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DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 130, 171, 173, and 174

[Docket No. PHMSA-2014-0105 (HM-251B)]

RIN 2137-AF08

Hazardous Materials: Oil Spill Response Plans and Information Sharing for High-Hazard Flammable Trains

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: PHMSA, in consultation with the Federal Railroad Administration, is issuing this NPRM to propose revisions to regulations that would expand the applicability of comprehensive oil spill response plans (OSRPs) based on thresholds of liquid petroleum oil that apply to an entire train consist. Specifically, we are proposing to expand the applicability for comprehensive OSRPs so that any railroad that transports a single train carrying 20 or more loaded tank cars of liquid petroleum oil in a continuous block or a single train carrying 35 or more loaded tank cars of liquid petroleum oil throughout the train consist must also have a current comprehensive written OSRP. We are further proposing to revise the format and clarify the requirements of a comprehensive OSRP (e.g., requiring that covered railroads develop response zones describing resources available to arrive onsite to a worst-case discharge, or the substantial threat of one, which are located within 12 hours of each point along the route used by trains subject to the comprehensive OSRP). We also solicit comment on defining high volume areas and staging resources using alternative response times , including shorter response times for spills that could

affect such high volume areas. Further, in accordance with the Fixing America's Surface Transportation Act of 2015, this action proposes to require railroads to share information about high-hazard flammable train operations with state and tribal emergency response commissions to improve community preparedness and seeks comments on these proposals. Lastly, PHMSA is proposing to incorporate by reference an initial boiling point test for flammable liquids from the ASTM D7900 method referenced in the American National Standards Institute/American Petroleum Institute Recommend Practices 3000, "Classifying and Loading of Crude Oil into Rail Tank Cars," First Edition, September 2014 as an acceptable testing alternative to the boiling point tests currently specified in the HMR. PHMSA believes providing this additional boiling test option provides regulatory flexibility and promotes enhanced safety in transport through accurate packing group assignment.

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

We are proposing a mandatory compliance date of 60 days after the date of publication of a final rule in the **Federal Register**. In this NPRM, we solicit comments from interested persons regarding the feasibility of the proposed compliance date.

ADDRESSES: You may submit comments identified by the docket number, PHMSA-2014-0105 (HM-251B), 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.

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 located at U.S. Department of Transportation, West Building, Ground Floor, Room W12–140, 1200 New Jersey Avenue, S.E., Washington, DC 20590.

Privacy Act: In accordance with 5 U.S.C. 553(c), DOT solicits comment from the public to better inform its rulemaking process. DOT posts these comments, without edit, to http://www.regulations.gov, as described in the system of records notice, DOT/ALL-14 FDMS, which is accessible through www.dot.gov/privacy. To facilitate comments tracking and response, we encourage commenters to provide their name or the name of their organization; however, submission of names is completely optional. Whether or not commenters identify themselves, all timely filed comments will be fully considered. If you wish to provide comments containing proprietary or confidential information, please contact the agency for alternate submission instructions.

FOR FURTHER INFORMATION CONTACT: Victoria Lehman, (202) 366-8553, Standards and Rulemaking Division, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, S.E., Washington, DC 20590-0001; or Karl Alexy, (202) 493-6245, Office of Safety Assurance and Compliance, Federal Railroad Administration.

SUPPLEMENTARY INFORMATION:

Abbreviations and Terms

AAR	Association of American Railroads
ACP	Area Contingency Plan
ANPRM	Advance Notice of Proposed Rulemaking
ANSI	American National Standards Institute
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
BSEE	Bureau of Safety and Environmental Enforcement
CDT	Central Daylight Time
CFR	Code of Federal Regulations
Crude Oil	Petroleum crude oil
CST	Central Standard Time
CWA	Clean Water Act (See Federal Water Pollution Control Act)
DHS	Department of Homeland Security
DOE	Department of Energy
DOI	Department of the Interior
DOT	Department of Transportation
EDT	Eastern Daylight Time
E.O.	Executive Order
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Environmentally Sensitive/Significant Area (See Endangered Species Act)
EST	Eastern Standard Time
FAST	Fixing America's Surface Transportation Act
FEMA	Federal Emergency Management Agency
FMCSA	Federal Motor Carrier Safety Administration
FR	Federal Register
FRA	Federal Railroad Administration
FWPCA	Federal Water Pollution Control Act (See Clean Water Act)

HHFT	High Hazard Flammable Train
HMR	Hazardous Materials Regulations (See 49 CFR parts 171-180)
HMT	Hazardous Materials Table (See 49 CFR 172.101)
IBP	Initial Boiling Point
ICP	Integrated Contingency Plan
LEPC	Local Emergency Planning Committee
MDT	Mountain Daylight Time
NASTTPO	National Association of SARA Title III Program Officials
NCP	National Contingency Plan
NIMS	National Incident Management System
NPRM	Notice of Proposed Rulemaking
NTSB	National Transportation Safety Board
OMB	Office of Management and Budget
OPA 90	Oil Pollution Act of 1990
OSC	On-Scene Coordinator
OSRP	Oil Spill Response Plan
PG	Packing Group
PHMSA	Pipeline and Hazardous Materials Safety Administration
PREP	National Preparedness for Response Exercise Program
RCP	Regional Contingency Plan
RFA	Regulatory Flexibility Act
RIA	Regulatory Impact Analysis
RP	Recommended Practice
RSPA	Research and Special Programs Administration
SERC	State Emergency Response Commission
TERC	Tribal Emergency Response Commission
TRANSCAER	Transportation Community Awareness and Emergency Response
TSA	Transportation Security Administration
TTCI	Transportation Technology Center Inc.
U.S.C.	United States Code
USCG	United States Coast Guard
USFA	United States Fire Administration

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I. Executive Summary

The Pipeline and Hazardous Materials Safety Administration (PHMSA), in coordination with the Federal Railroad Administration (FRA), is issuing this notice of proposed rulemaking (NPRM), titled "Oil Spill Response Plans and Information Sharing for High-Hazard Flammable Trains," in order to improve oil spill response readiness and mitigate effects of rail incidents involving petroleum oil and certain high-hazard flammable trains (defined in 49 CFR 171.8).

This NPRM is necessary due to the expansion in the United States' (U.S.) energy production, which has led to significant challenges for the country's transportation system. PHMSA published an advanced notice of proposed rulemaking (ANPRM) on August 1, 2014 (79 FR 45079), under the title, "Oil Spill Response Plans for High-Hazard Flammable Trains." This proposed rule addresses comments to the ANPRM and proposes to modernize the comprehensive oil spill response plan ("comprehensive plan") requirements under 49 CFR part 130 for petroleum oils. Additionally, consistent with the Emergency Order issued by the Secretary of Transportation (Secretary) on May 7, 2014, this NPRM proposes to require railroads to share information with state and tribal emergency response commissions (i.e., SERCs and TERCs) to improve community preparedness for potential high-hazard flammable train accidents. Lastly, PHMSA is proposing to incorporate by reference the ASTM D7900 test method referenced by the American National Standards Institute /American Petroleum Institute Recommend Practices 3000, "Classifying and Loading of Crude Oil into Rail Tank Cars," First Edition, September 2014 related to initial boiling point for flammable liquids as an acceptable testing alternative to the boiling point tests specified in the current regulations. PHMSA believes the incorporation of this ASTM methodology into regulation provides regulatory flexibility and promotes enhanced safety in transport through accurate packing group (PG) assignment.

The proposals in this NPRM work in conjunction with the requirements adopted in the final rule HM-251, "Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains" (80 FR 26643; May 8, 2015) ("HHFT Final Rule"). The Department of Transportation (DOT) continues its comprehensive approach to ensure the safe transportation of energy products.

PHMSA discusses the proposed requirements further throughout this NPRM and seeks

comments on the questions in the sections, as well as on all aspects of this proposal and its supporting analysis. PHMSA consolidates questions related to the proposed requirements for oil spill response plans in Section II, Subsection C ("Summary of Proposed Oil Spill Response Plan Requirements)" of this rulemaking. PHMSA consolidates the questions related to information sharing in Section VII ("Section-by-Section Review") under the discussion of § 174.312. PHMSA is also soliciting public comment on specific issues regarding our analysis and has consolidated these questions in Section 4 of the draft Regulatory Impact Analysis (RIA).

Expansion in domestic oil production relative to the 2000s has resulted in a large volume of crude oil being transported to refineries and other transport-related facilities throughout the country.[1] With the expectation of continued domestic production, rail transportation remains a flexible alternative to transportation by pipelines or vessels, which have historically delivered the vast majority of crude oil to U.S. refineries. The volume of crude oil carried by rail increased 423 percent between 2011 and 2012.[2] [3] In 2013, the number of rail carloads of crude oil approached 400,000, reached approximately 450,000 carloads in 2014, and fell to approximately 390,000 carloads in 2015.[4] Because rail transportation commonly includes petroleum oil shipped in high volumes and large quantities, either as several cars of material along with other commodities in a manifest train or as a single commodity train (commonly referred to as a "unit train"), there is a significant risk of train accidents that could reasonably be expected to cause substantial harm to the environment by discharging product into or on the navigable waters,

[1] See Memorandum of Understanding (MOU) between the Secretary of Transportation and the Administrator of the Environmental Protection Agency (EPA) establishing jurisdictional guidelines for implementing § 1321(j)(1)(C). 36 FR 24080; reprinted at 40 CFR part 112 App. A (December 18, 1971).
[2] See U.S. Rail Transportation of Crude Oil: Background and Issues for Congress; http://fas.org/sgp/crs/misc/R43390.pdf.
[3] See also "Refinery receipts of crude oil by rail, truck, and barge continue to increase" http://www.eia.gov/todayinenergy/detail.cfm?id=12131
[4] http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=ESM_EPC0_RAIL_NUS-NUS_MBBL&f=M

adjoining shorelines, or the exclusive economic zone.[5] As detailed in the Section III ("Recent Spill Events") of this rulemaking and the draft RIA, recent train accidents involving the discharge of petroleum oils have posed significant challenges for responders.

