification tank cars equipped with half head shields instead of the required full head protection. The hazardous materials authorized in the DOT specification 111A60ALW2, 111A60ALW1 and 111A100ALW2 tank cars are Class 5.1, 8 and 9 materials.	1	3
SP11880	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain Division 4.2 materials in specially equipped, covered hopper railcars.	1	2
SP11903	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes the manufacture, marking, sale and use of non-DOT specification cargo tank motor vehicles constructed from glass fiber reinforced plastics (GFRP) conforming with all regulations applicable to a DOT 407 or DOT 412 cargo tank motor vehicle, except as specified, for transportation in commerce of certain hazardous materials.	1	4
SP11911	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification metal refueling tanks containing certain Class 3 liquids. The Class 3 liquids will be discharged from the refueling tanks without removing the refueling tanks from the vehicle on which they are transported.	1	3
SP11966	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of a Division 5.1 material in 19 DOT specification 111A60ALW2 tank cars equipped with half head shields instead of the required full head protection.	1	3
SP11970	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of a non-DOT specification portable tank comparable to a DOT specification 51 portable tank, except as specified, for transportation in commerce of certain pyrophoric solids.	6	3
SP12018	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification insulated portable tank conforming with all regulations applicable to a DOT specification MC-338 insulated cargo tank, except as specified, for transportation in commerce of nitrogen, argon or oxygen, refrigerated liquids.	1	3
SP12074	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of certain DOT specification 51 steel portable tanks or UN steel portable tanks conforming with requirements of special provision T50 for transportation in commerce of	1	3

		Division 2.1 and 2.2 materials.		
SP12124	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain Division 4.2 and Division 4.3 materials in a non-DOT specification portable tank comparable to a DOT specification 51 portable tank.	2	3
SP12130	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification vacuum insulated portable tank conforming with all regulations applicable to a DOT specification MC 338 cargo tank motor vehicle, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP12173	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of non-DOT specification vacuum insulated portable tanks manufactured under a current DOT SP for transportation in commerce by cargo aircraft in Alaska, of nitrogen, refrigerated liquid.	1	3
SP12211	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of liquid nitrogen, cryogenic liquid, in non-DOT specification insulated portable tanks by cargo vessel for delivery to oil and gas production facilities within the jurisdiction of the United States of America.	4	3
SP12277	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder (pressure vessel) conforming with all regulations applicable to a DOT specification 106A500W multi-unit tank car tank, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP12289	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain DOT specification 51 steel portable tanks manufactured in accordance with Section VIII, Division 2 of the ASME Code instead of Division 1 for transportation in commerce of Division 2.1 and 2.2 materials.	1	3
SP12295	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of DOT specification IM 101 portable tanks fitted with bottom outlets for transportation in commerce of a toxic liquid, flammable, organic, n.o.s.	1	2
SP12392	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain DOT specification 51 steel portable tanks designed in accordance with Section VIII, Division 2 of the ASME Code instead of Section VIII, Division 1 for transportation in commerce of certain Division 2.1 and Division 2.2 materials.	1	3
SP12442	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification vacuum insulated portable tank, conforming with the regulations applicable to a DOT specification MC 338 cargo tank, except as specified, for transportation in commerce of nitrogen, refrigerated liquid.	1	2
SP12515	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification vacuum insulated portable tank conforming with all regulations applicable to a DOT specification MC 338 cargo tank motor vehicle, except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP12516	Cargo Tanks/ Rail Cars/	Authorizes manufacture, marking, sale and use of a non-DOT specification glass fiber reinforced plastic (GFRP)	1	4

	Portable Tanks	cargo tank for transportation in commerce of certain hazardous materials.		
SP12608	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of DOT specification IM 101 steel portable tanks for transportation in commerce of hydrogen peroxide aqueous solutions in concentrations exceeding 72% but not exceeding 92% by weight.	1	3
SP12626	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification portable tank equipped with an external bottom discharge valve conforming to all regulations applicable to a DOT specification IM 101 portable tank, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP12628	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of certain DOT specification 51 and UN T50 steel portable tanks manufactured in accordance with Section VIII, Division 1 of the ASME Code, including the 1999 Addenda which allows a design margin of 3.5., for transportation in commerce of Division 2.1 and 2.2 materials.	1	3
SP12630	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain DOT specification IM 101 portable tanks with a minimum shell thickness less than required in the HMR for transportation in commerce of lithium alkyls.	1	2
SP12637	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain cryogenic liquids in certain non-DOT specification vacuum insulated portable tanks.	2	2
SP12724	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain DOT specification MC 312 cargo tank motor vehicles equipped with a pressure relief device not in conformance with the HMR for transportation in commerce of hydrogen fluoride.	1	3
SP12779	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of a non-DOT specification vacuum insulated portable tank conforming with all regulations applicable to a DOT specification MC 338 cargo tank motor vehicle, except as specified, containing certain hazardous materials.	1	3
SP12841	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification vacuum insulated portable tanks conforming with all regulations applicable to a DOT specification MC 338 cargo tank motor vehicle, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP12905	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes tank car information to be stamped on permanent identification plates placed on opposite ends of the tank car instead of stamped into the tank's head.	11	5
SP12930	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of specific lined DOT specification MC312, DOT specification 407, and DOT specification 412 cargo tank motor vehicles which are not subject to the internal visual inspections required by § 180.407(e) and (f) for transportation in commerce of certain acids.	1	2
SP12981	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of DOT specification MC-330 and MC-331 cargo tank motor vehicles containing nitrous oxide, refrigerated liquid, with an alternate means to shut-down the flow of	1	3

		product.		
SP13020	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain non-DOT specification IMO Type 5 portable tanks for transportation in commerce of propane.	1	3
SP13046	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain UN portable tanks manufactured in accordance with Section VIII, Division 2 of the ASME Code, instead of Division 1 for transportation in commerce of Division 2.1 and 2.2 materials.	3	3
SP13110	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of dry metal catalyst in a non-DOT specification bulk packaging.	1	3
SP13207	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of ferric chloride solution and sulfuric acid in certain DOT specification IM 101 and UN portable tanks that do not conform with the filling density requirements specified in § 173.32(f)(5).	1	3
SP13219	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain DOT specification tank cars, containing Division 5.1 or 5.2 materials that have been inspected under a modified inspection program prior to being offered for transportation.	3	4
SP13258	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders conforming with all regulations applicable to a DOT specification 3T cylinder except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP13264	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes limited transportation in commerce within the United States of certain non-insulated, non-DOT specification steel portable tanks containing chloropicrin to facilitate international commerce.	1	3
SP13327	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of manway assemblies constructed from glass fiber reinforced plastics (GFRP) for installation on certain DOT specification cargo tank motor vehicles in transporting certain hazardous materials.	1	4
SP13385	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain UN portable tanks, containing liquid helium, which have not been impact tested.	1	4
SP13402	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of sulfur hexafluoride in DOT specification 110A1000W multi-unit tank car tanks with a higher filling density than currently authorized by the HMR.	2	3
SP13421	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification portable tank equipped with an external bottom discharge valve conforming to all regulations applicable to a UN portable tank, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP13482	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of uninsulated UN portable tanks that are currently authorized for transportation in commerce of certain hazardous materials, except that the UN portable tanks do not meet the provisions of § 172.101 special	1	2

		provisions B14 and TP38.		
SP13958	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of low specific activity LSA-II radioactive waste in non-specification packages consisting of either gondola rail cars with an 18-mil high density polypropylene (HDPP) liner or in tarpaulin-covered dump trucks with a 4 to 6-mil high density polyethylene (HDPE) liner.	1	3
SP14038	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of DOT specification 111S100W6 tank cars having a maximum gross weight on rail at 286,000 pounds for the transportation of Class 8 materials.	1	5
SP14039	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain UN portable tanks conforming to the requirements of § 172.102(c)(7) portable tank code T50 which are designed and constructed in accordance with Section VIII, Division 2 of the ASME Code instead of Section VIII, Division 1 for transportation in commerce of Division 2.1 and 2.2 materials.	1	2
SP14167	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of DOT specification 105J600W tank cars having a protective housing welded to the tank flange and having a maximum GWR (gross weight on rail) of 286,000 pounds for transportation in commerce of chlorine.	1	3
SP14173	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of DOT specification 105J400W tank cars having a maximum gross weight on rail at 286,000 pounds for transportation in commerce of certain hazardous materials.	2	2
SP14186	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of DOT specification 105J300W tank cars having a maximum gross weight on rail at 286,000 pounds for certain hazardous materials.	1	5
SP14193	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of thirty five non-DOT specification IMO Type 5 portable tanks, each mounted in an ISO frame, containing certain Division 2.2 and 2.3.compressed gases.	1	2
SP14210	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain UN portable tanks conforming to the requirements of § 172.102(c)(7), T50 which are designed and constructed in accordance with Section VIII, Division 2 of the ASME Code instead of Section VIII, Division 1. The portable tanks, mounted in ISO frames, are authorized for transportation in commerce of Division 2.1 and 2.2 materials.	1	2
SP14262	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes continued transportation in commerce of certain railroad tank cars containing carbon dioxide with a tank head thickness slightly below the minimum required.	2	2
SP14275	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification cargo tank motor vehicle conforming with all regulations applicable to DOT specification 412/407 cargo tank motor vehicles, except as specified, for transportation in commerce of certain hazardous materials.	2	3
SP14277	Cargo Tanks/ Rail Cars/	Authorizes manufacture, marking, sale and use of a non-DOT specification carbon glass fiber reinforced plastic	1	4

	Portable Tanks	(GFRP) cargo tank conforming with all regulations applicable to a DOT specification 407/412 cargo tank motor vehicle, except as specified, for transportation in commerce of certain hazardous materials.		
SP14292	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transport of boron trifluoride in DOT specification 3AAX and 3AA manifolded cylinders.	2	2
SP14296	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of certain UN Portable Tanks manufactured in accordance with Section VIII, Division 2 of the ASME Code, instead of Division 1. The portable tanks, mounted in ISO frames, are authorized for transportation in commerce of Division 2.1 and 2.2 materials.	2	3
SP14301	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of certain UN portable tanks conforming to the requirements of § 172.102(c)(7), T50 which are designed and constructed in accordance with Section VIII, Division 2 of the ASME Code instead of Section VIII, Division 1. The portable tanks, mounted in ISO frames, are authorized for the transportation in commerce of Division 2.1 and 2.2 materials.	2	2
SP14317	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of certain UN portable tanks conforming to the requirements of § 172.102(c)(7) portable tank code T50 which are designed and constructed in accordance with Section VIII, Division 2 of the ASME Code instead of Section VIII, Division 1. The portable tanks, mounted in ISO frames, are authorized for transportation in commerce of Division 2.1 and 2.2 materials.	1	3
SP14318	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain Division 2.3, Division 3, Division 6.1 and Class 8 materials in a non-DOT specification portable tank conforming to the requirements specified in § 172.102(c)(7) portable tank code T50 (UN portable tank) which are designed, constructed, certified and stamped in accordance with Section VIII, Division 1 of the ASME Code (2007 edition).	2	4
SP14398	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of DOT specification 105J600W tank cars having a maximum gross weight on rail at 286,000 pounds for the transportation of titanium tetrachloride.	1	4
SP14437	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder (pressure vessel) conforming with all requirements applicable to a DOT specification 106A500W multi-unit tank car tank except as specified, for transportation in commerce of certain hazardous materials.	1	2
SP14467	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale, and use of DOT 400 series cargo tank motor vehicles fabricated using certain duplex stainless steels and other materials not authorized in § 178.345-2 as a material of construction.	1	4
SP14483	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of certain UN portable tanks conforming to the requirements of § 172.102(c)(7) T50 which are designed	1	2

		and constructed in accordance with Section VIII, Division 2 of the ASME Code instead of Section VIII, Division 1. The portable tanks, mounted in ISO frames, are authorized for the transportation in commerce of Division 2.1 and 2.2 materials.		
SP14492	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale, and use of certain UN portable tanks conforming to the requirements of § 172.102(c)(7) portable tank code T50 which are designed and constructed in accordance with Section VIII, Division 1 of the ASME Code, including the 2004 edition, which allows a design margin of 3.5:1. The portable tanks, mounted in ISO frames, are authorized for transportation in commerce of Division 2.1 and 2.2 materials.	1	2
SP14520	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of DOT specification 105J500W tank cars having a maximum gross weight on rail of 268,000 pounds for transportation in commerce of chlorine, a Division 2.3 material provided the weight increase is applied to safety improvements of the packaging.	1	5
SP14532	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain Division 5.1 hazardous materials in tank cars that have not had their rupture disk removed for inspection.	1	2
SP14560	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of Division 4.2 hazardous materials in tank cars fitted with an alternative means of fittings protection.	1	2
SP14572	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of certain UN portable tanks conforming to the requirements of § 172.102(c)(7), T50 which are designed and constructed in accordance with Section VIII, Division 2 of the ASME Code instead of Section VIII, Division 1. The portable tanks, mounted in ISO frames, are authorized for transportation in commerce of Division 2.1 and 2.2 materials.	1	2
SP14573	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of DOT 400 series cargo tank motor vehicles fabricated using certain duplex stainless steels and other materials not authorized in § 178.345-2 as materials of construction.	1	4
SP14574	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of specific lined DOT specification MC 312 and DOT 412 cargo tanks which are not subject to the internal visual inspections and lining inspections required by § 180.407(c), (e) and (f) for transportation in commerce of certain Class 8 and Division 6.1 materials.	1	2
SP14578	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale, and use of certain UN portable tanks conforming to the requirements of § 172.102(c)(7) T50 which are designed and constructed in accordance with Section VIII, Division 2 of the ASME Code instead of Section VIII, Division 1. The portable tanks, mounted in ISO frames, are authorized for transportation in commerce of Division 2.1 and 2.2 materials.	1	2
SP14597	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of DOT specification DOT 110AW multi-unit tank car tanks for transportation in commerce of anhydrous ammonia and	1	2

		chlorine.		
SP14616	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale, and use of certain UN portable tanks conforming to the requirements of § 172.102(c)(7) portable tank code T50 which are designed and constructed in accordance with Section VIII, Division 2 of the ASME Code instead of Section VIII, Division 1 for transportation in commerce of Division 2.1 and 2.2 materials.	1	3
SP14689	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain DOT specification MC-331 cargo tank motor vehicles with a water capacity greater than 3,500 gallons, manufactured to the DOT MC-331 specification, constructed of quenched and tempered ("QT") steel except that the cargo tanks have baffle support clips welded directly to the inside of the cargo tank wall without the use of pads.	1	3
SP14630	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of certain non-DOT specification cargo tanks (nurse tanks) that are not authorized by the HMR for transportation in commerce of certain Division 6.1 liquid soil pesticide fumigants.	1	2
SP14710	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale, and use of DOT 400 series cargo tank motor vehicles constructed of titanium instead of the materials authorized in § 178.345-2.	1	4
SP14734	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of DOT specification 111A100W5 tank cars having a maximum gross weight on rail at 286,000 pounds for transportation in commerce of a Class 8 material.	1	4
SP14743	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes one-time, one-way transportation in commerce of approximately 2,020 lbs. of sodium in a non-DOT specification metal bulk tank.	1	2
SP14751	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of an organometallic substance, solid, in a non-DOT specification portable tank which is designed in accordance with the requirements for an UN portable tank and portable tank instructions "T9" except it is equipped with a bottom opening, or a DOT specification UN portable tank designed to the meeting the requirements of portable tank instruction "T21".	2	2
SP14756	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of a Division 4.2 material in 35 non-DOT specification portable tanks conforming to the requirements of a UN T21 portable tank except for the thickness of the bottom conical head.	1	3
SP14765	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of specific lined DOT specification MC 312 and DOT 412 cargo tank motor vehicles which are not subject to the internal visual inspections required by 49 CFR 180.407(c), (e) and (f) for transportation in commerce of certain acids.	1	3
SP14770	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of an organometallic substance, solid, water-reactive, flammable n.o.s in a non-DOT specification portable tank which is designed in accordance with the provisions for an UN portable tank (portable tank instruction "T9"), except it is equipped with a bottom	2	2

		opening.		
SP14779	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification glass fiber reinforced plastic (GFRP) cargo tank conforming with all regulations applicable to a DOT specification 412/407, except as specified, for transportation in commerce of certain hazardous materials.	1	4
SP14815	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of fifteen vacuum insulated UN portable tanks conforming to the requirements of § 72.102(c)(7) portable tank instruction "T75" which are designed and constructed in accordance with the EN 13530 Standard instead of the ASME Code Section VIII for export only of nitrous oxide, refrigerated liquid.	1	3
SP14832	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of DOT 105 and DOT 112 specification tank cars for use in transportation of hazardous materials that are toxic by inhalation with a welded manway protective housing, subject to certain limitations.	1	2
SP14889	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain UN portable tanks that are waived from the requirement to perform an internal examination as part of the intermediate 2.5 year periodic inspection when used exclusively for the transport of certain Class 4 organometallic substances.	1	3
SP14948	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of missile sustainer sections containing a flammable liquid in non-DOT specification packaging by motor vehicle and cargo vessel.	2	2
SP14980	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes one-way transportation in commerce of liquefied petroleum gas (LPG) in certain non-DOT specification storage tanks by private carrier motor vehicle. The prescribed packagings are non-DOT specification storage containers for liquefied petroleum gas, designed for permanent installation on consumer premises. Each container must conform to the following description: (1) be ASME Code "U" stamped; and (2) have a water capacity not exceeding 500 gallons.	22	4
SP15028	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes use of specific lined DOT specification MC 312, and DOT specification 412 cargo tank motor vehicles which are not subject to the internal visual inspections required by § 180.407(c), (e) and (f) for transportation in commerce of certain acids.	1	2
SP15036	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of non-DOT specification tank cars consisting of an inner pressure vessel and an outer protective for use in transportation of hazardous materials that are toxic by inhalation, subject to certain requirements and limitations.	1	2
SP15220	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of UN T75 Code portable tanks that are designed, constructed, certified and stamped in accordance with Section VIII Division 1, latest edition, of ASME Code, except as	1	4

		specified, for transportation in commerce of certain hazardous materials.		
SP15229	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of chlorine, Division 2.3 material in DOT 106A500X and DOT 106A500W multi-unit tank car tanks that are not equipped with a pressure relief device.	1	3
SP15267	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, and sale of non-DOT specification portable tanks with a maximum capacity of 165 liters (43.6 U.S. gallons) for transportation in commerce of liquid bromine.	1	3
SP15284	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of anhydrous hydrogen fluoride in DOT 112S500I specification tank cars equipped with alternative pressure relief devices.	4	2
SP15326	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain Division 4.2 and Division 4.3 materials in MC 331 cargo tank motor vehicles with filling/discharge connections external to the tank and located in a recessed well on the top of the cargo tank that does not have a remote self-closing internal valve.	1	2
SP15384	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of certain gases in DOT 107A tank car tanks (tubes). The tubes are retested by AE/UE in place of the internal visual inspection and the hydrostatic retest required in § 180.205.	1	3
SP15393	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes transportation in commerce of sulfuric acid in tanks cars that have undergone an alternative pre-trip inspection procedure.	1	4
SP15552	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes manufacture, marking, sale and use of a non-DOT specification glass fiber reinforced plastic (GFRP) cargo tank conforming with all regulations applicable to a DOT specification 407/412 for transportation in commerce of certain hazardous materials.	1	4
SP15647	Cargo Tanks/ Rail Cars/ Portable Tanks	Authorizes retesting of certain DOT specification and non-DOT specification multi-unit tank car tanks without approval from the Association of American Railroads (AAR).	1	3
		Operational Air/Vessel		
SP6543	Operational Air/Vessel	Authorizes use of non-DOT specification cylinders or containers for transportation in commerce of certain hazardous materials.	2	2
SP7060	Operational Air/Vessel	Authorizes carriage of radioactive materials aboard cargo aircraft only, under any combination of the following conditions: when the combined transport index exceeds the authorized limit of 200 per aircraft (as specified in § 175.700(b)(2)(ii)), or the separation distance criteria of § 175.702(a)(2)(ii) cannot be met.	2	3
SP7280	Operational Air/Vessel	Authorizes transportation in commerce of certain motor vehicles, fixed wing aircraft, helicopters, air cushioned vehicles/boats and power boats with fuel tanks 3/4 full instead of 1/4 full. In addition, the fueled vehicles are	1	3

		authorized to be transported with battery cables connected if the holds or compartment of a vessel in which vehicles are loaded are mechanically ventilated.		
SP7465	Operational Air/Vessel	Authorizes stowage aboard passenger vessels of motor vehicles, such as recreational vehicles, with attached cylinders of liquefied petroleum gas, as well as extra containers of gasoline (including camp stove or lantern fuel) and portable cylinders of liquefied petroleum gas. (State of Alaska, Department of Transportation)	1	3
SP7605	Operational Air/Vessel	Authorizes transportation in commerce of certain explosives contained in partially disassembled aircraft or sub-assemblies with explosive components (ejection seat, fuselage and canopy related devices) and aircraft canopy assemblies with explosive components installed.	2	2
SP7648	Operational Air/Vessel	Authorizes transportation of flares, aerial classed as Division 1.3G in a small cargo aircraft only, for test purposes.	1	2
SP7891	Operational Air/Vessel	Authorizes transportation in commerce of certain specially designed combination packagings containing certain hazardous materials without hazard labels or placards, with quantity limits not exceeding one liter for liquids or 2.85 kilograms for solids.	4	3
SP7928	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials using alternate stowage. (State of Alaska, Department of Transportation)	1	3
SP8249	Operational Air/Vessel	Authorizes manufacture, marking, sale and use of specially designed combination packagings for transportation in commerce of various hazardous materials without hazard labels or placards, with quantity limits not exceeding one liter for liquids or 2.85 kilograms for solids.	1	3
SP8307	Operational Air/Vessel	Authorizes transportation in commerce of packages described as non-pyrotechnic smoke generators containing certain Class 8 materials that may have a subsidiary poison inhalation hazard and also may contain nitrogen, compressed gas.	1	3
SP8697	Operational Air/Vessel	Authorizes transportation in commerce of liquefied petroleum gas in amounts that exceed the quantity limitations for transportation by cargo aircraft only in the State of Alaska.	1	3
SP8826	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 1.4, 1.5 and 1.6 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP8914	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP9168	Operational Air/Vessel	Authorizes the manufacture, marking, sale and use of specially designed combination packagings for transportation in commerce of various hazardous materials without hazard labels or placards, with quantity limits not exceeding one liter for liquids or 2.85	2	3

		kilograms for solids.		
SP9211	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 military explosives on certain vessels, in cargo holds having electrically-powered lighting, air conditioning, alarm, fire detection, and cargo-handling systems.	8	3
SP9551	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP9689	Operational Air/Vessel	Authorizes transportation in commerce of certain dense or heavy materials such as toluene diisocyanate, and other hazardous materials not exceeding 12.09 pounds per gallon, to be secured against movement in a freight container or transport vehicle by the use of a fabric restraint dunnage system when shipped by cargo vessel.	1	3
SP9735	Operational Air/Vessel	Authorizes certain Dangerous Cargo Manifests (DCMs) to be retained in a location other than on or near the bridge of the cargo vessel while the vessel is in port.	1	5
SP9856	Operational Air/Vessel	Authorizes use of either DOT specification or non-DOT specification packaging and authorizes patient use of oxygen systems (Division 2.2) on board a passenger ship or cargo ship.	1	2
SP10298	Operational Air/Vessel	Authorizes transportation in commerce of certain liquid fuels, Class 3 materials, contained in non-DOT specification packaging seal drums or rollagons of up to 500 gallon capacity by cargo aircraft to remote locations within the State of Alaska and Bronson Creek, British Columbia, Canada.	1	3
SP10648	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP10672	Operational Air/Vessel	Authorizes manufacture, marking, sale and use of specially designed combination packagings for transportation in commerce of certain Division 4.3, 4.1, 5.1, 5.2, 4.2, 6.1, Class 8 and 3 materials without hazard labels or placards, with quantity limits not exceeding one liter for liquids or 2.85 kilograms for solids.	1	3
SP10688	Operational Air/Vessel	Authorizes transportation in commerce of gasoline in non-DOT specification polyethylene containers, and overpacked on small, passenger-carrying aircraft within the State of Alaska.	1	3
SP10790	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP10966	Operational Air/Vessel	Authorizes transportation in commerce by helicopter of certain Class 3 materials and a Class 8 material in a UN31HA1 intermediate bulk container (IBC).	1	2
SP11110	Operational Air/Vessel	Authorizes transportation in commerce of Division 1.4S and Class 8 PGIII materials in an inaccessible location aboard an aircraft in quantities exceeding those	1	3

		authorized by § 175.75.		
SP11136	Operational Air/Vessel	Authorizes the offering in air transportation of fireworks, Division 1.3G, UN0335 which are forbidden or exceed the quantity limitations authorized for transportation by cargo aircraft only.	3	3
SP11232	Operational Air/Vessel	Authorizes transportation in commerce of acetylene, dissolved, contained in a DOT specification cylinder secured on a state-owned maintenance motor vehicle while stowed on a protected vehicle deck on board a passenger ferry vessel.	1	2
SP11248	Operational Air/Vessel	Authorizes manufacture, marking, sale and use of specially designed combination packagings for transportation in commerce of various hazardous materials without hazard labels or placards, with quantity limits not exceeding one liter for liquids or 2.85 kilograms for solids per inner packaging.	1	3
SP11273	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3, 1.4, 1.5, and 1.6 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP11328	Operational Air/Vessel	Authorizes transportation in commerce of an alternate stacking arrangement for cylindrical shaped UN5H3 bags of explosive, blasting type E, 1.5D, UN0332.	2	3
SP11386	Operational Air/Vessel	Authorizes transportation in commerce of certain liquefied petroleum gases and acetylene contained in DOT specification cylinders on board passenger ferry vessels which are carrying more than 25 passengers.	1	2
SP11503	Operational Air/Vessel	Authorizes transportation in commerce of certain closed freight containers on unmanned deck barges without the need to segregate the freight containers in accordance with the provisions of § 176.83(f) during Puget Sound and Alaska operations.	1	3
SP11510	Operational Air/Vessel	Authorizes transportation in commerce of certain DOT specification cylinders containing propane, a Division 2.1 gas, which is forbidden for shipment aboard passenger carrying aircraft.	1	2
SP11677	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP11781	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP11844	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP11866	Operational Air/Vessel	Authorizes transportation in commerce of internal combustion-powered motor vehicles in freight containers in cargo vessel holds that are not ventilated.	1	3
SP11881	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 (explosive) materials of different compatibility groups	2	3

		in the same motor vehicle in the vehicle spaces of a vessel under certain conditions.		
SP11989	Operational Air/Vessel	Authorizes stowage of certain Division 1.1, 1.2 and 1.4 explosives, in the same freight container with helium, compressed and nitrogen, compressed, Division 2.2, on board certain Department of Defense vessels.	1	2
SP12054	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP12133	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP12283	Operational Air/Vessel	Authorizes transportation in commerce of batteries for disposal or remanufacture, in non-DOT specification packagings, by cargo aircraft only between remote places within the State of Alaska.	6	3
SP12339	Operational Air/Vessel	Authorizes transportation in commerce by cargo vessel of DOT specification 3AL aluminum cylinders containing various Division 2.1 and 2.3 gases that are currently permitted for transport in such cylinders only by highway, rail and, in some cases, cargo-only aircraft.	8	2
SP12362	Operational Air/Vessel	Authorizes limited maintenance and repair operations to vehicles stowed below deck in the same cargo holds as Class 1 explosives aboard certain vessels.	1	2
SP12382	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP12383	Operational Air/Vessel	Authorizes stowage of closed steel freight containers of certain Class 1 explosives, in the cargo hold adjacent to the machinery space, at a distance of less than three meters from the forward bulkhead of the machinery space.	1	2
SP12401	Operational Air/Vessel	Authorizes manufacture, marking, sale and use of specially designed combination packagings for transportation in commerce of various hazardous materials without hazard labels or placards, with quantity limits not exceeding one liter for liquids or 2.85 kilograms for solids.	1	3
SP12463	Operational Air/Vessel	Authorizes transportation in commerce of oxygen, refrigerated liquid, UN1073 in insulated cylinders or insulated cargo tanks aboard a passenger ferry vessel as prescribed.	1	2
SP12592	Operational Air/Vessel	Authorizes transportation in commerce of motor vehicles with fuel in their tanks in a cargo hold of a certain vessel without full compliance with § 176.905(h), which requires all electrical equipment in the hold, other than fixed explosion-proof lighting, to be disconnected from its power source at a location outside the hold.	1	2
SP12674	Operational	Authorizes transportation in commerce of certain DOT	1	2

	Air/Vessel	specification cylinders containing propane, a Division 2.1 gas, which is forbidden for shipment aboard passenger carrying aircraft.		
SP12708	Operational Air/Vessel	Authorizes the transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only. The SP authorizes transportation of certain hazardous materials in aircraft of United States registry. It does not grant authority to use foreign controlled airspace or airports outside the United States.	1	2
SP12982	Operational Air/Vessel	Authorizes transportation in commerce of black powder for small arms and primers by which are forbidden for transportation by air, to be transported by passenger-carrying aircraft within and around the State of Alaska when other means of transportation are impracticable or not available.	1	3
SP13137	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP13169	Operational Air/Vessel	Authorizes transportation in commerce of certain DOT specification UN31A intermediate bulk containers containing flammable liquid, n.o.s. or combustible liquid, n.o.s., which exceed quantity limitations when shipped by air during Alaska operations.	1	3
SP13200	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP13313	Operational Air/Vessel	Authorizes transportation in commerce aboard passenger ferry vessels of certain hazardous materials contained on roll-on, roll-off transport vehicles subject to certain limitations and special requirements.	1	2
SP13736	Operational Air/Vessel	Authorizes transportation in commerce of certain DOT specification UN31A intermediate bulk containers containing certain Class 3 materials which exceed quantity limitations when shipped by air.	1	2
SP13876	Operational Air/Vessel	Authorizes the City of Kotzebue to offer for transportation in commerce certain batteries for disposal or remanufacture in non-DOT specification packagings exceeding the gross weight limitations by cargo aircraft only within the State of Alaska.	1	3
SP13997	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP14145	Operational	Authorizes the stowage of Class 1 (explosive) materials,	2	3

	Air/Vessel	in certain locations of a cargo hold above, below and adjacent to specified machinery spaces other than Category A. In addition, it authorizes the handling of Class 1 materials in certain locations of a cargo hold and on the transfer deck (main deck) while in transit and loading and unloading while underway at sea.		
SP14146	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of flammable liquid powered internal combustion engines and marine propulsion equipment containing internal combustion engines, with coolant and hydraulic systems that have not been emptied.	1	2
SP14158	Operational Air/Vessel	Authorizes transportation in commerce of a fuel cell power plant assembly containing packaged Division 4.2, PG II, and Class 8, PG II materials without meeting the segregation requirements.	1	2
SP14166	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	2	3
SP14201	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	3
SP14210	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP14327	Operational Air/Vessel	Authorizes transportation in commerce of certain compressed gas fueled and liquid-fueled cigarette lighters in checked baggage of passenger aircraft when packaged in a rigid, vapor-tight non-DOT specification solid plastic packaging that prevents any movement of the lighter during transport.	1	3
SP14392	Operational Air/Vessel	Authorizes stowage of Class 1 explosive materials below deck of a cargo vessel with an alternative container stowage configuration.	2	2
SP14466	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within and around the State of Alaska when other means of transportation are impracticable or not available	3	3
SP14516	Operational Air/Vessel	Authorizes a package of radioactive material that is labeled with the Cargo Aircraft Only label and also a subsidiary hazard label to be loaded in an inaccessible cargo location when transported by aircraft.	1	3
SP14527	Operational Air/Vessel	Authorizes air transportation of hazardous materials without identifying the packaging type on the Notification to Pilot in Command.	2	5
SP14531	Operational	Authorizes transportation in commerce of a breath tester	1	2

	Air/Vessel	in company owned aircraft as unregulated.		
SP14548	Operational Air/Vessel	Authorizes transportation of wheelchairs or other battery-powered mobility aids equipped with a non-spillable battery in checked baggage of passenger aircraft without disconnecting the battery.	3	5
SP14554	Operational Air/Vessel	Authorizes transportation in commerce of certain forbidden explosives by helicopter to various mountain sites in Antarctica as directed by the National Science Foundation of the U.S. government.	1	3
SP14569	Operational Air/Vessel	Authorizes transportation of Class 1 (explosive) materials on unmanned deck barges in an alternative stowage configuration.	2	2
SP14592	Operational Air/Vessel	Authorizes transportation in commerce of life-saving appliances, self-inflating by air when identifying only the gross weight per package on shipping papers.	1	5
SP14632	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.2, 1.3 and 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	2
SP14641	Operational Air/Vessel	Authorizes transportation in commerce by air of certain hazardous materials in packagings that exceed the quantity limit for cargo carrying aircraft.	1	3
SP14644	Operational Air/Vessel	Authorizes transportation in commerce by Part 133 Rotorcraft External Load Operations transporting certain hazardous materials attached to or suspended from a cargo aircraft in remote areas of the U.S. only, without being subject to certain hazard communication and packaging requirements.	1	2
SP14650	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1D and 1.4B explosives which are forbidden for transportation by cargo aircraft only.	1	2
SP14791	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP14828	Operational Air/Vessel	Authorizes transportation in commerce of certain Division 1.1, 1.3, 1.4 explosives which are forbidden or exceed quantities authorized for transportation by cargo aircraft only.	1	2
SP14830	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by cargo aircraft and rotorcraft (external load operations subject to 14 CFR Part 133) in remote areas of the United States only, without being subject to certain hazard communication requirements, quantity limitations, and certain loading and stowage requirements.	1	2
SP14861	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by cargo aircraft in remote areas of the U.S. only, without being subject to hazard	1	2

		communication requirements and quantity limitations.		
SP14907	Operational Air/Vessel	Authorizes transportation in commerce by air UN1268, petroleum distillates, n.o.s. solution, PG III in packages that exceed the quantity limit for cargo only aircraft.	1	3
SP14908	Operational Air/Vessel	Authorizes use of outer packaging not being capable of passing the Flame Penetration and Resistance Test and the Thermal Resistance Test for the transportation in commerce of certain cylinders of compressed oxygen, when no other practical means of transportation exists.	1	2
SP14921	Operational Air/Vessel	Authorizes transportation in commerce of compressed oxygen by Part 133 Rotorcraft External Load Operations attached to or suspended from an aircraft only within the State of Alaska.	1	3
SP14924	Operational Air/Vessel	Authorizes transportation in commerce of certain explosives by vessel in an alternative stowage configuration.	1	3
SP14927	Operational Air/Vessel	Authorizes transportation in commerce of certain cylinders of compressed gases with a subsidiary hazard of Division 5.1, when other means of transportation are impracticable, without their outer packaging being capable of passing the Flame Penetration and Resistance Test and the Thermal Resistance Test.	1	2
SP14959	Operational Air/Vessel	Authorizes transportation in commerce Class 3 gasoline in private motor vehicles and trailers when in approved containers of 6 gallon or less capacity on passenger ferry vessels transporting motor vehicles.	1	3
SP14995	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air or exceed the quantity limits, to be transported by cargo aircraft in the State of Alaska when other means of transportation are impracticable or not available.	1	3
SP14996	Operational Air/Vessel	Authorizes transportation in commerce of certain forbidden explosives by Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the United States only.	1	2
SP14999	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the United States only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15005	Operational Air/Vessel	Authorizes transportation in commerce of propane Division 2.1 in DOT specification 4B240, 4BA240, 4BW240 cylinders by Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from a cargo aircraft within the State of Alaska without being subject to quantity limitations.	1	3
SP15006	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 hazardous materials which are forbidden for	1	3

		transportation by air, to be transported in Part 133 Rotorcraft External Load Operations attached to or suspended from an aircraft, in remote areas of the State of Alaska only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.		
SP15014	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 hazardous materials by Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas within the State of Alaska only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	3
SP15073	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the United States only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15118	Operational Air/Vessel	Authorizes transportation in commerce of sodium cyanide in quantities that exceed those authorized by cargo only aircraft.	1	2
SP15126	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by Part 133 Rotorcraft External Load Operations attached to or suspended from a cargo aircraft, in remote areas of the U.S. only.	1	2
SP15129	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within and around the State of Alaska when other means of transportation are impracticable or not available.	1	3
SP15162	Operational Air/Vessel	Authorizes transportation in commerce of certain explosives that are forbidden for transportation by cargo aircraft in alternative packaging by 14 CFR Part 133 Rotorcraft External Load Operations attached to or suspended from an aircraft, in remote areas of the U.S. only.	1	2
SP15182	Operational Air/Vessel	Authorizes transportation in commerce of an oxidizing solid, water-reactive material as an excepted quantity on cargo aircraft.	1	3
SP15187	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15226	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for	1	3

		transportation by air, to be transported by cargo aircraft within and around the State of Alaska when other means of transportation are impracticable or not available.		
SP15227	Operational Air/Vessel	Authorizes carriage of radioactive materials aboard cargo aircraft only, under any combination of the following conditions: when the combined transport index exceeds the authorized limit of 200 per aircraft (as specified in § 175.700(b)(2)(ii)), or the separation distance criteria of § 175.702(b) cannot be met.	1	3
SP15228	Operational Air/Vessel	Authorizes carriage of radioactive materials aboard cargo aircraft only, under any combination of the following conditions: when the combined transport index exceeds the authorized limit of 200 per aircraft (as specified in § 175.700(b)(2)(ii)), or the separation distance criteria of § 175.702(b) cannot be met.	1	3
SP15238	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15240	Operational Air/Vessel	Authorizes transportation in commerce of certain flammable and combustible liquids in alternative packaging having a capacity of 119 gallons or more by cargo aircraft.	1	3
SP15241	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within the State of Alaska when other means of transportation are impracticable or not available.	1	3
SP15243	Operational Air/Vessel	Authorizes transportation in commerce of gasoline in non-DOT specification polyethylene containers, overpacked with plywood, on small, passenger-carrying aircraft within the State of Alaska.	1	3
SP15251	Operational Air/Vessel	Authorizes carriage of radioactive materials aboard cargo aircraft only, under any combination of the following conditions: when the combined transport index exceeds the authorized limit of 200 per aircraft (as specified in § 175.700(b)(2)(ii)), or the separation distance criteria of § 175.702(b) cannot be met.	1	3
SP15255	Operational Air/Vessel	Authorizes carriage of radioactive materials aboard cargo aircraft only, under any combination of the following conditions: when the combined transport index exceeds the authorized limit of 200 per aircraft (as specified in § 175.700(b)(2)(ii)), or the separation distance criteria of § 175.702(b) cannot be met.	1	3
SP15274	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft including external load within the State of Alaska when other means of transportation are impracticable or not	1	3

		available.		
SP15292	Operational Air/Vessel	Authorizes transportation in commerce of certain liquid fuels, Class 3 materials, contained in non-DOT specification packaging seal drums or rollagons of up to 500 gallon capacity by cargo aircraft to remote locations only within the State of Alaska.	1	3
SP15304	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15324	Operational Air/Vessel	Authorizes transportation in commerce of certain liquid fuels, Class 3 materials, contained in non-DOT specification packaging seal drums or rollagons of up to 500 gallon capacity by cargo aircraft to remote locations only within the State of Alaska.	1	3
SP15330	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within the State of Alaska when other means of transportation are impracticable or not available.	1	3
SP15343	Operational Air/Vessel	Authorizes transportation in commerce of certain liquid fuels, Class 3 materials, contained in non-DOT specification packaging seal drums or rollagons of up to 500 gallon capacity by cargo aircraft to remote locations within the State of Alaska and Bronson Creek, British Columbia, Canada.	1	3
SP15344	Operational Air/Vessel	Authorizes transportation in commerce of certain DOT specification cylinders containing propane, a Division 2.1 gas, which is forbidden for shipment aboard passenger carrying aircraft.	1	2
SP15357	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within the State of Alaska when other means of transportation are impracticable or not available.	1	3
SP15370	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within the State of Alaska when other means of transportation are impracticable or not available.	1	2
SP15378	Operational Air/Vessel	Authorizes carriage of radioactive materials aboard cargo aircraft only, under any combination of the following conditions: when the combined transport index exceeds the authorized limit of 200 per aircraft (as specified in § 175.700(b)(2)(ii)), or the separation distance criteria of § 175.702(b) cannot be met.	1	3
SP15388	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials which are forbidden for transportation by air or exceed quantity limitations, to be	1	3

		transported by cargo aircraft within the State of Alaska when other means of transportation are impracticable or not available.		
SP15392	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15397	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15408	Operational Air/Vessel	Authorizes transportation in commerce of certain liquid fuels, Class 3 materials, contained in non-DOT specification packaging seal drums or rollagons of up to 500 gallon capacity by cargo aircraft to remote locations within the State of Alaska.	1	3
SP15418	Operational Air/Vessel	Authorizes transportation in commerce of non-DOT specification fiber reinforced plastic (FRP), full composite (FC), compressed gas cylinders which are used as components in aircraft.	1	3
SP15420	Operational Air/Vessel	Authorizes carriage of radioactive materials aboard cargo aircraft only, under any combination of the following conditions: when the combined transport index exceeds the authorized limit of 200 per aircraft (as specified in § 175.700(b)(2)(ii)), or the separation distance criteria of § 175.702(a)(2)(ii) cannot be met.	1	3
SP15440	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15443	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft in remote areas of the U.S. without being subject to quantity limitations where no other means of transportation is available.	1	2
SP15467	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within the State of Alaska when other means of	1	3

		transportation are impracticable or not available.		
SP15468	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft, including 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, when other means of transportation are impracticable or not available.	1	2
SP15470	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15473	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15476	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15510	Operational Air/Vessel	Authorizes transportation in commerce of liquefied petroleum gas in amounts that exceed the quantity limitations for transportation by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft only in the State of Alaska.	1	3
SP15517	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15535	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity	1	2

		limitations and certain loading and stowage requirements.		
SP15537	Operational Air/Vessel	Authorizes offering in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within the State of Alaska when other means of transportation are impracticable or not available.	3	3
SP15541	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15547	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15556	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15559	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15560	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15583	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within the State of Alaska when other means of transportation are impracticable or not available.	1	3
SP15624	Operational	Authorizes transportation in commerce of certain Class	1	3

	Air/Vessel	1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within the State of Alaska when other means of transportation are impracticable or not available.		
SP15631	Operational Air/Vessel	Authorizes transportation in commerce of Division 1.1 explosives, which are forbidden, by cargo-only aircraft. This permit will not be renewed.	1	2
SP15636	Operational Air/Vessel	Authorizes transportation in commerce of certain Class 1 explosive materials which are forbidden for transportation by air, to be transported by cargo aircraft within the State of Alaska when other means of transportation are impracticable or not available.	1	3
SP15637	Operational Air/Vessel	Authorizes offering in commerce of a Division 1.1D explosive material which is forbidden for transportation by air, to be transported by cargo aircraft.	1	2
SP15652	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by cargo aircraft, including 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15654	Operational Air/Vessel	Authorizes transportation in commerce of certain hazardous materials by cargo aircraft, including 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	2
SP15664	Operational Air/Vessel	Authorizes transportation in commerce of liquefied petroleum gas in amounts that exceed the quantity limitations for transportation by 14 CFR Part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft only in the State of Alaska.	1	3
SP15710	Operational Air/Vessel	Authorizes transportation in commerce of a portable power source, containing a non-spillable battery, by passenger aircraft.	1	3
		Operational Highway/Rail/Shipper/Other		
SP5493	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of hydrogen sulfide, liquefied, a Division 2.3 material, in certain DOT specification 105J600W single-unit tank cars.	2	2
SP1862	Operational Highway/Rail/ Shipper/Other	Authorizes use of non-DOT specification hydraulic accumulators for transportation in commerce of compressed nitrogen.	7	2
SP2709	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.1C, 1.1D and 1.3C liquid explosives and a Division 6.1 material in both UN specification and non-	8	3

		specification packagings.		
SP5022	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.1, 1.2 and 1.3 explosives in specific temperature controlled equipment.	9	2
SP5951	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 2.3 materials in non-DOT specification tanks.	4	2
SP6293	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of spent mixed acid containing not over 3% dissolved nitroglycerin, not over 16% nitric acid, and at least 18% water by volume, in stainless steel DOT specification cargo tanks.	3	3
SP6309	Operational Highway/Rail/ Shipper/Other	Authorizes use of a non-DOT specification tank for transportation in commerce of certain non-flammable compressed gases.	1	3
SP6743	Operational Highway/Rail/ Shipper/Other	Authorizes use of DOT specification or non-specification portable tanks and intermediate bulk containers for the transportation in commerce of certain Division 1.5D explosives together on the same vehicle with Division 5.1 oxidizers not otherwise authorized.	2	4
SP6810	Operational Highway/Rail/ Shipper/Other	Authorizes use of manifolded and framed non-DOT specification seamless steel cylinders for transportation in commerce of certain Division 2.2 gases.	3	3
SP7835	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain DOT specification or UN certified packagings containing Division 2.1, 2.2, 2.3, 5.1, 4.3, and Class 3 and 8 materials on the same motor vehicle.	34	3
SP7887	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Class 1 articles in limited quantities and prescribed packagings as Division 4.1 flammable solid, organic, n.o.s. Applies to small “single-use expendable” or “reloadable” rocket motors first classed as Division 1.4C or 1.4S (NA0323 or NA0276) shipped with or without their igniters classed as Division 1.4G or 1.4S under § 173.56.	28	2
SP7972	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of not more than 15 grams of explosive or pyrotechnic material, including waste containing explosives that have an energy density not significantly greater than that of pentaerythritol tetranitrate, classed as Division 1.4E, when packed in a special shipping container.	1	3
SP8308	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce and temporary storage incident to transportation of non-fissile or fissile exempt radioactive materials packages aboard highway vehicles when their combined transport indices exceed 50 or the separation distance criteria cannot be met.	5	3
SP8520	Operational Highway/Rail/ Shipper/Other	Authorizes use of an alternative test method in determining whether a substance meets the definition of a Class 1.5D explosive, blasting, type E. The "Vented Bomb Fire Test" may be used in place of the External Fire Test prescribed in § 173.58(b).	1	2
SP8760	Operational Highway/Rail/ Shipper/Other	Authorizes display of flammable and toxic placards, showing the UN identification numbers 1993 and 2810, respectively, on a specific company's cargo tank motor vehicles having six or more compartments, in which one	1	2

		or more of the compartments contain a Class 3 and/or Division 6.1 hazardous material.		
SP8770	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain photographic processing materials consisting of a corrosive liquid, basic, organic, n.o.s.; corrosive liquid, basic, inorganic, n.o.s.; flammable solid, toxic, organic, n.o.s.; sodium hydroxide solution, in the same outside package.	1	2
SP8815	Operational Highway/Rail/ Shipper/Other	Authorizes bulk transportation in commerce of certain Division 1.5D explosives in cement mixer type motor vehicles.	2	4
SP8995	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 2.2 materials in a non-DOT specification portable tank.	2	3
SP9157	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials in a non-DOT specification multi-unit tank car tank.	3	5
SP9193	Operational Highway/Rail/ Shipper/Other	Authorizes use transportation in commerce of a downhole logging tool (sonde) that contains an accelerator housing, one section of which is charged with sulfur hexafluoride to a pressure of 80 psig.	1	2
SP9233	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a Division 5.1 (UN1563, chromium trioxide, anhydrous) material in a non-DOT specification, 900 cubic foot, two-compartment, sift-proof covered hopper type tank motor vehicle.	1	2
SP9271	Operational Highway/Rail/ Shipper/Other	Authorizes the deviation from rail car separation requirements for transportation in commerce of packages of Division 1.1, 1.2, 1.3 and 1.4 explosives.	5	2
SP9346	Operational Highway/Rail/ Shipper/Other	For rail operations, authorizes setting of the hand brake and blocking a wheel in both directions of the first and last cars of a series of coupled tank cars prior to unloading.	2	5
SP9352	Operational Highway/Rail/ Shipper/Other	Authorizes use of a non-DOT specification container for transportation in commerce of certain petroleum distillate hazardous materials.	1	2
SP9617	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of Division 1.4D flexible detonating cords containing not more than 3 grains of explosive per linear foot in the same motor vehicle or freight container with Division 1.1B, Division 1.4B or Division 1.4S detonators, electric or non-electric or Division 1.1B or Division 1.4B detonator assemblies, non-electric.	4	3
SP9649	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of munitions that contain components manufactured of depleted uranium metal, classified as Class 1 with a subsidiary hazard of Class 7. For munitions packaged as prescribed and transported with the subsidiary hazard of "Radioactive material, excepted package - articles manufactured from depleted uranium," alternate radiation levels, markings, and sheathing is authorized.	5	2
SP9694	Operational Highway/Rail/	Authorizes transportation in commerce of chlorine in MC 331 cargo tanks equipped with angle valves and	5	2

	Shipper/Other	pressure relief valves not presently authorized by the HMR.		
SP9965	Operational Highway/Rail/ Shipper/Other	Authorizes marking and shipment by motor vehicle of electrical transformers and/or capacitors containing bulk quantities of polychlorinated biphenyl contaminated oil as non-bulk packagings.	1	2
SP9985	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of a DOT specification 4L cylinder for transportation in commerce of carbon dioxide, refrigerated liquid and provides for the filling and discharging of a DOT specification 4L cylinder without removal from the vehicle.	1	2
SP10043	Operational Highway/Rail/ Shipper/Other	Authorizes use of inner packagings having a maximum capacity of five gallons, in non-DOT specification polyethylene bins of 30 cubic-foot capacity or UN31H1 intermediate bulk Containers (IBCs) for transportation in commerce of the residue of certain hazardous wastes classed as Class or Division 3, 5.1, 6.1, 8, or 9.	1	3
SP10045	Operational Highway/Rail/ Shipper/Other	Authorizes highway transportation and temporary storage incident to transportation of non-fissile or fissile-exempt radioactive materials packages when their combined transport indices exceed 50 or the separation distance criteria cannot be met.	1	3
SP10247	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain small quantities of Divisions 2.1, 2.2, 2.3 and 6.1.	1	3
SP10266	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Class 3 and Division 2.1 hazardous materials in non-DOT specification containers.	1	2
SP10427	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.1D detonating cord, Division 1.3C rocket motors and Division 1.4C power device cartridges with Division 2.2 compressed gases, Division 2.3 (PIH-Zone A) liquefied gases, Class 3 flammable liquids, Division 6.1 (PIH-Zone A) poisonous liquids, Class 8 corrosive liquids, and Class 9 lithium batteries together in the same motor vehicle.	1	2
SP10442	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain unapproved Division 1.1A, 1.1D and 1.3C waste explosive substances on the same motor vehicle with waste Division 4.1 flammable solids.	11	2
SP10458	Operational Highway/Rail/ Shipper/Other	Authorizes use of DOT specification 111A100W2 tank car tanks loaded with certain sulfuric acids or sulfur dioxide, to remain attached to transfer connections when the unloading process is discontinued.	1	5
SP10497	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain non-DOT specification stainless steel tanks containing dinitrogen tetroxide.	1	3
SP10656	Operational Highway/Rail/ Shipper/Other	Authorizes one-way transportation in commerce by highway or rail of shipments of radioactive scrap metal and related metal recycle materials.	1	3
SP10695	Operational Highway/Rail/	Authorizes transportation in commerce of ethylene oxide packaged in aluminum cartridges within a UN4G	2	2

	Shipper/Other	fiberboard box. For domestic transportation only, this SP also authorizes packages to be transported with a flammable gas (Division 2.1) label instead of both poison gas (Division 2.3) and flammable gas labels.		
SP10753	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of non-DOT specification packages for transportation of aluminum phosphide in privately owned pest control vehicles without placards.	1	3
SP10814	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale, and use of certain packagings for use in the transportation of sulfur hexafluoride.	3	3
SP10832	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain scrap airbag inflators, seat belt pretensioners and/or airbag modules classed as Division 1.3C.	1	3
SP10904	Operational Highway/Rail/ Shipper/Other	Authorizes use of a classification test method for the determination of skin corrosivity as an alternative to a procedure specified in the HMR.	1	3
SP10921	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain flammable liquids, which are packaged in combination packagings that are not subject to the HMR.	3	2
SP10949	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of lab pack quantities of cyanides on the same motor vehicle with non-lab packed acidic materials not to exceed 55 gallons per packaging.	6	5
SP10993	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain liquid fuels in non-DOT specification portable rubber containers of up to 500 gallon capacity by helicopter within and to only remote areas of the United States.	1	2
SP10996	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain rocket motors and reloadable rocket motor kits as Division 1.4C articles, explosive, n.o.s., when shipped in prescribed quantities and packagings. Exempts shippers from the § 172.101 Table, in that explosive articles with propellant charges in excess of 62.5 grams must be classed as Division 1.3C.	49	2
SP11020	Operational Highway/Rail/ Shipper/Other	Authorizes tank cars containing chlorine, Division 2.3, to remain standing with unloading connections attached when no product is being transferred, provided a minimum level of monitoring is maintained.	2	5
SP11031	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale, and use of non-DOT specification bulk packagings to be used for transportation in commerce of NA3082, UN3266.	1	2
SP11107	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.4 explosive devices which have not been examined and approved to be shipped as Division 1.1 devices.	1	3
SP11180	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of metal tubing which contains certain hazardous materials and exempts the metal tubing from the packaging, marking, labeling, and placarding requirements of the HMR.	1	2
SP11185	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of solid regulated medical waste in a non-DOT specification packaging consisting of a bulk outer packaging and non-	1	3

		bulk inner packagings		
SP11227	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain oil and gas well tools classed a Division 1.4C cartridges, power devices in specially designed motor vehicles and offshore tool pallets.	2	3
SP11230	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.1B and 1.4B non-electric detonator assemblies without packagings in the same motor vehicle with Division 1.1D and/or 1.5D explosives and/or Division 5.1 oxidizers when those detonator assemblies are placed within partitioned IME Safety Library Publication No. 22 containers or certain described compartments.	2	5
SP11265	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of ethylene oxide packaged in aluminum cartridges within a UN 4G fiberboard box with a Division 2.1 label instead of both Division 2.3 and 2.1 labels.	2	2
SP11274	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of fire extinguishers in privately owned and military owned vehicles on cargo vessels, as not subject to the requirements of the HRM for documentation, marking, and that each fire extinguisher must be shipped as an inner packaging.	1	2
SP11286	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of small quantities of hazardous materials which are not authorized under § 173.4, specifically Division 2.3 materials.	2	3
SP11294	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain lab pack quantities of hazardous materials with other materials in lab packs, with partial relief from certain segregation requirements.	1	5
SP11329	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of aluminum phosphide, aluminum phosphide pesticides and magnesium phosphide in specially designed packages, by private motor vehicles without placards.	3	3
SP11348	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of Ammonium perrhenate (solid), classed as Division 5.1 under the proper shipping name oxidizing solid, n.o.s., UN1479 instead of classifying it as a Class 7 material.	1	2
SP11406	Operational Highway/Rail/ Shipper/Other	Authorizes one-way transportation in commerce by highway or rail of shipments of liquid or solid waste that has low levels of radiation.	1	3
SP11432	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.4 igniters packed with certain Division 1.4 detonators. These materials may be shipped on the same motor vehicle, cargo vessel or cargo aircraft with Class 1 jet perforating guns, detonating cords, commercial shaped charges or power device cartridges, subject to certain packaging and safety measures.	2	2
SP11434	Operational Highway/Rail/ Shipper/Other	Authorizes tank cars containing certain Class 3 and 6.1 hazardous materials to remain standing with unloading connections attached when no product is being transferred, provided that a minimal level of monitoring,	1	3

		as specified is maintained.		
SP11440	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 6.1 materials which are toxic by inhalation in polyethylene drums or composite packagings which are stacked on a transport vehicle.	1	3
SP11481	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, mark, and sale of certain shock absorbers and struts containing a non-flammable gas, for transportation in commerce as accumulators.	1	5
SP11489	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain unapproved or unidentified as approved, air bag inflators or air bag modules or seat belt pretensioners as Division 1.4C explosives articles.	7	2
SP11502	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce, by highway, of hazardous materials prepared in accordance with 171.23 and the ICAO Technical Instructions, regardless of whether any part of the transportation is by aircraft.	2	2
SP11513	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain forbidden Division 1.1A explosive substances, unapproved Division 1.1C waste explosive substances and unapproved Division 1.2G explosives articles with packaging and operational controls.	1	2
SP11583	Operational Highway/Rail/ Shipper/Other	Authorizes, in the State of Alaska, transportation in commerce, of Class/Division 2.1, 2.2, 3, combustible liquids, 6.1 PG II and III, 8 and/or 9 materials in mixed trains (cargo and passenger) trains.	1	3
SP11629	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain forbidden Division 1.2G, 1.3G and 1.4G explosive articles which will likely cause a dangerous evolution of heat, or flammable gases from moisture exposure due to damage, improper storage or packaging failures.	1	2
SP11634	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce, by motor vehicle, of materials classed as ORM-D consumer commodities without inner packagings having to be packed, secured and cushioned within the outer packaging as required by the HMR, subject to certain conditions and limitations.	1	2
SP11646	Operational Highway/Rail/ Shipper/Other	Authorizes discharge of certain Class 3, Division 6.1 and Class 8 and Class 9 liquids from a DOT specification drum without removing the drum from the vehicle on which it is transported.	7	3
SP11693	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of fish meal treated with NATUROX(TM) or NATUROX(TM) premium liquid antioxidant instead of ethoxyquin as required by §173.218(c).	1	2
SP11771	Operational Highway/Rail/ Shipper/Other	Authorizes the offering of tank cars, containing Class 3 materials and combustible liquids, with no inspection of the top fittings and appurtenances and the unloading of these materials without opening and blocking the manway cover.	1	3
SP11789	Operational Highway/Rail/ Shipper/Other	Authorizes tank cars, containing butyl acrylates, stabilized, butadienes, stabilized, or styrene monomer, stabilized , to remain standing with unloading connections attached when no product is being	2	3

		transferred, provided that a minimal level of monitoring, as specified is maintained.		
SP11804	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a safety kit containing not more than two highway fusees, with burning time not exceeding 15 minutes each, a tire inflator aerosol and a fire extinguisher as a consumer commodity.	1	2
SP11809	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of consumer commodities or waste consumer commodities from more than one offeror (e.g., manufacturer, distribution center, or retail outlet) to a "designated facility" as defined in § 171.8.	6	4
SP11818	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of non-DOT specification containers that are installed in spacecraft or components of spacecraft and overpacked in a wood or metal box containing certain hazardous materials.	12	3
SP11834	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Class 3 adhesives with Division 5.2 liquid organic peroxides as part of a two-component adhesive mixing apparatus, subject to certain prescribed packaging and special provisions.	1	2
SP11839	Operational Highway/Rail/ Shipper/Other	Authorizes attendants of a cargo tank loading facility to remain in a warming shack during loading operations which is not within the required 25 feet from the cargo tank.	1	3
SP11900	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of small quantities of a wood preservative containing methyl isothiocyanate, a Division 6.1, Packing Group I, Hazard Zone B material, to be shipped in accordance with the small quantity exceptions under § 173.4.	1	2
SP11967	Operational Highway/Rail/ Shipper/Other	Authorizes tank cars, containing various Class 3, 8, and 9 hazardous materials, to remain standing with unloading connections attached when no product is being transferred, provided that a minimal level of monitoring, as specified, is maintained.	2	3
SP12046	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of laboratory reagent chemicals packaged in lab packs to facilitate relocation of laboratory facilities.	4	2
SP12065	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of Class 3 flammable liquids with flash points determined by an apparatus for flash point testing not currently authorized in § 173.120(c). Flash points of volatile organic liquids may as an alternative be determined by means of a Grabner MiniFlash Flashpoint Analyzer.	6	2
SP12102	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain unapproved Class 1 explosive materials desensitized by wetting with water, alcohol or other suitable diluent so as to eliminate their explosive properties.	47	3
SP12118	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of non-DOT specification cryogenic gas system consisting of DOT specification 4L cylinders and non-DOT	1	3

		specification pressure vessels for transportation in commerce of argon, nitrogen and oxygen, refrigerated liquid.		
SP12240	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of propane, Division 2.1, in DOT specification cylinders aboard passenger-carrying aircraft, when other means of transportation are impractical or not available.	1	2
SP12241	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain wetted metal catalyst classed as Division 4.2 material in bulk containers.	1	3
SP12325	Operational Highway/Rail/ Shipper/Other	Authorizes tank cars containing hazardous materials to remain standing with unloading connections attached, provided that a minimum level of monitoring is maintained and that specially designed hoses, capable of preventing a catastrophic uncontrolled release of product, are utilized.	16	5
SP12358	Operational Highway/Rail/ Shipper/Other	Authorizes shipments of lighters to be transported in commerce from the U.S. to a facility in Canada, without marking the SP number on shipping papers and packagings, or applying labels, as required by the HMR.	1	2
SP12379	Operational Highway/Rail/ Shipper/Other	Authorizes certain unloading attachments to remain attached to tank cars when no unloading of phosphoric acid is being conducted.	1	5
SP12396	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of low production lithium metal batteries packed with equipment containing certain non-DOT specification cylinders filled with compressed nitrogen gas.	1	2
SP12412	Operational Highway/Rail/ Shipper/Other	Authorizes discharge of liquid hazardous materials from certain UN intermediate bulk containers (IBCs) and DOT specification 57 portable tanks without removing them from the vehicle on which they are transported.	204	2
SP12443	Operational Highway/Rail/ Shipper/Other	Authorizes tank cars, containing certain hazardous materials to remain standing with unloading connections attached when no product is being transferred, provided that a minimal level of monitoring is maintained.	35	5
SP12622	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials from one facility to another as not subject to the shipping paper and placarding requirements in part 172.	1	2
SP12661	Operational Highway/Rail/ Shipper/Other	Authorizes the return shipment by motor vehicle of hazardous materials that have been accepted for transportation, transported, and subsequently determined to be non-compliant with the HMR.	1	4
SP12744	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of electric storage batteries together with materials of trade (MOTs) and a cesium-containing apparatus in the same motor vehicle as not subject to the requirements of the HMR.	2	2
SP12753	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of dichlorosilane in certain DOT specification seamless steel cylinders that have a water capacity exceeding 1000 pounds.	1	2
SP13002	Operational Highway/Rail/	Authorizes transportation in commerce of compressed nitrogen gas in accumulators that are an integral part of	1	3

	Shipper/Other	a launcher assembly.		
SP13034	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.4 explosives (cap type small arms primers) in non-DOT specification packagings in company owned and operated vehicles between manufacturing facilities without labels or markings.	3	3
SP13078	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 2.2 gases in approximately 198 DOT Class 112 and 114 tank cars without the use of head shields or thermal protection.	1	2
SP13102	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain non-DOT specification packagings, described as actuators, charged with limited quantities of various hazardous materials. The actuators are transported separately or as part of a valve assembly.	6	2
SP13179	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of approved cigarette lighters which have been removed from their inner packaging and are being sent for disposal.	55	5
SP13181	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of high voltage accelerators for transportation in commerce of sulfur hexafluoride.	1	3
SP13187	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of non-DOT specification packaging described as a radiation detection survey meter containing a plastic ionization chamber for transportation in commerce of certain Division 2.2 materials.	1	3
SP13235	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a DOT specification 4L cylinder containing certain refrigerated liquids which may be filled and discharged without removal from the motor vehicle.	13	3
SP13246	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of cigarette lighters in certain non-UN Standard outer packagings.	1	5
SP13262	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain cesium devices in alternative packagings and is exempt from labeling and placarding requirements.	1	2
SP13301	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials for a distance of approximately 400 feet, not subject to the shipping paper, marking and labeling requirements in part 172.	1	2
SP13322	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce for disposal purposes of certain Class 1 waste hazardous materials in non-bulk packagings, by private vehicle in a specially designed bomb-disposal trailer as the outer packaging.	1	4
SP13350	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of spacecraft auxiliary power units containing the residue of hydrazine, anhydrous.	3	3
SP13355	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of specially designed combination packagings for transportation in commerce of certain hazardous materials without hazard labels or placards.	1	3
SP13426	Operational Highway/Rail/	Authorizes manufacture, marking, sale and use of non-DOT specification containers (metal, single trip, inside	1	3

	Shipper/Other	containers, described as hermetically sealed electron tube radiation sensors) for transportation in commerce of Division 2.2 materials (argon, compressed).		
SP13487	Operational Highway/Rail/ Shipper/Other	Authorizes one-time, one-way transportation in commerce of certain infectious materials in special packagings transported by a contract carrier.	1	2
SP13546	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials along a public road of not more than 50 yards without shipping papers, marking, labeling, and emergency response information on the transport vehicle.	1	3
SP13577	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a Division 2.2 material as a limited quantity in certain non-DOT specification inside metal containers conforming with all requirements applicable to a DOT specification 2Q inner non-refillable metal receptacle, except as specified.	1	3
SP13963	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of a specially designed device containing Class 7 radioactive materials. The device is a reactor head package to be used to transport commercial nuclear power plants reactor vessel heads with or without the control rod drive mechanisms attached.	1	3
SP13976	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain UN Standard combination packages which contain limited quantities of a wood preserver containing methyl isothiocyanate, a Division 6.1, Packing Group I, Hazard Zone B material, in utility vehicles that are not placarded.	1	2
SP14183	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of non-DOT specification packagings described as hermetically sealed electron tube radiation sensors for use in the transportation in commerce of Division 2.2 and Division 2.1 materials.	1	3
SP14187	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a certain space satellite assembly containing non-DOT specification pressure vessels pressurized with compressed hydrogen, which is a component part of a nickel-hydrogen battery.	1	3
SP14188	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of a non-refillable, non-DOT specification inside metal container conforming with all regulations applicable to a DOT specification 2Q, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP14205	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of a non-DOT specification, non-refillable plastic aerosol container of not more than 30 fluid ounces containing a Division 2.2 material consisting of a non-toxic propellant gas and a non-hazardous material.	1	3
SP14227	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of non-DOT specification metal refueling tanks containing certain Class 3 liquids. The Class 3 liquids will be discharged from the refueling tanks without removing	1	3

		the refueling tanks from the vehicle on which they are transported.		
SP14236	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of a non-DOT specification, non-refillable, inside container conforming to all regulations applicable to a DOT specification 2Q, except as specified, for transportation in commerce of certain Division 2.1 material.	1	3
SP14249	Operational Highway/Rail/ Shipper/Other	Authorizes shipment of Division 1.4S waste shotshell cartridges in non-DOT specification bulk containers for disposal.	1	2
SP14267	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of fissile uranium contaminated equipment containing up to 252 grams of uranium-235 to be transported in US DOT 7A, type A packaging.	11	2
SP14274	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain DOT specification cylinders as part of a portable emission measurement system that releases a controlled amount of certain Division 2.1 and Division 2.2 materials during transportation under certain specified terms and conditions.	2	2
SP14281	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain scrap airbag inflators, seat belt pretensioners and/or airbag modules classed as Division 1.3C, subject to certain packaging and special provisions.	2	2
SP14282	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain detonators, detonator assemblies, detonators for ammunition, detonating fuses and igniting fuses on the same motor vehicle with any other Class 1 explosives when they are in separate and isolated (i.e. not adjacent) cargo-carrying compartments powered by the same tractor.	36	3
SP14283	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of non-DOT specification bulk packages containing uranium mill tailings and debris with low levels of radioactivity between specified processing facilities and a specified DOE owned disposal facility. Alternative requirements for hazard communication and packaging are authorized.	5	3
SP14287	Operational Highway/Rail/ Shipper/Other	Authorizes one-time transportation, for source disposal purposes only, of certain portable nuclear gauges.	3	3
SP14315	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of non-DOT specification metal refueling tanks containing certain Class 3 liquids. The Class 3 liquids will be discharged from the refueling tanks without removing the refueling tanks from the vehicle on which they are transported.	1	3
SP14329	Operational Highway/Rail/ Shipper/Other	Authorizes one-time transportation, for source disposal purposes only, of certain portable nuclear gauges.	2	3
SP14373	Operational Highway/Rail/	Authorizes transportation in commerce of certain compressed gas fueled and liquid-fueled cigarette	1	3

	Shipper/Other	lighters in checked baggage of passenger aircraft when packaged in a rigid, vapor-tight non-DOT specification solid plastic packaging that prevents any movement of the lighter during transport.		
SP14375	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.1A explosives in a solution of ethanol and water when transported in a specially designed packaging configuration by motor vehicle.	1	2
SP14385	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of placarded railroad tank cars containing hazardous materials that are transiting the International Bridge from Mexico to Laredo, TX prior to the mandated safety inspections.	2	2
SP14388	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain desensitized explosives in bulk by motor vehicle.	2	2
SP14395	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a Division 6.1 liquid soil fumigant in a non-DOT specification bulk packaging mounted on a farm tractor or wagon.	2	2
SP14414	Operational Highway/Rail/ Shipper/Other	Authorizes one-way transportation in commerce of certain hazardous materials (articles, explosive, n.o.s., 1.3L, UN0356, and lithium batteries, 9, UN3090) for a certain launch vehicle.	1	2
SP14415	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain gas and liquid fueled lighters in checked baggage of passenger aircraft when packaged in a rigid, vapor-tight non-DOT specification solid plastic box that will prevent any movement of the lighter during transport.	1	3
SP14422	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of 4 ounces or less of ethyl chloride packaged in a DOT-2P or DOT-2Q container, as a consumer commodity.	2	3
SP14424	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a DOT specification 4L cylinder containing carbon dioxide, refrigerated liquid which may be filled and discharged without removal from the motor vehicle.	2	2
SP14436	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of hazardous materials that are toxic by inhalation by rail without meeting the requirements of § 174.14 for expedited shipments.	1	2
SP14452	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of dried biomeal, solid, in non-DOT specification sift-proof roll-on/roll-off bulk bins.	2	2
SP14455	Operational Highway/Rail/ Shipper/Other	Authorizes the one-time, one-way transportation in commerce of steam generators and steam generator sections that have been removed from service in commercial nuclear power plants, and contain Class 7 radioactive material, to be classified as surface contaminated objects (SCO-II) and transported as non-specification packages from a licensed shipping facility to a licensed receiving facility.	1	2
SP14460	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of non-DOT specification permeation devices with a maximum volume of 6cc containing anhydrous ammonia without shipping papers, labeling and placarding.	1	2