This rulemaking addresses issues related to preparedness and planning for the potential of train accidents involving the discharge of flammable liquid energy products. Specifically, this NPRM proposes to: (1) expand the applicability of comprehensive oil spill response plans to include any single train transporting 20 or more loaded tank cars of liquid petroleum oil in a continuous block or a single train transporting 35 or more loaded tank cars of liquid petroleum oil throughout the train consist; (2) clarify and add new requirements for comprehensive oil spill response plans; (3) require railroads to share information with state and tribal emergency response commissions (i.e., SERCs and TERCs) for high-hazard flammable trains to improve community preparedness for potential accidents; and (4) provide an alternative test method for determining the initial boiling point of a flammable liquid. The proposals in this rulemaking are shaped by public comments, National Transportation Safety Board (NTSB) Safety Recommendations, analysis of recent accidents, and input from stakeholder outreach efforts (including first responders). The estimated costs and benefits are described in Table 1 below:

Table 1: 10 Year and Annualized Costs and Benefits by Stand-Alone Regulatory Proposal

Provision	Benefits (7%)		Costs (7%)
	Qualitative	Breakeven	
Oil Spill Response Planning and Response	• Improved Communication/Defined Command Structure may improve response. • Pre-identified Access to Equipment and Staging of Appropriate Equipment for Response Zones. • Trained Responders.	Cost-effective if this requirement reduces the consequences of oil spills by 4.1%.	10-Year: $18,051,343 Annualized: $2,570,105
Information	• Improved Communication.	Cost-effective if this	10-Year: $3,650,832

[5] See 33 U.S.C. 1321(j)(5)(C) and Section I. Statutory/Legal Authority for this Rulemaking of this document.

Table 1: 10 Year and Annualized Costs and Benefits by Stand-Alone Regulatory Proposal			
Provision	**Benefits (7%)**		**Costs (7%)**
	Qualitative	**Breakeven**	
Sharing	• Enhanced Preparedness.	requirement reduces the consequences of oil spills by 0.8%.	Annualized: $519,796
IBR of ASTM D7900	• Regulatory Flexibility • Enhanced Accuracy in Packing Group Assignments	--	No Cost Estimated
Total		Cost-effective if this requirement reduces the consequences of oil spills by 4.9%.	10-Year: **$21,702,175** Annualized: **$3,089,901**

A. Oil Spill Response Plans

The Oil Pollution Act of 1990 amended the Federal Water Pollution Control Act (FWPCA), also known as the Clean Water Act (CWA) at 33 U.S.C. 1321, by adding oil spill response planning requirements for "facilities" that handle oil. The CWA requires that owners and operators of onshore facilities prepare and submit oil spill response plans for facilities that "could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or the exclusive economic zone."[6] The CWA applies to railroads or "rolling stock," which is included in the definition of "onshore facility."[7]

The Department of Transportation's oil spill planning requirements for rolling stock and motor carriers are found at 49 CFR part 130. Part 130 currently requires "comprehensive written plans" that comply with the CWA for the transportation of oil in a quantity greater than 1,000 barrels or 42,000 gallons per package. The approximate capacity of a rail car carrying crude oil is 30,000 gallons. Therefore, part 130 does not currently require that railroads prepare

[6] 33 U.S.C. 1321(j)(5)(C).
[7] "Onshore facility" means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under, any land within the United States other than submerged land." 33 U.S.C. 1321(a)(10). "Rolling stock" refers to rail cars.

comprehensive written plans. Part 130 also includes preparation of "basic plans" for containers with a capacity of 3,500 gallons or more carrying petroleum oil. Therefore, basic oil spill response plans are currently required for most, if not all, tank car shipments of petroleum oil. This rulemaking does not propose changes to the basic plan requirements because there is no justification for such changes at this time.

On January 23, 2014, the NTSB issued Safety Recommendation R-14-05, recommending that PHMSA revise the oil spill response planning thresholds for comprehensive oil spill response plans.[8] The NTSB also issued Safety Recommendation R-14-02, recommending that FRA audit spill response plans.[9] These recommendations are further discussed in Section IV ("National Transportation Safety Board Safety Recommendation") of this rulemaking. On August 1, 2014, PHMSA, in consultation with FRA, issued an ANPRM (79 FR 45079; HM-251B) seeking comment on potential revisions to its regulations that would expand the applicability of comprehensive oil spill response plans (OSRPs) to high-hazard flammable trains (HHFTs), based on thresholds of crude oil that apply to an entire train consist.[10] The proposed changes in this rulemaking clarify the comprehensive plan requirements to address the risk posed by HHFTs carrying petroleum oils.

This rulemaking addresses the risk of increased shipments of large quantities of petroleum oil being transported by rail and proposes to modernize and clarify the requirements for comprehensive OSRPs and more closely align these requirements with the statutory requirements of the CWA. This rulemaking proposes to expand the applicability for

[8] http://www.phmsa.dot.gov/PHMSA/Key_Audiences/Hazmat_Safety_Community/Regulations/NTSB_Safety_Recommendations/Rail/ci.R-14-5,Hazmat.print.
[9] http://www.ntsb.gov/_layouts/ntsb.recsearch/Recommendation.aspx?Rec=R-14-002.
[10] For the purposes of this discussion, train consist is considered the rolling stock, exclusive of the locomotive, making up a train.

comprehensive OSRPs to railroads transporting a single train containing 20 or more tank cars loaded with liquid petroleum oil in a continuous block, or a single train containing 35 or more tanks cars loaded with liquid petroleum oil throughout the train consist. This quantity aligns with the definition of a high-hazard flammable train in the HHFT Final Rule, which added new requirements and operational controls for these trains. The proposed changes respond to commenter requests for more specificity in plan requirements; provide a better parallel to other federal oil spill response plan regulations promulgated under the CWA; address the needs identified by first responders in the "Crude Oil Rail Emergency Response Lessons Learned Roundtable Report"; and provide requirements to address the challenges identified through an analysis of recent spill events.[11] The changes also propose to leverage the geographic information provided through the expanded routing analysis requirements of the HHFT Final Rule by applying a geographic component to the response plan structure. Railroads would divide their routes into "response zones" and connect notification procedures and available response resources to the specific geographic route segments that comprise the response zones. The proposed changes clarify the railroad's role in response activities and the communication procedures needed to notify Federal, State, and local agencies. A summary of the Clean Water Act statutory language, the current regulations of 49 CFR part 130, and the proposed changes to the comprehensive plan requirements under this rulemaking are further described in Section II, Subsection C ("Summary of Proposed Oil Spill Response Requirements").

B. Information Sharing

Federal hazardous materials transportation law (49 U.S.C. 5101–5128) authorizes the

[11] http://www.phmsa.dot.gov/hazmat/osd/emergencyresponse.

Secretary to "prescribe regulations for the safe transportation, including security, of hazardous material in intrastate, interstate, and foreign commerce." The Secretary delegated this authority to PHMSA under 49 CFR 1.97(b). As such, PHMSA is responsible for overseeing a hazardous materials safety program that minimizes the risks to life and property inherent in transportation in commerce. The HMR include operational requirements applicable to each mode of transportation. On a yearly basis, the HMR provide safety and security requirements for the transportation of more than 2.5 billion tons of hazardous materials (hazmat), valued at about $2.3 trillion, over 307 billion miles on the nation's interconnected transportation network. [12]

The Secretary also has authority over all areas of railroad transportation safety (Federal railroad safety laws, principally 49 U.S.C. chapters 201–213); this authority is delegated to FRA under 49 CFR 1.89. Pursuant to its statutory authority, FRA promulgates and enforces a comprehensive regulatory program (49 CFR parts 200-244) and the agency inspects and audits railroads, tank car facilities, and hazardous material offerors for compliance with both FRA's regulations and the HMR. FRA also has an extensive, well-established research and development program to improve all areas of railroad safety, including hazardous materials transportation. As a result of the shared role in the safe and secure transportation of hazardous materials by rail, PHMSA and FRA work closely when considering regulatory changes, and the agencies take a system-wide, comprehensive approach consistent with the risks posed by the bulk transport of hazardous materials by rail.

On May 7, 2014, DOT issued an Emergency Restriction/Prohibition Order in Docket No.

[12] 2012 Commodity Flow Survey, Research and Innovative Technology Administration (RITA), Bureau of Transportation Statistics (BTS). See http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=CFS_2012_00H01&prodType=table.