SP14494	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of cylinders that are marked with obsolete proper shipping descriptions to allow for their return.	20	3
SP14500	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a DOT specification 4L cylinder containing oxygen, refrigerated liquid, which may be filled and discharged without removal from the motor vehicle.	1	2
SP14518	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of primers, cap type, UN0044 in non-DOT specification packaging when transported by private carrier for a distance of 10 miles or less.	3	2
SP14530	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a PG III flammable liquid in alternative packaging (a neutron scatter camera) by motor vehicle and cargo vessel.	1	2
SP14547	Operational Highway/Rail/ Shipper/Other	Authorizes one-way transportation in commerce of scrap/waste cartridges, small arms, blank in a non-DOT specification bulk container by motor vehicle.	1	2
SP14551	Operational Highway/Rail/ Shipper/Other	Authorizes surface transportation in commerce of certain explosives as dangerous good in apparatus, UN3363 instead of the EX classification of cartridge, power device, UN0323.	1	2
SP14599	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of packages of non-hazardous material identified as “biological substance, Category B”, for purposes of shipping and packaging drills conducted to evaluate bioterrorism, chemical terrorism and pandemic influenza preparedness.	1	2
SP14600	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of up to 5,000 lighters per motor vehicle not subject to the requirements of subparts C through H of Part 172 and part 177 in its entirety.	2	2
SP14640	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of packages containing very small quantities of certain PG I hazardous materials, identified as analytical standards, that are not authorized for transportation aboard passenger-carrying aircraft under the excepted quantity provisions of § 173.4a.	1	3
SP14649	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.4C and 1.4S small arms ammunition in non-DOT specification rugged steel containers by motor vehicle exclusively between company facilities.	1	2
SP14657	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of specified radioactive materials in designated DOT specification 6M and 20WC-1 packagings on or after October 1, 2008, in order to allow a transition period to performance oriented package use.	1	2
SP14691	Operational Highway/Rail/ Shipper/Other	Authorizes the return shipment by motor vehicle of hazardous materials that have been accepted for transportation, transported and subsequently determined to be non-compliant with the HMR	1	4
SP14718	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of a DOT specification cylinder conforming in all respects to DOT specification 39, except for a procedure in	1	3

		completing the marking requirement, for the transportation in commerce of certain hazardous materials.		
SP14722	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale, and use of a non-DOT specification packaging described as a hermetically-sealed electron tube device for transportation in commerce of certain hazardous materials.	1	2
SP14728	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of specified radioactive materials in a designated DOT specification 20WC-5 packaging after October 1, 2008, in order to allow a transition period to performance oriented package use.	3	3
SP14732	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of reconditioned (used) refrigerating machines containing a group A1 refrigerant by motor vehicle.	1	2
SP14768	Operational Highway/Rail/ Shipper/Other	Authorizes transportation of certain materials (infectious substances and biological substances) in alternative packaging (freezers) transported in motor vehicles.	1	2
SP14772	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of specified type B and/or fissile quantities of radioactive materials in designated U.S. Nuclear Regulatory Commission (NRC) authorized packages, after October 1, 2008, in order to allow a transition period to performance oriented package use.	2	2
SP14789	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.1B and 1.4B detonator assemblies with any other Class 1 explosives in the same motor vehicle provided they are packaged in separate and isolated cargo-carrying compartments.	1	3
SP14801	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials as materials of trade when transported by a dedicated contract carrier and they comply with all the provisions of § 173.6.	1	2
SP14814	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 2.2 compressed gases in non-DOT specification cylinders to support an International Space Station project.	1	2
SP14823	Operational Highway/Rail/ Shipper/Other	Authorizes the return shipment by motor vehicle of hazardous materials that have been accepted for transportation, transported, and subsequently determined to be non-compliant with the HMR	1	4
SP14848	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain DOT specification cylinders as part of a portable emission measurement system, that release a controlled amount of certain Division 2.1 and 2.2 materials without removing the cylinder from the vehicle on which it is transported.	1	2
SP14865	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of liquefied petroleum gas in a specially designed vault when transported by railroad in Alaska.	1	3
SP14909	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of cylinders of compressed oxygen solely and specifically intended for human health care and veterinary services only, when no	1	3

		other practical means of transportation exist, without their outer packaging being capable of passing the Flame Penetration and Resistance Test and the Thermal Resistance Test.		
SP14915	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of UN1992, flammable liquid, n.o.s., PG III and UN1219, isopropanol, PG II across a public road, from one part of a plant to another, as essentially not subject to parts 172 and 173.	3	2
SP14933	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 6.2 infectious substances and biological substances in special packagings in a dedicated truck by highway.	1	2
SP14957	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of approximately 80,000 packages under the terms of § 173.4 with alternative marking to deplete carton stock.	1	3
SP14967	Operational Highway/Rail/ Shipper/Other	Authorizes one-time transportation in commerce of certain hazardous materials to a new site approximately 5 miles away as exempt from certain requirements of the HMR provided alternative packaging and operational controls are met as specified.	1	2
SP14969	Operational Highway/Rail/ Shipper/Other	Authorizes one-way transportation in commerce of certain Category A infectious substances in special packagings in a dedicated truck by highway via pre-determined routes.	1	2
SP14974	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of lead batteries from more than one shipper without voiding the exception in § 173.159(e).	1	4
SP15001	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of cylinders transported by private or contract motor carrier with alternative marking and shipping paper documentation.	1	2
SP15059	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of helium, Division 2.2 in non-DOT specification packaging.	2	3
SP15071	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a cartridge, power device and air, compressed, article, n.o.s. (cartridges, power device installed on equipment and non-flammable, compressed gas) and helium, compressed in non-DOT specification cylinders.	1	3
SP15097	Operational Highway/Rail/ Shipper/Other	Authorizes one-way transportation in commerce of certain unapproved toy caps or fireworks for testing.	1	2
SP15130	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to hazard communication requirements, quantity limitations and certain loading and stowage requirements.	1	3
SP15131	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale and use of DOT specification 113A90W tank cars for transportation in commerce of certain non-flammable cryogenic liquids.	1	2
SP15161	Operational	Authorizes transportation in commerce of lead batteries	21	4

	Highway/Rail/ Shipper/Other	from more than one shipper without voiding the exception in § 173.159(e).		
SP15166	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain hazardous materials by 14 CFR Part 133 Rotorcraft External Load Operations attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to quantity limitations.	1	3
SP15198	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of residues of titanium tetrachloride contained in disassembled process equipment in non-DOT specification packaging across public roads of not more than seven tenths of a mile, from one part of a plant to another, without shipping papers, marking, labeling, and placarding.	1	2
SP15206	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of electric double layer capacitors with an energy storable capacity of not more than 10Wh, and the capacitors installed in equipment, in certain packagings, without being subject to the HMR.	3	5
SP15250	Operational Highway/Rail/ Shipper/Other	Authorizes the Department of Energy to examine, class, and approve new explosives that are tested to a newer revision of the Department of Defense Ammunition and Explosive Hazard Classification Procedures (TB 700-2) that has not been incorporated by reference.	2	2
SP15257	Operational Highway/Rail/ Shipper/Other	Authorizes transportation of certain hazardous materials, a short distance from one facility to another, in intermediate bulk containers (IBC) not otherwise authorized.	1	3
SP15279	Operational Highway/Rail/ Shipper/Other	Authorizes one-time transportation in commerce of Division 6.2 materials in special packaging transported by a contract carrier for short distances by motor vehicle (less than 2 miles).	1	2
SP15351	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of packages of thermometers containing certain Division 2.1 material as excepted quantities by aircraft.	1	2
SP15364	Operational Highway/Rail/ Shipper/Other	Authorizes one-way transportation in commerce of Division 1.4G fireworks in non-DOT specification fiberboard non-bulk outer packagings when transported by private motor carrier or contract motor carrier.	1	3
SP15368	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of flammable liquid, n.o.s., containing methanol in soil samples as "Dangerous Goods in Excepted Quantities" when transported and packaged in accordance with § 173.4a and as specified.	1	2
SP15386	Operational Highway/Rail/ Shipper/Other	Authorizes one-time, one-way transportation in commerce of five (5) 5-gallon buckets containing wetted waste primers and three (3) 5-gallon buckets containing wetted waste propellant by a contract carrier for disposal without an EX approval.	1	2
SP15425	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a certain family of hydrazine compounds with primary hazard classes of Class 8 and Division 6.1 on the same motor vehicle without regard to segregation requirements.	1	3

SP15446	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of organic peroxides with hazard warning labels that were authorized prior to the HM-215I (PHMSA-2006-25476) compliance date of January 1, 2011.	1	3
SP15448	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Class 1 materials under an Interim Hazard Classification (IHC).	1	2
SP15452	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of oxygen in certain DOT specification 39 cylinders that have their pressure relief devices set to an alternative burst pressure range.	1	3
SP15471	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of spacecraft subsystem fuel propellant tanks containing the residue of hydrazine, anhydrous which does not meet the requirements of § 173.172.	1	2
SP15516	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain waste hazardous materials between plants for less than one half mile by private motor vehicle without shipping paper documentation.	1	2
SP15577	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain Division 1.4S small arms cartridges in non-DOT specification bulk packagings without labels and markings for a distance not to exceed 200 yards by motor vehicle on a public road, subject to certain limitations and requirements.	1	2
SP15580	Operational Highway/Rail/ Shipper/Other	Authorizes movement of freight trains utilizing a “light locomotive consist” of two helper locomotives attached to the rear end of a stalled train without positioning buffer cars separating these locomotives from the rear placarded hazardous materials cars in the train.	1	2
SP15599	Operational Highway/Rail/ Shipper/Other	Authorizes manufacture, marking, sale, and use of hydrogen storage systems for use in fuel cells for a period of not more than 1 year. The hydrogen storage systems utilize non-DOT specification cylinders containing hydrogen absorbed in metal hydride.	1	2
SP15620	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce by motor vehicle of approximately 36,000 non-DOT specification containers filled with 1,1,1,2-tetrafluoroethane. This SP will not be renewed.	1	3
SP15655	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of certain waste pyrotechnic material that has not been approved under 49 CFR 173.56(b) by motor vehicle.	1	3
SP15666	Operational Highway/Rail/ Shipper/Other	Authorizes transportation in commerce of a specific product containing a marine pollutant (alcohol C-12 - C-16 poly (1-6) ethoxylate), as not meeting the § 171.8 definition of a marine pollutant.	1	2
SP15689	Operational Highway/Rail/ Shipper/Other	Authorizes discharge of a Division 2.1 material from an authorized DOT specification cylinder without removing the cylinder from the vehicle on which it is transported.	1	3

		Non-Bulk Packaging Specifications/IBCs		
SP4354	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of methyl chloroformate in UN Standard 1H1 drums and 6HA1 composite packagings which do not meet the overpack requirements of § 173.226(b).	1	3
SP5112	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain Class 1 explosives (nitroglycerin, desensitized UN0143) in a specially designed container. The prescribed packaging is a specially designed kettle drum type aluminum container permanently mounted on a specially designed strong aluminum base.	1	3
SP6299	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification portable tanks conforming with all regulations applicable to a DOT specification MC 338 cargo tank motor vehicle, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP6971	Non-Bulk Packaging Specifications/ IBCs	Authorizes a gross mass of the completed packaging exceeding the 29 kg gross weight limit specified in § 173.4 for transportation in commerce of packages containing small quantities of hazardous materials, identified as analytical standards.	1	3
SP8215	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain Division 1.1, 1.3 and 1.4 explosives, Division 4.1 flammable solids and ORM-D materials in non-DOT specification packagings without labels and EX-number markings for a distance not to exceed 7/10 mile by cargo motor vehicle or rail freight.	1	3
SP8445	Non-Bulk Packaging Specifications/ IBCs	Authorizes the transportation by private or contract motor carrier of certain shipments of various liquid or solid hazardous substances and hazardous wastes packed in inside plastic, glass, earthenware or metal containers, not exceeding one-gallon capacity, overpacked in a UN specification 1A2 or 1B2 metal drum, a UN 1G fiber drum or a UN1H2 plastic drum, not exceeding 220 liters (55-gallon) nominal capacity only for the purposes of disposal, re-packing or re-processing.	43	2
SP8451	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of not more than 25 grams of solid explosive or pyrotechnic material, including waste-containing explosives that have an energy density not significantly greater than that of pentaerythritol tetranitrate, classed as Division 1.4E, when packed in a special shipping container.	175	2
SP8472	Non-Bulk Packaging Specifications/ IBCs	Authorizes use of non-DOT specification containers to transport Argon, compressed. The prescribed packaging is a non-DOT specification, metal, single trip, inside container, described as a detector or ionization chamber, having a design (operating) pressure of 300 psig and an 85 cubic inch maximum water capacity. The detector assemblies must be shipped in a suitably suspended and	1	2

		cushioned strong outside container.		
SP8748	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of boron trifluoride, Division 2.3, in a non-DOT specification metal pressure envelope contained in a radiation detection system. The prescribed packaging is a radiation detection system having a non-DOT specification metal pressure envelope with welded or soldered joints, and brazed ceramic to metal insulator feed-through assemblies.	1	2
SP9672	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain Division 4.2 and Division 4.3 materials in an MC 330 or MC 331 cargo tank with a filling/discharge opening that does not have a remote self-closing internal valve.	1	3
SP9722	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of UN1H1 plastic drums to be used for transportation in commerce of nitric acid with not more than 40% nitric acid.	2	3
SP10048	Non-Bulk Packaging Specifications/ IBCs	Authorizes use of a UN 1A2 drum with inside non-DOT specification metal containers for transportation in commerce of certain hazardous materials.	7	3
SP10501	Non-Bulk Packaging Specifications/ IBCs	Authorizes repair and reuse of a certain UN13L2 flexible intermediate bulk container (IBC) for transportation in commerce of certain solid hazardous materials.	1	2
SP10529	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of certain non-DOT specification packagings. The prescribed packagings are metal, single trip, inside containers, described as hermetically sealed electron tube radiation sensors containing certain Division 2.1 and 2.2 gases.	1	2
SP10880	Non-Bulk Packaging Specifications/ IBCs	Authorizes the transportation in commerce of ammonium nitrate-fuel oil mixture (ANFO), Division 1.5, in reusable, flexible intermediate bulk containers (IBCs) type UN 13H3 or UN 13H4 conforming to subpart N and O of part 178.	11	2
SP10984	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of specially designed UN 1A1 steel drums for the shipment of dichlorosilane, subject to certain limitations and requirements.	2	2
SP11077	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain Division 6.1 materials, as well as nitric acid, in a limited number of UN1A1 and DOT 42B drums which do not meet all requirements of §§ 173.226 and 173.227.	3	3
SP11156	Non-Bulk Packaging Specifications/IBCs	Authorizes transportation in commerce of NA0331, UN1942 and UN0331 in non-DOT specification multi-wall plastic-lined paper bags.	57	2
SP11167	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of a non-DOT specification double containment packaging for transportation in commerce of various hazardous materials.	1	2
SP11215	Non-Bulk	Authorizes transportation in commerce of certain	1	2

	Packaging Specifications/ IBCs	hazardous materials, contained in a solid fuel rocket. The SP covers launch operations and non-launch operations associated with vehicle deployment with or without a spacecraft.		
SP11220	Non-Bulk Packaging Specifications/ IBCs	Authorizes the refilling and reuse of certain packagings, containing liquid hazardous materials authorized by § 172.101 and part 173 to be shipped in composite packagings with a steel outer packaging, which have not been subjected to the leakproofness test in accordance with § 173.28(b)(2).	4	3
SP11401	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain cesium devices in alternative packaging with no hazard labels.	10	2
SP11443	Non-Bulk Packaging Specifications/IBCs	Authorizes transportation in commerce of certain organic peroxides, Division 5.2, in UN 31A intermediate bulk containers (IBCs).	2	2
SP11606	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain non-DOT specification steel drums and certain UN1A1 and UN1A2 steel drums without the marking of the symbol of the manufacturer and the initials "USA" to be shipped without leakproofness testing.	4	2
SP11624	Non-Bulk Packaging Specifications/IBCs	Authorizes transportation in commerce by motor vehicle, rail freight and cargo vessel of certain waste paints and paint related materials, Class 3, in metal or plastic pails, packed in cubic yard boxes, dump trailers, and roll-off containers.	114	2
SP11647	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3AA cylinder, without billets being inspected after parting as specified, for transportation in commerce of certain hazardous materials.	2	3
SP11670	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain hazardous materials in a non-DOT specification cylinder used for oil well sampling.	1	2
SP11753	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce by motor vehicle of certain UN1H1 drums containing ammonia solutions placed within temperature controlled vehicles.	2	2
SP11779	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of gasoline in non-bulk polyethylene jerricans, to remote areas in support of log-cutting operations. The jerricans are loaded on external cargo racks of helicopters.	1	2
SP11883	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification volumetric meter provers, manufactured from steel, have capacities ranging from 100 gallons to 1,500 gallons, and mounted on motor vehicles for transportation in commerce of certain Class 3 materials.	1	2
SP11892	Non-Bulk	Authorizes manufacture, marking, sale and use of	1	2

	Packaging Specifications/ IBCs	certain DOT specification 51 steel portable tanks manufactured in accordance with Section VIII, Division 2 of the ASME Code instead of Division 1. The portable tanks, mounted in ISO frames, are authorized for transportation in commerce of Division 2.1 and 2.2 materials.		
SP11924	Non-Bulk Packaging Specifications/IBCs	Authorizes manufacture, marking, sale and use of UN13H3 or UN13H4 flexible intermediate bulk containers (IBCs), UN11HG2W Composite IBCs, and UN6HH1 composite packagings for use as the outer packaging for lab pack applications.	2	2
SP11932	Non-Bulk Packaging Specifications/ IBCs	Authorizes motor vehicle transportation in commerce of oxygen generators in non-DOT specification packaging when installed in deployment modules and personal service units.	3	2
SP11947	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of multiple non-DOT specification containers, manifolded together within a frame and securely mounted on a truck chassis, for transportation in commerce of certain hazardous materials.	1	2
SP11953	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming to a DOT specification 4BW, except for the maximum water capacity.	1	3
SP12162	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain non-DOT specification cylinders containing Division 2.2 materials for use by the U.S. Department of Defense.	1	2
SP12195	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of metal intermediate bulk containers meeting UN design Type 31A as prescribed in part 178, except for minimum thickness requirements, for transportation in commerce of certain hazardous materials.	1	3
SP12268	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of the residue of certain Class 8 materials in non-DOT specification stainless steel tanks with capacities of 30, 75, or 105 gallons.	1	2
SP12338	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain non-DOT specification cylinders described as high pressure purifiers containing a Division 4.2 material.	1	3
SP12340	Non-Bulk Packaging Specifications/ IBCs	Authorizes use certain UN3H1 jerricans, containing ammonia solutions, which exceed the vapor pressure requirements.	1	2
SP12402	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT specification 3BN cylinder except as specified, for transportation in commerce of certain hazardous materials.	2	3
SP12440	Non-Bulk Packaging Specifications/	Authorizes manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT-3AL specification	1	2

	IBCs	cylinder, except as specified, for transportation in commerce of certain hazardous materials.		
SP12475	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce certain hazardous materials in certain UN1A1 drums and the reuse of those UN1A1 drums without leakproofness testing.	1	2
SP12481	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain non-DOT specification packagings, described as actuators, charged with limited quantities of various hazardous materials.	1	2
SP12609	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation of a caustic alkali liquid (decontamination solution) in packages filled prior to October 1, 1991 meeting the HMR in effect on September 30, 1991.	1	2
SP12633	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of gasoline in a non-DOT specification, non-bulk packaging (drum) mounted in a heli-torch frame.	1	2
SP12675	Non-Bulk Packaging Specifications/IBCs	Authorizes use of non-specification, reusable high-strength plastic or metal containers or other dedicated handling devices, for return transportation of airbag modules and seat-belt pretensioners from the assembly plant to the manufacturer.	1	4
SP12688	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of nitric acid in drums that do not meet the minimum thickness requirements.	3	2
SP12705	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of nitric acid in drums that do not meet the minimum thickness requirements.	1	2
SP12748	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain Division 1.1B, 1.1D, and 1.4D materials in non-DOT specification packaging for neutron radiography.	2	2
SP12750	Non-Bulk Packaging Specifications/IBCs	Authorizes manufacture, marking, sale and use of certain UN13H4 woven plastic, coated and with liner flexible intermediate bulk containers (IBCs) for use as the outer packaging for lab pack applications in accordance with § 173.12(b)(2)(i).	1	2
SP12817	Non-Bulk Packaging Specifications/ IBCs	Authorizes the reuse of specification UN 1H1 non-removable head plastic drums for the transportation of certain Class 8 materials to Environmental Protection Agency (EPA) licensed treatment, storage or disposal facilities.	1	3
SP12997	Non-Bulk Packaging Specifications/ IBCs	Authorizes the transportation in commerce of a corrosive liquid, basic, inorganic, n.o.s. in a vented intermediate bulk container (IBC).	2	5
SP12998	Non-Bulk Packaging	Authorizes transportation in commerce of lab packs containing materials that are not waste materials.	30	2

	Specifications/IBCs			
SP13027	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale, and use of multiple non-UN Standard containers conforming with all regulations applicable to a UN31A intermediate bulk container, except as provided. The containers are manifolded together within a frame and securely mounted on a truck chassis.	1	3
SP13052	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, mark, sale and use of UN11G intermediate bulk containers (IBCs) for transportation in commerce of waste paint and related materials.	1	2
SP13057	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of steel tubing which has an inner core containing certain the hazardous materials. The steel tubing is exempted from the packaging, marking, labeling and placarding requirements of the HMR.	1	3
SP13083	Non-Bulk Packaging Specifications/ IBCs	Authorizes the transportation in commerce of a self-heating solid material in UN13H2 or UN13H3 intermediate bulk containers (IBCs).	1	3
SP13161	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of small quantities of certain hazardous materials in inner packages without cushioning or absorbent material around the inner packages, as not subject to the HMR when transported by highway and packaged in accordance with § 173.4 or transported by cargo aircraft and packaged in accordance with § 173.4a as specified.	1	3
SP13211	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain nitroglycerin solutions in alcohol in UN4GV certified combination packages.	1	2
SP13275	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of a Division 2.1 material in certain DOT specification 2Q non-refillable containers.	1	3
SP13282	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of a DOT specification UN1A1 steel drum or a UN1H1 plastic drum with a capacity of 55 U.S. gallons containing hypochlorite solutions, which exceed the quantity limitations when shipped by air.	1	3
SP13306	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain organic peroxide, type F, liquid in specially designed UN4G combination packages that contain inner packagings having closures that are not in the upright position.	1	3
SP13321	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain infectious substances in specially designed, reusable textile bags.	1	3
SP13481	Non-Bulk Packaging Specifications/	Authorizes transportation in commerce of not more than 25 grams of liquid explosive substances that have an energy density not greater than pure nitroglycerin,	13	2

	IBCs	classed as Division 1.4E when packed in a special shipping container.		
SP13552	Non-Bulk Packaging Specifications/ IBCs	Authorizes the transportation in commerce of phosphorus, white dry or phosphorus, white, under water or phosphorus white, in solution, or phosphorus, yellow dry or phosphorus, yellow, under water or phosphorus, yellow, in solution in alternate packaging.	11	2
SP13756	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of water-tight seamed steel tubing containing certain hazardous materials and exempts those steel-clad hazardous materials from the packaging, marking, labeling, and placarding requirements of the HMR.	1	3
SP14152	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain dry metal catalyst in UN4G combination packages or UN4D wooden boxes with stainless steel inner receptacles.	1	3
SP14155	Non-Bulk Packaging Specifications/ IBCs	Authorizes the one-way transportation in commerce of Division 1.4G fireworks in non-DOT specification fiberboard or plastic non-bulk outer packagings when transported by private motor carrier.	1	2
SP14189	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of the residue of certain paint and resin solutions for the purpose of cleaning in non-DOT specification bulk and non-bulk packagings.	1	3
SP14204	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of bromine in a 10 gallon UN 1N1 Monel drum that does not have a cap seal and is not overpacked in a UN 1A2 or UN 1H2 drum.	1	3
SP14223	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain soap products in non-DOT specification, non-refillable plastic containers.	2	3
SP14272	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale, and use of a non-DOT specification packaging described as a volumetric meter prover mounted on a trailer for transportation in commerce of liquefied petroleum gas residue vapors.	1	3
SP14286	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of 1,1,1,2-tetrafluoroethane or refrigerant gas R 134a in a non-refillable, non-DOT specification inside metal container similar to a DOT 2Q container.	2	3
SP14314	Non-Bulk Packaging Specifications/IBCs	Authorizes domestic transportation in commerce of certain Class 9 seat belt pretensioners as not subject to the HMR when transported by motor vehicle or rail freight.	3	4
SP14376	Non-Bulk Packaging Specifications/IBCs	Authorizes one-way transportation in commerce by motor vehicle of waste lighters containing a Division 2.1 flammable gas, not meeting the definition of a lighter in § 171.8, for disposal only.	1	2
SP14418	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of water-reactive solids, powder in special packaging without being labeled or marked with the proper shipping name.	1	2

SP14427	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain non-DOT specification, non-refillable plastic aerosol containers filled with a Division 2.2 propellant gas and a non-hazardous material.	1	3
SP14441	Non-Bulk Packaging Specifications/ IBCs	Authorizes the one-way transportation in commerce of Division 1.4G fireworks in non-DOT specification fiberboard non-bulk outer packagings when transported by private motor carrier.	1	2
SP14475	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain packagings containing a consumer commodity, ORM-D, with closures that are not oriented in the upward direction.	1	2
SP14485	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification cylinders described as radiation detector chambers for transportation in commerce of certain Division 2.1 and 2.2 gases.	1	2
SP14488	Non-Bulk Packaging Specifications/ IBCs	Authorizes one-way transportation in commerce of an influenza vaccine in a custom stainless steel batch reactor at a constant pressure of 1-5 psig by use of a cylinder feeding air into the reactor.	1	3
SP14493	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of non-DOT specification containers (heat pipes) containing anhydrous ammonia for use in specialty cooling applications such as satellites and military aircraft.	4	2
SP14506	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of a methanol mixture as a small quantity under the provisions of § 173.4 when the amount of hazardous material in each inner receptacle exceeds 30 ml.	1	2
SP14513	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of lab packs of hazardous waste materials with different hazard classes in the same outer packaging.	1	2
SP14523	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain infectious substances in special packagings (freezers).	1	2
SP14524	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of a DOT specification 3AL cylinder containing 90% oxygen and 10% nitrogen as consumer commodity when the capacity does not exceed 5.2 ounces transported by motor vehicle.	1	2
SP14556	Non-Bulk Packaging Specifications/ IBCs	Authorizes the transportation in commerce of certain PG III solid hazardous materials in non-DOT specification bulk flexible packaging.	1	2
SP14603	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of a non-refillable, non-DOT specification inside metal container conforming with all regulations applicable to a DOT specification 2Q, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP14635	Non-Bulk Packaging Specifications/	Authorizes transportation in commerce of nitric acid, other than red fuming, with more than 70% nitric acid in alternative packaging when transported by motor	1	3

	IBCs	vehicle.		
SP14656	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification combination packaging for transportation in commerce of certain hazardous materials.	1	3
SP14659	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of calcium carbide in water-tight, sift-proof, closed top, metal, non-DOT specification cargo tanks, portable tanks and bulk bins suitable for liquids.	6	2
SP14677	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of celluloid sheet in a non-DOT specification regular slotted box, style RSC/0201 as described in ASTM International Standard D5119.	2	2
SP14690	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale, and use of non-DOT specification high voltage accelerators for transportation in commerce of sulfur hexafluoride.	1	2
SP14694	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain unapproved equipment contaminated with explosives in non-DOT specification packaging.	1	2
SP14712	Non-Bulk Packaging Specifications/IBCs	Authorizes manufacture, marking, sale, and use UN11G fiberboard and UN13H4 woven plastic, coated and with liner flexible intermediate bulk containers (IBCs) for use as the outer packaging for certain Class 3 waste paints.	1	2
SP14741	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification high voltage accelerators for transportation in commerce of sulfur hexafluoride.	1	2
SP14754	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of approximately 72,000 1-gallon polyethylene bottles that are transported under the provisions of SP 6614 except they have not been marked with the name or symbol of the bottle producer.	1	3
SP14777	Non-Bulk Packaging Specifications/ IBCs	Authorizes one-way transportation in commerce of Class 9 hazardous waste in alternative packaging for approximately 8 miles by motor vehicle.	1	2
SP14838	Non-Bulk Packaging Specifications/ IBCs	Authorizes the transportation of Class 1 explosives in a specially designed outer packaging as Division 1.3C or 1.4C for materials and devices respectively without being first examined as required by § 173.56 for transportation by company owned motor vehicle or private carriage between plants.	1	2
SP14843	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of a manufactured article (rotating electrical connector) containing gallium in alternative packaging, and without shipping papers unless transported by air.	1	2
SP14849	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification fiberboard boxes for transportation in commerce of certain batteries without shipping papers, marking of the proper shipping name and identification number or labeling, when transported for recycling or	1	3

		disposal.		
SP14867	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification hoop-wrapped fiber reinforced welded steel lined tubes with water capacities of up to 2525 gallons (9560L), enclosed and secured within an ISO freight container for transportation in commerce of certain Division 2.1 and 2.2 gases.	1	2
SP14871	Non-Bulk Packaging Specifications/IBCs	Authorizes transportation in commerce of lighters containing flammable gas in non-UN Standard specification packagings that are capable of meeting UN performance standards at the PG II performance level and are overpacked.	1	2
SP14912	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification containers conforming to all regulations applicable to a DOT specification 2Q container, except as specified, for transportation in commerce of certain hazardous materials.	1	3
SP14935	Non-Bulk Packaging Specifications/ IBCs	Authorizes one-time, one-way transportation in commerce of 250 gallon and 500 gallon capacity DOT specification 57 portable tanks or UN31A intermediate bulk containers with visible indications of damage or wears containing the residue of a Class 3 hazardous material for cleaning.	1	3
SP14940	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification cans conforming with all regulations applicable to a DOT specification 2P or 2Q inner metal receptacle except for wall thickness, for transportation in commerce of certain Division 2.1 and 2.2 aerosols.	1	3
SP14947	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of used dry batteries with voltages not exceeding 9 volts mixed with restricted amounts of lithium batteries and wet, non-spillable batteries for recycling without the effective insulation of exposed terminals when packaged in plastic drums in dedicated county vehicles.	2	2
SP14973	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of anhydrous ammonia in non-DOT specification packaging (heat pipes). The heat pipes are fabricated from aluminum alloy welded tubing and do not include valves or pressure relief.	1	3
SP14978	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of pyrophoric liquids in inner metal containers (bubblers) with openings greater than 25mm (1 inch) which are engineered to specific electronics applications that require a larger opening.	1	2
SP14992	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of Division 6.2 infectious substances and biological substance in alternative packagings (freezers) in a dedicated, specially designed transport vehicle.	1	3
SP14994	Non-Bulk Packaging Specifications/ IBCs	Authorizes use of certain 1-gallon plastic drums that are reused without meeting the minimum thickness requirement on corners and undercut areas for transportation in commerce of certain hazardous materials.	1	2

SP15038	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of hydrazine, anhydrous in unauthorized DOT specification packaging by motor vehicle.	1	3
SP15088	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of a DOT specification 4G combination packaging for transportation in commerce of certain materials toxic by inhalation, Hazard Zone A and B, by motor vehicle.	1	3
SP15136	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification fully-wrapped carbon fiber composite cylinder with a seamless aluminum liner that meets all requirements of ISO 11119 Part 2, except as specified, for transportation in commerce of certain Division 2.1 and 2.2 gases.	1	2
SP15141	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-refillable, non-DOT specification cylinder containing boron trifluoride, for transportation in commerce. The cylinders are described as electron tubes that are part of radiation detectors.	1	3
SP15146	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain refrigerant gases in non-DOT specification, non-refillable, inside metal containers conforming in part with DOT specification 2Q.	9	3
SP15156	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of non-DOT specification packaging described as a radiation detection survey meter containing a plastic ionization chamber for transportation in commerce of certain Division 2.2 materials.	1	3
SP15191	Non-Bulk Packaging Specifications/ IBCs	Authorizes use of UN1H1 drums as single package for certain toxic by inhalation materials transported by a private motor carrier.	1	3
SP15235	Non-Bulk Packaging Specifications/IBCs	Authorizes manufacture, mark, sale and use of UN 11G fiberboard intermediate bulk containers (IBCs) for use as the outer packaging for certain Class 3 waste paints and waste paint related material.	1	2
SP15260	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use, in underwater applications, of non-DOT specification composite cylinders, conforming to all requirements of the DOT-CFFC (fully wrapped carbon-fiber reinforced aluminum liner) cylinder, for transportation in commerce of certain hazardous materials.	1	3
SP15283	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of Class 3, PG II polyester resin in UN31A intermediate bulk containers and Division 5.2, organic peroxide, type D, catalyst in a UN3H1/Y jerrican or drum. The packagings are used as part of a concrete mixing/application system.	1	2
SP15335	Non-Bulk Packaging Specifications/ IBCs	Authorizes the manufacture, mark, sale and use of a non-DOT specification box conforming with all regulations applicable to a DOT specification UN 4G fiberboard box, for the transportation in commerce of nitric acid other than red fuming, with at least 65%, but no more than 70% nitric acid.	1	3

SP15441	Non-Bulk Packaging Specifications/ IBCs	Authorizes bulk transportation in commerce of certain desensitized explosives classed as Class 3, by motor vehicle.	1	2
SP15519	Non-Bulk Packaging Specifications/ IBCs	Authorizes relief from the requirement to replace the rigid plastic inner receptacle in intermediate bulk containers (IBCs) used to transport UN2031 with more than 55% nitric acid every 2 years.	1	3
SP15540	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of certain non-DOT specification bulk packages containing Class 3 material by cargo aircraft where no other means of transportation is practicable.	1	3
SP15568	Non-Bulk Packaging Specifications/ IBCs	Authorizes one-way transportation in commerce of certain desensitized explosive solids (UN3380) in sift-proof closed bulk bins for a distance of not more than fifteen miles.	1	2
SP15615	Non-Bulk Packaging Specifications/ IBCs	Authorizes transportation in commerce of UN0336 fireworks in UN4G packaging with a capacity greater than 450 liters.	3	2
SP15617	Non-Bulk Packaging Specifications/ IBCs	Authorizes one-way, one-time transportation in commerce of alternate packaging for waste phosgene in glass breakseal bulbs. The segregation requirements are waive for the transportation of this Division 2.3 material to a disposal facility.	1	2
SP15623	Non-Bulk Packaging Specifications/ IBCs	Authorizes manufacture, marking, sale and use of multiple non-DOT specification containers, manifolded together within a frame and securely mounted on a truck chassis, for transportation in commerce of certain hazardous materials.	1	3

F. Request for Comments

PHMSA welcomes comments concerning the proposed amendments in this rulemaking. Specifically, PHMSA is interested in comments from SP holders (both those deemed suitable and those deemed not suitable for adoption) reviewed for this rulemaking. Due to the large scope of this rulemaking, PHMSA asks that when submitting comments to the Docket for this rulemaking, commenters include the SP Number and Topic area in the comment title and document name (e.g. SP12345 / Cylinder – General).

For holders of SPs deemed suitable for adoption, PHMSA requests comment on our determination. PHMSA is particularly interested in comments that confirm or refute the

suitability, safety, and general applicability of the SPs. PHMSA is also soliciting comments on the regulatory text proposed in this rulemaking. Specifically, PHMSA is interested in comments that address whether the proposed regulatory text accurately encompasses the requirements of the SP.

For holders of SPs deemed not suitable for adoption, PHMSA requests comment on our determination. PHMSA is particularly interested in comments that confirm or refute the suitability, safety, and general applicability of the SPs. Please note that if you are a holder of a SP that was not proposed to be adopted but believe it should be, PHMSA asks that you submit material to support such an argument. Specifically, PHMSA requests:

- Information and arguments that support the proposed adoption including technical and scientific data;
- The impact of the proposed adoption including cost and benefits;
- The frequency of shipments made under the SP;
- The frequency of hazardous materials incidents (such as those described in 171.15 and 171.16) occurring during shipments made under the SP; and
- Proposed regulatory text.

PHMSA asks that when submitting comments to the docket for this rulemaking for SPs deemed not suitable, the SP Number, Topic area and the letters "NS" indicating "Not suitable" are reflected in the comment title and document name (e.g. SP12345 / Cylinder – Retest / NS).

Finally, PHMSA requests comment as it considers a future proposed requirement for a SP applicant to provide potential regulatory text as part of each SP application. Specifically,

PHMSA requests comment on the impact this practice would have, such as benefits or drawbacks.