DOT-OST-2014-0067 (Order).[13] That Order required each railroad transporting in commerce within the U.S. 1,000,000 gallons or more of Bakken crude oil in a single train to provide certain information in writing to the SERC for each state in which it operates such a train. Subsequently, in August of 2014, PHMSA published an NPRM proposing to codify and clarify the requirements of the Order in the Hazardous Materials Regulations (HMR; 49 CFR parts 171-180) and requested public comment on the various facets of that proposal. See 79 FR 45015 (Aug. 1, 2014) (HHFT NPRM). In the final rule of that proceeding, however, PHMSA did not adopt the notification requirements proposed in the NPRM. See 80 FR 26643 (May 8, 2015) (HHFT Final Rule). PHMSA determined the expansion of the existing route analysis and consultation requirements under § 172.820 of the HMR to include HHFTs would be the best approach to ensuring that emergency responders and others involved with emergency response planning and preparedness would have access to sufficient information regarding crude oil shipments moving through their jurisdictions. PHMSA reasoned that expanding the existing route analysis and consultation requirements of § 172.820 (which already apply to the rail transportation of certain hazardous materials historically considered to be highly hazardous) would preserve the intent of the Emergency Order to enhance information sharing with emergency responders and allow for the easy incorporation of HHFTs into the overall hazardous materials routing and information sharing scheme.

On December 4, 2015, President Obama signed into law the Fixing America's Surface Transportation Act of 2015 ("FAST Act"). The FAST Act includes the "Hazardous Materials Transportation Safety Improvement Act of 2015" at §§ 7001 through 7311, which provides direction for PHMSA's hazardous materials safety program. Section 7302 directs the Secretary

[13] http://www.dot.gov/briefing-room/emergency-order

to issue regulations that require real-time sharing of electronic train consist information for hazardous materials shipments and require Class I railroads to provide State Emergency Response Commissions (SERCs) advanced notification of HHFTs traveling through their respective jurisdictions. DOT will implement the requirements related to electronic train consists in a separate rulemaking, but is addressing the requirement for advanced notification of HHFTs to SERCs in this rule. Section 7302 requires Class I railroads to provide advanced notification and information on HHFTs to SERCs consistent with the notification requirements in the Secretary's May 2014 Emergency Order in docket number DOT-OST-2014-0067. Section 7302 further requires SERCs receiving this advanced notification to provide the information to law enforcement and emergency response agencies upon request and directs the Secretary to establish security and confidentiality protections for the electronic train consist information and advanced notification information required by § 7302. In response to the FAST Act and the public's interest and feedback the Department previously received related to its May 7, 2014, Emergency Order,[14] this NPRM proposes to add a new § 174.312 to the HMR. This new section will establish the information sharing requirements, related to Emergency Order DOT-OST-2014-0067. As directed by the FAST Act, the proposed information requirements in § 174.312 are generally consistent with the Order, but broaden the scope of trains covered by the requirement. Consistent with the FAST Act, the proposed regulation expands the notification requirement to apply to all HHFTs as defined in the HHFT Final Rule, not just trains transporting 1,000,000 or more gallons of Bakken crude oil, and requires railroads to provide the notification monthly. Also, § 174.312 would require railroads to provide the required information to both SERCs and Tribal Emergency Response Commissions (TERCs), or other

[14] A discussion regarding public interest and feedback can be found later in the preamble in the section on "HHFT Rulemaking and Response."

appropriate state designated agencies. Finally, under proposed § 174.312, a railroad operating a train subject to the Comprehensive Oil Spill Response Plan requirements of this proposed rule would also need to provide the relevant SERCs, TERCs, or other appropriate state agencies with the contact information for qualified individuals and the description of response zones required to be compiled under proposed 49 CFR part 130.

Table 2 below describes, generally, how this proposed rule would address routing and information sharing issues, as compared to the Order (which remains in effect), the regulatory provisions implemented by the HHFT final rule, and the provisions of the FAST Act. PHMSA discusses the information sharing proposals further in the section-by-section analysis for § 174.312 later in this document and solicits comment on the questions listed there, as well as all aspects of this proposal.

Table 2: Information Sharing for Emergency Responders

Category	Emergency Order And HHFT NPRM	HHFT Final Rule (Routing)	FAST Act (Advanced Notification)	OSRP NPRM (Information Sharing)
Who is subject?	All railroads transporting 1,000,000 gallons or more of Bakken crude oil in a single train	All railroads transporting HHFT (20 cars in a block, 35 in consist carrying ANY Class 3 flammable liquid)	Class I railroads transporting HHFT (20 cars in a block, 35 in consist carrying ANY Class 3 flammable liquid)	All railroads transporting HHFT (20 cars in a block, 35 in consist carrying ANY Class 3 flammable liquid)
Who must the railroads notify?	Railroads notify SERCs or other appropriate state-designated entities. Provide the notification to FRA upon request.	Railroads provide point of contact (POC) information to state and/or regional fusion centers and state, local, and tribal officials in jurisdictions that may be affected	Railroads must notify SERCs who share information with other state and local public agencies upon request, as appropriate.	Railroads must notify SERCs, TERCs, or other appropriate state designated entities who share information with other state and local public agencies upon request, as appropriate. Railroads provide the notification to DOT upon request.

		by a rail carrier's routing decisions and who directly contact the railroad to discuss routing decisions.		
What type of notification?	*Active* – Information must continuously be supplied to these entities.	*Passive* - Information on routing and risk analysis will be discussed upon request with state, local, and tribal officials in jurisdictions that may be affected by a rail carrier's routing decisions.	Active – Information must continuously be supplied to these entities.	*Active* –Propose the active information sharing requirements in the Order with certain changes described below.
When/how often?	Update notifications when Bakken crude oil traffic materially changes within a particular county or state (by 25% or more)	Routing and risk analysis is performed annually.	Update the notifications prior to making any material changes to any volumes or frequencies of HHFTs traveling through a county.	Monthly notification or certification of no change to ensure that changes to frequency or volume are clearly communicated.
What to include in the notification?	A reasonable estimate of the number of affected trains that are expected to travel, per week, through each county within the state.	Information on results of routing and risk analysis can be discussed upon request. This includes the volume of hazardous material transported, rail traffic density, trip length, and route among other factors.	A reasonable estimate of the number of implicated trains that are expected to travel, per week, through each county within the applicable state.	A reasonable estimate of the number of HHFTs that are expected to travel, per week, through each county within the state.

	The routes over which the affected trains will be transported.	Information on results of routing and risk analysis can be discussed upon request. This includes routes over which affected trains are transported.	Identification of the routes over which such liquid will be transported.	The routes over which the affected trains will be transported.
	A description of the petroleum crude oil and applicable emergency response information required by subparts C and G of part 172 of this subchapter	Compile under current requirements in subparts C and G of part 172.	Identification and a description of the Class 3 flammable liquid being transported on such trains and applicable emergency response information, as required by regulation.	A description of the materials shipped and applicable emergency response information required by subparts C and G of part 172 of this subchapter.
	At least one point of contact at the railroad (including name, title, phone number and address) responsible for serving as the point of contact for the State Emergency Response Commission and relevant emergency responders related to the railroad's transportation	A point of contact (including the name, title, phone number and e-mail address) who can provide fusion centers and consult with other State, local and tribal officials (may include SERCs/TERCs) about the results of the routing and risk analysis (includes information on 27 factors) upon request.	A point of contact at the Class I railroad responsible for serving as the point of contact for State emergency response centers and local emergency responders related to the Class I railroad's transportation of such liquid.	At least one point of contact at the railroad (including name, title, phone number and address) for the SERC, TERC, and relevant emergency responders related to the railroad's transportation of affected trains.

	of affected trains.			
Spill Response Plan Info	N/A	N/A	N/A	For petroleum oil trains subject to Comprehensive Oil Spill Response Plan, the contact info for the qualified individuals and description of response zones compiled under part 130 must also be included.

C. Initial Boiling Point Test

An offeror's responsibility to accurately classify and describe a hazardous material is a key requirement under the HMR. In accordance with § 173.22 of the HMR, it is the offeror's responsibility to properly "class and describe a hazardous material in accordance with parts 172 and 173 of the HMR." For transportation purposes, classification is ensuring the proper hazard class, packing group, and shipping name are assigned to a particular material. For a Class 3 flammable liquid, the HMR provide two tests to determine classification. Both the flash point and initial boiling point (IBP) must be conducted to properly classify and assign an appropriate packing group (PG) for a Class 3 Flammable liquid with certain changes described below, in accordance with §§ 173.120 and 173.121.

In 2014, the rail and oil industry, with PHMSA's input, developed a recommended practice (RP) designed to improve crude oil rail safety through proper classification and loading practices. This effort was led by API and resulted in the development of an American National Standards Institute (ANSI) recognized recommended practice (see ANSI/API RP 3000, "Classifying and Loading of Crude Oil into Rail Tank Cars"). The API RP 3000 provides guidance on the material characterization, transport classification, and quantity measurement for

overfill prevention of petroleum crude oil for the loading of rail tank cars. With regard to classification, this recommended practice concluded that for crude oils containing volatile, low molecular weight components (e.g. methane), the recommended best practice is to test using American Society for Testing and Materials (ASTM) D7900.

The IBP test and practice recommended by industry (ASTM D7900) is not currently aligned with the testing requirements authorized in the HMR, forcing shippers to continue to use the testing methods authorized in § 173.121(a)(2). The ASTM D7900 differs from the boiling point tests currently in the HMR, because it is the only test which ensures a minimal loss of light ends. Therefore, for initial boiling point determination, PHMSA is proposing to incorporate by reference the ASTM D7900 test method identified within API RP 3000, thus permitting the industry best practice for testing Class 3 PG assignments. We note that the incorporation of the ASTM D7900, which aligns with the API RP 3000, will not replace the currently authorized initial boiling point testing methods, but rather serve as a testing alternative if one chooses to use that method. PHMSA believes this provides flexibility and promotes enhanced safety in transport through accurate packing group assignment.