IV. Section-by-Section Review by Topic Area

A. Cylinders – General

Part 172

172.102 Special Provisions

Section 172.102 lists special provisions applicable to the transportation of specific hazardous materials. Special provisions contain packaging requirements, prohibitions, and exceptions applicable to particular quantities or forms of hazardous materials. Non-bulk packagings must be marked with the United Nations (UN) identification number and proper shipping name, and bear labels communicating the hazard of the material contained in the package. DOT-SP 13544 authorizes the transportation in commerce of Department of Transportation (DOT) Specification 4BA240 cylinders containing liquefied petroleum gas (LPG) and propane and/or residue of LPG or propane without hazard warnings provided the materials are transported in a closed and placarded transport vehicle. This SP supports the propane cylinder exchange programs that accept expended cylinders in exchange for full cylinders. Cylinders collected during the course of these programs may not always bear the appropriate hazard warning markings and labels as required by the HMR. DOT-SP 13544 imposes certain operational controls to ensure appropriate hazard communication, driver training, and appropriate securement of the cylinder on the transport vehicle. PHMSA proposes to add a special provision, "N95" to allow non-bulk packagings containing UN1075, Liquefied petroleum

gas and UN1978, Propane not to be marked with the UN number and proper shipping name or bear hazard labels provided certain restrictions are met.

Section 172.400a

The HMR provide exceptions or alternatives to the labeling requirements under specific circumstances. One such alternative permits the use of a neckring marking, under certain conditions, in accordance with the CGA publication C-7, Guide to Preparation of Precautionary Labeling and Marking of Compressed Gas Containers, Appendix A, 8th Edition (2004). Section 172.400a permits the use a CGA Pamphlet C-7 marking in lieu of the 100 mm x 100 mm square-on-point labels on a Dewar flask meeting the requirements in § 173.320 and cylinders containing Division 2.1, 2.2, and 2.3 materials that are not overpacked.

DOT-SP 14251 authorizes the transportation in commerce of overpacked cylinders, containing Class 2 materials, with CGA C-7 neckring labels provided the overpack is labeled in accordance with § 172.400. Additionally, the CGA petitioned PHMSA (P-1521) to allow cylinders to display the neckring marking even when overpacked. The petition would still require the overpack to display the 100 mm x 100 mm square-on-point labels in accordance with 49 CFR Part 172, Subpart E. The marking prescribed in Appendix A to CGA publication C-7, Guide to Preparation of Precautionary Labeling and Marking of Compressed Gas Containers, Appendix A, 8th Edition (2004) provides useful information in a clear and consistent manner and its widespread use on cylinders over the course of several years has enhanced its recognition. The adoption of DOT-SP 14251 and CGA's proposed change would provide greater flexibility for shipments of overpacked cylinders while ensuring adequate hazard communication. Therefore, PHMSA is proposing to revise this section to authorize the transportation in

commerce of overpacked cylinders, containing Class 2 materials, with CGA C-7 neckring labels and to allow these cylinders to display the neckring marking even when overpacked provided the overpacks are properly labeled.

Part 173

Section 173.181

Section 173.181 specifies the authorized packagings for the shipment of pyrophoric materials (liquids) in transportation. DOT-SP 14419 authorizes the additional use of DOT specification 3AL cylinders constructed from aluminum alloy 6061-T6 for the shipment of pyrophoric liquids provided the cylinders are constructed of 6061-T6 aluminum, have a minimum marked service pressure of 1800 psig, have a maximum water capacity of 49 liters, and any preheating or heating of the cylinders is limited to a maximum temperature of 175 °F. PHMSA proposes to revise this section to allow for the use of DOT specification 3AL cylinders constructed from aluminum alloy 6061-T6, with the same specified limitations for the shipment of pyrophoric materials.

Section 173.193

Section 173.193(b) states that "Bromoacetone, methyl bromide, chloropicrin and methyl bromide mixtures, chloropicrin and methyl chloride mixtures, and chloropicrin mixtures charged with non-flammable, non-liquefied compressed gas must be packed in Specification 3A, 3AA, 3B, 3C, 3E, 4A, 4B, 4BA, 4BW, or 4C cylinders having not over 113 kg (250 pounds) water capacity (nominal)." DOT-SP 12301 authorizes the transportation in commerce of Chloropicrin and methyl bromide mixtures in DOT4BW cylinders with water capacity (nominal) not over 454

kg (1,000 pounds). PHMSA proposes to revise § 173.193(b) to allow for a water capacity of not over 454 kg (1,000 pounds) for chloropicrin and methyl bromide mixtures packed in DOT specification 4BW cylinders.

Section 173.301

This section outlines the general requirements for the use of cylinders including a list of authorized cylinders, general filling requirements, valve protection, and pressure relief device requirements. In this NPRM, PHMSA proposes revisions that would amend the pressure relief device requirements and permit the use of valve caps made from a material other than metal.

PHMSA proposes to authorize the transportation in commerce of DOT specification 39 cylinders without a pressure relief device valve being in communication with the vapor space. With limited exceptions, § 173.301(f) requires a cylinder filled with a compressed gas to be fitted with a pressure relief device. Section 173.301(f)(2) states that "a pressure relief device, when installed, must be in communication with the vapor space of a cylinder containing a Division 2.1 (flammable gas) material." DOT-SP 13318 authorizes the transportation in commerce of DOT specification 39 cylinders of 75 cubic inches or less volume, without the PRD in direct communication with the vapor space. PHMSA proposes to amend paragraph (f)(2) to state that this provision does not apply to cylinders of 75 cubic inches or less in volume filled with a liquefied petroleum gas, methyl acetylene and propadiene mixtures, stabilized, propylene, propane or butane. This SP was originally issued in 2003 subsequent to the publication of HM-220D [67 FR 51625; August 8, 2002] which instituted the requirement that the PRD be in communication with the vapor space, and continues to allow a shipping practice that prior to 2003 has been successfully used with an acceptable safety record.

PHMSA proposes to create an additional exception to pressure relief device requirements for DOT-3E cylinders under certain limited circumstances. DOT-SP 8074 provides an exception from the pressure relief device requirements for a DOT specification 3E cylinder up to 12 inches long and 2 inches in diameter when filled with the following gases up to the specified limits: Carbon dioxide, liquefied 0.24L (8 oz.), Ethane 0.12L (4oz.), Ethylene (4 oz.), Hydrogen chloride, anhydrous 0.24L (8 oz.), Nitrous oxide 0.24L (8 oz.), Vinyl fluoride, stabilized 0.24L (8 oz.) and Monochlorotrifluoromethane 0.35L (12 oz.). PHMSA proposes to add a new paragraph § 173.301(f)(7) to authorize DOT 3E cylinders of this size and containing these gasses to be shipped without a pressure relief device provided they are under the provided maximum weight limits.

Finally, PHMSA also proposes to authorize the use of valve protection caps that are made from a material other than metal. Compressed gas cylinders must meet certain valve protection requirements outlined in §§ 173.40(d) and 173.301(h). Each cylinder with a valve must have a protective metal cap, other valve protection device, or an overpack which is sufficient to protect the valve from damage during transportation. For Division 2.3 or 6.1 Hazard Zone A or B materials, the valve protection must be of sufficient strength to protect the valve from breakage and leakage resulting from a drop of 2.0 m (7 ft) or more onto a non-yielding surface at the orientation most likely to cause damage. DOT-SP 12782 authorizes plastic valve protection caps for certain Division 2.1, 2.2, and 2.3 materials when the valve protection is sufficient to prevent leakage when the cylinder, with the valve installed, is dropped from 2.0 m (7 ft) or more onto a non-yielding floor, impacting the valve assembly or cap at the orientation most likely to cause damage. In this NPRM, PHMSA proposes to amend §§ 173.40(d) and 173.301(h) to allow for the valve protection, including the valve cap, to be made from plastic. PHMSA is not proposing

any changes to § 173.301b(c) because ISO 11117 permits valve caps made of materials other than metal.

Section 173.302a

Sections 173.302, 173.302a, 173.304 and 173.304a prescribe additional requirements for the transport of non-liquefied (permanent) and liquefied compressed gases in DOT specification cylinders. These requirements include authorized cylinders and filling limits. Section 173.302a(b) states that a DOT 3A, 3AX, 3AA, 3AAX, and 3T cylinder may be filled with a compressed gas, other than a liquefied, dissolved, Division 2.1, or Division 2.3 gas, to a pressure 10% in excess of its marked service pressure, subject to certain safety criteria. DOT-SP 6530 authorizes the transport in commerce of hydrogen and mixtures of hydrogen with helium, argon, or nitrogen, in certain cylinders filled to 110 % of their marked service pressure. PHMSA proposes to add a new paragraph (c) to include this exception and to remark the other paragraphs in this section to reflect this addition. This SP was originally issued over 40 years ago.

Section 173.304a

In § 173.304a(a)(2), a table provides the maximum filling densities and permissible cylinder types for certain named gases. Currently, § 173.304a(a)(2) permits a maximum filling density of 68% for carbon dioxide and nitrous oxide in DOT 3, DOT 3HT2000 and DOT 39 cylinders as well as DOT 3A, 3AX, 3AA, 3AAX, 3E, 3T, and 3AL cylinders with a marked service pressure of 1800 psi. PHMSA proposes to modify the entries currently in the table in § 173.304a(a)(2) to add additional filling densities for carbon dioxide and nitrous oxide.

DOT-SP 13599 authorizes additional maximum filling densities for carbon dioxide and nitrous oxide to include 70.3%, 73.2%, and 74.5% in DOT 3A, 3AA, 3AX, 3AAX, 3AL, and 3T cylinders with marked service pressures of 2000, 2265, and 2400, psig respectively, subject to operational controls. Air Products and Chemicals Inc. (Air Products) submitted a petition for rulemaking (P-1560) requesting PHMSA revise § 173.304a(a)(2) to adopt the provisions of DOT-SP 13599. Air Products stated in its petition that the proposed increase in the maximum permitted filling densities would yield various benefits including increased harmonization of compressed gas filling requirements with the UN Model Regulations, benefits to the carbonated beverage industry, decreased fuel costs associated with the transportation and delivery of carbon dioxide and nitrous oxide, and reduced administrative costs through the elimination of DOT-SP 13599. PHMSA has a high degree of confidence that the increased filling densities for these gases will not adversely impact safety. While determining if DOT-SP 13599 was suitable for inclusion in this rulemaking, PHMSA's technical evaluators confirmed that if the table in § 173.304a is revised to clearly link the maximum permitted filling density with the specific gas and the specific packaging, then the operational controls of DOT-SP 13599 would be met. Therefore, PHMSA proposes to modify the entries currently in the table in § 173.304a(a)(2) for carbon dioxide and nitrous oxide to include the maximum filling densities listed in P-1560 and DOT-SP 13599.

Part 180, Subpart C

Qualification, Maintenance and Use of Cylinders

The HMR prescribe requirements for the continuing qualification, maintenance, and periodic requalification of DOT specification cylinders, DOT SP cylinders, and UN pressure

receptacles. These requirements ensure that cylinders continue to conform to the appropriate specification and compromised cylinders are not filled with hazardous materials. The discussion of the proposed amendments includes a section-by-section review of the current requirements, and a discussion of SPs considered for adoption and proposed amendments.

Part 180

Section 180.209

Each DOT specification cylinder must be given a complete external and internal visual inspection and subjected to a hydrostatic pressure test. This combination of a visual examination and hydrostatic test is referred to as requalification. The time period for periodic requalification is typically 5 years, but this period varies depending on the cylinder specification and the gas service. The requalification period for various DOT specification cylinders is shown in the § 180.209 table.

Paragraph (e) authorizes a proof pressure test in lieu of the volumetric expansion test for 4B, 4BA, 4BW, or 4E cylinders protected with a corrosion resistant coating used exclusively for the gases specified in that paragraph. DOT-SP 12084 expands on the list in paragraph (e) to include additional gases. These gases are refrigerated gases and liquefied gases similar to those already permitted by § 180.209(e). This SP was originally granted in 1998 and has been revised several times to expand the list of gases authorized by the SP. Since 1998, thousands of cylinders have been requalified in the manner described by this SP without safety incident. In this NPRM, PHMSA proposes to adopt the provisions in DOT-SP 12084 by removing the list of authorized gases and authorizing the use of the proof pressure test for DOT- 4B, 4BA, 4BW, or 4E cylinders protected externally by a suitable corrosion resistant coating and used exclusively

for non-corrosive gases. The authorized specifications limit the total pressure in the cylinder to 500 psi or less. It should be noted that because this SP does not include a 4E cylinder, PHMSA specifically requests comments on the feasibility of its inclusion.

Section 180.213

Cylinders requalified in accordance with the HMR must bear requalification markings in accordance with § 180.213. As provided in § 180.213(c), "The depth of requalification markings may not be greater than specified in the applicable specification. The markings must be made by stamping, engraving, scribing or other method that produces a legible, durable mark." DOT-SP 14937 allows the use of a label embedded in epoxy in lieu of other methods described in § 180.213. PHMSA proposes to amend paragraph (c) to allow the use of a label embedded in epoxy in lieu of stamping provided the marking is legible and durable. This SP was originally issued in 2008 and has an acceptable safety record.

B. Cylinders – NDT/Aerosols

Part 173

Section 173.304

Section 173.304 specifies the requirements for the filling of cylinders with liquefied compressed gases. Paragraph (d) of this section provides for authorized packagings for the filling of cylinders with refrigerant and dispersant gases. The current regulations authorize these materials in a 2Q non-refillable container. DOT-SP 12573 authorizes a refrigerant gas ("R 134a," UN3159) in a non-DOT specification container similar to a 2Q container at a maximum allowable pressure requirement for the contents of 198 psig at 54.4 °C (130 °F).

Based on our review of the permit and no discovery of compliance violations or incidents associated with the transport history of the permit, we are proposing to adopt the container found in DOT-SP 12573 as an authorized container. However, we are differing marginally from the permit in that we are adopting a maximum pressure threshold of 200 psig at 55 °C (131 °F) for the contents. There is no safety basis for the 200 psig ceiling other than we believe it is a cleaner cutoff point than the 198 psig maximum found in the SP. In addition, as part of the variation on the design of a DOT 2Q container, the modified container will be marked as "DOT 2Q1."

Finally, the current regulations require that the pressure of the contents of the metal containers not exceed 87 psig at 21 °C (70 °F). We invite comment on whether the requirement for a maximum pressure should be specified at 21 °C (70 °F) for the 2Q1 container in addition to the limit at 55 °C (131 °F). If so, we invite comment on what should the limit be for typical refrigerant or dispersant gas such as 1,1,1,2 Tetrafluoroethane, R134a. See the associated discussions for §§ 173.306 and 178.33d.

Section 173.306

Section 173.306 provides general requirements and exceptions for shipments of limited quantities of compressed gas. In this NPRM, we are making several proposed changes to this section. The proposed changes are discussed as follows:

Conforming revisions. Throughout this section of the HMR and within related SPs that provide exemptions from these regulations for gases, pressure standards are indicated at either 130 °F or 131 °F. In the interest of consistency and conformity with the general requirements for compressed gases in §§ 173.301 and 173.301a, we are proposing to change all references of 54.4

°C (130 °F) to 55 °C (131 °F). We invite comment on whether there are any potential negatives in making this conforming change. We are also making revisions to the construction and formatting of how this section is presented (e.g., insertion of an "if, then" table) in an effort to make the requirements more reader-friendly.

Authorized metal containers

DOT 2P inner nonrefillable metal containers. Under § 173.306, limited quantities of foodstuffs or soaps with soluble or emulsified compressed gas are authorized in nonrefillable metal or plastic containers. Paragraph (b)(1) introductory text authorizes these containers subject to a pressure requirement not to exceed 140 psig at 54.4 °C (130 °F). SPs 13601 and 14503 authorize the transportation of "UN1950, Aerosols, non-flammable (each not exceeding 1 L capacity), 2.2," and 7951 authorizes the transportation of "UN1956, Compressed gas, n.o.s., 2.2," in containers that conform to DOT 2P or 2Q specifications except for some minimal modifications. The containers must have maximum pressures for the contents of 160 psig at 54.4 °C (130 °F) and 150 psig at 23.9 °C (75 °F), respectively. DOT-SP 7951 states that the containers must be transported in the refrigerated state. PHMSA is seeking comments on whether refrigeration should be a condition of the transport of these materials. As part of the variation on the specification of these containers, the modified container will be marked as "DOT 2P1" under the provisions of new § 178.33c discussed separately in this rulemaking.

We are also proposing to include DOT 2P1 as an authorized metal aerosol container under § 173.306(a)(3)(iii). We see no reason to limit this container to foodstuffs or soaps under paragraph (b)(1) because the pressure limit for the contents is the same as the current requirement for a DOT 2P container, and the safety factor of the minimum burst pressure under

the SP is greater than that for a DOT 2P container (270 psig vs. 240 psig). We are not proposing to adopt the burst pressure requirement because the SP requirements are such that the pressure relief system of these containers must function at a pressure below the burst pressure. Also, the DOT 2P1 would be authorized for both Division 2.1 and 2.2 aerosols under § 173.306(a)(3)(iii).

DOT 2Q inner nonrefillable metal containers. Limited quantities of compressed gas are authorized in metal aerosol containers (see § 171.8 of the HMR). Paragraph (a)(3) introductory text of this section authorizes metal aerosol containers under certain conditions including packaging types and pressure thresholds. The current regulations under § 173.306(a)(3)(iii) require use of a DOT 2Q container for pressures exceeding 160 psig at 54.4 °C (130 °F) but not to exceed 180 psig. DOT-SP 12573 authorizes the transport of "Aerosols, non-flammable," UN1950 in non-DOT specification containers that conform to DOT 2Q specifications except for some modifications. The containers must have maximum pressures for the contents of 198 psig at 54.4 °C (130 °F).

Based on review of the permit and no discovery of compliance violations or incidents associated with the transport history of the permit, we are proposing to adopt the modified DOT 2Q as an authorized metal aerosol container. However, we are differing marginally from the permit in that we are adopting a maximum pressure threshold of 200 psig at 55 °C (131 °F). There is no safety basis for the 200 psig ceiling other than we believe it is a cleaner cutoff point than the 198 psig maximum found in the permit. As part of the variation of the specification of a DOT 2Q container, the modified container will be marked as "DOT 2Q1."

This proposed rule would also expand authorized materials to include Division 2.1 aerosols. We see no reason to limit the use of this container to non-flammable aerosols based on

the record of use for this container and that DOT 2Q containers currently authorized in the HMR are allowed to be used for all defined aerosol types, however, we invite comment on the suitability of the container for all aerosol types. See the associated discussions for §§ 173.304 and 178.33d.

DOT-SP 13581 is linked to the above proposed provision in that it authorizes the use of metal aerosol containers manufactured, tested, and marked according to DOT-SP 12573. We believe with the adoption of the modified DOT 2Q container (i.e., a DOT 2Q1 container), this SP will no longer be needed.

Alternatives to testing of metal aerosol containers by a hot water bath test.

As a condition of the use of a metal aerosol container, each container, after being filled, must be subjected to a hot water bath to raise the internal pressure to such a degree that leakage or permanent deformation, if any, can be determined (see § 173.306(a)(3)(v)). The provision also provides for a testing protocol for a container where the contents may be sensitive to heat. Currently, this is the only method authorized for determining leakage or permanent deformation and thus, fillers that have developed other protocols or that do not want to subject their products to a hot water bath test must obtain a SP. A number of SPs that authorize the use of alternative methods to determine leakage or permanent deformation are discussed as follows:

(1) Alternate hot water bath test. DOT-SP 12995 authorizes a methodology that is a combination of a hot water bath test, a weight test, and visual inspection. Rather than subjecting each filled container to a hot water bath test, only one container out of each lot is subjected to the hot water bath test, a second is subjected to a weight test, the results of which must be compared to weight specification for the container as outlined in quality control procedures, and finally, the

remainder of the lot must be visually inspected by examining the valve, crimp, and seam areas for evidence of leakage.

Based on review of the permit and no discovery of compliance violations or incidents associated with the transport history of the permit, we are proposing to adopt DOT-SP 12995. The permit authorizes only DOT 2Q containers but we are applying it to all authorized metal aerosol containers. While determining if DOT-SP 12995 was suitable for inclusion in this rulemaking, PHMSA's technical evaluators confirmed that the methodology that includes a combination of hot water bath test, weight test, and visual inspection may be performed on a DOT 2P as well as a DOT 2Q. Since these containers are similar designs except in terms of strength, this alternative to the hot water bath test is applicable to any metal container. Previously, most applicants of DOT-SP 12995 only requested 2Q because that is what they needed for their particular hazmat, but that does not mean that alternative testing is not good for similar containers. Additionally, the permit applies to specific filling conditions but we will apply this testing method to containers complying with the current filling conditions in § 173.306(a)(3). Finally, we vary from the permit with our proposed language in that we require maintenance and access to operating procedures especially with regard to the weight test and specification in order to effect a broader application of this alternative. Rather than specify standards, we will allow persons to develop their own procedures that best fit their product on the condition that DOT has access to these procedures. We invite comment on this approach and others. In our proposal, for purposes of this alternative, we designate a lot as 2,000 containers consistent with the SP. We invite comment on whether we should specify a lot size, allow persons to determine the lot size, and if so, how the testing procedures should be modified to accommodate larger lot sizes.

(2) Automated in-line pressure test. DOT-SPs 14429, 14623, 14625, 14627, 14723, 14724, 14786, 14842, 14887, 14953, 15135, 15265, 15427, and 15972 all authorize the use of an automated process to check the pressure of filled containers (i.e., an "automated in-line pressure check") instead of subjecting the containers to a hot water bath. Based on review of the SPs and no discovery of compliance violations or incidents associated with the transport history of the permit, we are proposing to adopt the provisions of these SPs, specifically authorizing the use of an automated process for pressure checks that does not involve a hot water bath. The safety control measures for the "automated in-line pressure check" vary greatly among the SPs with regard to the criteria for rejection, limits on the filling of contents, inspection, and corrective action. We are seeking comments on whether the proposed +/- 0.5% accuracy of the pressure measuring instrument is appropriate for widely-used automated equipment for aerosols. Rather than attempt to develop a standard that might not address all possible variations on an automated process, we have opted to propose a performance-based requirement that adopts parts of all of the SPs. Specifically, we propose to require the development of operating procedures (which we believe most entities should already have as part of their processes), we provide for basic components that the procedures must address (e.g., inclusion of rejection criteria), and we require written record of the operating procedures be made accessible to DOT representatives. We invite comment on the merits of this approach.

(3) Weight test. DOT-SP 14440 authorizes the use of a process to check the weight of filled containers (i.e., an "automated in-line pressure check") instead of subjecting the containers to a hot water bath. Based on review of the permit and no discovery of compliance violations or incidents associated with the transport history of the permit, we are proposing to adopt the scope of this SP, specifically authorizing the use of weight checks as a means to determine compliance

with pressure requirements. Comparison of the weight of a container against the pre-determined target weight for the container provides an indication of the filling of the container. For example, a container with a weight greater than that of the target weight provides an indication of overfilling and thus, would likely exceed the authorized pressure limit at 55 °C (131 °F). We have opted to propose a performance-based requirement that adopts parts of all of the SPs. Specifically, we propose to require the development of operating procedures (which we believe most entities should already have as part of their processes), we provide for basic components that the procedures must address (e.g., a supplementary heat test for rejection of a lot), and we require written record of the operating procedures accessible to DOT representatives. We invite comment on the merits of this approach.

(4) Leakage test. DOT-SP 14544 authorizes the use of a high pressure air test on empty containers combined with a leakage test for filled containers instead of subjecting the containers to a hot water bath. The testing protocol for filled containers found in this SP is currently applied to plastic containers under paragraph (a)(5) of this section in the HMR, however, the pressure and leakage test of the empty containers differs in its application. Under DOT-SP 14544, each empty container must be pressure tested at 120 psig instead of the HMR requirement that each empty container must be subjected to a pressure equal to or in excess of the maximum expected in the filled containers at 55 °C (131 °F), and that is at least two-thirds of the design pressure of the container. Under both tests, if there is evidence of leakage, the container must be rejected. Based on review of the permit, no discovery of compliance violations or incidents associated with the transport history of the permit, and a similar requirement currently under the HMR, we are proposing to adopt the scope of this SP, specifically authorizing the use of a leakage test as a means to determine compliance with pressure requirements. Our

implementation will differ from the SP in that we are proposing to adopt the leakage testing requirements under § 173.306(a)(5)(v), but including the DOT-SP 14544 testing protocol for empty containers as an alternative. We invite comment on our approach to adopt this SP.

Accumulators. The HMR provides for special considerations for limited amounts of compressed gas in accumulators. DOT-SP 8786 authorizes the transport of accumulators under an alternative testing procedure from what is outlined in paragraph (f)(2) and (f)(3) of this section. Instead of testing each accumulator to three times (3x) the charge pressure, the SP provides for conditions to test one accumulator out of each lot of 1,000 to the burst design pressure, and two accumulators to two and a half times (2.5x) the charge pressure. Based on review of the permit, no discovery of compliance violations or incidents associated with the transport history of the permit, and the lengthy history of use of this SP, we are proposing to adopt DOT-SP 8786 except for the specific conditions for the preparation for testing of the accumulators.

Aerosol disposal.

The general packaging requirements of the HMR forbid the transport of leaking or improperly-filled packages. This includes aerosol containers that are found to be leaking or improperly filled as part of a combination packaging. Although the HMR provides for conditions to allow for the transport of damaged, defective, or leaking packages under salvage packaging provisions in § 173.3(c) and (d) for salvage drums and salvage cylinders, respectively, these provisions do not apply to aerosol containers that are leaking or improperly filled. Thus, shippers (fillers) with defective aerosol containers ("waste aerosols") are limited to onsite

disposal of aerosol containers that do not comply with the HMR. DOT-SP 11296 provides for an option to transport these containers to an offsite facility for disposal under certain conditions (e.g., overpacking in DOT specification packagings, modal restrictions, etc.).

Based on review of the permit, no discovery of compliance violations or incidents associated with the transport history of the permit, and that adoption would allow for the transport of these aerosols for proper disposal, we are proposing to adopt the general scope of DOT-SP 11296 but with some differences. The proposed language is not limited to flammable aerosols such as indicated in the language in DOT-SP 11296. Also, the proposed regulatory language is modeled after the salvage packaging requirements of § 173.3(c) in that: (1) the authorized outer packaging for overpacking the defective cylinders has been expanded to include other metal drums (i.e., 1B2 and 1N2); (2) a condition for cushioning and absorbent material, when necessary, has been added; and (3) an "aerosol salvage" drum marking has been adopted. We invite comment on several aspects of these proposed provisions including authorized aerosols, (e.g., are there concerns with allowing aerosols other than flammable aerosols only in the drums?), authorized outer packaging, hazard communication, and authorized transport modes.

Part 178

Section 178.33c

Under the HMR, certain DOT specification containers with restricted capacity and commonly referred to as "aerosol containers" are authorized for transport of compressed gases and for liquefied compressed gases under limited situations. These containers include DOT 2P (inner non-refillable metal) containers. The specification standards are outlined in § 178.33 of

the HMR, but the specification does not provide for variations on the standards. Thus, technological advances or design changes to satisfy customer needs are such that the resulting metal containers would not comply with the standards for a DOT 2P container, nor any other container authorized under either §§ 173.304 or 173.306 of the HMR. DOT-SPs 13601 and 14503 (also 7951) provide for a variation on the DOT 2P container specifications by authorizing construction of the container according to modifications to the standards for manufacture and testing.

These variations on a 2P container are equipped with some manner of pressure relief system (e.g., a rim-vent release device or a dome expansion device) that must function within a certain pressure range, otherwise the container is rejected. In effect, these containers are designed to buckle to relieve pressure before bursting. For example, for a container built to DOT-SP 13601, the pressure relief system must function between 175 psig and 210 psig or be rejected. However, we have no specific information in the special permit(s) on the relationship between the functional range and the tested burst pressure. The current requirements for a container for foodstuffs under § 173.306(b)(1) is that the pressure of the contents cannot exceed 140 psig at 130 °F and the container must be capable of withstanding a pressure of 1.5x the contents at 130 °F without bursting. Thus, 140 psig of contents equates to a minimum burst pressure of 210 psig. Additionally, the current minimum burst pressure for a DOT 2P container is 240 psig (§ 178.33-8). Using the DOT-SP 13601 requirements, the minimum burst pressure requirement is listed as 270 psig (assumed at 130 °F) and the pressure of contents at 130 °F may not exceed 160 psig thus, equating to approximately 1.7x the contents at 130 °F without bursting (which is more stringent than for a 2P under the HMR). However, accounting for the pressure range for operation of the relief system at 175 psig to 210 psig, the multiplier based on the

maximum pressure of the contents is approximately 1.1x to 1.3x the contents. That is, the relief system must function within 1.1x to 1.3x the pressure of the contents at 130 °F.

This is further complicated under DOT-SP 14503 (and 7951) where the standard for the pressure of the contents is set at 75 °F for which we do not have an equivalent requirement under the HMR. Additionally, the ranges for functioning of the relief systems have a higher upper bound, 175 to 250 and 175 to 235, respectively. And, finally there is no minimum burst pressure specified in DOT-SP 14503 (and 7951); therefore, we must default to the DOT 2P minimum burst pressure of 240 psig. Again, the circumstances are unclear in that the upper bounds for the functional ranges approach or exceed the 2P minimum burst pressure yet we do not have information on the actual tested burst pressure which could be much larger. Therefore, based on the requirements of DOT-SP 13601, we propose to implement a requirement that for containers with pressure relief systems, the upper bound of the functional range for a pressure relief system must be no greater than 80% of the minimum burst pressure or the recorded test pressure. We invite comment on using this approach and whether it would be preferable to implement a requirement for the upper bound of the range based on the pressure of the contents?

Overall, based on review of the permit and no discovery of safety issues or incidents associated with the transport history of the permit, we are proposing to incorporate the standards for the modified DOT 2P container found in DOT-SP 13601 (and likely 14503 (7951)) as a variation on the DOT 2P container design. This variation would be required to be marked as a "DOT 2P1." Rather than repeat in total the DOT 2P specification standards that have remained the same for a DOT 2P1 container, we propose to instruct the reader that all standards for a DOT 2P1 remain the same as those for a DOT 2P except for the variations outlined in a proposed new § 178.33c-2.

Section 178.33d

Under the HMR, certain DOT specification containers with restricted capacity and commonly referred to as "aerosol containers" are authorized for transport of compressed gases and for liquefied compressed gases under limited situations. These containers include DOT 2Q (inner nonrefillable metal) containers. The specification standards are outlined in § 178.33a of the HMR but the specification does not provide for variations on the standards. Thus, technological advances or design changes to satisfy customer needs are such that the resulting metal containers would not comply with the standards for a DOT 2Q container, nor any other container authorized under either §§ 173.304 or 173.306 of the HMR. DOT-SP 12573 provides for a variation on the DOT 2Q container specifications by authorizing construction of the container according to modifications to the standards for type and size, manufacture, wall thickness, and testing. DOT-SP 14503 also provides for a variation on the DOT 2Q container specification by authorizing construction of the container according to modifications to its manufacture and testing.

These variations on a 2P container are equipped with some manner of pressure relief system (e.g., a rim-vent release device or a dome expansion device) that must function by a certain threshold level or within a certain pressure range, otherwise the container is rejected. In effect, these containers are designed to buckle to relieve pressure before bursting. For example, for a container built to DOT-SP 12573, the minimum pressure before the system buckles is 220 psig (and if not equipped with a pressure relief system, the container may not burst below 320 psig). The maximum pressure of the contents authorized under this SP is 198 psig at 130 °F (we proposed at maximum level of 200 psig based on this SP in the § 173.306 discussion for 2Q containers). The current requirements for a 2Q container under § 173.306(a)(3)(ii) is that the

pressure of the contents cannot exceed 180 psig at 130 °F and the container must be capable of withstanding a pressure of 1.5x the contents at 130 °F without bursting. Applying the same multiplier to 200 psig, the container must withstand 300 psig without bursting. The DOT-SP 12573 minimum burst pressure of 320 psig is more stringent; however, the calculated burst pressure of 300 psig based on the proposed maximum pressure of contents is also greater than the current required minimum burst pressure of 270 psig for a 2Q container. Thus, it provides a greater margin of safety than current required but also provides some opportunity for relief as a standard. We propose to adopt a 300 psig minimum burst pressure for this modified 2Q container. Also, we propose to require buckling of the system at 75% of tested burst pressure (with a minimum burst test pressure of 300 psig). We invite comment on these approaches for adoption of the provisions for the modified 2Q container under DOT-SP 12573. Based on review of the permit and no discovery of incidents associated with the transport history of the permit, we are proposing to adopt the standards for the modified DOT 2Q container found in DOT-SP 12573 as a variation on the DOT 2Q container design. This variation would be required to be marked as a "DOT 2Q1."

The requirements under DOT-SP 14503 operate differently in that the standard for the pressure of the contents is set at 75 °F to which we do not have an equivalent requirement under the HMR. Additionally, the SP provides for a range of pressure for functioning of the relief systems, specifically, 180 to 300 psig. And, finally there is no minimum burst pressure specified in DOT-SP 14503 so we must default to the DOT 2Q minimum burst pressure of 270 psig. The upper bound for the functional range exceeds the 2Q minimum burst pressure yet we do not have information on the actual tested burst pressure which could be much larger. Therefore, based on a similar proposal to implement provisions of DOT-SP 13601 for 2P containers (see the

§ 178.33c discussion), the upper bound of the functional range for a pressure relief system must be no greater than 80% of the test pressure. We invite comment on using this approach and whether it would be preferable to implement a requirement for the upper bound of the range based on the pressure of the contents.

Based on review of the permit and no discovery of incidents associated with the transport history of the permit, we are proposing to adopt the standards for the modified DOT 2Q container found in DOT-SP 14503 as a variation on the DOT 2Q container design. This variation would be required to be marked as a "DOT 2Q2." Rather than repeat, in total, the DOT 2Q specification standards for each of these modified containers that have remained the same, we propose to implement the proposals in this section by instructing the reader that all standards for a DOT 2Q1 or a DOT 2Q2 remain as for a DOT 2Q except for the variations outlined in proposed new §§ 178.33d-2 and 178.33d-3. We invite comment on this method of implementing these modified DOT 2Q specification containers.

C. Cargo Tanks/Rail Cars/Portable Tanks

Part 173

Section 173.315

Section 173.315 specifies the bulk packaging provisions for liquefied compressed gases in UN and DOT specification cargo tanks and portable tanks. DOT-SP 12576 authorizes non-DOT specification cargo tanks for the transportation of UN1080, Sulfur hexafluoride, that otherwise conform to the MC 331 specifications except for design pressure, capacity, and marking. The cargo tanks are designed and built in conformance with Section VIII, Division 1, of the ASME Code, and the design pressure may not exceed 600 psig. Additionally, the water

capacity range for each tank ranges from a minimum of 15 gallons to a maximum of 500 gallons. Based on our review of the permit and no discovery of compliance violations or incidents associated with the transport history of the permit, we are proposing to revise the § 173.315(a)(2) Table by referring to a new Note 28 in the entry for "Division 2.2, materials not specifically provided for in this table" as Sulfur hexafluoride is not listed by name in the table. New note 28 codifies such tanks specified in DOT- SP12576 for the transportation of Sulfur hexafluoride. PHMSA is soliciting comment on whether this amendment should include other compressed gases and whether the prescribed design pressure or capacity should be revised in a final rule.

Section 173.319

Section 173.319 prescribes the loading and packaging provisions for cryogenic liquids transported in tank cars. Currently, the HMR authorizes a maximum of 10 psig in a DOT 113C120W tank car containing UN1038, Ethylene, refrigerated liquid, when offered for transportation by rail. DOT-SP 12039 authorizes the transportation in commerce of DOT 113C120W tank cars containing Ethylene, refrigerated liquid, at an internal pressure of 20 psig instead of the maximum 10 psig. Based on our review of the permit and no discovery of compliance violations or incidents associated with the transport history of the permit, we are proposing to revise the paragraph (d)(2) Table by authorizing a maximum of 20 psig consistent with DOT-SP 12039.

D. Operational Air/Vessel

Part 172

Sections 172.101 (Hazardous Materials Table) and 172.102 Special Provisions

Section 172.101 provides instructions for using the Hazardous Materials Table (HMT) and the HMT itself. Column 7 of the HMT specifies codes for special provisions applicable to hazardous materials. Special provisions contain packaging requirements, prohibitions, and exceptions applicable to particular quantities or forms of hazardous materials. When Column 7 of the HMT refers to a special provision for a hazardous material, the meaning and requirements of that special provision are as set forth in § 172.102 (Special provisions).

In this NPRM, PHMSA is proposing to revise Column 7 for several entries to add the vessel-specific special provision "W11." This special provision would allow, when offered for transportation by vessel, certain materials to be offered in the same transport unit with foodstuffs and cargo of an organic nature provided a distance of 3m (10 feet) is maintained between the hazardous materials and foodstuffs or cargo of an organic nature. The affected entries are as follows:

Section 172.102 lists special provisions applicable to the transportation of specific hazardous materials.

- Benzaldehyde, UN1990
- Corrosive liquid, acidic, inorganic, n.o.s, UN3264, PG II and III
- Corrosive liquid, acidic, organic, n.o.s., UN3265, PG II and III
- Extracts, flavoring, liquid, UN1197, PG II and III

- Flammable liquids, corrosive, n.o.s., UN2924, PG III
- Phosphoric acid solution, UN1805

Special Provision W11

Currently, § 176.800(a) of the HMR specifies that each package requiring a Class 8 (corrosive) label being transported by vessel must be stowed clear from living quarters and away from foodstuffs and cargo of an organic nature. In addition, § 176.800(b) prohibits packages requiring a Class 8 (corrosive) label from being stowed over any readily combustible material. DOT-SP 11691 authorizes deviation from the segregation requirements for vessel stowage when shipped in the same transport unit of certain flammable, Class 9 (miscellaneous), and corrosive liquids that are the ingredients of soft drinks (beverages). DOT-SP 11691 also allows these packages of certain corrosive liquids to be stowed over packages of other specifically authorized flammable liquids. During the review of this SP, PHMSA noted that the transport conditions found in DOT-SP 11691 are different from the currently authorized segregation from foodstuffs requirements found in the International Maritime Dangerous Goods (IMDG) Code sections 7.3.4.2.1 and 7.3.4.2.2, in that a segregation distance of 3 m (10 ft) from foodstuffs is required by the IMDG Code.

Based on our review, DOT-SP 11691 did not reveal safety incidents associated with its transport history. Therefore, we are proposing to adopt new special provision "W11" to adopt the operational control provisions of DOT-SP 11691 as well as the additional requirement that packages requiring Class 8 labels must be separated within the transport unit by a distance of 3 m (10 ft) from foodstuffs and cargo of an organic nature. The SP includes specific technical names that are authorized, but to be more consistent with the IMDG Code provisions, PHMSA is

proposing to extend the exception to all packages offered for transport under any of the proper shipping names (and associated packing group) to which this special provision is assigned. The proposed special provision W11 would allow entries assigned this special provision, when offered for transportation by vessel, to be offered in the same transport unit with foodstuffs and cargo of an organic nature provided a distance of 3m (10 feet) is maintained between the hazardous materials and foodstuffs or cargo of an organic nature. Class 8 (corrosive) materials assigned this special provision would also be allowed to be stowed over packages of flammable liquids also assigned this special provision.

Part 176

Section 176.90

Section 176.90 prescribes requirements for private automobiles carrying Class 1 hazardous materials on board ferry vessels. There are four SPs that provide relief for ferry transport of private automobiles carrying engines, gasoline, and propane. DOT-SP 7465, 11150, 13213, and 14458 all contain slightly different provisions to facilitate this process safely. Where differences exist between these permits, PHMSA has attempted to choose the least restrictive provision for adoption. PHMSA specifically requests comments on this approach.

PHMSA is proposing to renumber the existing lone paragraph as paragraph (a), and to add a new paragraph (b) to adopt an exception for "Engines, internal combustion, flammable gas powered or flammable liquid powered, including when fitted in machinery or vehicles (i.e. motor vehicles, recreational vehicles, campers, trailers), vehicle flammable liquid or flammable gas powered, gasoline, and petroleum gases, liquefied or liquefied petroleum gas" when included as

part of a motor home, recreational vehicle, camper, or trailer when carried on board ferry vessels subject to certain operational controls.

In this NPRM, PHMSA is proposing to revise this section to allow items normally offered as engines, vehicles, gasoline, or propane in private automobiles aboard ferry vessels to receive exceptions with certain restrictions. These restrictions include: (1) cylinders must be visually inspected for defects, cracks, or leaks, and gasoline containers must show no signs of damage or leakage; (2) cylinders of liquefied petroleum gas must have the cylinders securely attached to recreational vehicles; (3) extra containers of gasoline (including camp stove or lantern fuel) and portable cylinders of liquefied petroleum gas (including cylinders for camping equipment) not securely attached to recreational vehicles must be stowed in the vessel's paint locker; (4) liquefied petroleum gas cylinders must be secured by closing the shut-off valves prior to the recreational vehicles being loaded on the vessel; (5) the owner or operator of each recreational vehicle must be directed to close all operating valves within the vehicles, (6) “no smoking" signs must be posted on the vehicle decks and, if used for storage of hazardous materials in close proximity to the vessel’s paint locker; (7) a continuous patrol of the vehicle decks must be made by a crewmember, and any unusual or dangerous situation must be reported to the vessel's master; (8) passengers are allowed on the vehicle decks, but are subject to the control of the crew personnel conducting the continuous vehicle deck patrol; (9) vessel personnel responsible for performing any function in the proposed section must be trained in accordance with Subpart H of Part 172; and (10) shipments made under this section are subject to the Hazardous Materials Incident Reporting requirements.

E. Operational Highway/Rail/Shipper/Other

Part 171

Section 171.8

Section 171.8 defines terms generally used throughout the HMR that have broad or multi-modal applicability. PHMSA is proposing to add the following definition based on the proposed adoption of DOT-SP 11458:

Display pack: This term means a package intended to be placed on the floor of retail stores which is designed to provide direct customer access to consumer commodities contained within the package when all or part of the outer fiberboard packaging is removed.

DOT-SP 11458 authorizes the transportation in commerce of display packs of consumer commodity packages or limited quantity packages that exceed the 30 kg gross weight limit. The provisions of DOT-SP 11458 are being proposed for adoption into § 173.156. However, the term "display pack" is not currently defined in the HMR. Therefore, in this NPRM we are proposing to adopt the definition for "display pack" under § 171.8 based upon the definition found in DOT-SP 11458.

Part 172

Section 172.102

Section 172.102 lists Special Provisions applicable to the transportation of specific hazardous materials. Special Provisions contain packaging requirements, prohibitions, and

exceptions applicable to particular quantities or forms of hazardous materials. PHMSA is proposing the following revisions to the § 172.102, Special Provisions:

Special Provision 380

PHMSA proposes to add Special Provision 380 to adopt SP 10705. This SP provides relief from the segregation requirements of § 177.848(d) for the transport of UN1092, Acrolein, stabilized by private carrier in a motor vehicle. The SP prescribes the packaging that must be used and the materials with which acrolien, stabilized may be loaded. The SP further specifies that the motor carrier must maintain a satisfactory safety rating as prescribed in part 385 of CFR Title 49. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to adopt its provisions in its entirety in this Special Provision. The provisions of DOT-SP 10705 are specific to UN1092, Acrolein, stabilized; therefore, this Special Provision is assigned exclusively to that HMT entry.

Special Provision 381

PHMSA proposes to add Special Provision 381 to adopt SP 7991. This SP provides relief from the HMR for the transportation of railroad flagging kits by highway. See § 173.184 for a detailed discussion of the proposed adoption of DOT-SP 7991. This Special Provision is assigned to the following HMT entries: Fusee (rail or highway) (NA1325, Division 4.1, PG II; Articles, pyrotechnic (UN0431, Division 1.4G, PG II); Signal Devices, hand (UN0373, Division 1.4S, PG II); Signal Devices, hand (UN0191, Division 1.4G, PG II); and Signals, railway track, explosive (UN0193, Division 1.4S, PG II).

Special Provision 382

PHMSA proposes to add Special Provision 382 to adopt SP 8006. This SP provides relief from the labeling requirements of § 172.400(a) for the transportation of toy plastic or paper caps for toy pistols by motor vehicle, railcar, cargo vessel, and cargo aircraft. See § 172.400a(a)(8) for a detailed discussion of the proposed adoption of DOT-SP 8006. This Special Provision is assigned to the following HMT entries: Articles, explosive, n.o.s. (UN0349) and Toy caps (UN0337).

Special Provision 383

PHMSA proposes to add Special Provision 383 to adopt SP 11356. This SP authorizes material meeting the conditions for high viscosity flammable liquids specified in § 173.121(b)(1)(i), (b)(1)(ii), and (b)(1)(iv), to be re-classed to Packing Group III for transportation by motor vehicle. The SP prescribes packaging, capacity limitations, and load securement requirements. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in the transportation of these materials while maintaining an equivalent level of safety, we are proposing to adopt the provisions of the SP in its entirety in this Special Provision. This Special Provision is assigned to the following HMT entries: Coating solution (UN1139, PG II) and paint (UN1263, PG II).

Special Provision 384

PHMSA proposes to add Special Provision 384 to adopt SP 11666. This SP authorizes the transportation of green graphite electrodes and shapes that are large single component solid objects not subject to sifting, in open rail flat cars, open bed motor vehicles, and intermodal containers. The SP prescribes load securement requirements for the electrodes and shapes. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in the transportation of these articles and materials while maintaining an equivalent level of safety, we are proposing to adopt the provisions of the SP in its entirety in this Special Provision. This Special Provision is assigned to the following HMT entries: Other regulated substances, n.o.s. (NA3077, PG III) and Environmentally hazardous substances, solid, n.o.s. (UN3077, PG III)

Special Provision 385

PHMSA proposes to add Special Provision 385 to adopt SP 13343. This SP authorizes the use of cargo heaters when weather conditions are such that the freezing of certain wetted explosive material is likely. Shipments must be made by private, leased or contract carrier vehicles in exclusive use. Cargo heaters must be reverse refrigeration (heat pump) units. Shipments made in accordance with the SP are excepted from the anti-freeze requirements of § 173.60(b)(4). Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility to motor carriers engaged in the transportation of these explosive materials while maintaining an equivalent level of safety, we are proposing to adopt the provisions of the SP in its entirety in this Special Provision. The provisions of DOT-SP 13343 are specific to Trinitroresorcinol, wetted or Styphnic acid, wetted

with not less than 20% water, or mixture of alcohol and water by mass (UN0394); therefore this Special Provision is assigned exclusively to that HMT entry.

Special Provision B130

PHMSA proposes to add Special Provision B130 to adopt SP 14525. This SP provides relief from the HMR except for the shipping paper requirements of Subpart C of Part 172, emergency response information as required by § 172.602, and the marking requirements of § 172.302,(a), (b), and (d) when transporting used diatomaceous earth filter material by highway. The SP prescribes packaging, quantity limitations, and the required method of storing the packages within the motor vehicle. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility to private motor carriers engaged in pest control operations while maintaining an equivalent level of safety, we are proposing to adopt the provisions of the SP in its entirety in this Special Provision. The provisions of SP 14525 are specific to self-heating solid, organic, n.o.s. (UN3088); therefore this Special Provision is assigned exclusively to that HMT entry.

Section 172.202

Section 172.202 establishes requirements for shipping descriptions on shipping papers. As part of these shipping paper requirements, in many situations a net or gross quantity of the hazardous materials must be included. SP 11811 provides relief from this requirement for local collections operations transporting hazardous materials and hazardous substances by highway that are "household wastes" as described in 40 CFR 261.4 and not subject to the Environmental

Protection Agency's hazardous waste regulations in 40 CFR, Parts 262 and 263. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility to shippers while maintaining an equivalent level of safety, we are proposing to revise paragraph (c) of § 172.202 to adopt the provisions of SP 11811 in its entirety.

Section 172.315

Section 172.315 establishes requirements for the marking of packages containing limited quantities of hazardous materials. For transportation by highway by private carrier SP 11197 provides relief from the requirement to display the limited quantity marking on packages containing materials assigned to Packing Groups II and III prepared in accordance with the limited quantity requirements in Part 173. The relief offered by SP 11197 does not include materials assigned to Classes 1, and 7, and Division 6.1 and 6.2 materials. The SP prescribes inner packaging and package quantity limitations; the maximum gross weight of packages that may be transported in one vehicle; and special package marking requirements. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to add a new paragraph (a)(3) to § 172.315 to adopt the provisions of SP 11197 in its entirety.

Section 172.400a

Section 172.400a provides exceptions from the § 172.400 general labeling requirements for packages or containment devices containing hazardous materials and offered for

transportation or transported in commerce. SP 8006 provides relief from the § 172.400 general labeling requirements for toy plastic or paper caps for toy pistols described as "UN0349, Articles, explosive, n.o.s. (Toy caps), 1.4S, PG II" or "NA0337, Toy caps, 1.4S, PG II" when offered for transportation by motor vehicle, rail freight, cargo vessel, and cargo aircraft. The toy plastic or paper caps must have been examined in conformance with § 173.56 and approved by the Associate Administrator for Hazardous Materials Safety. The SP specifies that the toy plastic or paper caps must be in the form of sheets, strips, rolls, or individual caps and further specifies the maximum average explosive composition of each cap. The SP also prescribes quantity limitations and packaging, segregation, and special marking requirements. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to add a new paragraph (a)(8) to § 172.400a to adopt the provisions of SP 8006 in its entirety.

Part 173

Section 173.12

Section 173.12 provides certain exceptions and authorizations for the transportation of waste materials. SP 11470 authorizes transportation by motor vehicle and cargo vessel of shrink-wrapped pallets containing boxes of waste ORM-D or limited quantity materials when marked with the word "WASTE" on the outside of the pallet instead of each individual box. The SP prescribes packaging and marking requirements for the waste materials. In addition, under a petition for rulemaking under petition number P-1611, COSTHA also requested that PHMSA adopt this SP into the HMR. Based on our review, the fact that transportation conducted under

this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to add a new paragraph (h) to § 173.12 to adopt the provisions of SP 11470 in its entirety.

Section 173.29

Section 173.29 prescribes certain requirements, exceptions, and authorizations for the transportation of empty packagings. SP 9610 provides relief from complete shipping papers and the placarding requirements of subpart F of part 172 for smokeless powder residue when transported by motor vehicle or railcar in "Container-on-flat-car" (COCF) or "Trailer-on-flat-car" (TOCF) service. The smokeless powder must be approved in conformance with § 173.56 as a Class 1 explosive substance. The SP prescribes packaging requirements, quantity limitations, operational controls, and a specific shipping description for the material. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to revise paragraph (f) of § 173.29 to adopt the provisions of SP 9610 in its entirety. We invite specific comment on the adoption of this SP pertaining to hazard communication.

Section 173.63

Section 173.63 provides certain packaging exceptions for the transportation of Class 1 (explosive) materials. SP 4850 authorizes Cord, detonating, or Fuse detonating, metal clad (UN0290, Div. 1.1D) to be renamed and reclassed as Cord, detonating, mild effect, or Fuse, detonating, mild effect, metal clad (UN0104, Div. 1.4D); and Charges, shaped, flexible, linear (UN0288, Div. 1.1D) to be renamed and reclassed "Charges, shaped, flexible, linear (UN0237,

Div. 1.4D) and transported by motor vehicle, railcar, cargo vessel, and cargo aircraft. The SP prescribes packaging requirements and quantity limitations. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to revise paragraph (a) of § 173.63 to adopt the provisions of SP 4850 in its entirety.

Section 173.156

Section 173.156 provides certain exceptions and authorizations for the transportation of limited quantities and other regulated materials (ORM). For transportation by railcar in trailer-on-flat-car (TOFC) or container-on-flat-car (COFC) service, or roadrailer and/or railrunner trailers or by motor vehicle, or cargo vessel SP 11458 authorizes display packs of consumer commodity packages that exceed 30 kg gross weight. See § 171.8 for a discussion of the proposed addition of the definition of "display pack." The SP prescribes packaging and marking requirements and quantity limitations. In addition, in a petition for rulemaking under petition number P-1607, COSTHA requested PHMSA adopt this SP into the HMR. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to add a new paragraph (c) to § 173.156 to adopt the provisions of SP 11458 in its entirety.

The proposed adoption of SP 11470 relating to exceptions for waste limited quantity and ORM-D materials is discussed in § 173.12. We are proposing to add a new paragraph (d) to § 173.156 to direct the reader to the proposed new paragraph (h) of § 173.12 which adopts the provisions of SP 11470.

Section 173.159

Section 173.159 prescribes packaging requirements for wet batteries. For transportation by motor vehicle, railcar, cargo vessel and passenger and cargo aircraft, SP 11078 excepts the transportation of nickel cadmium batteries containing potassium hydroxide, a Class 8 material from the other requirements of the HMR. The SP prescribes packaging requirements and quantity limitations. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to add a new paragraph (j) to § 173.159 to adopt the provisions of SP 11078 in its entirety.

Section 173.168

Section 173.168 prescribes specific approval, testing, protection, packaging, and equipment marking requirements for chemical oxygen generators. SP 11984 authorizes certain unapproved chemical oxygen generators with only one positive means of preventing unintentional actuation of the generator, and without the required approval number marked on the outside of the package, to be transported by motor vehicle, railcar, and cargo vessel. The SP prescribes packaging, testing and marking requirements. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are

proposing to add a new paragraph (g) to § 173.168 to adopt the provisions of SP 11984 in its entirety.

Section 173.184

Section 173.184 prescribes specific packaging requirements for the transportation of highway or rail fusees. Flagging kits transported on railroad motor vehicles including privately owned motor vehicles under the direct control of on-duty railroad employees, in conformance with SP 7991, are excepted from the requirements of the HMR. Flagging kits can only contain fusees and railroad torpedoes described as; Fusee (rail or highway) (NA1325, Division 4.1, PG II); Articles, pyrotechnic (UN0431, Division 1.4G, PG II); Signal devices, hand (UN0373, Division 1.4S, PG II); Signal devices, hand (UN0191, Division 1.4G, PG II); and Signals, railway track, explosive (UN0193, Division 1.4S, PG II). The SP prescribes packaging requirements, quantity limitations and operational controls. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to add a new paragraph (c) to § 173.184 to adopt the provisions of SP 7991 in its entirety.

Section 173.226

Section 173.226 prescribes specific packaging requirements for the transportation of Materials poisonous by inhalation, Division 6.1, Packing Group I, Hazard Zone A. When transported as prescribed in SP 11055, liquid hazardous materials in Division 6.1 Packing Group

I, Hazard Zone A are excepted from the segregation requirements of §§ 174.81, 176.83, and 177.848(d). The SP prescribes packaging and testing requirements, quantity limitations, and cushioning and absorbent material requirements. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to add a new paragraph (f) to § 173.226 to adopt the provisions of SP 11055 in its entirety.

Section 173.306

Section 173.306 provides exceptions for limited quantities of compressed gas. SP 13199 permits reconditioned (used) refrigerating machines (UN2857, Div. 2.2) to be transported under the requirements prescribed in § 173.306(e) and excepted from the marking requirements of § 172.302(c) when transported by motor vehicle, and meeting certain structure and Class A refrigerant gas weight requirements. The SP also prescribes operational controls and testing requirements. Section 173.306(e) currently permits only new (unused) refrigerating machines to be excepted from specification packaging, placarding, and certain rail and highway modal requirements. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to a add new paragraph (e)(2) to § 173.306 to adopt the provisions of SP 13199 in its entirety.

Section 173.322

Section 173.322 prescribes specific packaging requirements for the transportation of ethyl chloride. SP 14422 authorizes transportation by motor vehicle, railcar, or cargo vessel of four ounces or less of ethyl chloride, packaged in a DOT-2P or DOT-2Q container as a consumer commodity. The SP prescribes quantity limitations and packaging, testing and marking requirements. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in transportation while maintaining an equivalent level of safety, we are proposing to and add a new paragraph (f) to § 173.322 to adopt the provisions of SP 14422 in its entirety.

Part 174

Section 174.67

Section 174.67 establishes specific operational requirements for railroad tank car unloading. For combustible liquid or Class 3 liquid petroleum distillate fuels, SP 12002 authorizes clearing frozen liquid blockages from the outlet by attaching a fitting to the outlet line and applying nitrogen at a pressure of 50 to 100 psi. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in rail operations while maintaining an equivalent level of safety, we are proposing to revise paragraph (g) to § 174.67 to adopt the provisions of SP 12002 in its entirety.

Part 177

Section 177.820

SPs 11352, 12207, 12306, 13165, and 14945 authorize the movement of certain hazardous materials across public roads. Such movements are not subject to Subparts C

(Shipping Papers), D (Marking), E (Labeling), and F (Placarding) of Part 172. The SPs prescribe operational controls. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in rail operations while maintaining an equivalent level of safety, we are proposing to add a new § 177.820 to adopt the provisions of these SPs in their entirety.

Section 177.834

Section 177.834 establishes general operational requirements for transportation by highway. SPs 9874, 13190, 13424, 13959, 14141, 14150, 14680, 14822, 14827, and 14840 authorize "attendance" of the loading or unloading of a cargo tank by a qualified person observing all loading or unloading operations by means of a video monitor located at a remote control station. These SPs prescribe operational controls and specific requirements for the video monitoring system. Based on our review, the fact that transportation conducted under these SPs have an acceptable safety record, and adopting them would provide flexibility in operations while maintaining an equivalent level of safety, we are proposing to revise paragraph (i)(3) and (i)(4) of § 177.834 to adopt the provisions of these SPs in their entirety.

SPs 13484 and 14447 authorize "attendance" of the loading or unloading of a cargo tank through the use of hoses equipped with cable connected wedges, plungers, or flapper valves located at each end of the hose, able to stop the flow of product from both the source and the receiving tank within one second without human intervention in the event of a hose rupture, disconnection, or separation. The SPs prescribe inspection requirements and operational controls for use of the hoses. Based on our review, the fact that transportation conducted under these SPs have an acceptable safety record, and adopting them would provide flexibility in operations

while maintaining an equivalent level of safety, we are proposing to revise paragraphs (i)(3) and (i)(4) of § 177.834 to adopt the provisions of SPs 13484 and 14447 in their entirety.

SPs 10597, 10803, 10882, 14618, and 14726 authorize the use of diesel or propane fueled combustion cargo heaters in motor vehicles used to transport Class 3 (flammable liquid) or Division 2.1 (flammable gas) materials. The SPs prescribe operational controls for use of the heaters. Based on our review, the fact that transportation conducted under these SPs have an acceptable safety record, and adopting them would provide flexibility in operations while maintaining an equivalent level of safety, we are proposing to revise paragraph (l)(2)(i) of § 177.834 to adopt the provisions of these SPs in their entirety. In this NPRM, as the existing paragraph (l)(2)(ii) of § 177.834 relating to the Effective date for combustion heater requirements is obsolete, we are proposing its removal. In addition, we are also proposing the redesignation of paragraph (l)(2)(iii) of § 177.834 to paragraph (l)(2)(ii).

Section 177.838

Section 177.838 establishes specific operational requirements for the transportation of Class 4 (flammable solid) materials, Class 5 (oxidizing) materials, and Division 4.2 (self-heating and pyrophoric liquid) materials. Notwithstanding the segregation requirements of § 177.848(d), SP 11373 authorizes the transport on the same transport vehicle of Sodium hydrosulfite or sodium dithionite, UN1384, in Packing Group II or III; Thiourea dioxide, UN33341, in Packing Group II or III; and Self-heating, solid, organic, n.o.s., UN3088, in Packing Group II or III, with Class 8 materials. The SP prescribes packaging and separation requirements. Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in highway operations while maintaining an equivalent level

of safety, we are proposing to revise the title of § 177.838 and add a new paragraph (i) to § 177.838 to adopt the provisions of SP 11373 in its entirety.

Section 177.840

Section 177.840 establishes specific operational requirements for the transportation of Class 2 (gases) materials. Notwithstanding the segregation requirements of § 177.848(d), SP 11043 authorizes the transport on the same transport vehicle of Division 2.3, Hazard Zone A materials with materials classed as Division 2.1, Class 3, Class 4, Class 5, and Class 8. The SP prescribes packaging, marking, separation requirements.

Notwithstanding the segregation requirements of § 177.848(d), SP 14335 authorizes the transport on the same transport vehicle of Division 2.3, Hazard Zone A materials with specification non-bulk packagings and IBCs containing only the residue of Division 2.1, 4.3, 5.1, and Class 3 and 8 materials. The SP prescribes separation and securement requirements, operational controls, quantity limitations, and carrier safety rating requirements.

Based on our review, the fact that transportation conducted under these SPs have an acceptable safety record, and adopting them would provide flexibility in highway operations while maintaining an equivalent level of safety, we are proposing to add a new paragraph (a)(3) to § 177.840 to adopt the provisions of SPs 11043 and 14335 in their entirety.

Section 177.841

Section 177.841 establishes specific operational requirements for the transportation of Division 6.1 and Division 2.3 materials. Notwithstanding the segregation requirements of

§ 177.848(d), SP 11151 authorizes transportation by highway by private or contract motor carrier of Division 6.1 Packing Group I, Hazard Zone A materials meeting the definition of a hazardous waste as provided in § 171.8 on the same transport vehicle with materials classed as Class 3, Class 4, Class 5, and Class 8. The Division 6.1 Packing Group I, Hazard Zone A materials must be loaded on pallets and separated from the Class 3, Class 4, Class 5, and Class 8 materials by a minimum horizontal distance of 2.74 m (9 feet). Based on our review, the fact that transportation conducted under this SP has an acceptable safety record, and adopting it would provide flexibility in highway operations while maintaining an equivalent level of safety, we are proposing to add a new paragraph (f) to § 177.841 to adopt the provisions of SP 11151 in its entirety.

F. Non-Bulk Packaging Specifications/IBCs

Part 172

Section 172.101

The § 172.101 HMT designates the materials listed therein as hazardous materials for the purpose of transportation of those materials. For each listed material, the HMT identifies the hazard class or specifies that the material is forbidden in transportation, and gives the proper shipping name or directs the user to the preferred proper shipping name. In addition, the HMT specifies or references requirements in this subchapter pertaining to labeling, packaging, quantity limits aboard aircraft, and stowage of hazardous materials aboard vessels. We are proposing to revise several entries in the HMT to adopt SPs relating to non-bulk packagings and IBCs. Specifically, for "UN1415, Lithium," "UN2257, Potassium," "UN3190, Self-heating solid, inorganic, n.o.s.," "UN1428, Sodium," "UN1381, Phosphorus, yellow, under water" and

"UN2813, Water-reactive solid, n.o.s." for Packing Groups II and III, we are proposing to add a reference to § 173.151 to provide packaging exceptions for relevant Hazard Class 4 materials. These proposed revisions are discussed below.

Part 173

Section 173.62

Section 173.62 provides specific packaging requirements for explosives. DOT-SP 12335 authorizes the transportation in commerce by motor vehicle, cargo vessel, and cargo aircraft when authorized in the HMT and passenger-carrying aircraft, when authorized for carriage by hazmat table and used exclusively to transport personnel to remote work sites of certain Division 1.1D and 1.4D detonating cords without the ends being sealed in alternative packaging, provided that the inner packaging containing the detonating cord is made of a static-resistant plastic bag of at least 3 mil thickness and the bag is securely closed for transportation. We have noted nine violations related to shipments moving under DOT-SP 12335. However, the violations did not involve safety issues with the permit. Thus, we propose to adopt the provisions of the SP in its entirety in § 173.62.

Section 173.150

Section 173.150 provides exceptions from the HMR for certain Class 3 flammable liquid material. This section includes exceptions for limited quantities, consumer commodities,

alcoholic beverages, aqueous solutions of alcohol and combustible liquids. In this NPRM, PHMSA is proposing to add a paragraph (h) to include an exception that would permit Diesel fuel (UN1202 or NA1993) and Gasoline (UN1203) to be transported one way, by motor vehicle, directly from the loading location to an equipment repair facility in non-specification non-bulk packaging, known as a gasoline dispenser.. Specifically, shipments wishing to use this exception would be required to transport the material in a gasoline dispenser and prior to loading, each dispenser must be capped or plugged all product inlet and outlet piping, so that no fluid may be released during transportation. Furthermore, no dispenser may contain more than 2 gallons of gasoline, and each dispenser must be blocked, braced or strapped to the motor vehicle to prevent movement during transportation. This revision is proposed to adopt DOT-SP 13217. Based on our review, the fact the SP has no violations or reported incidents, and adopting it would expand the general applicability in a safe manner, we are proposing to adopt its provisions in its entirety in § 173.150.

Section 173.151

Section 173.151 provides exceptions for Class 4 materials. In this NPRM we are proposing to add new paragraph (e) that would except "Lithium, UN1415," "Potassium, UN2257," and "Sodium, UN1428," with a net quantity of material per inner packaging not exceeding 25 grams, from the labeling requirements of Part 172, Subpart E and the placarding requirements of Part 172 Subpart F, if they are offered for transportation or transported in the packagings with conditions set forth in that paragraph. We are also establishing new paragraph (f) to authorize shipment of Self-heating solid, inorganic, n.o.s, in unlined, non-DOT specification multi-wall paper bags containing a maximum of 55 pounds (net) weight. We are

further adding new paragraph (g) to authorize Water reactive solid, n.o.s. (contains magnesium, magnesium nitrides) in Packing Group II or III to be contained in sift-proof bulk packagings. These revisions would adopt DOT-SP 11602, 13796, and 15373.

DOT-SP 11602 authorizes the transportation in commerce of certain Division 4.3 materials contained in sift-proof closed bulk packagings that prevent that prevent water from reaching the hazmat and have sufficient venting to preclude a dangerous accumulation of gaseous emissions. Based on our review, the fact the SP has no violations or reported incidents, and adopting it would expand the general applicability in a safe manner, we are proposing to adopt its provisions in its entirety in § 173.151.

DOT-SP 13796 authorizes the transportation in commerce of "UN1381, Phosphorus, yellow, under water," in a 30 gallon UN 1A2 steel drum certified as a minimum to the PG I performance level for solids and the PG II performance level for liquids and as a minimum dual marked as a UN1A2/X400/S (for solid) and UN1A2 Y/1.4/150 (for liquids). Based on our review, the fact the SP has no violations or reported incidents, and that its adoption would expand the general applicability in a safe manner, we are proposing to adopt its provisions in its entirety in § 173.151.

DOT-SP 15373 authorizes the manufacture, mark, sale and use of the specially designed combination packagings described herein for transportation in commerce of "UN1415, Lithium," "UN2257, Potassium,," and "UN1428, Sodium8," without hazard labels or placards, with quantity limits not exceeding 25 grams. Based on our review, the fact the SP has no violations or reported incidents, and adopting it would expand the general applicability in a safe manner, we are proposing to adopt its provisions in its entirety in § 173.151.

Section 173.154

Section 173.154 provides exceptions for Class 8, corrosive materials. We are proposing to establish a new paragraph (b)(3) to authorize polyethylene bottles with rated capacities of one gallon (3.785 liters), packed inside an open-top, heavy wall, high density polyethylene box for shipping Packing Group II and III corrosives. We are also proposing to establish new paragraph (e) to authorize hydrochloric acid concentration not exceeding 38%, in Packing Group II to be contained in UN31H1 or UN31HH1 intermediate bulk containers when loaded in accordance with the requirements of § 173.35(h). These revisions would adopt DOT-SP 6614, 12030, and 14137.

DOT-SP 6614 authorizes the use of polyethylene bottles placed in a polyethylene crate for the transportation in commerce of "Compounds, cleaning liquid (consisting of solutions containing potassium hydroxide, hydrochloric acid or phosphoric acid), NA1760, PG II or III," "Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide), PG II, and Corrosive liquid, basic, inorganic, n.o.s. (Sodium hydroxide), PG II, UN3266," "Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid and Nitric acid), UN3264, PG II" "Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid), UN3265, PG III" "Hypochlorite solutions, UN1791, PG III," "Hydrochloric acid solution (with not over 32% strength), UN1789,PG II" and "Sulfuric acid (with not more than 51% acid), UN2796, PG II." PHMSA has on file sixty-seven violations related to shipments moving under DOT-SP 6614. However, the violations did not involve safety issues with the permit. We are proposing to adopt the permit, and extend it to all corrosive materials of Packing Groups II or III based on the history of no violations involving safety issues and no reported incidents.

DOT-SP 12030 authorizes the transportation in commerce of a combination packaging with a maximum gross weight not over 37.0 kg, consisting of one UN6HG2 composite packaging containing battery fluid and one UN4G fiberboard box containing a dry storage battery. The UN6HG2 composite packaging has a maximum capacity of 8.0 liters and is marked as meeting the requirement for Packaging Group II. Based on our review, the fact the SP has no violations or reported incidents, and adopting it would expand the general applicability in a safe manner, we are proposing to adopt its provisions in its entirety in a new paragraph (f) in § 173.154.

DOT-SP 14137 authorizes the transportation in commerce of certain hydrochloric acid solutions in UN31H1 or UN31HH1 when loaded in conformance with the requirements in § 173.35(h) and the hydrochloric acid concentration does not exceed 38%. Based on our review, the fact the SP has no violations or reported incidents, and adopting it would expand the general applicability in a safe manner, we are proposing to adopt its provisions in its entirety in § 173.154.

Section 173.158

Section 173.158 provides general requirements and exceptions for shipments and packagings of nitric acid. In this NPRM, we are proposing to establish a new paragraph (i) to authorize "Nitric acid of up to 40% concentration" in a UN1H1 non-removable head plastic drums with certain conditions set forth in that paragraph and add new paragraph (j) for the transportation of "Nitric acid, other than red fuming, with more than 70% nitric acid" and "Nitric acid, other than red fuming, with not more than 70% nitric acid" in a combination packaging

when offered for transportation or transported by rail, highway, or cargo vessel. These proposed revisions would adopt DOT-SP 8230 and 14213.

DOT-SP 8230 authorizes the transportation in commerce of Packing Groups I and II nitric acids in certain combination packagings by motor vehicle, rail freight, cargo vessel and cargo-only aircraft. Specifically, "Nitric acid, other than red fuming, with more than 70% nitric acid" and "Nitric acid, other than red fuming, with not more than 70% nitric acid" is authorized to be transported in inner plastic bottles in rigid foam plastic receptacles or plastic bags lined absorbent material in outer packagings. Based on our review, the fact the SP has no violations or reported incidents, and adopting it would expand the general applicability in a safe manner, we are proposing to adopt its provisions in its entirety in § 173.158.

DOT-SP 14213 authorizes the manufacture, marking, sale and use of UN1H1 plastic drums to be used for the transportation in commerce of nitric acid with not more than 40% nitric acid. Based on our review, the fact the SP has no violations or reported incidents, and adopting it would expand the general applicability in a safe manner, we are proposing to adopt its provisions in its entirety in § 173.158.

Section 173.159

Section 173.159 provides packaging and shipping specifications and exceptions for wet batteries. We are proposing to revise paragraph (e) to include both shipments of electric storage batteries containing electrolyte or corrosive battery fluid, and electric storage batteries and battery acid. This change would adopt DOT-SP 13548.

DOT-SP 13548 authorizes the transportation in commerce of lead acid batteries and packages of battery acid with two different UN numbers on the same motor vehicle with the

packages secured against movement. Based on our review, the fact the SP has no violations or reported incidents, and adopting it would expand the general applicability in a safe manner, we are proposing to adopt its provisions in its entirety in § 173.159.

Section 173.181

Section 173.181 sets forth packaging and shipping requirements for Pyrophoric materials (liquids). In this NPRM, we are proposing to add new paragraph (d) to authorize the transportation in commerce of certain pyrophoric materials in a combination package consisting of UN1A2 outer package and a UN1A1 inner package. This revision would adopt DOT-SP 12920.

DOT-SP 12920 authorizes the transportation in commerce of certain pyrophoric materials in a combination package consisting of UN1A2 outer package and a UN1A1 inner package, with no more than two (2) inner drums placed inside the outer drum. PHMSA has on file six violations related to shipments moving under DOT-SP 12920. However, the violations did not involve safety issues with the permit; rather, they pertained to non-compliance with the permit or the HMR. Based on our review, the fact the SP has no violations involving safety issues with the permit and no reported incidents, and adopting it would expand the general applicability in a safe manner, we are proposing to adopt its provisions in its entirety in § 173.181.