II. Background

A. Current Oil Spill Response Requirements

The Clean Water Act (CWA), as amended by the Oil Pollution Act of 1990 (OPA 90), directs the President, at § 1321(j)(1)(C),[15] to issue regulations "establishing procedures, methods, and equipment and other requirements for equipment to prevent discharges of oil and hazardous substances from vessels and from onshore facilities and offshore facilities, and to contain such

[15]CWA § 311(j)(1)(C). See also 33 U.S.C. 1321(j)(5); CWA § (j)(5), respectively.

discharges." The CWA directs the President to issue regulations requiring owners and operators of certain vessels and onshore and offshore facilities to develop, submit, update and in some cases obtain approval of Oil Spill Response Plans (OSRPs).

Under 33 U.S.C. 1321(j)(5), an "owner or operator" of "[a]n onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, . ." must "prepare and submit to the President a plan for responding, to the maximum extent practicable, to a worst-case discharge, and to a substantial threat of such a discharge, of oil or a hazardous substance." Under 33 U.S.C. 1321(j)(5)(D), if a response plan is required then it must have specific elements, including submission and review.

On October 22, 1991, the President delegated to the Secretary authority to regulate certain transportation-related facilities (i.e., motor carriers and railroads) under § 1321(j)(1)(C) and 1321(j)(5). See Executive Order 12777, 56 FR 54757, sections 2(b)(2), 2(d)(2). The Secretary later delegated his authority to regulate certain transportation-related facilities (i.e., motor carriers and railroads) to PHMSA's predecessor agency, the Research and Special Programs Administration (RSPA). PHMSA's delegated authority under § 1321(j)(1)(C) and 1321(j)(5) for certain transportation-related facilities (i.e., motor vehicles and rolling stock) is solely the authority to promulgate regulations. The Federal Highway Administration and the FRA have the authority for OSRP review and approval for motor carriers and railroads, respectively.

The terms "transportation related facility" and "nontransportation related facility" are defined in a December 18, 1971, Memorandum of Understanding (MOU) between the Department and the U.S. Environmental Protection Agency (EPA) establishing jurisdictional

guidelines for implementing § 1321(j)(1)(C). 36 FR 24080; reprinted at 40 CFR part 112, appendix A. "Transportation related facilities" include: Highway vehicles and railroad cars which are used for the transport of oil in interstate or intrastate commerce and the equipment and appurtenances related thereto .... Excluded are highway vehicles and railroad cars and motive power used exclusively within the confines of a non transportation related facility or terminal facility and which are not intended for use in interstate or intrastate commerce.[16]

On June 17, 1996, RSPA published a final rule at 49 CFR part 130 to carry out PHMSA's delegated authority under the CWA for motor carriers and railroads (61 FR 30533). This rule adopted general spill response planning and response plan implementation requirements intended to prevent and contain spills of oil during transportation. Requirements for the "scope" of the regulations were included in § 130.2. Section 130.2(b) clarifies that the requirements of part 130 have no effect on "the discharge notification requirements of the United States Coast Guard (33 CFR part 153) and EPA (40 CFR part 110)."

Part 130 requires a basic OSRP for oil shipments in a packaging having a capacity of 3,500 gallons or more, which requires the preparation of a written plan that (1) "sets forth the manner of response to discharges . . ." (2) "takes into account the maximum potential discharge of the contents from the packaging," (3) "identifies private personnel and equipment available to respond to a discharge," and (4) "identifies the appropriate persons and agencies (including their telephone numbers) to be contacted in regard to such a discharge and its handling, including the National Response Center." The requirements for a basic response plan were issued as a "containment rule pursuant to § 1321(j)(1)(C)" of the CWA.[17]

The regulations at 49 CFR part 130 prohibit a person from transporting oil in a package

[16] 36 FR 24080
[17] 61 FR 30537

containing more than 42,000 gallons (1,000 barrels) unless that person has a current comprehensive OSRP that: (1) conforms to all requirements for a basic OSRP, (2) is consistent with the National Contingency Plan and Area Contingency Plans, (3) identifies the qualified individual with authority to implement removal and facilitate communication between federal officials and spill response personnel, (4) identifies and ensures by contract or other means response equipment and personnel to remove a worst-case discharge, (5) describes training, equipment testing, and drills, and (6) is submitted to FRA. The regulations also require motor carriers to submit plans to FHWA. However, motor carriers do not have packages capable of meeting the threshold for a comprehensive plan. The comprehensive OSRP addresses minimum requirements for a plan specified by 33 U.S.C. 1321(j)(5)(D). In the 1996 final rule, a nationwide, regional or other generic plan is acceptable. The plan holder was not required to account for different response locations.

Table 3 outlines the specific differences between a basic and comprehensive OSRP. The shaded rows of the table indicate requirements that are not part of the basic OSRP, but are included in the comprehensive OSRP requirements in 49 CFR 131(b).

Table 3: Comparison of Current Basic and Comprehensive OSRPs by Requirement

Category	Requirement	Type of OSRP	
		Basic	Comprehensive
Preparation	Sets forth the manner of response to a discharge.	Yes	Yes
Preparation	Accounts for the maximum potential discharge of the packaging.	Yes	Yes
Personnel / Equipment	Identifies private personnel and equipment available for response.	Yes	Yes
Personnel / Coordination	Identifies appropriate persons and agencies (including telephone numbers) to be contacted, including the National Response Center (NRC).	Yes	Yes
Documentation	Is kept on file at the principal place of business and at the dispatcher's office.	Yes	Yes
Coordination	Reflects the requirements of the National Contingency Plan (40 CFR part 300) and Area	No	Yes

	Contingency Plans.		
Personnel / Coordination	Identifies the qualified individual with full authority to implement removal actions, and requires immediate communications between the individual and the appropriate Federal official and the persons providing spill response personnel and equipment.	No	Yes
Personnel / Equipment / Coordination	Identifies and ensures by contract or other means the availability of, private personnel, and the equipment necessary to remove, to the maximum extent practicable, a worst-case discharge (including that resulting from fire or explosion) and to mitigate or prevent a substantial threat of such a discharge.	No	Yes
Training	Describes the training, equipment, testing, periodic unannounced drills, and response actions of personnel, to be carried out under the plan to ensure safety and to mitigate or prevent discharge or the substantial threat of such a discharge.	No	Yes
Documentation	Is submitted (and resubmitted in the event of a significant change) to the Administrator of FRA.	No	Yes

B. Advanced Notice of Proposed Rulemaking

On August 1, 2014, PHMSA, in consultation with FRA, published an ANPRM to seek comment on potential revisions to its regulations that would expand the applicability of comprehensive OSRPs to HHFTs transporting petroleum oil based on thresholds of crude oil that apply to an entire train consist (79 FR 45079). On the same day, also in consultation with FRA, PHMSA published the HHFT NPRM, which proposed to define HHFT to mean a single train carrying 20 or more carloads of a Class 3 flammable liquid (79 FR 45015). As discussed above, trains transporting a package (i.e., rail car) containing 3,500 gallons or more of oil are subject to the basic OSRP requirement at 49 CFR 130.31(a). However, part 130 only requires a comprehensive OSRP when the quantity of oil is greater than 42,000 gallons per package. Because the typical rail tank car has a capacity around 30,000 gallons, few if any rail carriers are

currently subject to the comprehensive OSRP plan requirements.[18]

In setting the current OSRP threshold quantities, RSPA considered a 1,000,000-gallon threshold that would apply to shipments, rather than individual packages. Specifically, RSPA stated,

> Conversely, the 1,000,000-gallon threshold adopted by EPA [Environmental Protection Agency] is contingent on several factors, including restrictive provisions that the facility may not transfer oil over water to or from vessels and that the facility's proximity to a public drinking water intake must be sufficiently distant to assure that the intake would not be shut down in the event of a discharge. Further, the EPA threshold refers to the capacity not of a single fixed storage tank, but of the entire facility, including barrels and drums stored at the facility. In summary, this example also is not analogous to hazards routinely encountered during transportation by railway and highway.
>
> During the June 28, 1993 public meeting, the "substantial harm" threshold was discussed at length, but participants did not agree on what volume of oil reasonably could cause substantial harm to the marine environment. Also, the 42,000-gallon threshold is supported by a number of comments to the docket citing its use by the EPA in related sections of the Code of Federal Regulations. Consequently, RSPA believes its determination to use a threshold value of 42,000 gallons in a single packaging is appropriate and reasonable.[19]

As discussed in the June 17, 1996 RSPA final rule, RSPA recognized that an incident involving the transportation of 1,000,000 gallons of crude oil could reasonably be expected to cause substantial harm, even if not in a single packaging. Under the same CWA authority, delegated to EPA for non-transportation-related facilities, EPA requires Facility Response Plans (FRPs) for facilities with 1,000,000 gallons or more in aggregate oil storage capacity and which meet one or more of the harm factors at 40 CFR part 112.20(f)(1)(ii) and for facilities with transfers of oil over water to or from vessels that have aggregate oil storage capacities of 42,000

[18] The 2014 AAR's Universal Machine Language Equipment Register (UMLER) numbers showed 5 tank cars listed with a capacity equal to or greater than 42,000 gallons, and none of these cars were being used to transport oil or petroleum products.
[19] 61 FR 30537.

gallons or more.[20] EPA also requires Spill Prevention Control and Countermeasure (SPCC) plans under the CWA authority for onshore non-transportation related facilities with an aggregate aboveground oil storage capacity of more than 1,320 gallons of oil or completely buried storage capacity greater than 42,000 gallons and which have a reasonable expectation of an oil discharge to navigable waters or adjoining shorelines.