V. Regulatory Analyses and Notices

A. Statutory/Legal Authority for this Rulemaking

This rulemaking is issued under the authority of the Federal hazardous materials transportation law (49 U.S.C. 5101 et seq.). Section 5103(b) authorizes the Secretary of

Transportation to prescribe regulations for the safe transportation, including security, of hazardous materials in intrastate, interstate, and foreign commerce. This rulemaking proposes adoption of certain special permits into the hazardous materials regulations.

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

This proposed rulemaking is not considered a significant regulatory action under Executive Order 12866 ("Regulatory Planning and Review"), as supplemented and reaffirmed by Executive Order 13563 ("Improving Regulation and Regulatory Review"), stressing that, to the extent permitted by law, an agency rulemaking action must be based on benefits that justify its costs, impose the least burden, consider cumulative burdens, maximize benefits, use performance objectives, and assess available alternatives, and the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034). Executive Orders 12866 and 13563 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."

Executive Order 13610, issued May 10, 2012, urges agencies to conduct retrospective analyses of existing rules to examine whether they remain justified and whether they should be modified or streamlined in light of changed circumstances, including the rise of new technologies. By building off of each other, these three Executive Orders require agencies to regulate in the "most cost-effective manner," to make a "reasoned determination that the benefits of the intended regulation justify its costs," and to develop regulations that "impose the least burden on society."

In this notice of proposed rulemaking, PHMSA is proposing to amend the HMR to adopt provisions contained in certain widely-used or long-standing SPs that have an established safety record. The proposed revisions are intended to provide wider access to the regulatory flexibility offered in SPs and eliminate the need for numerous renewal requests, thus reducing paperwork burdens and facilitating commerce while maintaining an appropriate level of safety. PHMSA assumes that for most regulated entities in these categories, the revisions proposed in this notice of proposed rulemaking requires little or no change to existing practice or behavior and incremental compliance costs will thus be close to zero. At the same time, the potential for additional safety benefits is also very limited in these cases, as existing practice and operations are already minimizing the number of incidents.

Estimated benefits associated with this rule result from the regulated community no longer being required to apply for SP sand amount to approximately $12,000 annually. Costs associated with the rule are estimated to be negligible annually. Current SP holders are already complying with the proposed requirements and, if adopted, these requirements would not impose new requirements on current non-holders of SPs. The overall costs and benefits of the rule are dependent on the level of pre-existing compliance and the overall effectiveness of the new requirements specified in this rulemaking

C. Executive Order 13132

This notice of proposed rulemaking has been analyzed in accordance with the principles and criteria contained in Executive Order 13132 ("Federalism"), 64 FR 43255 (Aug. 10. 1999) and the President's May 20, 2009 memorandum (74 FR 24693 [May 22, 2009]). The requirements in this proposed rule would preempt state, local, and Indian tribe requirements but would not have substantial direct effects on the States, the relationship between the national

government and the States, or the distribution of power and responsibilities among the various levels of government. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

The Federal hazardous materials 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 the following subjects:

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

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

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

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

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

Federal hazardous materials transportation law provides at 49 U.S.C. 5125(b)(2) that, if DOT issues a regulation concerning any of these subjects, DOT must determine and publish in the Federal Register the effective date of Federal preemption. The effective date may not be earlier than the 90th day following the date of issuance of the final rule and not later than 2 years after the date of issuance.

This proposed rule would address subject areas (1), (2), (3), and (5) above and would preempt any state, local, or Indian tribe requirements concerning these subjects unless the non-

Federal requirements are “substantively the same” as the Federal requirements. The effective date of Federal preemption is [INSERT DATE 90 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

D. Executive Order 13175

This notice of proposed rulemaking has been analyzed in accordance with the principles and criteria contained in Executive Order 13175 ("Consultation and Coordination with Indian Tribal Governments"). Because this NPRM does not have tribal implications and does not impose substantial direct compliance costs, the funding and consultation requirements of Executive Order 13175 do not apply.

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

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires an agency to review regulations to assess their impact on small entities unless the agency determines that a rule is not expected to have a significant impact on a substantial number of small entities. The primary costs to small entities associated with this proposed rule include developing and updating a risk assessment, developing and updating operating procedures, and additional training for hazmat employees who perform loading and unloading operations.

PHMSA expects the impacts of this rule will be limited for many small entities due to their compliance with other existing Federal regulations. In this notice of proposed rulemaking, PHMSA also explicitly acknowledges that many regulated entities are holders of SPs or are part of industry associations with voluntary codes of safe practice, and that these may be sufficient for compliance with the proposed rule as long as all of the relevant safety areas are addressed and documented. For regulated entities in these categories, the notice of proposed rulemaking requires little or no change to existing practices or behavior and incremental compliance costs

will thus be close to zero. Therefore, the benefit and cost figures discussed below should be viewed as upper bounds, both of which will be reduced by the extent of current practice.

PHMSA estimates that there are 50 potentially affected small entities. The annualized documentation cost for developing and updating the risk assessment and the operating procedures is estimated to be $375/small entity. The annualized cost of additional training for affected employees is estimated to be approximately $5.50/employee. Further, PHMSA estimates that approximately 50% of small businesses are already implementing procedures that would be compliant with this notice of proposed rulemaking. Based upon the above estimates and assumptions, PHMSA certifies that this notice of proposed rulemaking does not have a significant economic impact on a substantial number of small entities. Further information on the estimates and assumptions used to evaluate the potential impacts to small entities is available in the Regulatory Impact Assessment that has been placed in the public docket for this rulemaking.

F. Paperwork Reduction Act

PHMSA currently has an approved information collection under OMB Control No. 2137-0051, entitled "Special Permits and Approvals," expiring on May 31, 2015. Section 1320.8(d), Title 5, Code of Federal Regulations, requires PHMSA to provide interested members of the public and affected agencies an opportunity to comment on information collection and recordkeeping requests. This rulemaking adds new exceptions to the HMR while eliminating the need for persons to apply for a SP, resulting in a decrease in burden. PHMSA estimates the reduction in information collection burden as follows:

Decrease in Annual Number of Respondents:	98
Decrease in Annual Responses:	98
Decrease in Annual Burden Hours:	196
Decrease in Annual Burden Cost:	$12,337.00

There are 728 grantees associated with the 98 special permits being proposed for adoption in this rulemaking. Over 10 years, a SP would on average be renewed twice, resulting in 1,456 renewals (728 x 2). The average number of applications per year would be approximately 146 (1,456 / 10). The annual estimated cost savings would total $12,337.00 (146 number of renewals per year x $39.50/hr. preparation cost; 146 renewals per year x $45.00/hr compliance cost).

Please direct your requests for a copy of this final information collection to Steven Andrews or T. Glenn Foster, Office of Hazardous Materials Standards (PHH-12), Pipeline and Hazardous Materials Safety Administration, 1200 New Jersey Avenue, S.E., 2nd Floor, Washington, D.C., 20590-0001.

G. Regulation Identifier Number (RIN)

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

H. Unfunded Mandates Reform Act

This notice of proposed rulemaking does not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. PHMSA has concluded that the rule will not impose

annual expenditures of $141.3 million on State, local, or tribal governments or the private sector, and thus does not require an Unfunded Mandates Act analysis.

I. Executive Order 13609 and International Trade Analysis

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

Similarly, the Trade Agreements Act of 1979 (Public Law 96-39), as amended by the Uruguay Round Agreements Act (Public Law 103-465), prohibits Federal agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. For purposes of these requirements, Federal agencies may participate in the establishment of international standards, so long as the standards have a legitimate domestic objective, such as providing for safety, and do not operate to exclude imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards.

PHMSA participates in the establishment of international standards in order to protect the safety of the American public, and we have assessed the effects of the proposed rule to ensure that it does not cause unnecessary obstacles to foreign trade. Accordingly, this rulemaking is

consistent with E.O. 13609 and PHMSA's obligations under the Trade Agreement Act, as amended.

J. Environmental Assessment

PHMSA proposes to adopt provisions contained in certain widely-used or long-standing SPs that have an established safety record. The proposed revisions are intended to provide wider access to the regulatory flexibility offered in SPs and eliminate the need for numerous renewal requests, thus reducing paperwork burdens and facilitating commerce while maintaining an appropriate level of safety.

The National Environmental Policy Act (NEPA), 42 USC 4321 – 4375, requires that federal agencies analyze proposed actions to determine whether the action will have a significant impact on the human environment. The Council on Environmental Quality (CEQ) regulations order federal agencies to conduct an environmental review considering (1) the need for the proposed action (2) alternatives to the proposed action (3) probable environmental impacts of the proposed action and alternatives and (4) the agencies and persons consulted during the consideration process. 40 CFR 1508.9(b). A detailed NEPA assessment has been placed in the docket for this rulemaking for public review.

K. Privacy Act

Anyone is able to search the electronic form of any written communications and comments received into any of our dockets by the name of the individual submitting the document (or signing the document, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477) which may be viewed at: http://www.gpo.gov/fdsys/pkg/FR-2000-04-11/pdf/00-8505.pdf.

L. National Technology Transfer and Advancement Act

The National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) directs federal agencies to use voluntary consensus standards in their regulatory activities unless doing so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g. specification of materials, test methods, or performance requirements) that are developed or adopted by voluntary consensus standard bodies.

This proposed rulemaking does not involve voluntary consensus standards.

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, 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, Incorporation, Radioactive materials, and Railroad safety.

49 CFR Part 176

Hazardous materials transportation, Maritime carriers, Radioactive materials, Reporting and recordkeeping requirements.

49 CFR Part 177

Hazardous materials transportation, Motor carriers, Radioactive materials, Reporting and recordkeeping requirements.

49 CFR Part 178

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

49 CFR Part 180

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

In consideration of the foregoing, 49 CFR Chapter I is proposed to be amended 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; 101, section 4 (28 U.S.C. 2461 note); Pub. L. 104-121, sections 212-213; Pub. L. 104-134, section 31001; 49 CFR 1.81 and 1.97.

2. In § 171.8, the definition of "Display pack" is added in alphabetical sequence to read as follows:

§ 171.8 Definitions and abbreviations.

* * * * *

Display pack means a package intended to be placed at retail stores which provides direct customer access to consumer commodities contained within the package when all or part of the outer fiberboard packaging is removed.

* * * * *

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

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

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

4. In § 172.101, the Hazardous Materials Table is amended by revising entries under "[REVISE]" in the appropriate alphabetical sequence to read as follows:

§ 172.101 Purpose and use of hazardous materials table.

* * * * *

§ 172.101 HAZARDOUS MATERIALS TABLE

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identification Numbers	PG	Label Codes	Special Provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations		(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	[REVISE]												
	*		*		*		*		*		*		*
	Acrolein, stabilized	6.1	UN1092	I	6.1, 3	1, B9, B14, B30, B42, B77, T22, TP2, TP7, TP13, TP38, TP44, 380	None	226	244	Forbidden	Forbidden	D	40
	*		*		*		*		*		*		*
G	Articles, explosives, n.o.s.	1.4S	UN3049	II	1.4S	101, 382	None	62	None	25 kg	100 kg	01	25
	*		*		*		*		*		*		*
	Articles, pyrotechnic *for technical purposes*	1.4G	UN0431	II	1.4G	381	None	62	None	Forbidden	75 kg	02	25
	*		*		*		*		*		*		*
+	Benzaldehyde	9	UN1990	III	9	IB3, T2, TP1, W11	155	203	241	100 L	220 L	A	
	*		*		*		*		*		*		*
	Coating solution (*includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining*)	3	UN1139	II	3	149, IB2, T4, TP1, TP8, 383	150	202	242	5 L	60 L	B	
	*		*		*		*		*		*		*
G	Corrosive liquid, acidic, inorganic, n.o.s	8	UN3264	I	8	A6, B10, T14, TP2, TP27	None	201	243	0.5 L	2.5 L	B	40
				II	8	B2, IB2, T11, TP2, TP27, W11	154	202	242	1 L	30 L	B	40
				III	8	IB3, T7, TP1, TP28, W11	154	203	241	5 L	60 L	A	40
G	Corrosive liquid, acidic, organic, n.o.s.	8	UN3265	I	8	A6, B10, T14, TP2, TP27	None	201	243	0.5 L	2.5 L	B	40
				II	8	B2, IB2, T11, TP2, TP27, W11	154	202	242	1 L	30 L	B	40

				III	8	IB3, T7, TP1, TP28, W11	154	203	241	5 L	60 L	A	40
	*		*		*		*		*		*		*
G	Environmentally hazardous substance, solid, n.o.s	9	UN3077	III	9	8, 146, 335, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33, 384	155	213	240	No limit	No limit	A	
	*		*		*		*		*		*		*
	Extracts, flavoring, liquid	3	UN1197	II	3	149, IB2, T4, TP1, TP8, W11	150	202	242	5 L	60 L	B	
				III	3	B1, IB3, T2, TP1, W11	150	203	242	60 L	220 L	A	
	*		*		*		*		*		*		*
	Fireworks	1.4S	UN0337	II	1.4S	108, 382	None	62	None	25 kg	100 kg	01	25
	*		*		*		*		*		*		*
G	Flammable liquids, corrosive, n.o.s.	3	UN2924	I	3, 8	T14, TP2	None	201	243	0.5 L	2.5 L	E	40
				II	3, 8	IB2, T11, TP2, TP27	150	202	243	1 L	5 L	B	40
				III	3, 8	B1, IB3, T7, TP1, TP28, W11	150	203	242	5 L	60 L	A	40
	*		*		*		*		*		*		*
D	Fusee (*railway or highway*)	4.1	NA1325	II	4.1	381	None	184	None	15 kg	50 kg	B	
	*		*		*		*		*		*		*
	Lithium	4.3	UN1415	I	4.3	A7, A19, IB4, IP1, N45	151	211	244	Forbidden	15 kg	E	52
	*		*		*		*		*		*		*
D G	Other regulated substances, solid, n.o.s.	9	NA3077	III	9	B54, IB8, IP2, T1, TP33, 384	155	213	240	No limit	No limit	A	
	*		*		*		*		*		*		*
	Paint *including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base*	3	UN1263	II	3	149, B52, IB2, T4, TP1, TP8, TP28, 383	150	173	242	5 L	60 L	B	
	*		*		*		*		*		*		*

	Petroleum gases, liquefied *or* Liquefied petroleum gas	2.1	UN1075		2.1	T50, N95	306	304	314, 315	Forbidden	150 kg	E	40
	*		*		*		*		*		*		*
	Phosphoric acid solution	8	UN1805	III	8	A7, IB3, N34, T4, TP1, W11	154	203	241	5 L	60 L	A	
	*		*		*		*		*		*		*
	Phosphorus, white dry *or* Phosphorus, white, underwater *or* Phosphorus white , in solution *or* Phosphorus, yellow, dry *or* Phosphorus, yellow, under water *or* Phosphorus, yellow, in solution	4.2	UN1381	I	4.2, 6.1	B9, B26, N34, T9, TP3, TP31	151	188	243	Forbidden	Forbidden	E	
	*		*		*		*		*		*		*
	Potassium	4.3	UN2257	I	4.3	A7, A19, A20, B27, IB4, IP1, N6, N34, T9, TP7, TP33	151	211	244	Forbidden	15 kg	D	52
	*		*		*		*		*		*		*
	Propane, *see also* Petroleum gases, liquefied	2.1	UN1978		2.1	19, T50, N95	306	304	314, 315	Forbidden	150 kg	E	40
	*		*		*		*		*		*		*
G	Self-heating solid, inorganic, n.o.s.	4.2	UN3190	II	4.2	IB6, IP2, T3, TP33	151	212	241	15 kg	50 kg	C	
				III	4.2	IB8, IP3, T1, TP33	151	213	241	25 kg	100 kg	C	
	*		*		*		*		*		*		*
G	Self-heating solid, organic, n.o.s.	4.2	UN3088	III	4.2	IB8, IP3, T1, TP33, B130	None	213	241	25 kg	100 kg	C	
	*		*		*		*		*		*		*
	Signal devices, hand	1.4G	UN0191	II	1.4G	381	None	62	None	Forbidden	75 kg	02	25
	*		*		*		*		*		*		*
	Signal devices, hand	1.4S	UN0373	II	1.4S	381	None	62	None	25 kg	100 kg	01	25
	*		*		*		*		*		*		*
	Signals, railway track, explosive	1.4S	UN0193	II	1.4S	381	None	62	None	25 kg	100 kg	01	25
	*		*		*		*		*		*		*

	Sodium	4.3	UN1428	I	4.3	A7, A8, A19, A20, B9, B48, B68, IB4, IP1, N34, T9, TP7, TP33, TP46	151	211	244	Forbidden	15 kg	D	52
	*	*		*			*		*		*		*
	Trinitroresorcinol, wetted *or* Styphnic acid, wetted *with not less than 20 percent water, or mixture of alcohol and water by mass*	1.1D	UN0394	II	1.1D	385	None	62	None	Forbidden	Forbidden	04	25, 5E
	*	*		*			*		*		*		*
G	Water-reactive solid, n.o.s.	4.3	UN2813	I	4.3	IB4, N40, T9, TP7, TP33	None	211	242	Forbidden	15 kg	E	40
				II	4.3	IB7, IP2, T3, TP33	151	212	242	15 kg	50 kg	E	40
				III	4.3	IB8, IP4, T1, TP33	151	213	241	25 kg	100 kg	E	40

* * * * *

5. In § 172.102:

   a. In paragraph (c)(1), special provisions 380, 381, 382, 383, 384, and 385 are added in numerical sequence.

   b. In paragraph (c)(3), special provision B130 is added in numerical sequence.

   c. In paragraph (c)(5), special provision N95 is added in numerical sequence.

   d. In paragraph (c)(9), special provision W11 is added in numerical sequence.

   The additions are to read as follows:

§ 172.102 Special Provisions.

* * * * *

(c) * * *

(1) * * *

380 For transportation by private carrier in a motor vehicle, acrolein, stabilized is not subject to the segregation requirements of § 177.848(d) of this subchapter if the following requirements are met:

a. The material is packaged in a DOT Specification 4BW240 cylinder, or in a DOT 51 portable tank.

b. The material may only be loaded with Class 3, Class 8, and Division 4.1 materials in Packing Group II or III.

c. The motor carrier must maintain a "satisfactory" safety rating as prescribed in part 385 of this title.

381 For railroad flagging kits, see § 173.184 (c) of this subchapter.

382 When packaged as prescribed in § 172.400a(a)(8), a package containing this material is excepted from the labeling requirements of § 172.400(a) of this subchapter.

383 For transportation by motor vehicle, material meeting the conditions for high viscosity flammable liquids specified in § 173.121(b)(1)(i), (b)(1)(ii), and (b)(1)(iv), may be re-classed to Packing Group III. Packaging must be UN standard metal drums attached with heavy duty steel strapping to a pallet. The capacity of each drum must not exceed 220 L (58 gallons).

384 For green graphite electrodes and shapes that are large single component solid objects not subject to sifting, transport in open rail flat cars, open bed motor vehicles, and intermodal containers is also authorized. The objects must be secured to the flat car, motor vehicle, intermodal container, or unitized by steel banding to wooden runners or pallets and the units secured to the flat car, motor vehicle, or freight container to prevent shifting and movement, including relative motion between the objects, under conditions normally incident to transportation.

385 Notwithstanding the provisions of § 177.834(l) of this subchapter, cargo heaters may be used when weather conditions are such that the freezing of a wetted explosive material is likely. Shipments must be made by private, leased or contract carrier vehicles under exclusive use of the offeror. Cargo heaters must be reverse refrigeration (heat pump) units. Shipments made in accordance with this Special provision are excepted from the requirements of § 173.60(b)(4) of this subchapter.

(3) * * *

* * * * *

B130 When transported by highway, used diatomaceous earth filter material is not subject to any other provisions of this subchapter except for the shipping paper requirements of subpart C of part 172 of this subchapter; emergency response information as required by § 172.602(a)(2) through (a)(7) of this subchapter; and the marking requirements of § 172.302(a) of this subchapter, if the following requirements are met:

(a) Packagings are non-DOT specification sift-proof motor vehicles or sift-proof roll-on/roll-off bulk bins, which are covered by a tarpaulin or other equivalent means.

(b) The temperature of the material at the time it is offered for transport and during transportation may not exceed 55 °C (130 °F).

(c) The time between offering the material for transportation at the point of origin, and unloading the material at the destination does not exceed 48 hours.

(d) In addition to the training requirements specified by §§ 172.700 through 172.704, each driver of a vehicle transporting hazardous materials must be trained regarding the properties and hazards of diatomaceous earth filter material, precautions to ensure safe transport of the material, and actions to be taken in the event of an emergency during transportation, or a

substantial delay in transit, and

(5) * * *

* * * * *

N95 Non-bulk packagings containing UN1075, Liquefied petroleum gas and UN1978, Propane are authorized to be transported in DOT 4BA240 cylinders and are not required to be marked with the UN number and proper shipping name or bear hazard labels provided:

a. The cylinder must be transported in a closed motor vehicle with the FLAMMABLE GAS placards.

b. Shipping papers must reflect a correct current accounting of all cylinders both full and expended.

c. The cylinders are collected and transported by a private or a contract carrier for reconditioning, reuse or disposal.

d. Cylinders must be secured in the vehicle in accordance with § 177.834(a).

(9) * * *

* * * * *

W11 Notwithstanding the requirements of § 172.800 and § 176.83(d), entries assigned this special provision, when offered for transportation by water, may be offered in the same transport unit with foodstuffs and cargo of an organic nature provided a distance of 3 m (10 ft) is maintained between the hazardous materials and foodstuffs or cargo of an organic nature. Class 8 (corrosive) materials assigned this special provision may also be stowed above packages of flammable liquids also assigned this special provision.

* * * * *

7. In 172.202 paragraph (c)(1) is added to read as follows:

§ 172.202 Description of hazardous material on shipping papers.

* * * * *

(c) * * *

(1) During local collections operations, hazardous materials and hazardous substances transported by highway that are "household wastes" as described in 40 CFR 261.4 and not subject to the Environmental Protection Agency's hazardous waste regulations in 40 CFR, Parts 262 and 263 are excepted from the requirements of this paragraph.

* * * * *

8. In 172.315 paragraph (a)(3) is added to read as follows:

§ 172.315 Limited quantities.

(a) * * *

(3) Except for, Classes 1, and 7, and Division 6.1 and 6.2 materials, for transportation by highway by private carrier, the limited quantity marking is not required to be displayed on a package containing materials assigned to Packing Groups II and III prepared in accordance with the limited quantity requirements in part 173 of this subchapter provided:

(i) Inner packagings for liquid hazardous materials do not exceed 1.0 L (0.3 gallons) net capacity each;

(ii) Inner packagings for solid hazardous materials do not exceed 1.0 kg (2.2 pounds) net capacity each;

(iii) No more than 2 L (0.6 gallons) or 2 kg (4.4 pounds) aggregate net quantity of any one hazardous material may be transported in one vehicle; and

(iv) The maximum gross weight of the packages must not exceed 60 kg (132 pounds) per vehicle.

(v) Each package is marked with the name and address of the offeror, a 24-hour emergency response phone number and the statement "Contains Chemicals" in letters at least one-inch high on a contrasting background.

* * * * *

9. In § 172.400a, paragraph (a)(1) is revised and paragraph (a)(8) is added to read as follows:

§ 172.400a Exceptions from labeling.

(a) * * *

(1) A Dewar flask meeting the requirements in § 173.320 of this subchapter or a cylinder containing a Division 2.1, 2.2, or 2.3 material that is durably and legibly marked in accordance with CGA C–7, Appendix A (IBR; see § 171.7 of this subchapter).

* * * * *

(8) Toy plastic or paper caps for toy pistols described as "UN0349, Articles, explosive, n.o.s. (Toy caps), 1.4S, PG II" or "NA0337, Toy caps, 1.4S, PG II" offered for transportation by motor vehicle, rail freight, cargo vessel, and cargo aircraft in conformance with the following conditions:

(i) The toy plastic or paper caps must be in the form of sheets, strips, rolls, or individual caps;

(ii) The caps must not contain more than an average of twenty-five hundredths of a grain of explosive composition per cap;

(iii) The caps must be packed inside packagings constructed of cardboard not less than 0.013-inch in thickness, metal not less than 0.008-inch in thickness, non-combustible plastic not less than 0.015-inch in thickness, or a composite blister package consisting of cardboard not less than 0.013-inch in thickness and non-combustible plastic not less than 0.005-inch in thickness that completely encloses the caps;

(iv) The minimum dimensions of each side and each end of the cardboard packaging must be 1/8th inch in height or more;

(v) The number of caps inside each packaging must be limited so that not more than 10 grains of explosives composition may be packed into one cubic inch of space, and not more than 17.5 grains of the explosive composition of toy caps may be packed in any inner packaging;

(vi) Inner packagings must be packed in outer packagings meeting PG II performance criteria;

(vii) Toy caps maybe packed with non-explosive or non-flammable articles provided the outer packagings are marked as prescribed in this paragraph;

(viii) Toy paper caps of any kind must not be packed in the same packaging with fireworks;

(ix) The outside of each package must be plainly marked "ARTICLES, EXPLOSIVES, N.O.S. (TOY CAPS) – HANDLE CAREFULLY" OR "TOY CAPS – HANDLE CAREFULLY"; and

(x) Explosives shipped in conformance with this paragraph must have been examined in conformance with § 173.56 and approved by the Associate Administrator for Hazardous Materials Safety.

* * * * *

PART 173--SHIPPERS--GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

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

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

11. In § 173.12, add paragraph (h) to read as follows:

§ 173.12 Exceptions for shipment of waste materials.

* * * * *

(h) Shrink-wrapped pallets of limited quantity waste. Shrink-wrapped pallets containing boxes of waste ORM-D or limited quantity materials may be transported by motor vehicle and cargo vessel when marked with the word “WASTE” on the outside of the pallet instead of on each individual box under the following conditions:

(1) Expired consumer commodities must be in their original undamaged packaging and marked with the "Consumer Commodity ORM-D" marking or “Limited Quantities Ltd-Qty” marking,

(2) Packages must be securely affixed to a pallet and shrink wrapped,

(3) The outside of the shrink wrap must be marked on opposite sides with: “Waste Consumer Commodity ORM-D” or “Waste Limited Quantities Ltd-Qty,” and

(4) A packaging or shipping paper that is permanently marked with a special permit number, “DOT–SP” or “DOT–E,” for which the provisions of the special permit have been adopted into this subchapter may continue to be used for the life of the packaging without obliterating or otherwise removing the permanent marking.

* * * * *

12. In § 173.29, paragraph (f) is revised to read as follows:

§ 173.29 Empty packagings.

* * * * *

(f) Smokeless powder residue when transported by motor vehicle or railcar in COFC or TOFC service is excepted from shipping papers and the placarding requirements of subpart F of part 172 of this subchapter when transported in conformance with the following:

(1) The outer packaging is a UN specification 1G fiber drum or 1A2 steel drum;

(2) The amount of smokeless powder per outer packaging does not exceed 5 grams;

(3) The smokeless powder is approved in conformance with § 173.56 as a Class 1 explosive substance;

(4) Empty packages must be in a closed transport vehicle;

(5) Empty packages must be loaded by the shipper and unloaded by the shipper or consignee; and

(6) The proper shipping description of the material is "RESIDUE: Last Contained Powder, smokeless, Hazard Class N/A, Identification Number N/A, Packing Group N/A".

* * * * *

13. In § 173.40, revise paragraph (d) as follows:

§ 173.40 General packaging requirements for toxic materials packaged in cylinders.

* * * * *

(d) * * *

(1) * * *

(ii) Each cylinder with a valve must be equipped with a protective metal or plastic cap, other valve protection device, or an overpack which is sufficient to protect the valve from breakage or leakage resulting from a drop of 2.0 m (7 ft) onto a non-yielding surface, such as concrete or steel. Impact must be at an orientation most likely to cause damage.

14. In § 173.62, Packing Instruction 139 in the Table of Packing Methods, paragraph (c)(5) is revised to read as follows:

§ 173.62 Specific packaging requirements for explosives.

* * *

(c) * * *

(5) * * *

TABLE OF PACKING METHODS

Packing Instruction	Inner packagings	Intermediate packagings	Outer packagings
*	*	*	*
139	Bags	Not necessary	Boxes
PARTICULAR PACKING REQUIREMENTS OR EXCEPTIONS: 1. For UN0065, 0102, 0104, 0289 and 0290, the ends of the detonating	*	*	*

cord must be sealed, for example, by a plug firmly fixed so that the explosive cannot escape. The ends of CORD DETONATING flexible must be fastened securely. 2. For UN0065, 0104, 0289, 0290 the ends of the detonating cord are not required to be sealed provided the inner packaging containing the detonating cord consists of a static-resistant plastic bag of at least 3 mil thickness and the bag is securely closed. 3. For UN0065 and UN0289, inner packagings are not required when they are			

fastened securely in coils			
*	*	*	*

* * * * *

15. In § 173.63, paragraph (a) is revised to read as follows:

§ 173.63 Packaging exceptions.

(a) Charges, and detonating cords and fuses. The following approved explosive articles may be reclassed as certain Division 1.4 Compatibility Group D (1.4D) explosives when prepared and offered for transportation under the following conditions:

(1) Cord, detonating (UN0065, Div. 1.1D), having an explosive content not exceeding 6.5 g (0.23 ounces) per 30 centimeter length (one linear foot) may be reclassed as Cord, detonating (UN0289, Div. 1.4D) and offered for transportation domestically if the aggregate gross weight of all packages containing Cord, detonating (UN0065) does not exceed 45 kg (99 pounds) per:

(i) Transport vehicle, freight container, or cargo-only aircraft;

(ii) Off-shore down-hole tool pallet carried on an off-shore supply vessel;

(iii) Cargo compartment of a cargo vessel; or

(iv) Passenger-carrying aircraft used to transport personnel to remote work sites, such as offshore drilling units.

(2) Cord, detonating, or Fuse detonating, metal clad (UN 0290, Div. 1.1D) may be renamed and reclassed as Cord, detonating, mild effect, or Fuse, detonating, mild effect, metal clad (UN 0104, Div. 1.4D); and Charges, shaped, flexible, linear (UN 0288, Div. 1.1D) may be

renamed and reclassed "Charges, shaped, flexible, linear (UN 0237, Div. 1.4D) and transported by motor vehicle, railcar, cargo vessel, and cargo aircraft, under the following conditions:

(i) The explosive substances in each item must not exceed 10.7 grams per meter (50 grains per foot) and the length of each cord, fuse, and charge must not exceed 30.5 meters (100 foot) in any one package;

(ii) "Cord, detonating, mild effect," must be packaged in conformance with § 173.62(c), Packing Instruction 139; and

(iii) "Charges, shaped, flexible, linear," must be packaged in conformance with § 173.62, Packing Instruction 138.

* * * * *

16. In § 173.150, add paragraph (h) to read as follows:

§ 173.150 Exceptions for Class 3 (flammable and combustible liquids).

* * * * *

(h) Diesel fuel (NA1993) and Gasoline (UN1203) may be transported one way, by motor vehicle, directly from the loading location to an equipment repair facility, in a non-DOT specification, non-bulk packaging, known as a gasoline dispenser, which has been removed from service at gasoline marketing outlets, without complying with the marking set forth in § 172.301(c), under the following conditions:

(i) Prior to loading, each dispenser must be prepared for transportation by capping or plugging all product inlet and outlet piping, so that no fluid may be released during transportation;

(ii) No dispenser may contain more than 2 gallons of gasoline; and

(iii) Each dispenser must be blocked, braced or strapped to the motor vehicle to prevent movement during transportation.

* * * * *

17. In § 173.151, add paragraphs (e), (f), (g), and (h) to read as follows:

§ 173.151 Exceptions for Class 4.

* * * * *

(e) Except for transportation by aircraft, Lithium (UN1415), Potassium (UN2257), and Sodium (UN1428) with a net quantity of material per inner packaging not exceeding 25 grams, are excepted from the labeling requirements of Part 172, Subpart E and the placarding requirements of Part 172 Subpart F, when offered for transportation or transported in the following packagings under the following conditions:

(1) Packaging.

(i) The hazardous material is placed in a tightly closed plastic bottle after being submerged in mineral oil;

(ii) The plastic bottle is placed inside a plastic bag which must be securely closed to prevent leaks or punctures in conformance with the instructions provided by the packaging manufacturer in accordance with § 178.2(c) of this subchapter.

(iii) The bagged bottle is then be placed inside a metal can with all void spaces filled with an oil-absorbing material and sealed tight; and

(iv) The can is then placed into a heat sealed barrier bag.

(2) Marking. Each inner plastic bottle, outer metal can, and barrier bag must be marked with: (A) chemical name; (B) quantity; and (C) the name and address of the offeror.

(3) Recordkeeping. (i) Records of the preparation, packaging, and marking of each chemical must be documented and all components in each package must be noted; and

(ii) Records must be retained for a minimum of 5 years and be accessible at or through the shipper's principal place of business and be made available, upon request, to the Associate Administrator or designated official.

(f) Except for transportation by aircraft, Self-heating solid, inorganic, n.o.s. (UN3190) may by contained in:

(1) Unlined, non-DOT specification multi-wall paper bags containing a maximum of 55 pounds (net) of product as follows.

(A) Each bag must be capable of passing the tests at the Packing Group II performance level specified in Subpart M of 49 CFR Part 178 for paper bags;

(B) All bags must be held a minimum of 24 hours after packaging and a determination made that the material temperature does not exceed 100 º F prior to offering for shipment; and

(C) Shipments must be made in closed freight containers.

(g) Except for transportation by aircraft, Water reactive solid, n.o.s. (contains magnesium, magnesium nitrides) in Packing Group II or III may be contained in sift-proof bulk packagings that prevent liquid water from reaching the hazardous material with sufficient venting to preclude dangerous accumulation of flammable, corrosive or toxic gaseous emissions such as methane, hydrogen and ammonia.

(h) Phosphorus, yellow, under water (UN1381) may be contained in the following packaging, subject to the following conditions:

(1) Packaging. (i) A 30 gallon UN 1A2 steel drum certified to the PG I performance level for solids and the PG I or PG II performance level for liquids and dual marked as a UN1A2/X400/S (for solid) and UN1A2 X(or Y)/1.4/150 (for liquids).

(ii) Sufficient water must be present in each drum to ensure that the phosphorous is covered during transportation, in any orientation of the drum;

(iii) Drums must be held and observed for a minimum of 24-hours before transportation. Any leaking or otherwise unsuitable drums must be replaced prior to transportation;

(iv) Packages must be destroyed and may not be reused; and

(v) The net mass of the material and water, in kilograms, must not exceed the mass that would be permitted by calculating the volume of the packaging in liters multiplied by the specific gravity indicated on the package certification.

(2) Conditions.

(i) Transportation is by private or contract motor carrier only;

(ii) Transportation is authorized from the generator site(s) of the material to a facility where it must be unloaded by the consignee for reprocessing;

18. In § 173.154, add paragraphs (b)(3), (e) and (f) to read as follows:

§ 173.154 Exceptions for Class 8 (corrosive materials).

* * * * *

(b) * * *

(3) When transported by private motor carrier only, the following materials may be packaged in polyethylene bottles with a capacity no greater than 3.785L (one gallon), packed inside an open-top, heavy wall, high density polyethylene box (i.e., crate) in a manner that the

polyethylene bottles are not subjected to any superimposed weight, and the boxes must be reasonably secured against movement within the transport vehicle and loaded so as to minimize the possibility of coming in contact with other lading:

Compounds, cleaning liquid (consisting of solutions containing potassium hydroxide, hydrochloric acid or phosphoric acid), NA1760, PG II or III;

Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide), PG II, and Corrosive liquid, basic, inorganic, n.o.s. (Sodium hydroxide), PG II, UN3266;

Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid and Nitric acid), UN3264, PG II;

Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid), UN 3265, PG III; Hypochlorite solutions, UN1791, PG III;

Hydrochloric acid solution (with not over 32% strength), UN 1789, PG II; and

Sulfuric acid (with not more than 51% acid), UN2796, PG II.

(i) No more than four bottles, securely closed with threaded caps, may be packed in each box.

(ii) Each empty bottle must have a minimum weight of not less than 140 grams and a minimum wall thickness of not less than 0.020 inch (0.508 mm).

(iii) The completed package must meet the Packing Group II performance level, as applicable for combination packagings with a plastic box outer packaging, in accordance with Subpart M of Part 178.

(A) Tests must be performed on each type and size of bottle, for each manufacturing location. Samples taken at random must withstand the prescribed tests without breakage or leakage.

(B) One bottle for every two hours of production, or for every 2500 bottles produced, must be tested by dropping a bottle filled to 98% capacity with water from a height of 1.2 meters (3.9 feet) onto solid concrete directly on the closure.

(C) A copy of the test results must be kept on file at each facility where packagings are offered for transportation, and must be made available to a representative of the Department of Transportation upon request.

(iv) The name or symbol of the bottle producer, and the month and year of manufacture, must be marked by embossing, ink-jet printing of permanent ink, or other permanent means on the face or bottom of each bottle, in letters and numbers at least 6 mm (0.2 inch) high. Symbols, if used, must be registered with the Associate Administrator.

(v) The box must be constructed from high density polyethylene in the density range 0.950- 0.962, and be capable of holding liquid when in the upright position.

* * * * *

(e) Hydrochloric acid concentration not exceed 38%, in Packing Group II, may be contained in UN31H1 or UN31HH1 intermediate bulk containers when loaded in accordance with the requirements of § 173.35(h).

(f) Battery fluid, acid, packaged with a dry storage battery in Packing Group II, may be packaged in a UN6HG2 composite packaging containing battery fluid and a dry storage battery packed in a UN4G fiberboard box. The UN6HG2 composite packaging must have a maximum capacity of 8.0 liters and be marked as meeting the requirement for Packaging Group II. The maximum allowable gross weight for the completed package is 37.0 kg.

19. In § 173.156, add paragraphs (c) and (d) to read as follows:

§ 173.156 Exceptions for limited quantity and ORM.

* * * * *

(c) Display packs. Display packs, as defined in § 171.8 of this subchapter, of consumer commodity packages that exceed 30 kg gross weight may be transported by railcar in trailer-on-flatcar (TOFC) or container-on-flat-car (COFC) service, or roadrailer and/or railrunner trailers or by motor vehicle, or cargo vessel only under the following conditions:

(1) Packaging. Combination packages must conform to the packaging requirements of Subpart B of 49 CFR Part 173 and meet the following limitations:

(i) The inner containers must conform to the quantity limits for inner packagings prescribed in §§ 173.150(b), 173.152(b), 173.154(b), 173.155(b) and 173.306(a) and (b), as appropriate;

(ii) The inner containers must be packed into trays to secure individual containers from movement inside the completed combination package during transportation;

(iii) The tray(s) must be placed into a fiberboard box, and the fiberboard box must be banded and secured to a pallet by metal, fabric, or plastic straps to form a single palletized unit; and

(iv) The maximum net quantity of hazardous material permitted on one palletized unit is 550 kg (1,210 lbs.).

(2) Marking. The outside of each package must be plainly and durably marked with either "Consumer commodity, ORM-D" or "Limited Quantities, Ltd-Qty," so that both labels will not be displayed at the same time in the surrounding rectangle as prescribed in §§ 172.315 and 172.316.

(d) Exceptions for waste limited quantities and ORM-D materials. Certain exceptions for waste limited quantity and ORM-D materials are prescribed in § 173.12(h).

20. In § 173.158, add paragraphs (i) and (j) to read as follows:

§ 173.158 Nitric acid.

* * * * *

(i) Nitric acid of up to 40% concentration, when offered for transportation or transported by rail, highway, or cargo vessel, may be contained in a UN1H1 non-removable head plastic drum, tested and marked at the PGII level for liquids with a specific gravity of at least 1.8, and a hydrostatic test pressure appropriate for the hazardous material.

(1) Drums may only be used one time and must be destroyed after emptying.

(2) Drums must be permanently and legibly marked "Single Trip Only" and "Must be Destroyed When Empty."

(j) Nitric acid, other than red fuming, with more than 70% nitric acid and Nitric acid, other than red fuming, with not more than 70% nitric acid, when offered for transportation or transported by rail, highway, or cargo vessel, may be packaged in a UN 4G performance standard packaging meeting the Packing Group I or II performance level:

(1) Inner packaging: A plastic ("fluorinated ethylene-propylene" [FEP] polymers, "perfluoroalkoxy" [PFA] polymers or similar materials) bottle with lined screw closure meeting the compatibility requirements of § 173.24(e) of this section and having a net capacity not greater than 2.5 liters (0.66 gallon) each. The wall thickness of the bottle must not be less than 0.020".

(2) Intermediate packaging: (A) A tightly closed rigid-foam plastic receptacle each containing one inner packaging; or

(B) A plastic bag containing one inner packaging and placed inside a heavy-wall polypropylene bag lined with polypropylene absorbent material of sufficient capacity to completely absorb the liquid contents of each inner package. Both bags must be tightly sealed with either plastic tape, a wire tie or a cable tie.

21. In § 173.159, revise the first sentence in introductory paragraph (e) and add paragraph (j) to read as follows:

§ 173.159 Batteries, wet.

* * * * *

(e) When transported by highway or rail, shipments of electric storage batteries containing electrolyte or corrosive battery fluid, and shipments of electric storage batteries and battery acid, are not subject to any other requirements of this subchapter, if all of the following are met: * * *

* * * * *

(j) Nickel cadmium batteries containing liquid potassium hydroxide. Nickel-cadmium batteries that each contain no more than 10 ml of liquid potassium hydroxide, a Class 8 material, are not subject to the requirements of this subchapter when transported by motor vehicle, railcar, cargo vessel, and passenger and cargo aircraft under the following conditions:

(1) Each battery must be sealed in a heat sealed bag, packaged to prevent short circuits, and placed in the center of an outer plastic drum and surrounded with a foam-in-place packaging material;

(2) The outer plastic drum must meet the UN 1H2 performance standard at the Packing Group II level;

(3) The gross weight of the package may not exceed 15.2 kg (33.4 pounds); and

(4) The cumulative amount of potassium hydroxide solution in all of the batteries in each package may not exceed 4 ounces (0.11 kg).

22. In § 173.168, add paragraph (g) to read as follows:

§ 173.168 Chemical oxygen generators.

* * * * *

(g) Exceptions. An unapproved chemical oxygen generator with only one positive means of preventing unintentional actuation of the generator, and without the required approval number marked on the outside of the package, may be transported by motor vehicle, railcar, and cargo vessel only under the following conditions:

(1) Packaging. (i) The one positive means of preventing unintentional actuation of the generator shall be installed in such a manner that the percussion primer is so completely protected from its firing pin that it cannot be physically actuated or the electric firing circuit is so completely isolated from the electric match that it cannot be electrically actuated.

(ii) Inner packaging. Except as provided in paragraph (g)(1)(iii) of this section below, an unapproved chemical oxygen generator, or unapproved chemical oxygen generator installed in smaller size equipment such as a PBE shall be packaged in a combination packaging consisting of a non-combustible inner packaging that fully encloses the oxygen generator or piece of equipment inside an outer packaging which meets the requirements in § 173.212 or "Packaging for Airline Supplies - ATA Specification No. 300," published by the Airlines for America.

(iii) Impractical size packaging. If the piece of equipment in which the unapproved chemical oxygen generator is installed is so large (e.g., an aircraft seat) as to not be practically able to be fully enclosed in the packaging prescribed in paragraphs (g)(1)(ii) of this section, then a visible and durable warning tag must be securely attached to the piece of equipment stating "**THIS ITEM CONTAINS A CHEMICAL OXYGEN GENERATOR."**

(2) Testing. Each unapproved chemical oxygen generator, without its packaging, must be capable of withstanding a 1.8 meter drop onto a rigid, non-resilient, flat and horizontal surface, in the position most likely to cause damage, with no actuation or loss of contents.

(3) Marking. (i) If the unapproved chemical oxygen generator is inside a piece of equipment which is sealed or difficult to determine if an oxygen generator is present, for example - a closed sealed passenger service unit, then a visible and durable warning sign must be attached to the piece of equipment stating: "**THIS ITEM CONTAINS A CHEMICAL OXYGEN GENERATOR"**; and

(ii) Each outer package, and overpack if used, must be visibly and durably marked with the following statement: **"THIS PACKAGE IS NOT AUTHORIZED FOR TRANSPORTATION ABOARD AIRCRAFT".**

23. In § 173.181, revise introductory paragraph (a) and add paragraph (d) to read as follows:

§ 173.181 Pyrophoric materials (liquids).

* * * * *

(a) Specification steel or nickel cylinders prescribed for any compressed gas except acetylene having a minimum design pressure of 1206 kPa (175 psig). DOT 3AL cylinders with a minimum marked service pressure of 1,800 psig and a maximum water capacity of 49 liters (13

gal) are authorized only for UN3194, Pyrophoric liquid, inorganic, n.o.s. Any preheating or heating of the DOT 3AL cylinders must be limited to a maximum temperature of 79.4 °C (175 °F). Cylinders with valves must be: * * *

* * * * *

(d) Packaging - A combination packaging consisting of the following:

(1) Outer packaging. A 208 liter capacity UN1A2 drum that has been certified to PG I. The drum has a minimum wall thickness of 1.0 mm and the top head is closed with a steel closing ring with a minimum thickness of 2.4 mm.

(2) Inner packaging. A 10 liter or 20 liter UN1A1 drum which has been certified to PG I. The drums have a minimum wall thickness of 1.9 mm. Both drums have 4 NPT or VCR openings, each with a diameter of 6.3 mm. The 10 liter or 20 liter drum must be fabricated from stainless steel. On the upper head, both the 10 and 20 liter drums are fitted with a center opening with a maximum diameter of 68.3 mm. The opening is sealed with a threaded closure fabricated from 316 stainless steel. No more than two (2) inner drums may be placed inside the outer drum.

24. In § 173.184, add paragraph (c) to read as follows:

§ 173.184 Highway or rail fusees.

* * * * *

(c) For transportation by highway, railroad flagging kits are not subject any other requirements of this subchapter when all of the following conditions are met:

(1) The flagging kits may only contain fusees and railroad torpedoes as follows:

(i) Fusee (rail or highway) (NA1325, Division 4.1, PG II).

(ii) Articles, pyrotechnic (UN0431, Division 1.4G, PG II).

(iii) Signal devices, hand (UN0373, Division 1.4S, PG II).

(iv) Signal devices, hand (UN0191, Division 1.4G, PG II).

(v) Signals, railway track, explosive (UN0193, Division 1.4S, PG II).

(2) Fusees and railroad torpedoes must be transported in compartmented metal containers. Each compartment must have a cover with a latching device. Compartments for railroad torpedoes must be equipped with a spring loaded positive locking device. Each compartment may only contain one type of device.

(3) Each flagging kit may contain a maximum of 36 fusees and 36 railroad torpedoes. No more than 6 flagging kits may be transported at one time on any motor vehicle.

(4) Flagging kits may only be transported on railroad motor vehicles including privately owned motor vehicles under the direct control of on-duty railroad employees.

(5) The fusees and railroad torpedoes must be kept in the closed flagging kits whenever they are not being used on the railroad right-of-way, while the motor vehicle is being driven, or whenever the motor vehicle is located on other than railroad property.

(6) When left in unattended motor vehicles on non-railroad property, a flagging kit must be locked, locked inside the motor vehicle, or stored in a locked compartment on the motor vehicle.

25. In § 173.193, revise paragraph (b) to read as follows:

§ 173.193 Bromoacetone, methyl bromide, chloropicrin and methyl bromide or methyl chloride mixtures, etc.

* * * * *

(b) Bromoacetone, methyl bromide, chloropicrin and methyl bromide mixtures, chloropicrin and methyl chloride mixtures, and chloropicrin mixtures charged with non-

flammable, non-liquefied compressed gas must be packed in Specification 3A, 3AA, 3B, 3C, 3E, 4A, 4B, 4BA, 4BW, or 4C cylinders having not over 113 kg (250 pounds) water capacity (nominal) except:

(1) DOT specification 4BW cylinders containing chloropicrin and methyl bromide mixtures may not exceed 453 kg (1000 pounds). This capacity limit does not apply to shipments of methyl bromide; and

(2) water capacity (nominal).

* * * * *

26. In § 173.226, add paragraph (f) to read as follows:

§ 173.226 Materials poisonous by inhalation, Division 6.1, Packing Group I, Hazard Zone A.

* * * * *

(f) Liquid hazardous materials in Division 6.1 Packing Group I, Hazard Zone A are excepted from the segregation requirements of §§ 174.81, 176.83, and 177.848(d) of this subchapter when packaged as follows:

(1) Inner packaging system. The inner packaging system must consist of three packagings: (i): A glass, plastic or metal receptacle, with a capacity of not more than 1 liter (1 quart), securely cushioned with a non-reactive, absorbent material. The receptacle must have a closure which is held in place by any means capable of preventing back-off or loosening of the closure by impact or vibration during transportation.

(ii) The receptacle must be packed within a leak-tight packaging of metal, with a capacity of not less than 4 liters (1 gallon); and

(iii) The metal packaging must be securely cushioned with a nonreactive absorbent material and packed in a leak-tight UN 1A2 steel drum or UN 1H2 plastic drum, with a capacity of not less than 19 liters (5 gallons).

(2) Outer packaging. The inner packaging system must be placed in a UN 1A2 steel drum or UN 1H2 plastic drum, with a capacity of not less than 114 liters (30 gallons). The inner packaging system must be securely cushioned with a non-reactive, absorbent material. The total amount of liquid contained in the outer packaging may not exceed 1 liter (1 quart).

(3) Both the inner packaging system and the outer packaging must conform to the performance test requirements of Subpart M of part 178 of this subchapter at the Packing Group I performance level. The inner packaging system must meet these tests without benefit of the outer packaging.

* * * * *

27. In § 173.301, revise paragraphs (f)(1) through (2), (h)(2)(i), and add paragraph (f)(7) to read as follows:

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

* * * * *

(f) Pressure relief device systems. (1) Except as provided in paragraphs (f)(5) through (f)(7) or (j) of this section, a cylinder filled with a gas and offered for transportation must be equipped with one or more pressure relief devices sized and selected as to type, location, and quantity, and tested in accordance with CGA Pamphlet S-1.1 (compliance with paragraph 9.1.1.1 is not required) and CGA Pamphlet S-7. The pressure relief device must be capable of

preventing rupture of the normally filled cylinder when subjected to a fire test conducted in accordance with CGA Pamphlet C-14 (IBR, see § 171.7 of this subchapter), or, in the case of an acetylene cylinder, CGA Pamphlet C-12 (IBR, see § 171.7 of this subchapter).

(2) A pressure relief device, when installed, must be in communication with the vapor space of a cylinder containing a Division 2.1 (flammable gas) material. This provision does not apply to DOT-specification 39 cylinders of 1.2L (75 cubic inches) or less in volume filled with a liquefied petroleum gas, methyl acetylene and propadiene mixtures, stabilized, propylene, propane or butane.

* * * * *

(7) A pressure relief device is not required on a DOT Specification 3E cylinder measuring up to 50mm (2 inches) in diameter by 305mm (12 inches) in length for the following gases in the maximum weight limits specified:

(i) Carbon Dioxide 0.24L (8 oz. limit)

(ii) Ethane 0.12L (4 oz. limit)

(iii) Ethylene 0.12L (4 oz. limit)

(iv) Hydrogen Chloride, anhydrous 0.24L (8 oz. limit)

(v) Monochlorotrifluoromethane 0.35L (12 oz. limit)

(vi) Nitrous oxide, 0.24L (8 oz. limit)

(vii) Vinyl fluoride, stabilized 0.24L (8 oz. limit)

* * * * *

(h) * * *

(2) * * *

(i) By equipping the cylinder with securely attached metal or plastic caps of sufficient strength to protect valves from damage during transportation;

* * * * *

28. In § 173.302, revise paragraph (f)(1) to read as follows:

§ 173.302 Filling of cylinders with nonliquefied (permanent) compressed gases or adsorbed gases.

* * * * *

(f) * * *

(1) Only DOT specification 3A, 3AA, 3AL, 3E, 3HT, 39 cylinders, 4E (filled to less than 200 psig at 21 °C (70 °F), and UN pressure receptacles ISO 9809-1, ISO 9809-2, ISO 9809-3 and ISO 7866 cylinders are authorized.

* * * * *

29. In § 173.302a:

a. Revise paragraphs (a)(1) and (a)(5);

b. Add a new paragraph (a)(6);

c. Redesignate paragraphs (c), (d) and (e) as paragraphs (d), (e), and (f); and

d. Add new paragraph (c).

The revisions and additons are to read as follows:

§ 173.302a Additional requirements for shipment of nonliquefied (permanent) compressed gases in specification cylinders.

(a) * * *

(1) DOT 3, 3A, 3AA, 3AL, 3B, 3E, 4B, 4BA, 4BW, and 4E cylinders.

* * * * *

(5) Aluminum cylinders manufactured in conformance with specifications DOT 39, 3AL and 4E are authorized for oxygen only under the conditions specified in § 173.302(b).

(6) DOT 4E cylinders- DOT 4E cylinders with a maximum capacity of 43L (11 gal) must have a minimum rating of 240 psig and be filled to no more than 200 psig at 21 °C (70 °F).

* * * * *

(c) Special filling limits for DOT 3A, 3AX, 3AA, and 3AAX cylinders containing Division 2.1 gases. A DOT specification 3A, 3AX, 3AA, and 3AAX cylinder may be filled with hydrogen and mixtures of hydrogen with helium, argon or nitrogen, to a pressure 10% in excess of its marked service pressure, if the following requirements are met:

(1) The cylinder must confirm to all of the requirements of paragraph (b) of this section;

(2) The cylinder was manufactured after December 31, 1945;

(3) DOT specification 3A and 3AX cylinders are limited to those having an intermediate manganese composition.

(i) Cylinders manufactured with intermediate manganese steel must have been normalized, not quench and tempered. Quench and temper treatment of intermediate steel is not authorized.

(ii) Cylinders manufactured with chrome moly steel must have been normalized, not quenched and tempered, not normalized.

(4) Cylinders must be equipped with safety relief devices as follows:

(i) Cylinders less than 1.7 m (65 inches) in length must be equipped with fusible metal backed frangible disc devices;

(ii) Cylinders 1.7 m (65 inches) or greater in length and 24.5 cm (9.63 inches) in diameter or larger must be equipped with fusible metal backed frangible disc devices or frangible disc devices. Cylinders having diameter of .56 m (22 inches) or larger must be equipped with frangible disc devices.

(d) Carbon monoxide. Carbon monoxide must be offered in a DOT 3, 3A, 3AX, 3AA, 3AAX, 3AL, 3E, 3T or 4E cylinder having a minimum service pressure of 1800 psig. The pressure in a steel cylinder may not exceed 1000 psig at 21 °C (70 °F), except that if the gas is dry and sulfur free, the cylinder may be filled to 5/6 of the cylinder's service pressure or 2000 psig, whichever is less. A DOT 3AL cylinder may be filled to its marked service pressure. A DOT 4E cylinder must be rated at least 240 psig and be filled to no more than 200 psig at 21C (70F). A DOT 3AL or DOT 4E cylinder is authorized only when transported by motor vehicle, rail car, or cargo-only aircraft.

(e) Diborane and diborane mixtures. Diborane and diborane mixed with compatible compressed gas must be offered in a DOT 3AL1800 or 3AA1800 cylinder. The maximum filling density of the diborane may not exceed 7%. Diborane mixed with compatible compressed gas may not have a pressure exceeding the service pressure of the cylinder if complete decomposition of the diborane occurs. Cylinder valve assemblies must be protected in accordance with § 173.301(h).

(f) Fluorine. Fluorine must be shipped in specification 3A1000, 3AA1000, or 3BN400 cylinders without pressure relief devices and equipped with valve protection cap. The cylinder may not be charged to over 400 psig at 21 °C (70 °F) and may not contain over 2.7 kg (6 lbs) of gas.

30. In § 173.304, revise paragraph (d) to read as follows:

§ 173.304 Filling of cylinders with liquefied compressed gases.

* * * * *

(d) Refrigerant and dispersant gases. Nontoxic and nonflammable refrigerant or dispersant gases must be offered for transportation in cylinders prescribed in § 173.304a of this subchapter, or in DOT 2P, 2Q, or 2Q1 containers (§§ 178.33, 178.33a, and 178.33d-2 of this subchapter). DOT 2P, 2Q, and 2Q1 must be packaged in a strong outer packaging of such design as to protect valves from damage or accidental functioning under conditions incident to transportation. For DOT 2P and 2Q containers, the pressure inside the containers may not exceed 87 psia at 21.1°C (70 °F). For 2Q1 containers, the pressure inside the container may not exceed 200 psig at 55 °C (131 °F). Each completed metal container filled for shipment must be heated until its contents reach a minimum temperature of 55 °C (131 °F) without evidence of leakage, distortion, or other defect. Each outer package must be plainly marked "INSIDE CONTAINERS COMPLY WITH PRESCRIBED SPECIFICATIONS".

* * * * *

31. In § 173.304a, revise in the table in paragraph (a)(2), the entries for:

a. Carbon dioxide; and

b. Nitrous oxide.

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

(a) * * * * *

(2) For the gases named, the following requirements apply (for cryogenic liquids, see § 173.316):

Kind of gas	Maximum permitted filling density (percent) (see Note 1)	Packaging marked as shown in this column or of the same type with higher service pressure must be used, except as provided in §§ 173.301(l), 173.301a(e), and 180.205(a) (see notes following table)
*	*	*
Carbon dioxide (see Notes 4, 7, and 8)	70.3	DOT- 3A2000, DOT-3AA2000, DOT-3AX2000, DOT- 3AAX2000, DOT-3T2000
Carbon dioxide (see Notes 4, 7, and 8)	73.2	DOT- 3A2265, DOT-3AA2265, DOT-3AX2265, DOT-3AAX2265, DOT- 3T2265
Carbon dioxide (see Notes 4, 7, and 8)	74.5	DOT- 3A2400, DOT-3AA2400, DOT- 3AX2400, DOT- 3AAX2400, DOT-3T2400
*	*	*
Nitrous oxide (*see* Notes 7, 8, and 11)	70.3	DOT- 3A2000, DOT-3AA2000, DOT-3AX2000,DOT-3AAX2000, DOT-3T2000
Nitrous oxide (*see* Notes 7, 8, and 11)	73.2	DOT- 3A2265, DOT-3AA2265, DOT-3AX2265,DOT-3AAX2265, DOT-3T2265
Nitrous oxide (*see* Notes 7, 8, and 11)	74.5	DOT- 3A2400, DOT-3AA2400, DOT-3AX2400,DOT-3AAX2400, DOT-3T2400

*	*	*

* * * * *

32. In § 173.306:

a. Revise paragraph (a) and (b);

b. Add paragraph (e)(2) and (m); and

c. Revise paragraphs (f) and (k).

The revisions and additions read as follows:

§ 173.306 Limited quantities of compressed gases.

(a) Limited quantities of compressed gases for which exceptions are permitted as noted by reference to this section in § 172.101 of this subchapter are excepted from labeling, except when offered for transportation or transported by air, and, unless required as a condition of the exception, specification packaging requirements of this subchapter when packaged in accordance with the following paragraphs. For transportation by aircraft, the package must conform to the applicable requirements of § 173.27 of this subchapter and only packages of hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments are not subject to subpart F (Placarding) of part 172 of this subchapter, to part 174 of this subchapter except § 174.24, and to part 177 of this subchapter except § 177.817. Each package may not exceed 30 kg (66 lbs.) gross weight.

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

(2) When in refillable metal containers filled with a material that is not classed as a hazardous material to not more than 90% of capacity at 21.1 °C (70 °F) and then charged with nonflammable, nonliquefied gas. Each container must be tested to three times the pressure at 21.1 °C (70 °F) and, when refilled, be retested to three times the pressure of the gas at 21.1 °C (70 °F). Also, one of the following conditions must be met:

(i) The container is not over 0.95 L (1 quart) capacity and charged to not more than 170 psig (1172.1 kPa) at 21.1 °C (70 °F), and must be packed in a strong outer packaging; or

(ii) The container is not over 114 L (30 gallons) capacity and charged to not more than 75 psig (517.1 kPa) at 21.1 °C (70 °F).

(3) When in a metal aerosol (see § 171.8 of this subchapter for a definition of aerosol) container of a non-DOT specification, a DOT 2P, a DOT 2Q, or a variation of a 2P or 2Q design, provided all of the following conditions are met. Additional exceptions for material in packaging conforming to this paragraph (a)(3) are provided in paragraph (i) of this section.

(i) Capacity. The capacity of the container must not exceed 1 L (61.0 cubic inches).

(ii) General pressure conditions. The authorized metal aerosol containers and associated pressure limits are provided in the following table. The pressure in the container must not exceed 180 psig at 55 °C (131 °F) except as may be authorized for variations of a DOT specification container type. In any event, the metal container must be capable of withstanding without bursting a pressure of at least one and one-half times the equilibrium pressure of the contents at 55 °C (131 °F).

If the contents are placed in a…	**Then, the gauge pressure (psi) at 55 °C (131 °F) must be…**	**Specification citation…**
non-DOT specification	Up to but not exceeding 140	……

container		
2P	Greater than 140 but not exceeding 160	§ 178.33
2Q	Greater than 160 but not exceeding 180	§ 178.33a
If the contents are placed in a variation of a 2P or 2Q specification in a….	**Then, the gauge pressure (psi) at 55 °C (131 °F) must be…**	**Specification citation…**
2P1	Greater than 140 but not exceeding 160	§ 178.33c-2
2Q1	Greater than 160 but not exceeding 200	§ 178.33d-2

(iii) Liquid fill. The liquid content of the material and gas must not completely fill the container at 55 °C (131 °F).

(iv) Outer packaging. The containers must be packed in strong outer packagings.

(v) Pressure testing. Each container, after it is filled, must be subjected to a test performed in a hot water bath; the temperature of the bath and the duration of the test must be such that the internal pressure reaches that which would be reached at 55 °C (131 °F), or 50 °C (122 °F) if the liquid phase does not exceed 95% of the capacity of the container at 50 °C (122 °F)). If the contents are sensitive to heat, the temperature of the bath must be set at between 20 °C (68 °F) and 30 °C (86 °F) but, in addition, one container in 2,000 must be tested at the higher temperature. No leakage or permanent deformation of a container may occur. However, instead of this standard water bath test, container(s) may be tested using one of the following methods subject to certain conditions –

(A) Alternative water bath test. (1) One filled container in a lot of 2,000 must be subjected to a test performed in a hot water bath; the temperature of the bath and the duration of

the test must be such that the internal pressure reaches that which would be reached at 55 °C (131 °F). If the container shows evidence of leakage or permanent deformation, the lot of 2,000 containers must be rejected;

(2) A second filled container in the lot of 2,000 must be weighed and compared to the weight specification for the containers as documented in the operating procedures for the weight test. Failure of the container to meet the weight specification is evidence of leakage or overfilling and the lot of 2,000 must be rejected;

(3) The remainder of the containers in the lot of 2,000 must be visually inspected (e.g, examination of the seams). Containers showing evidence of leakage or overfilling must not be transported; and

(4) Each person employing this test must maintain a copy of the operating procedures (or an electronic file thereof) that is accessible at, or through, its principal place of business and must make the procedures available upon request, at a reasonable time and location, to an authorized official of the Department of Transportation.

(B) Automated pressure test. Each person employing an automated process for pressure testing of filled containers must develop procedures for implementation of the test. Each person must maintain a copy of the procedures (or an electronic file thereof) that is accessible at, or through, its principal place of business and must make the procedures available upon request, at a reasonable time and location, to an authorized official of the Department of Transportation. The procedures must, at a minimum, include instruction on the following:

(1) Pressure specifications. Each person must specify pressure standard(s) (e.g. a pressure limit or range) for a container respective of the design and/or contents. Each container, after it is filled, must be pressure checked and compared to the standards. For a pressure limit,

any container exceeding the pressure limit must be rejected. For a pressure range, any container outside of the set range must be rejected. The instruments used to determine the pressure must be properly calibrated before a production run to an accuracy of +/- or better; and

(2) Periodic inspection. At designated intervals, a randomly selected container must be inspected for proper closure and verification of filling pressure. If a container shows signs of improper closure or over-filling, five (5) additional randomly selected containers must be inspected. If any of the additional containers show signs of improper closure or over-filling, all containers produced since the last inspection must be rejected.

(C) Weight test. Each person employing a weight test of filled containers must develop procedures for implementation of the test. Each person must maintain a copy of the procedures (or an electronic file thereof) that is accessible at, or through, its principal place of business and must make the procedures available upon request, at a reasonable time and location, to an authorized official of the Department of Transportation. The procedures must, at a minimum, include instruction on the following:

(1) Weight specifications. Each person must specify target weight specifications for a particular container. Each container, after it is filled, must be weighed and compared to the target weight specification for the container. Any container outside the target weight specification is an indication of leakage or overfilling and must be rejected. The instruments used to determine the weight must be properly calibrated before a testing run and be sufficiently sensitive to measure within 0.10 g of the true weight of the container;

(2) Heat testing and pressure limits. One container out of each lot of successfully filled containers must be heat tested by raising the internal pressure until it reaches that which would be reached at 55 °C (131 °F). The lot size should be no greater than 2,000. If the pressure in the

container exceeds the maximum pressure allowed for the container type or if the container shows signs of leakage or permanent deformation, the lot must be rejected. Alternatively, five (5) additional randomly selected containers from the lot may be tested to qualify the lot but if any of the five containers fail the test, the entire lot must be rejected;

(3) Periodic inspection. At designated intervals, a randomly selected container must be inspected for proper closure and verification of filling pressure. If a container shows signs of improper closure or over-filling, five (5) additional randomly selected containers must be inspected. If any of the additional containers show signs of improper closure or over-filling, all containers produces since the last inspection must be rejected; and

(4) Visual inspection. Each container must be visually inspected prior to being packaged. Any container showing signs of leakage or permanent deformation must be rejected.

(D) Leakage test. (1) Pressure and leak testing before filling. Each empty container must be subjected to a pressure equal to or in excess of the maximum expected in the filled containers at 55 °C (131 °F) (or 50 °C (122 °F) if the liquid phase does not exceed 95% of the capacity of the container at 50 °C (122 °F)). This must be at least two-thirds of the design pressure of the container. If any container shows evidence of leakage at a rate equal to or greater than $3.3 \times 10{-}2$ mbar L/s at the test pressure, distortion or other defect, it must be rejected; and

(2) Testing after filling. The person filling each container must ensure that the crimping equipment is set appropriately and the specified propellant is used before filling a container. Once filled, each container must be weighed and leak tested. The leak detection equipment must be sufficiently sensitive to detect at least a leak rate of $2.0 \times 10{-}3$ mbar L/s at 20 °C (68 °F). Any filled container which shows evidence of leakage, deformation, or overfilling must be rejected.

(vi) Each outer packaging must be marked "INSIDE CONTAINERS COMPLY WITH PRESCRIBED REGULATIONS."

(4) When in gas samples transported under the following conditions:

(i) A gas sample may only be transported as non-pressurized gas when its pressure corresponding to ambient atmospheric pressure in the container is not more than 105 kPa absolute (15.22 psia).

(ii) Non-pressurized gases, toxic (or toxic and flammable) must be packed in hermetically sealed glass or metal inner packagings of not more than one L (0.3 gallons) overpacked in a strong outer packaging.

(iii) Non-pressurized gases, flammable must be packed in hermetically sealed glass or metal inner packagings of not more than 5 L (1.3 gallons) and overpacked in a strong outer packaging.

(5) For limited quantities of Division 2.2 gases with no subsidiary risk, when in a plastic aerosol (see § 171.8 of this subchapter for a definition of aerosol) container of a non-DOT specification or a DOT 2S, provided all of the following conditions are met. Additional exceptions for material in packaging conforming to this paragraph (a)(5) are provided in paragraph (i) of this section.

(i) Capacity. The capacity of the container must not exceed 1 L (61.0 cubic inches).

(ii) General pressure conditions. The authorized plastic aerosol containers and associated pressure limits are provided in the following table. The pressure in the container must not exceed 160 psig at 55 °C (131 °F) except as may be authorized for variations, if any, of a DOT specification container type. In any event, the metal container must be capable of withstanding

without bursting a pressure of at least one and one-half times the equilibrium pressure of the contents at 55 °C (131 °F).

If the contents are placed in a…	**Then, the gauge pressure (in psig) at 55 °C (131 °F) must be…**	**Specification citation…**
non-DOT specification container	Up to but not exceeding 140	……
2S	Greater than 140 but not exceeding 160	§ 178.33b

(iii) Liquid fill. Liquid content of the material and gas must not completely fill the container at 55 °C (131 °F).

(iv) Outer packaging. The containers must be packed in strong outer packagings.

(v) Pressure testing. Except as provided in paragraph (a)(5)(vi) of this section, each container must be subjected to a test performed in a hot water bath; the temperature of the bath and the duration of the test must be such that the internal pressure reaches that which would be reached at 55 °C (131 °F) or 50 °C (122 °F) if the liquid phase does not exceed 95% of the capacity of the container at 50 °C (122 °F). If the contents are sensitive to heat, or if the container is made of plastic material which softens at this test temperature, the temperature of the bath must be set at between 20 °C (68 °F) and 30 °C (86 °F) but, in addition, one container in 2,000 must be tested at the higher temperature. No leakage or permanent deformation of a container may occur except that a plastic container may be deformed through softening provided that it does not leak.

(vi) Leakage test. As an alternative to the hot water bath test in paragraph (a)(5)(v) of this section, testing may be performed as follows:

(A) Pressure and leak testing before filling. Each empty container must be subjected to a pressure equal to or in excess of the maximum expected in the filled containers at 55 °C (131 °F) (or 50 °C (122 °F) if the liquid phase does not exceed 95% of the capacity of the container at 50 °C (122 °F). This must be at least two-thirds of the design pressure of the container. If any container shows evidence of leakage at a rate equal to or greater than 3.3 × 10−2 mbar L/s at the test pressure, distortion or other defect, it must be rejected; and

(B) Testing after filling. Prior to filling, the filler must ensure that the crimping equipment is set appropriately and the specified propellant is used before filling the container. Once filled, each container must be weighed and leak tested. The leak detection equipment must be sufficiently sensitive to detect at least a leak rate of 2.0 × 10−3 mbar L/s at 20 °C (68 °F). Any filled container which shows evidence of leakage, deformation, or excessive weight must be rejected.

(vii) Each outer packaging must be marked "INSIDE CONTAINERS COMPLY WITH PRESCRIBED REGULATIONS."

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

part 174 of this subchapter, except § 174.24, and to part 177 of this subchapter, except § 177.817. Additional exceptions for certain compressed gases in limited quantities and the ORM-D hazard class are provided in paragraph (i) of this section.

(1) Foodstuffs or soaps with soluble or emulsified compressed gas are authorized in non-refillable metal or plastic containers not to exceed 1 L (61.0 cubic inches) provided the pressure does not exceed a pressure of 140 psig at 55 °C (131 °F) except as may be authorized for variations DOT of a specification container type. For pressure greater than 140 psig to 160 psig, a 2P1 or 2Q2 may be used. In no case may the pressure of the contents be greater than 150 psig at 75 °F. Plastic containers must only contain Division 2.2 non-flammable soluble or emulsified compressed gas. In any event, the metal or plastic container must be capable of withstanding, without bursting, a pressure of at least one and one-half times the equilibrium pressure of the contents at 55 °C (131 °F).

If the contents are placed in a…	**Then, the gauge pressure (in psig) at 55 °C (131 °F) must be…**	**Specification citation…**
non-DOT specification metal or plastic container	Up to but not exceeding 140	……
If the contents are placed in a variation of a 2P or 2Q specification in a….	**Then, the gauge pressure (in psig) at 55 °C (131 °F) must be…**	**Specification citation…**
2P1	Greater than 140 but not exceeding 160	§ 178.33c-2
2Q2	Greater than 140 but not exceeding 160	§ 178.33d-3

(i) Containers must be packed in strong outer packagings.