PHMSA recognizes that a single tank car is not likely to hold 42,000 gallons of crude oil, but the increasing reliance on HHFTs increases the risk that more than one tank car could rupture during a derailment and result in the discharge of the contents of more than one rail car. RSPA either did not consider this risk or did not consider it significant when it established the current threshold. In the ANPRM, PHMSA sought comments on what impact changing the applicability threshold would have on current business practices for shipping crude oil by rail. The ANPRM also explained that since the typical capacity for a rail tank car used in the transport of crude oil is around 30,000 gallons, a 1,000,000-gallon threshold for oil per train consist would translate to requiring a comprehensive OSRP for trains composed of approximately 35 cars of crude oil. PHMSA expected the business practices for HHFTs would result in train consists that often exceed 35 crude oil tank cars. The ANPRM also explained that a 42,000 gallon per train consist threshold would translate to requiring comprehensive OSRPs for trains composed of approximately two cars of crude oil.

Also in the ANPRM, PHMSA sought comments on nine questions to inform our understanding of adjusting the threshold quantities that would trigger comprehensive OSRP requirements for HHFTs of petroleum oil as well as adjusting the plan requirements. PHMSA requested that comments reference a specific portion of the ANPRM, explain the reason for any

[20] The terms comprehensive plan, oil spill response plan (OSRP) and facility response plan (FRP) are often used interchangeably.

recommended change, include supporting data, and explain the source, methodology, and key assumptions of the supporting data.

The ANPRM described the consequences, including environmental impacts, of several recent HHFT derailments, including Lac-Mégantic, Quebec, Canada; Aliceville, Alabama; and Casselton, North Dakota. In response to its participation in the investigation of the Lac-Mégantic accident, the NTSB issued Safety Recommendation R-14-05, which requested that PHMSA revise the spill response planning thresholds prescribed in 49 CFR part 130 to require comprehensive OSRPs that effectively provide for the carriers' ability to respond to worst-case discharges resulting from accidents involving unit trains or blocks of tank cars transporting oil and other petroleum products. In this recommendation, the NTSB raised a concern that, "[b]ecause there is no mandate for railroads to develop comprehensive plans or ensure the availability of necessary response resources, carriers have effectively placed the burden of remediating the environmental consequences of an accident on local communities along their routes." In light of these incidents (as well as others described in this rulemaking and the accompanying regulatory impact analysis) and NTSB Safety Recommendation R-14-05, PHMSA is now proposing to revise the applicability and requirements for comprehensive OSRPs.

C. Summary of Proposed Oil Spill Response Requirements

A summary of the Clean Water Act statutory language, the current regulations of 49 CFR part 130 for comprehensive plans, and the proposed changes to the comprehensive plan requirements under this rulemaking are further described in the Tables 4, 5, & 6 below.

Table 4: Applicability Comparison		
CWA Statute	**Current Regulatory**	**Proposed Changes to Applicability**

	Applicability for Comprehensive Plans	for Comprehensive Plans
33 U.S.C. 1321 (j)(5)(A)(i) The President shall issue regulations which require an owner or operator of a tank vessel or facility described in subparagraph (C) to prepare and submit to the President a plan for responding, to the maximum extent practicable, to a worst-case discharge, and to a substantial threat of such a discharge, of oil or a hazardous substance.	*49 CFR Part 130* Comprehensive plan requirements include both the general elements for the basic plan in 130.31(a) and the additional measures in 130.31(b).	*49 CFR Part 130* Restructures part 130 to include comprehensive oil spill response plans in subpart C. Provides general requirements for recordkeeping, plan format and information about response structure to facilitate usability and enforceability of plan requirements. All proposed changes better align the requirements with other regulations for oil spill response plans under other federal agencies, including optional use of the Integrated Contingency Plan (ICP) format.
33 U.S.C. 1321 (j)(5)(C)(iv) An onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or the exclusive economic zone.	*§ 130.31(b)(1)* 42,000 gallons of liquid oil in a single package	*§130.101* Expands the current applicability to include trains transporting: • 42,000 gallons of liquid oil in a single package (current applicability); OR • At least 20 cars of liquid petroleum oil in a continuous block or 35 cars of liquid petroleum oil in a consist.

Table 5: Plan Requirements Comparison		
Plan Elements Required by CWA Statute	**Current Regulatory Comprehensive Plan Elements**	**Proposed Changes to Comprehensive Plan Elements**
33 U.S.C. 1321 (j)(5)(D)(i) A response plan must be consistent with the requirements of the National Contingency Plan and Area Contingency Plans.	*§ 130.31(b) (2)* A comprehensive plan must be consistent with the requirements of the National Contingency Plan and Area Contingency Plans.	*§ 130.103* Requires certification that the plan is consistent with a list of specific NCP/ACP requirements for "minimum compliance," to clarify the elements of NCP/ACP applicable to rail shipments.
33 U.S.C. 1321 (j)(5)(D)(ii) A response plan must identify the qualified individual having full authority to implement removal actions, and require immediate communications between that individual and the appropriate federal official and the persons providing personnel and equipment	*§ 130.31(b) (3)* A comprehensive plan must identify the qualified individual having full authority to implement removal actions, and requires immediate communications between that individual and the appropriate federal official and the persons providing spill response personnel and equipment;	*§§ 130.104 -130.105* Requires identification of qualified individual for each response zone in quickly accessible information summary. Requires that the plan include a checklist of necessary notifications, contact information, and necessary information to clarify communication procedures.

33 U.S.C. 1321 (j)(5)(D)(iii) A response plan must identify, and ensure by contract or other means approved by the President the availability of, private personnel and equipment necessary to remove to the maximum extent practicable a worst-case discharge (including a discharge resulting from fire or explosion), and to mitigate or prevent a substantial threat of such a discharge.	*§ 130.31(b) (4)* A comprehensive plan must identify, and ensure by contract or other means the availability of, private personnel (including address and phone number), and the equipment necessary to remove, to the maximum extent practicable, a worst-case discharge (including a discharge resulting from fire or explosion) and to mitigate or prevent a substantial threat of such a discharge.	*§ § 130.102 & 130.106* Includes the establishment of response zones, to ensure the availability of personnel and equipment in different geographic route segments. Demonstrate that the response management system uses the National Incident Management System (NIMS) for common terminology and has a manageable span of control, a clearly defined chain of command, and trained personnel to fill each position. Includes requirements to identify the organization, personnel, equipment, and deployment location thereof capable of removal and mitigation of a worst-case discharge.
33 U.S.C. 1321 (j)(5)(D)(iv); A response plan must describe the training to be carried out under the plan to ensure the safety of the facility and to mitigate or prevent the discharge.	*§ 130.31(b) (5)* A comprehensive plan must describe the training to be carried out under the plan to ensure the safety of the facility and to mitigate or prevent the discharge.	*§ 130.107* Requires certification and documentation that employees have been trained in carrying out their responsibilities under the plan.
33 U.S.C. 1321 (j)(5)(D)(iv) A response plan must describe the equipment testing to be carried out under the plan.	*§ 130.31(b) (5)* A comprehensive plan must describe the equipment testing to be carried out under the plan.	*§130.108* Requires description and certification that equipment testing meets the manufacturer's minimum requirements, which is equivalent to U.S. Coast Guard (USCG) requirements.
33 U.S.C. 1321 (j)(5)(D)(iv) A response plan must describe the periodic unannounced drills to be carried out under the plan.	*§ 130.31(b) (5)* A comprehensive plan must describe the periodic unannounced drills to be carried out under the plan.	*§130.108* Requires drills to be equivalent to the DOT PREP standard. PREP includes sections for each agency regulated under CWA.
33 U.S.C. 1321 (j)(5)(D)(iv) A response plan must describe the response actions of persons on the vessel or at the facility.	*§ 130.31(b) (5)* A comprehensive plan must describe the response actions of facility personnel, to be carried out under the plan to ensure the safety of the facility and to mitigate or prevent the discharge, or the substantial threat of such a discharge.	*§ 130.106* Requires a description of all of the following: • Activities and responsibilities of railroad personnel prior to arrival of Qualified Individual (QI) • QI responsibilities and actions • Procedures coordinating railroad/QI actions with the Federal On-Scene Coordinator
33 U.S.C. 1321 (j)(5)(D)(v) A response plan must be updated periodically.	49 CFR part 130 does not specify clearly if or when the railroad must update a comprehensive plan.	*§ 130.109* Clarifies that plans should be reviewed internally in full every 5 years at a

		minimum, when new or different conditions or information changes within the plan, or after a discharge requiring plan activation occurs.
33 U.S.C. 1321 (j)(5)(D) (vi) A response plan must be resubmitted for approval of each significant change.	*§ 130.31(b) (6)* Is submitted, and resubmitted in the event of any significant change, to the Federal Railroad Administrator (for tank cars).	*§ 130.109* Requires plans to be resubmitted to FRA in the event of new or different operating conditions or information that would substantially affect the implementation of the plan. Provides examples of significant changes for clarity.

Table 6: Plan Approval Comparison		
Approval and Review Required by CWA Statute	**Current Regulatory Requirement**	**Proposed Changes**
33 U.S.C. 1321 (j)(5) (E) With respect to any response plan submitted under this paragraph for an onshore facility that, because of its location, could reasonably be expected to cause significant and substantial harm to the environment by discharging into or on the navigable waters or adjoining shorelines or the exclusive economic zone, and with respect to each response plan submitted under this paragraph for a tank vessel, nontank vessel, or offshore facility, the President shall— (i) promptly review such response plan; (ii) require amendments to any plan that does not meet the requirements of this paragraph; (iii) approve any plan that meets the requirements of this paragraph; (iv) review each plan periodically thereafter; and (v) in the case of a plan for a nontank vessel, consider any applicable State-mandated response plan in effect on August 9, 2004, and ensure consistency to the extent practicable.	*§ 130.31(b) (6)* Is submitted, and resubmitted in the event of any significant change, to the Federal Railroad Administrator (for tank cars).	*§ 130.111* Requires explicit approval of plans by FRA. Specifies process for FRA to notify railroads of any sections of alleged deficiencies in plan and provides railroads the opportunity to respond. Clarifies railroads will review plans five years from the date of last approval and resubmit plans after significant changes.
33 U.S.C. 1321 (j)(5) (F) A tank vessel, nontank vessel, offshore facility, or onshore facility required to prepare a response plan under this subsection may not handle, store, or transport oil unless— (i) in the case of a tank vessel, nontank vessel, offshore facility, or onshore facility for which a response plan is reviewed by the President under subparagraph (E), the plan has been approved by the President; and (ii) the vessel or facility is operating in compliance		*§ 130.101* Prohibits the transportation of oil subject to comprehensive plans unless the requirements for submission, review and approval in § 130.111 are met and the railroad is operating in compliance with the plan.

with the plan.		
33 U.S.C. 1321 (j)(5) (G) Notwithstanding subparagraph (E), the President may authorize a tank vessel, nontank vessel, offshore facility, or onshore facility to operate without a response plan approved under this paragraph, until not later than 2 years after the date of the submission to the President of a plan for the tank vessel, nontank vessel, or facility, if the owner or operator certifies that the owner or operator has ensured by contract or other means approved by the President the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to a worst-case discharge or a substantial threat of such a discharge.		*§ 130.111* Allows railroads to temporarily continue operating without plan approval, provided the plan has been submitted to FRA and the railroad submits a certification to FRA that the railroad has obtained, through contract or other approved means, the necessary personnel and equipment to respond, to the maximum extent practicable, to a worst-case discharge or a substantial threat of such a discharge. Requires that the certificate be signed by the qualified individual or an appropriate corporate officer.

PHMSA solicits comment on the proposed oil spill response plan requirements in the following areas:

1. On ways to effectively provide regulatory flexibility to bona fide small entities that pose a lesser safety risk and may not be able to comply with the requirements of the proposed rule due to cost concerns, limited benefit, or practical considerations.
2. On whether the 12-hour response time is sufficient for all areas subject to the plan, or whether a shorter response time (e.g., 6-hours) is appropriate for certain areas (e.g. High Volume Areas) which pose an increased risk for higher consequences from a spill; on criteria to define such "High Volume Areas" where a shorter response time should be required, as well as whether the definition for "High Volume Area" in 49 CFR 194.5 (excluding pipeline diameter) captures this increased risk, or if there is other criteria which can be used to reasonably and consistently identify such areas for rail; on whether requiring response resources to be capable of arriving within 6 hours will lead to improvements in response, and for specific evidence of these

improvements; and on whether the final rule should have a longer response time than 12 hours for spills for all other areas subject to the plan requirements in order to offset costs from requiring shorter response times for High Volume Areas.

3. On whether the proposed training requirements are sufficient, or whether the Qualified Individual should be trained to the Incident Commander level using the Incident Command System (ICS).

D. Related Actions

PHMSA and FRA have taken a comprehensive approach to responding to the risks posed by large quantities of flammable liquids by rail. The HHFT Final Rule outlines many of these actions under the Sections III ("Regulatory Actions Addressing Rail Safety") and IV ("Non-Regulatory Actions Addressing Rail Safety").[21] A brief summary of significant actions relating to response planning and information sharing are included in this document.

1. Call to Action

On January 9, 2014, the Secretary issued a "Call to Action" to actively engage all the stakeholders in the crude oil industry, including CEOs of member companies of the American Petroleum Institute (API) and CEOs of railroads. In a meeting held on January 16, 2014, the Secretary and the Administrators of PHMSA and FRA requested that offerors and carriers identify prevention and mitigation strategies that can be implemented quickly. As a result of this meeting, the rail and crude oil industries agreed to voluntarily consider or implement potential improvements, including speed restrictions in high consequence areas, alternative routing, the use of distributive power to improve braking, and improvements in emergency response

[21] *See* 80 FR 26654 and 80 FR 26657, respectively.

preparedness and training. The following are some of the call-to-action items related to emergency response and classification over the past year.

In February 2014, under an agreement between DOT and AAR, railroads developed a $5 million specialized crude-by-rail training and tuition assistance program for local first responders at the Transportation Technology Center, Inc. (TTCI). The funding provided for the development of a training curriculum for emergency responders in petroleum crude oil response and tuition assistance for over a 1,500 first responders in 2014.[22]

As a result of the call to action in 2014, the rail and oil industry, along with PHMSA's input, developed a RP designed to improve rail safety through the proper classification and loading of crude oil. This effort was led by the API and resulted in the development of an ANSI recognized recommend practice (see ANSI/API RP 3000, "Classifying and Loading of Crude Oil into Rail Tank Cars"). This recommend practice, which, during its development, went through a public comment period in order to be designated as an American National Standard, addresses the proper classification of crude oil for rail transportation and the quantity measurement for overfill prevention when loading crude oil into rail tank cars. RP 3000 provides guidance on the material characterization, transport classification, and quantity measurement for overfill prevention of petroleum crude oil for the loading of rail tank cars.

2. Emergency Order

As noted in the Executive Summary above, on May 7, 2014, DOT issued the Order.[23] The Order requires each railroad transporting in commerce within the U.S. 1,000,000 gallons or more of Bakken crude oil in a single train to provide certain information in writing to the SERC

[22] TTCI is wholly owned subsidiary of the Association of American Railroads. TTCI is a transportation research and testing organization, providing emerging technology solutions for the railway industry throughout North America and the world.
[23] http://www.dot.gov/briefing-room/emergency-order.

for each state in which it operates such a train. The Order requires railroads to provide (1) the expected volume and frequency of affected trains transporting Bakken crude oil through each county in a state (or a commonwealth's equivalent jurisdiction (e.g., Louisiana parishes, Alaska boroughs, Virginia independent cities), (2) the routes over which the identified trains are expected to be operated; (3) a description of the petroleum crude oil and applicable emergency response information, and (4) contact information for at least one responsible party at the railroad. The Order requires railroads to provide SERCs updated notifications when there is a "material change" in the volume of affected trains.

DOT subsequently issued a frequently asked questions document clarifying several aspects of the Order (e.g., the required level of specificity of the data to be shared, the duty of railroads to provide updated information to the SERCs and the railroad's ability to share the same data with state agencies other than the SERCs). See document number 0003 in Docket No. DOT-OST-2014-0067 and the more detailed discussion of the Order in the "HHFT Information Sharing Notification" section of this discussion.

3. Rulemaking Actions

On May 8, 2015, PHMSA, in consultation with FRA, published the HHFT Final Rule. Several provisions adopted in the HHFT Final Rule relate to this NPRM, including the definition of a HHFT and the information sharing portion of the route analysis and consultation requirements.

The HHFT Final Rule defined *High-Hazard Flammable Train* as a continuous block of 20 or more tank cars in a single train or 35 or more cars dispersed through a train loaded with a Class 3 flammable liquid. This definition served as the applicable threshold of many of the requirements in the HHFT Final Rule and is the threshold at which, per the HHFT Final Rule,

the route analysis and consultation requirements of § 172.820 apply to HHFTs. That section prescribes additional safety and security planning requirements for the transportation of certain hazardous materials by rail. Prior to the HHFT Final Rule, § 172.820 applied to the rail transportation of bulk packages of materials poisonous by inhalation and certain explosive and radioactive materials. In the HHFT Final Rule, PHMSA expanded the applicability of § 172.820 to include HHFTs. Thus, in accordance with the HHFT Final Rule, rail carriers that operate HHFTs must annually assess the safety and security risks of routes used to transport those materials, as well as all practicable alternative routes, using a minimum of 27 risk factors identified in appendix D to part 172 of the HMR. Based on this analysis, rail carriers must identify and use the safest and most secure routes for the transportation of HHFTs (as well as the other covered hazardous materials). Paragraph (g) of § 172.820 requires rail carriers subject to the rule to identify a point of contact for routing issues and provide that contact information to the following:

- State and/or regional fusion centers that have been established to coordinate with State, local, and tribal officials on security issues within the area encompassed by the rail carrier's rail system;[24] and
- State, local, and tribal officials in jurisdictions that may be affected by a rail carrier's routing decisions and who have contacted the carrier regarding routing decisions.

4. Safety Advisories

Safety advisories are documents published by PHMSA and FRA in the Federal Register that inform the public and regulated community of a potential dangerous situation or issue. In

[24] http://www.dhs.gov/fusion-center-locations-and-contact-information.

addition to safety advisories, PHMSA and FRA may also issue other notices, such as safety alerts. PHMSA and FRA published the following safety advisories and notices related to information sharing and emergency response planning.

On April 17, 2015, PHMSA issued a safety advisory notice (Notice No. 15-7; 80 FR 22781) to remind hazardous materials shippers and carriers of their responsibility to ensure that current, accurate, and timely emergency response information is immediately available to emergency response officials for shipments of hazardous materials, and that such information is maintained on a regular basis.[25] This notice outlined existing regulatory requirements applicable to hazardous materials shippers (including re-offerors) and carriers found in the HMR, specifically in subpart G of part 172.