(ii) Liquid content of the material and the gas must not completely fill the container at 55 °C (131 °F).

(iii) Each outer packaging must be marked “INSIDE CONTAINERS COMPLY WITH PRESCRIBED REGULATIONS.”

(2) Cream in refillable metal or plastic containers with soluble or emulsified compressed gas. Plastic containers must only contain Division 2.2 non-flammable soluble or emulsified compressed gas. Containers must be of such design that they will hold pressure without permanent deformation up to 375 psig and must be equipped with a device designed so as to release pressure without bursting of the container or dangerous projection of its parts at higher pressures. This exception applies to shipments offered for transportation by refrigerated motor vehicles only.

(3) Nonrefillable metal or plastic containers charged with a Division 6.1 Packing Group III or nonflammable solution containing biological products or a medical preparation which could be deteriorated by heat, and compressed gas or gases. Plastic containers must only contain 2.2 non-flammable soluble or emulsified compressed gas. The capacity of each container may not exceed 35 cubic inches (19.3 fluid ounces). The pressure in the container may not exceed 140 psig at 55 °C (131 °F), and the liquid content of the product and gas must not completely fill the containers at 55 °C (131 °F). One completed container out of each lot of 500 or less, filled for shipment, must be heated, until the pressure in the container is equivalent to equilibrium pressure of the contents at 55 °C (131 °F). There must be no evidence of leakage, distortion, or other defect. The container must be packed in strong outer packagings.

(4) Electronic tubes, each having a volume of not more than 30 cubic inches and charged with gas to a pressure of not more than 35 psig and packed in strong outer packagings.

(5) Audible fire alarm systems powered by a compressed gas contained in an inside metal container when shipped under the following conditions:

(i) Each inside container must have contents which are not flammable, poisonous, or corrosive as defined under this part,

(ii) Each inside container may not have a capacity exceeding 35 cubic inches (19.3 fluid ounces),

(iii) Each inside container may not have a pressure exceeding 70 psig at 21.1 °C (70 °F) and the liquid portion of the gas may not completely fill the inside container at 55 °C (131 °F), and

(iv) Each nonrefillable inside container must be designed and fabricated with a burst pressure of not less than four times its charged pressure at 55 °C (131 °F). Each refillable inside container must be designed and fabricated with a burst pressure of not less than five times its charged pressure at 55 °C (131 °F).

* * * * *

(e) * * *

(2) Used refrigerating machines. (i) Packaging. Reconditioned (used) refrigerating machines (UN 2857, Div. 2.2) may be excepted from the marking requirements of § 172.302(c) and transported by motor vehicle when they conform to the requirements prescribed in § 173.306(e)(1), are secured or permanently attached to the motor vehicle, and are:

(A) Permanently affixed to a steel base structure,

(B) Permanently affixed to a trailer, or

(C) Manufactured with a rigid internal structure designed for transportation and stacking conditions such that they do not leak and do not deteriorate, distort, or become damaged in a manner that could adversely affect their safety or reduce their strength in transportation, cause instability in stacks of refrigerating machines, or cause damage to these machines in a way that is likely to reduce safety in transportation.

(ii) Testing. Used refrigerating machines returned from their rental locations must be transported back to an authorized original equipment manufacturer service facility and undergo maintenance, repair and/or replacement that renders these machines back to the same operational level as that of new refrigerating machines, and must undergo a leak test by a certified technician, prior to re-shipment.

* * * * *

(f) Accumulators (Articles, pressurized pneumatic or hydraulic containing non-flammable gas). The following applies to accumulators, which are hydraulic accumulators containing nonliquefied, nonflammable gas, and nonflammable liquids or pneumatic accumulators containing nonliquefied, nonflammable gas, fabricated from materials which will not fragment upon rupture.

(1) Accumulators installed in motor vehicles, construction equipment, and assembled machinery and designed and fabricated with a burst pressure of not less than five times their charged pressure at 70 °F, when shipped, are not subject to the requirements of this subchapter.

(2) Accumulators charged with limited quantities of compressed gas to not more than 200 psig at 70 °F are excepted from labeling (except when offered for transportation by air) and the specification packaging requirements of this subchapter when shipped under the following

conditions. In addition, shipments are not subject to subpart F of part 172 of this subchapter, to part 174 of this subchapter except § 174.24 and to part 177 of this subchapter except § 177.817.

(i) Each accumulator must be shipped as an inside packaging;

(ii) Each accumulator may not have a gas space exceeding 2,500 cubic inches under stored pressure; and

(iii) Each accumulator must be tested, without evidence of failure or damage, to at least three times its charged pressure of 70 °F, but not less than 120 psi before initial shipment and before each refilling and reshipment.

(3) Accumulators with a charging pressure exceeding 200 psig at 70 °F and in compliance with the requirements stated in paragraph (f)(2), (i), (ii), and (iii) of this section, as applicable, are excepted from labeling (except when offered for transportation by air) and the specification packaging requirements of this subchapter when shipped under the following conditions:

(i) Each accumulator must be designed and fabricated with a burst pressure of not less than five (5) times its charged pressure at 70 °F when shipped;

(ii) For an accumulator with a gas space not to exceed 100 cubic inches, it must be designed and fabricated with a burst pressure of not less than five (5) times its charged pressure at 70 °F. Out of each lot not to exceed 1,000 successively produced accumulators per day of the same type, accumulators must be tested, in lieu of the testing of paragraph (f)(2)(iii) of this section, as follows:

(A) One (1) accumulator must be tested to the minimum design burst pressure;

(B) Two (2) accumulators, one at the beginning of production and one at the end must be tested to at least two and a half times the charge pressure without evidence of leakage or distortion;

(C) If accumulators fail either test, an additional four (4) sets of accumulators from the lot may be tested. If any additional accumulators fail, the lot must be rejected;

(D) Accumulators must be packaged in strong outer packaging.

(iii) For an accumulator with a gas space not to exceed 30 cubic inches, it must be designed and fabricated with a burst pressure of not less than four (4) times its charged pressure at 70 °F. Out of each lot not to exceed 1,000 successively produced accumulators per day of the same type, accumulators must be tested, in lieu of the testing of paragraph (f)(2)(iii) of this section, as follows:

(A) One (1) accumulator must be tested to the minimum design burst pressure;

(B) Two (2) accumulators, one at the beginning of production and one at the end must be tested to at least two and a half times the charge pressure without evidence of leakage or distortion;

(C) If accumulators fail either test, an additional four (4) sets of accumulators from the lot may be tested. If any additional accumulators fail, the lot must be rejected;

(D) Accumulators must be packaged in strong outer packaging.

(4) Accumulators intended to function as shock absorbers, struts, gas springs, pneumatic springs or other impact or energy-absorbing devices are not subject to the requirements of this subchapter provided each:

(i) Has a gas space capacity not exceeding 1.6 L and a charge pressure not exceeding 280 bar, where the product of the capacity expressed in liters and charge pressure expressed in bars does not exceed 80 (for example, 0.5 L gas space and 160 bar charge pressure);

(ii) Has a minimum burst pressure of 4 times the charge pressure at 20 °C for products not exceeding 0.5 L gas space capacity and 5 times the charge pressure for products greater than 0.5 L gas space capacity;

(iii) Design type has been subjected to a fire test demonstrating that the article relieves its pressure by means of a fire degradable seal or other pressure relief device, such that the article will not fragment and that the article does not rocket; and

(iv) Accumulators must be manufactured under a written quality assurance program which monitors parameters controlling burst strength, burst mode and performance in a fire situation as specified in paragraphs (f)(4)(i) through (f)(4)(iii) of this section. A copy of the quality assurance program must be maintained at each facility at which the accumulators are manufactured.

(5) Accumulators not conforming to the provisions of paragraphs (f)(1) through (f) (4) of this section, may only be transported subject to the approval of the Associate Administrator.

* * * * *

(k) Aerosols for recycling or disposal. Aerosols (as defined in § 171.8 of the subchapter) intended to be recycled or for disposal may be transported only under the following conditions:

(1) Used aerosols conforming to paragraph (a)(3), (a)(5), (b)(1), (b)(2), or (b)(3) of this section are not subject to the 30 kg (66 pounds) gross weight limitation when transported by motor vehicle for purposes of recycling or disposal under the following conditions:

(i) The strong outer packaging and its contents must not exceed a gross weight of 500 kg (1,100 pounds);

(ii) Each aerosol must be secured with a cap to protect the valve stem or the valve stem must be removed; and

(iii) The packaging must be offered for transportation or transported by—

(A) Private or contract motor carrier; or

(B) Common carrier in a motor vehicle under exclusive use for such service.

(2) Aerosols intended to conform to (a)(3) or (a)(5) at the time of filling but that are leaking or have been improperly filled may be transported for disposal under the conditions provided below. These aerosols are not eligible for the exceptions provided in paragraphs (a) and (i) of this section except for subpart F (Placarding) of part 172 of this subchapter.

(i) Packaging. (A) The aerosols must be packaged in a metal or plastic removable head salvage drum that is a UN 1A2, 1B2, 1N2 or 1H2 drum tested and marked for at least the Packing Group II performance level for liquids;

(B) Each drum shall be provided, when necessary, with sufficient cushioning and absorption material to prevent excessive shifting of the aerosols and to eliminate the presence of any free liquid at the time the drum is closed. All cushioning and absorbent material used in the drum must be compatible with the hazardous material; and

(C) The pressure inside each completed drum, at any time during transportation, may not exceed the design test pressure marked on the drum.

(ii) Hazard communication. (A) Instead of the marking requirements for non-bulk packages in § 172.301 of this subchapter, each drum must be marked with either "AEROSOL SALVAGE" or "AEROSOL SALVAGE DRUM" in association with the required label(s); and

(B) The overpack marking requirements of § 173.25 of this subchapter do not apply.

(3) Modal restrictions. The completed drums must be offered for transportation or transported by private or contract carrier going by highway or rail. Vessel or air transportation is not authorized.

* * * * *

(m) For additional exceptions, see § 173.307 of this part.

33. In § 173.315, paragraph (a)(2) table, the entry "Division 2.2 materials not specifically provided for in this table" is revised, and a new Note 28 is added. The revision and addition read as follows:

§ 173.315 Compressed gases in cargo tanks and portable tanks.

(a) * * *

(1) * * *

(2) * * *

Kind of gas	Maximum permitted filling density		Specification container required	
	Percent by weight (see Note 1)	**Percent by volume (see par. (f) of this section)**	**Type (see Note 2)**	**Minimum design pressure (psig)**
* * * * * * *				
Division 2.2, materials not specifically provided for in this table	See par. (c) of this section	See Note 7	DOT-51, MC-330, MC-331	See Notes 19 and 28.
* * * * * * *				

* * * * *

Note 28: For UN1080, Sulfur hexafluoride, a non-specification cargo tank that otherwise conforms to a DOT Specification MC 331 cargo tank except for design pressure and capacity is authorized. Design pressure may not exceed 600 psig. The water capacity range for each tank is 15 to 500 gallons.

* * * * *

34. In § 173.319, revise paragraph (d)(2) table to read as follows:

§ 173.319 Cryogenic liquids in tank cars.

* * * * *

(d) * * *

(2) * * *

PRESSURE CONTROL VALVE SETTING OR RELIEF VALVE SETTING

Maximum start-to-discharge pressure (psig)	**Maximum permitted filling density (percent by weight)**			
	Ethylene	**Ethylene**	**Ethylene**	**Hydrogen**
17				6.60
45	52.8			
75		51.1	51.1	
Maximum pressure when offered for transportation	10 psig	20 psig	20 psig	
Design service temperature	Minus 260 °F	Minus 260 °F	Minus 155 °F	Minus 423 °F.
Specification (see § 180.507(b)(3) of this subchapter)	113D60W 113C60W	113C120W	113D120W	113A175W. 113A60W.

* * * * *

35. In § 173.322, add paragraph (f) to read as follows:

§ 173.322 Ethyl chloride.

* * * * *

(f) Exceptions. Ethyl chloride may be transported by motor vehicle, railcar, or cargo vessel as a limited quantity under the following conditions:

(1) Packaging. A specification DOT-2P or a DOT-2Q non-refillable inner receptacle with a maximum capacity of not more than four (4) fluid ounces, inside an outer packaging tested and certified to the PG I level.

(2) Marking. Each outer packaging must be plainly and durably marked "NOT AUTHORIZED FOR TRANSPORTATION BY PASSENGER OR CARGO AIRCRAFT".

* * * * *

PART 174--CARRIAGE BY RAIL

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

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

37. In § 174.67, revise paragraph (g) to read as follows:

§ 174.67 Tank car unloading.

* * * * *

(g) The valve cap, or the reducer when a large outlet is to be used, must be removed with a suitable wrench after the set screws are loosened and a pail must be placed in position to catch any liquid that may be in the outlet chamber. If the valve cap or reducer does not unscrew easily, it may be tapped lightly with a mallet or wooden block in an upward direction. If leakage shows upon starting the removal, the cap or reducer may not be entirely unscrewed. Sufficient threads must be left engaged and sufficient time allowed to permit controlled escape of any accumulation

of liquid in the outlet chamber. If the leakage stops or the rate of leakage diminishes materially, the cap or reducer may be entirely removed. If the initial rate of leakage continues, further efforts must be made to seat the outlet valve (see paragraph (f) of this section). If this fails, the cap or reducer must be screwed up tight and the tank must be unloaded through the dome. If upon removal of the outlet cap the outlet chamber is found to be blocked with frozen liquid or any other matter, the cap must be replaced immediately and a careful examination must be made to determine whether the outlet casting has been cracked. If the obstruction is not frozen liquid, the car must be unloaded through the dome. If the obstruction is frozen liquid and no crack has been found in the outlet casting, the car may, if circumstances require it, be unloaded from the bottom by removing the cap and attaching unloading connections immediately. Before opening the valve inside the tank car with a frozen liquid blockage:

(1) Steam must be applied to the outside of the outlet casting or wrap casting with burlap or other rags and apply hot water to the wrapped casting to melt the frozen liquid; or

(2) For combustible liquid or Class 3 liquid petroleum distillate fuels the blockage may be cleared by attaching a fitting to the outlet line and applying nitrogen at a pressure of 50 to 100 psi.

* * * * *

PART 176--CARRIAGE BY VESSEL

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

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

39. Revise § 176.90 to read as follows:

§ 176.90 Private Automobiles.

(a) Class 1 (explosive) material. A private automobile which is carrying any Class 1 (explosive) material (except permitted fireworks or small arms ammunition) may not be transported on a passenger-carrying ferry vessel unless the Class 1 (explosive) material is in compliance with packaging, labeling, marking, and certification requirements of this subchapter. Permitted fireworks and small arms ammunition may be carried without the required packaging, labeling, marking, or certification if they are in tight containers.

(b) Engines, gasoline, or liquefied petroleum gas. Engines, internal combustion, flammable gas powered or flammable liquid powered, including when fitted in machinery or vehicles (i.e. motor vehicles, recreational vehicles, campers, trailers), vehicle flammable liquid or flammable gas powered, gasoline, and petroleum gases, liquefied or liquefied petroleum gas when included as part of a motor home, recreational vehicle, camper, or trailer; are excepted from the requirements of this subchapter if the following conditions are met:

(1) Any container showing deterioration which might affect its integrity must not be allowed on board the vessel. A visual inspection by a responsible member of the crew must be made of each cylinder of liquefied petroleum gas before it may be allowed aboard the vessel. A cylinder that has a crack or leak, is bulged, has a defective valve or a leaking or defective pressure relief device, or bears evidence of physical abuse, fire or heat damage, or detrimental rusting or corrosion, may not offered for transportation on board the vessel. Leaking or damaged containers of gasoline may not be offered for transportation on board the vessel.

(2) Motor vehicles may be stowed in the same hold or compartment or on the vehicle deck of passenger vessels with cylinders of liquefied petroleum gas when the cylinders are securely attached to recreational vehicles, such as campers or trailers.

(3) Extra containers of gasoline (including camp stove or lantern fuel) and portable cylinders of liquefied petroleum gas (including cylinders for camping equipment) not securely attached to recreational vehicles must be stowed in the vessel's paint locker. Containers must be securely closed.

(4) All liquefied petroleum gas cylinders must be secured by closing the shut-off valves prior to the recreational vehicles being loaded on the vessels. The owner or operator of each recreational vehicle must be directed to close all operating valves within the vehicles.

(5) “No smoking” signs must be posted on the vehicle decks and, if used for storage of hazardous materials; in close proximity to the vessel’s paint locker.

(6) An hourly patrol of the vehicle decks must be made by a crewmember. Any unusual or dangerous situation must be reported to the vessel's master.

(7) Passengers may be allowed on the vehicle decks during the voyage and are subject to the control of the crew personnel conducting the continuous vehicle deck patrol.

(8) Each person responsible for performing a function authorized by this section must be trained in accordance with subpart H of part 172 of this subchapter and on the requirements of this section.

(9) Shipments made under this paragraph are subject to the Hazardous Materials Incident Reporting requirements specified in §§ 171.15 and 171.16 of this subchapter.

PART 177--CARRIAGE BY PUBLIC HIGHWAY

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

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

41. Section 177.820 is added to read as follows:

§ 177.820 Movement of motor vehicles across highways.

Materials in Class 2, Class 3, Class 4, Class 5, Class 6, Class 8, and Class 9; Class 7 Radioactive material, excepted packages (UN 2908, UN 2909, UN 2910, and UN 2911); and Combustible liquids are not subject to 49 CFR, Part 172 Subparts C (Shipping Papers), D (Marking), E (Labeling), and F (Placarding) of part 172 when moved directly across a public road provided:

(a) The movement is from one part of a facility to another;

(b) The public road is not more than a two lane single roadway; and

(c) Access to the public road must be restricted by signals, lights, gates, or similar controls.

42. In § 177.834, revise paragraphs (i)(3), (i)(4), and (l)(2)(i) remove and reserve paragraph (l)(2)(ii) to read as follows:

§ 177.834 General Requirements.

* * * * *

(i) * * *

(3) A qualified person "attends" the loading or unloading of a cargo tank only if, throughout the process:

(i) Except for unloading operations subject to §§ 177.837(d), 177.840(p), and 177.840(q), the qualified person is within 7.62 m (25 feet) of the cargo tank. The qualified person attending the unloading of a cargo tank must be alert and have an unobstructed view of the cargo tank and delivery hose to the maximum extent practicable during the unloading operation; or

(ii) The qualified person observes all loading or unloading operations by means of a video monitor located at a remote control station, and the loading or unloading system is equipped as follows:

(A) The video monitoring system must have a motorized zoom lens, and must be capable of panning and zooming from the remote control station. The camera must be mounted so as to provide an unobstructed view of all equipment involved in the loading or unloading operations, including all valves, hoses, domes, and safety relief devices. In addition, the view capability must include the entire containment area.

(B) Upon loss of video, loading or unloading operations must be immediately terminated.

(C) Shut-off valves operable from the remote control station must be provided.

(D) In the event of a remote system failure, a qualified person must immediately resume attending the loading or unloading of the cargo tank as provided in paragraph (i)(3)(i).

(E) A containment area must be provided capable of holding the contents of as many cargo tank motor vehicles as might be loaded at any single time.

(F) A qualified person must personally conduct a visual inspection of each cargo tank motor vehicle after it is loaded, prior to departure, for any damage that may have occurred during loading; or

(iii) Hoses used in the loading or unloading operations are equipped with cable connected wedges, plungers or flapper valves located at each end of the hose, able to stop the flow of product from both the source and the receiving tank within one second without human intervention in the event of a hose rupture, disconnection or separation.

(A) Prior to each use, each hose must be inspected to ensure that it is of sound quality, without defects detectable through visual observation; and

(B) The loading or unloading operations must be physically inspected by a qualified person at least once every sixty (60) minutes.

(4) A person is "qualified" if he has been made aware of the nature of the hazardous material which is to be loaded or unloaded, has been instructed on the procedures to be followed in emergencies, and except for persons observing loading or unloading operations by means of a video monitor and persons inspecting hoses in accordance with paragraph (3)(iii)(B), is authorized to move the cargo tank, and has the means to do so.

* * * * *

(l) * * *

(2) * * *

(i) Use of combustion cargo heaters. A motor vehicle equipped with a combustion cargo heater may be used to transport Class 3 (flammable liquid) or Division 2.1 (flammable gas) materials only if the following requirements in paragraph (A) or (B) are met:

(A) The combustion cargo heater is powered by diesel fuel or propane and each of the following requirements are met:

(1) Electrical apparatus in the cargo compartment is non-sparking or explosion proof.

(2) There is no combustion apparatus in the cargo compartment.

(3) There is no connection for return of air from the cargo compartment to the combustion apparatus.

(4) The heating system will not heat any part of the cargo to more than 54 °C (130 °F).

(5) Heater requirements under § 393.77 of this title are complied with.

(6) The heater unit and its fuel supply must be externally mounted on the truck or trailer.

(7) The heater unit must retain combustion in a sealed combustion chamber.

(8) The heater unit must utilize outside air for combustion (air from the cargo space cannot be used for combustion).

(9) Heater unit combustion gases must be exhausted to the outside of the truck or trailer.

(B) It is a catalytic heater and each of the following requirements are met:

(1) The heater's surface temperature cannot exceed 54 °C (130 °F)—either on a thermostatically controlled heater or on a heater without thermostatic control when the outside or ambient temperature is 16 °C (61 °F) or less.

(2) The heater is not ignited in a loaded vehicle.

(3) There is no flame, either on the catalyst or anywhere in the heater.

(4) The manufacturer has certified that the heater meets the requirements under paragraph (l)(2)(i)(B) of this section by permanently marking the heater "MEETS DOT REQUIREMENTS FOR CATALYTIC HEATERS USED WITH FLAMMABLE LIQUID AND GAS."

(5) The heater is also marked "DO NOT LOAD INTO OR USE IN CARGO COMPARTMENTS CONTAINING FLAMMABLE LIQUID OR GAS IF FLAME IS VISIBLE ON CATALYST OR IN HEATER."

\(ii) [Reserved]

* * * * *

43. In § 177.838, the title of the section is revised and paragraph (i) is added to read as follows:

§ 177.838 Class 4 (flammable solid) materials, Class 5 (oxidizing) materials, and Division 4.2 (self-heating and pyroforic liquid) materials.

* * * * *

(i) Division 4.2 (self-heating) materials. Notwithstanding the segregation requirements of § 177.848(d) of this part, the following Division 4.2 (self-heating) materials may be transported on the same transport vehicle with Class 8 (corrosive) materials. The hazardous materials must be palletized with a minimum height of 100 mm (4 inches) off the floor of the vehicle, and the Division 4.2 (self-heating) material is separated from the corrosive material by a minimum horizontal distance of 1.2 m (4 feet).

(1) Sodium hydrosulfite or sodium dithionite, UN1384, in Packing Group II or III packaged in UN 1A2 steel drums that meet the Packing Group II performance requirements of subpart M of part 178 of this title.

(2) Thiourea dioxide, UN3341, in Packing Group II or III packaged in UN 1G fiber drums meeting packing group II performance requirements of subpart M of part 178 of this title.

(3) Self-heating, solid, organic, n.o.s., UN3088, in Packing Group II or III packaged in UN 1G fiber drums meeting packing group II performance requirements of subpart M of part 178 of this title.

* * * * *

44. In § 177.840, add paragraph (a)(3) to read as follows:

§ 177.840 Class 2 (gases) materials.

(a) * * *

(3) Cylinders containing material classed as Division 2.3, Hazard Zone A. (i) Notwithstanding the segregation requirements of § 177.848(d) of this part, a cylinder containing a Division 2.3, Hazard Zone A materials may be transported on the same transport vehicle with

materials classed as Division 2.1, Class 3, Class 4, Class 5, and Class 8 if all of the following requirements are met:

(A) The Division 2.3, Hazard Zone A material must be packaged as authorized by this subchapter. In addition, each package must be must be placed in a plastic bag which is taped closed and then overpacked in a UN 1A2 steel drum tested and marked for a Packing Group II or higher performance level with insulation material inside to protect the cylinders from fire. The outside of the overpack must be marked with an indication that the inner packagings conform to the prescribed specifications.

(B) A Division 2.1 material requiring strong non-bulk outer packagings in accordance with § 173.301(a)(9) of this subchapter must be overpacked in a UN 1A2 steel or 1H2 plastic drum tested and marked for a Packing Group II or higher performance level. The outside of the overpack must be marked with an indication that the inner packagings conform to the prescribed specifications.

(C) Packages containing Division 2.3 Hazard Zone A material must be separated within the transport vehicle from packages containing Division 2.1, Class 3, Class 4, Class 5, and Class 8 materials by a minimum horizontal distance of 1.5 m (5 feet). In addition, all steel or plastic overpacks containing packages of Division 2.3, Hazard Zone A or Division 2.1 material must be placed on pallets within the transport vehicle.

(ii) Notwithstanding the segregation requirements of § 177.848(d) of this part, Division 2.3, Hazard Zone A materials may be transported on the same transport vehicle with non-bulk packagings and IBCs meeting a UN performance standard containing only the residue of Division 2.1, 4.3, 5.1, and Class 3 and 8 materials if all of the following requirements are met:

(A) The materials are transported in enclosed trailers equipped with inlet and outlet vent

openings with a minimum total area of one square foot per 1,000 cubic feet of trailer volume. Electrical systems within the trailer's interior must be non-sparking or explosion proof.

(B) Cylinders must be transported in an upright position and securely restrained within the trailer, or loaded into racks, secured to pallets, or packed in wooden or fiberboard boxes or crates to prevent the cylinders from shifting or overturning within the motor vehicle under normal transportation conditions. If cylinders are secured to a pallet, the pallet must be designed to transport 1,590 kg (3,500 lbs.) per pallet and the cylinders must be secured within the pallet by a web strap rated at 4,545 kg (10,000 lbs.).

(C) A cylinder containing Division 2.3 Hazard Zone A materials must be separated from non-bulk packagings and IBCs meeting a UN performance standard containing the residue of materials in Division 2.1, 4.3, or 5.1, or Class 3 or 8 by a minimum horizontal distance of 3 m (10 feet). The maximum gross weight of Division 2.3 Hazard Zone A material carried on one vehicle must not exceed 3,636 kg (8,000 lbs.).

(D) Motor carriers must have a “satisfactory” safety rating as prescribed in Part 385 of this Title.

* * * * *

45. In § 177.841, add paragraph (f) to read as follows:

§ 177.841 Division 6.1 and Division 2.3 materials.

* * * * *

(f) Notwithstanding the segregation requirements of § 177.848(d) of this part, when transported by highway by private or contract motor carrier, Division 6.1 Packing Group I, Hazard Zone A materials meeting the definition of a hazardous waste as provided in § 171.8 of

this subchapter, may be transported on the same transport vehicle with materials classed as Class 3, Class 4, Class 5, and Class 8. The Division 6.1 Packing Group I, Hazard Zone A materials must be loaded on pallets and separated from the Class 3, Class 4, Class 5, and Class 8 materials by a minimum horizontal distance of 2.74 m (9 feet) when in conformance with the following:

(1) These materials are placed in combination packagings as prescribed in § 173.226(c).

(2) Combination packages containing materials poisonous by inhalation, Division 6.1, Packing Group I, Hazard Zone A, must be:

(i) Filled and packed by employees;

(ii) On pallets, when in a transport vehicle; and

(iii) Separated from hazardous materials assigned to Class 3, Class 8 or Divisions 4.1, 4.2, 4.3, 5.1, 5.2 by a nine foot (minimum distance) buffer zone, when in a transport vehicle. The buffer zone maybe established by:

(A) A load lock;

(B) Empty drums;

(C) Drums containing hazardous materials (e.g., Class 9) that are compatible with materials in all other drums immediately around them; or

(D) Drums containing non-hazardous materials that are compatible with materials in all other drums immediately around them.

* * * * *

PART 178--SPECIFICATIONS FOR PACKAGINGS

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

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

47. Section 178.33c is added to read as follows:

178.33c Specification 2P; inner nonrefillable metal receptacle variations.

Sec

178.33c-1 Compliance.

178.33c-2 Variation 1.

178.33c-2 Variation 1.

§ 178.33c Specification 2P; inner nonrefillable metal receptacle variations.

§ 178.33c-1 Compliance.

Each container must continue to comply with the details for a 2P container in accordance with § 178.33-1 of this subpart except for the specific variations provided in this section.

§ 178.33c-2 Variation 1.

In accordance with § 178.33c-1, the following modifications or additional conditions apply under Variation 1–

(a) Manufacture. Side seams: not permitted. Ends: The ends shall be designed to withstand pressure and be equipped with a pressure relief system (e.g., rim-venting release or a dome expansion device) designed to function prior to bursting of the container.

(b) Tests. (1) One out of each lot of 25,000 containers or less, successively produced per day complete with ends assembled (and without a pressure relief system assembled) shall be pressure tested to destruction at gauge pressure and must not burst below 240 psig. For containers with a pressure relief system as described in paragraph (a) of this section and

assembled, it must function at not less than 175 psig and not greater than 85% of the minimum design burst pressure for that container (minimum 240 psig). Failure at a location other than the pressure relief system will reject the lot.

(2) Each such 25,000 containers or less, successively produced per day, shall constitute a lot and if the test container(s) shall fail, the lot shall be rejected. For containers with an end expansion device, the lot must be rejected if the container bursts prior to buckling of the device. Otherwise, ten (10) additional containers of each container design produced may be selected at random and subjected to the test. These containers shall be complete with ends assembled. Should any of the containers thus tested fail, the entire lot must be rejected. All containers constituting a lot shall be of like material, size, design construction, finish, and quality.

(c) Each container must be marked to show: DOT-2P1.

48. Section § 178.33d is added to read as follows:

178.33d Specification 2Q; inner nonrefillable metal receptacle variations.

Sec.

178.33d-1 Compliance.

178.33d-2 Variation 1.

178.33d-3 Variation 2.

§ 178.33d Specification 2Q; inner nonrefillable metal receptacle variations.

§ 178.33d-1 Compliance.

Each container must continue to comply with the details for a 2Q container in accordance with § 178.33a-1 of this subpart except for the specific variations provided in this section.

§ 178.33d-2 Variation 1.

In accordance with § 178.33d-1, the following modifications or additional conditions apply under Variation 1–

(a) Type and size. The maximum capacity of containers in this class shall not exceed 0.40 L (24.4 cubic inches). The maximum inside diameter shall not exceed 2.1 inches.

(b) Manufacture. Ends: The top of the container must be designed with a pressure relief system consisting of radial scores on the top seam(s). The bottom of the container must be designed to buckle at a pressure greater than the pressure at which the top buckles and vents.

(c) Wall thickness. The minimum wall thickness for any container shall be 0.0085 inches.

(d) Tests. (1) Two containers (one without a pressure relief system and one with) out of each lot of 2,500 or less, successively produced per day shall be pressure tested to destruction at gauge pressure. The container without a pressure relief system must not burst below 300 psig. The container assembled with a pressure relief system as described in paragraph (b) of this section must be tested such that the top (dome) buckles at not less than 75% of the tested burst pressure (minimum 300 psig).

(2) Each such 2,500 containers or less, successively produced per day, shall constitute a lot and if the test container(s) shall fail, the lot shall be rejected. Otherwise, five (5) additional pairs of containers may be selected at random and subjected to the test under which failure occurred. Should any of the containers thus tested fail, the entire lot must be rejected. All

containers constituting a lot shall be of like material, size, design construction, finish, and quality.

(e) Each container must be marked to show: DOT-2Q1.

§ 178.33d-3 Variation 2.

In accordance with § 178.33d-1, the following modifications or additional conditions apply under Variation 2–

(a) Manufacture. Ends: The ends shall be designed to withstand pressure and the container equipped with a pressure relief system (e.g., rim-venting release or a dome expansion device) designed to buckle prior to the burst of the container.

(b) Tests. One out of each lot of 10,000 containers or less, successively produced per day shall be pressure tested to destruction at gauge pressure and must not burst below 270 psig. For containers with a pressure relief system as described in paragraph (a) of this section and assembled, it must function at not less than 175 psig and not greater than 85% of the minimum design burst pressure of that container (minimum 270 psig). Failure at a location other than the pressure relief system will reject the lot.

(c) Each container must be marked to show: DOT-2Q2.

PART 180--CONTINUING QUALIFICATION AND MAINTENANCE OF PACKAGINGS

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

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

50. Section 180.209 is amended as follows:

a. In paragraph (a), Table 1 “Requalification of Cylinders” is amended, and a footnote is added;

b. Revise paragraph (e); and

c. Amend the Table in paragraph (g).

The revision and amendments read as follows.

§ 180.209 Requirements for requalification of specification cylinders.

(a) * * * * *

Table 1—Requalification of Cylinders [1]

Specification under which cylinder was made	**Minimum test pressure (psig) [2]**	**Requalification period (years)**
DOT 3	3000 psig	5
DOT 3A, 3AA	5/3 times service pressure, except noncorrosive service (*see* § 180.209(g))	5, 10, or 12 (*see* § 180.209(b), (e), (f), (h), and (j)
DOT 3AL	5/3 times service pressure	5, 10 or 12 (see § 180.209(e), (j) and § 180.209(m)[3]).
DOT 3AX, 3AAX	5/3 times service pressure	5, 10 (see § 180.209(e)
3B, 3BN	2 times service pressure (*see*§ 180.209(g))	5 or 10 (see § 180.209(e), (f))
3E	Test not required	

3HT	5/3 times service pressure	3 (*see* §§ 180.209(k) and 180.213(c))
3T	5/3 times service pressure	5
4AA480	2 times service pressure (*see* § 180.209(g))	5 or 10 (*see* § 180.209(e) or (h))
4B, 4BA, 4BW, 4B-240ET	2 times service pressure, except non-corrosive service (*see* § 180.209(g))	5, 10, or 12 (*see* § 180.209(e), (f), and (j))
4D, 4DA, 4DS	2 times service	5
DOT 4E	2 times service pressure, except non-corrosive (*see* § 180.209(g))	5 or 10 (See § 180.209(e))
4L	Test not required	
8, 8AL		10 or 20 (*see* § 180.209(i))
Exemption or special permit cylinder	See current exemption or special permit	See current exemption or special permit
Foreign cylinder (see § 173.301(j) of this subchapter for restrictions on use)	As marked on cylinder, but not less than 5/3 of any service or working pressure marking	5 (*see* §§ 180.209(l) and 180.213(d)(2))

[1] Any cylinder not exceeding 2 inches outside diameter and less than 2 feet in length is excepted from volumetric expansion test.

[2] For cylinders not marked with a service pressure, see § 173.301a(b) of this subchapter.

[3] This provision does not apply to cylinders used for carbon dioxide, fire extinguisher or other industrial gas service.

* * * * *

(e) Proof pressure test. A cylinder made in conformance with specifications 4B, 4BA, 4BW, or 4E protected externally by a suitable corrosion-resistant coating and used exclusively for non-corrosive gas that is commercially free from corroding components may be requalified by volumetric expansion testing or proof pressure testing every 10 years instead of every 5 years. When subjected to a proof pressure test, the cylinder must be carefully examined under test pressure and removed from service if a leak or defect is found.

* * * * *

(g) * * *

Cylinders conforming to…	Used exclusively for…
* * *	* * * *
DOT 4BW	Alkali metal alloys, liquid, n.o.s., Alkali metal dispersions or Alkaline earth metal dispersions, Potassium, Potassium Sodium alloys and Sodium that are commercially free of corroding components.

* * * * *

51. In § 180.213, revise paragraph (c) to read as follows:

§ 180.213 Requalification markings

* * * * *

(c) Requalification marking method. The depth of requalification markings may not be greater than specified in the applicable specification. The markings must be made by stamping, engraving, scribing, or applying a label embedded in epoxy that will remain legible and durable throughout the life of the cylinder, or by other methods that produce a legible, durable mark.

* * * * *

Issued in Washington, DC.

Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety
Pipeline and Hazardous Materials Safety Administration

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