PHMSA Notice 15-7 emphasized that the responsibility to provide accurate and timely information is a shared responsibility for all persons involved in the transportation of hazardous materials. This information includes, but is not limited to, identification and volume of the specific hazardous material; location of the hazardous material on the train; risks of fire and explosion; immediate precautions to be taken in the event of an incident; initial methods for handling spills or leaks in the absence of fire; and preliminary first aid measures. It is a shipper's responsibility to provide accurate emergency response information that is consistent with both the information provided on a shipping paper and the material being transported. Likewise, re-offerors of hazardous materials must ensure that this information can be verified to be accurate, particularly if the material is altered, mixed, or otherwise repackaged prior to being placed back into transportation. In addition, carriers must ensure that emergency response information is maintained appropriately, is accessible, and can be communicated immediately in the event of a

[25] See: http://www.gpo.gov/fdsys/pkg/FR-2015-04-23/pdf/2015-09436.pdf.

hazardous materials incident. All of this information must be immediately available to any person who, as a representative of Federal, State, local or tribal governments (including a SERC), responds to an incident involving hazardous material or is conducting an investigation which involves a hazardous material.

On April 17, 2015 FRA and PHMSA also issued a joint safety advisory notice (FRA Safety Advisory 2015-02; PHMSA Notice No. 15-11; 80 FR 22778). The agencies issued the joint safety advisory notice to remind railroads operating an HHFT—defined as a train comprised of 20 or more loaded tank cars of a Class 3 flammable liquid in a continuous block, or a train with 35 or more loaded tank cars of a Class 3 flammable liquid across the entire train—as well as the offerors of Class 3 flammable liquids transported on such trains, that certain information may be required by PHMSA and/or FRA personnel during the course of an investigation immediately following an accident.

5. Stakeholder Outreach

PHMSA and FRA have also taken specific actions to develop appropriate response outreach and training tools to mitigate the impact of future incidents. The following are some of PHMSA's actions related to emergency response and information sharing for rail crude oil incidents over the past year.

In February 2014, PHMSA hosted a stakeholder meeting with participants from the emergency response community, railroad industry, Transport Canada, and its federal agency partners, FRA and Federal Motor Carrier Safety Administration. The objective was to discuss emergency preparedness related to incidents involving transportation of crude oil by rail. The discussion topics included: current state of crude oil risk awareness and operational readiness/capability; familiarity with bulk shippers of crude oil and emergency response plans

and procedures; available training resources (e.g., sources, accessibility, gaps in training); and the needs of emergency responders/public safety agencies.

In May 2014, in conjunction with the Virginia Department of Fire Programs, PHMSA hosted a "Lessons Learned" forum that consisted of a panel of fire chiefs and emergency management officials from some of the jurisdictions that experienced a crude oil or ethanol rail transportation incident. The purpose of this forum was to share firsthand knowledge about their experiences responding to and managing these significant rail incidents. In attendance were public safety officials from Aliceville, AL; Cherry Valley, IL; Cass County, ND; and Lynchburg, VA. Based on the input received from the forum participants, PHMSA published the "*Crude Oil Rail Emergency Response Lessons Learned Roundtable Report*," which outlined the key factors that were identified as having a direct impact on the outcomes of managing a crude oil transportation incident.[26]

While the "Lessons Learned Roundtable Report" was focused on public emergency responders, some of the key findings also addressed the railroads:

- All agencies involved in emergency response operations need to understand NIMS [National Incident Management System], their specific role within NIMS, and must have a representative assigned to the Command Post to facilitate communications and coordination with all response assets.
- Pre-incident planning and communication with all organizations, specifically shippers and carriers (railroads), is essential to learn about the product(s) being transported and the availability of emergency response resources.

[26] See http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id_0903D018579BF84E6914C0BB932607F5B3F50300/filename/Lessons_Learned_Roundtable_Report_FINAL_070114.pdf.

- Emergency responders are not fully aware of the response resources available from the railroads and other organizations (e.g., air monitoring capabilities). This information would be useful in pre-incident planning, preparedness, and response operations.

In June 2014, in partnership with FRA and the U.S. Fire Administration (USFA), PHMSA hosted a stakeholder meeting with hazardous materials response subject matter experts from public safety organizations, railroads, government, and industry to discuss the best practices for responding to a crude oil incident by rail. In coordination with the working group, PHMSA drafted the "*Commodity Preparedness and Incident Management Reference Sheet*." This document contains incident management best practices for emergency response operations, including a risk-based hazardous materials emergency response operational framework. The framework provides first responders with key planning, preparedness, and response principles to successfully manage a crude oil rail transportation incident. The document also assists fire and emergency services personnel in decision-making and developing an appropriate response strategy to an incident (i.e., defensive, offensive, or non-intervention strategies).[27] In partnership with the USFA's National Fire Academy (NFA), a series of six coffee break training bulletins were published and widely distributed to the emergency response community providing reference to this response document.[28]

In October 2014, to further promote the "*Commodity Preparedness and Incident Management Reference Sheet,"* PHMSA contracted with the Department of Energy, Mission Support Alliance-Hazardous Materials Management and Emergency Preparedness (MSA-

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[27] This document has been widely distributed throughout the emergency response community and is also available on the PHMSA Operation Safe Delivery Web Site at http://www.phmsa.dot.gov/hazmat/osd/emergencyresponse.

[28] See http://www.usfa.fema.gov/training/coffee_break/hazmat_index.html.

HAMMER) to develop the *Transportation Rail Incident Preparedness and Response (TRIPR) for Flammable Liquid Unit Trains* training modules. In 2015, the web-accessible Transportation Rail Incident Preparedness and Response (TRIPR) modules became available to provide emergency responders with critical information on best practices related to rail incidents involving Class 3 flammable liquids such as crude oil and ethanol.[29] The curriculum consists of nine training modules that focus on key response functions and incorporates three animated, interactive training scenarios and introductory videos to help instructors lead tabletop discussions. TRIPR offers a flexible approach to increasing the awareness of emergency response personnel on the best practices and principles related to rail incidents involving Class 3 flammable liquids. A key component of this initiative is to learn from past experiences and to leverage the expertise of public safety agencies, rail carriers, and industry subject matter experts in order to prepare first responders to safely manage rail incidents. These modules are not intended to be a standalone training program, but are offered to supplement existing programs.

In December 2014, PHMSA hosted a follow-up meeting which re-engaged the emergency response stakeholder group to allow all parties within the Federal Government, railroad industry, and response community to provide updates on the various emergency response-related initiatives aimed to improve community awareness and preparedness for responding to incidents involving crude oil and other Class 3 flammable liquid shipments by rail.

In addition to PHMSA's efforts mentioned above, in January 2015, the National Response Team (NRT), led by the Environmental Protection Agency (EPA), conducted a webinar, titled "*Emerging Risks, Responder Awareness Training for Bakken Crude Oil*," to educate responders on Bakken crude oil production and transportation along with the health and

[29] See http://www.phmsa.dot.gov/hazmat/osd/emergencyresponse/TRIPR.

safety issues facing first responders. In addition to the training webinar, the NRT also intends to conduct a large-scale exercise scenario in 2015 to assess Federal, State, and local response capabilities to a crude oil incident.

Also in January 2015, the Environmental Protection Agency (EPA), along with other federal partners, including FEMA, USCG, DOE, DOT, and DHS, hosted conference calls with State officials and representatives from the appropriate offices, boards, or commissions that play a role in preparing or responding to an incident involving crude-by-rail. The purpose of these discussions was to gain a better understanding of how States are preparing to respond to rail incidents involving crude oil and to identify key needs from each State. Questions centered on what actions (e.g., planning, training, exercises) have been planned or conducted in the State or local communities, what communities or areas have the greatest risk, what regional actions or activities states have participated in and any other related concerns states would like to discuss.

In August 2015 and May 2016, PHMSA representatives attended the Northwest Tribal Emergency Management Council's annual meeting in Spokane, Washington. This provided PHMSA with the opportunity to speak directly with tribal emergency management leaders and emphasize the importance of effective tribal and federal cooperation.

In addition to these sources of information described above, PHMSA provides resources to the emergency response community in many other forms. Some of the key resources provided by PHMSA include:

- Hazardous Materials Emergency Preparedness (HMEP) Grant Program: On an annual basis, PHMSA awards over $20M in grant funding through its HMEP grant program to States, Territories, and Tribes to carry out planning and training activities to ensure state and local emergency responders are properly prepared and trained to respond to

hazmat transportation incidents. These activities include conducting hazardous materials commodity flow surveys, drafting and updating hazmat operations plans, funding emergency response exercises, and NFPA-472 related training.[30]

- Assistance for Local Emergency Response Training (ALERT) Grant: Additionally, in FY15 PHMSA will award its ALERT grant. This is a competitive grant opportunity using prior year recovery funds to a non-profit organization(s) that can provide direct or web-based hazardous materials training for volunteer or remote emergency responders. The priority for this grant will be emergency response activities for the transportation of crude oil, ethanol and other flammable liquids by rail. The anticipated award for this grant is September 2015.
- Emergency Response Guidebook: This guidebook provides emergency responders with a go-to manual to help deal with hazardous materials incidents during the critical first 30 minutes. It is also available as a free mobile app. The Emergency Response Guidebook is available at: http://www.phmsa.dot.gov/hazmat/outreach-training/erg.[31]
- Hazardous Materials Information Center: The Center provides live, one-on-one assistance Monday-Friday, 9 a.m. to 5 p.m. (ET). The Hazardous Materials Information Center is available at: http://phmsa.dot.gov/hazmat/standards-rulemaking/hmic.[32]
- Outreach: PHMSA has a staff of highly trained individuals skilled in training known as the Hazardous Materials Safety Assistance Team (HMSAT). The HMSAT team is part of our field operations personnel and is available in all regions of the United

[30] http://www.phmsa.dot.gov/hazmat/grants.
[31] http://www.phmsa.dot.gov/hazmat/outreach-training/erg.
[32] http://phmsa.dot.gov/hazmat/standards-rulemaking/hmic.

States to answer questions and provide on-site assistance to customers of the Hazardous Materials Transportation-State and Local Education (HMT-SALE) program, State, local and tribal governments, and industry associations with technical issues, outreach, training, and compliance assistance in the field of hazardous materials transportation: http://www.phmsa.dot.gov/phmsa-ext/feedback/hmsatPresenterRequestForm.jsp.[33]

A myriad of other sources of information and support are available to State, local and tribal governments' emergency preparedness and response efforts, including other federal agencies, and industry groups. For example, the U.S. Department of Homeland Security operates the National Operations Center 24 hours a day, 365 days a year to interact with State governors, emergency responders, and perform critical infrastructure operations across the country to prepare for, respond to, and recover from hazardous materials incidents.

Complementing the Federal Government's efforts, the railroad and shipping industries have also made efforts to improve crude oil by rail safety. API has built new partnerships between rail companies and oil producers. At the request of FRA, API is developing an outreach program to train first responders in HHFT derailment response throughout the U.S., particularly in states that have seen a rise in the transport of crude oil by rail. The oil and rail industries have worked to identify where existing training initiatives and conferences can be held to provide the training to as many responders as possible. The AAR is also worked to develop an inventory of emergency response resources and resource staging locations along routes utilized by HHFTs.

The railroad industry, hazardous materials shippers, and other organizations also provide emergency response assistance and training to communities through a variety of means,

[33] http://www.phmsa.dot.gov/phmsa-ext/feedback/hmsatPresenterRequestForm.jsp.

including the Transportation Community Awareness and Emergency Response (TRANSCAER®) program. The TRANSCAER program offers emergency response information, emergency planning assistance, and training to Local Emergency Planning Committees (LEPCs) under the AAR Circular OT-55-O protocol. AAR and API are working together to produce a crude oil by rail safety training video through their partnership with the TRANSCAER program.

The AAR Circular OT-55-O also outlines a procedure whereby local emergency response officials and emergency planning organizations may obtain a list of the types and volumes of hazardous materials that are transported through their communities. On January 27, 2015, AAR published revisions to the Circular for members to "provide bona fide emergency response agencies or planning groups with specific commodity flow information covering all hazardous commodities transported through the community for a 12 month period in rank order." Previously only the top 25 commodities were available. The railroad industry considers this information to be restricted information for business confidential and security reasons, and that the recipient of the information must agree to release the information only to bona fide emergency response planning and response organizations and not distribute the information publicly in whole or in part without the individual railroad's express written permission. Additional description of voluntary efforts by the regulated community is provided under the Section V, Subsection G ("Voluntary Actions") of this rulemaking.

E. HHFT Information Sharing Notification

As previously discussed, on May 7, 2014, the Secretary of Transportation, under the authority of 49 U.S.C. 5121(d), issued an Emergency Restriction/Prohibition Order in Docket

No. DOT-OST-2014-0067 (Order).[34] The Order requires each railroad transporting in commerce within the United States, 1,000,000 gallons or more of Bakken crude oil in a single train to provide certain information in writing to the SERC for each state in which it operates such a train. The Order requires railroads to provide (1) the expected volume and frequency of affected trains transporting Bakken crude oil through each county in a state (or a commonwealth's equivalent jurisdiction (e.g., Louisiana parishes, Alaska boroughs, Virginia independent cities)), (2) the routes over which the identified trains are expected to be operated; (3) a description of the petroleum crude oil and applicable emergency response information, and (4) contact information for at least one responsible party at the railroad. Further, the EO requires railroads to provide SERCs updated notifications prior to any "material change" in the volume of affected trains and requires railroads to provide copies of notifications made to each SERC to FRA upon request.

DOT subsequently issued a frequently asked questions document (FAQs) clarifying several aspects of the Order.[35] The FAQs clarified that for purposes of the Order, "Bakken crude oil" is any crude oil tendered to railroads for transportation from any facility located within the Williston Basin (North Dakota, South Dakota, and Montana in the United States or Saskatchewan or Manitoba in Canada).

Second, the FAQs clarified the level of specificity of the traffic data railroads are required to provide the SERCs and the requirement to provide updated information in anticipation of a "material change" in estimated volumes or frequency of trains traveling through a particular local jurisdiction. Specifically, citing the Order's stated goal of providing first responders an understanding of the volume and frequencies with which Bakken crude oil is transported through their communities so that they can prepare appropriate response plans, the

[34] http://www.dot.gov/briefing-room/emergency-order.
[35] See document number 0003 in Docket No. DOT-OST-2014-0067.

FAQs explained that when reporting traffic data required by the Order, railroads should look at their aggregate traffic of Bakken crude oil through the jurisdiction for the prior year and after considering any reasonably anticipated changes in that traffic, provide a reasonable estimate of the weekly traffic along the affected routes. The FAQs explained that the estimate could be provided in range to account for normal variations in traffic, but any changes of 25 percent or more from the aggregate estimates provided are considered a "material change" requiring a railroad to provide updated information to the relevant SERC.

Third, the FAQs addressed issues related to the potential confidentiality of the data railroads submit to SERCs under the Order. DOT explained that the data is intended for persons with a need-to-know; that is, first responders at the state and local level, as well as other appropriate emergency response planners. Noting that historically railroads and states have routinely entered into confidentiality agreements prior to railroads providing states with information on commodities transported in trains within their jurisdictions, the FAQs clarified that railroads may require reasonable confidentiality agreements prior to providing the required information to SERCs or other state agencies. As discussed later in the following section, confidentiality concerns have been the subject of further analysis and discussion.

Fourth, recognizing that different states have different methods and agencies responsible for emergency response planning and preparedness within their jurisdictions and a state's SERC may not always be the state agency most directly involved in emergency response planning and preparedness, the FAQs provided that if a state agrees that it would be advantageous for the information required by the Order to be shared with another state agency (such as a fusion center) involved with emergency response planning and/or preparedness, as opposed to the SERC, a railroad may share the required information with that agency instead of the SERC.

Finally, the FAQs addressed railroads' responsibilities as applied to tribal lands and clarified that the Order does not require railroads to reach out to Tribal Emergency Response Commissions (TERCs), as DOT itself planned outreach to Tribal leaders to let them know that their TERCs can coordinate with the appropriate SERCs for access to data supplied under the Order. The FAQs did make clear, however, that railroads must ensure that SERCs (or relevant fusion centers or other state agencies) are also supplied with information for traffic through tribal lands.

Following the issuance of the Order, some stakeholders, including the Association of American Railroads (AAR) and the American Shortline and Regional Railroad Association (ASLRRA), expressed concern that the crude oil routing information the Order requires railroads to provide to SERCs is sensitive information from a security perspective and should only be available to persons with a need-to-know the information (e.g., emergency responders and emergency response planners). The AAR and ASLRRA also expressed the view that commercially sensitive information should remain confidential and not be publically available. See the discussion of AAR and ASLRRA's concerns published at 79 FR 59891 on October 3, 2014 (FRA's "Proposed Agency Information Collection Activities; Notice and Request for Comments" related to the Order). After consulting with DOT, the Department of Homeland Security (DHS) and the Transportation Security Administration (TSA), FRA responded to AAR and ASLRRA's concerns, by explaining that the information the Order requires railroads to supply to SERCs is not commercially sensitive or Security Sensitive Information (SSI) defined by DOT, DHS, or TSA regulations. Id. at 59892. FRA further noted that DOT found no basis to conclude that the public disclosure of the information is detrimental to transportation safety. Id.

After the issuance of the Emergency Order in August 2014, PHMSA published the High-

Hazard Flammable Train NPRM. In that NPRM, PHMSA proposed to codify the requirements of the Emergency Order and requested public comment on the various facets of that proposal. Specifically, PHMSA proposed to add a new § 174.310, "Requirements for the operation of high-hazard flammable trains," to subpart G of part 174. Proposed § 174.310 set forth additional requirements for the operation of HHFTs including making such trains subject to the route analysis and consultation requirements of existing § 172.820, certain speed restrictions and specific braking standards, as well as notifications to SERCs consistent with the Order. Specifically, paragraph (a)(2) of proposed § 174.310 required railroads transporting in a single train 1,000,000 gallons or more of Bakken crude to provide certain information about these trains to the SERCs or other appropriate state delegated entities in which it operates. Generally consistent with the Order, the NPRM's proposal required railroads to provide the following information to the SERCs or "other appropriate state delegated entities": (1) a reasonable estimate of the number of affected trains that expected to travel, per week, through each county within the state; (2) the routes over which the affected trains will be transported; (3) a description of the crude oil being transported and applicable emergency response information; and (4) updates in the event of any "material change." Table 7 depicts the comments received in response to this proposal, representing approximately 99,856 signatories.

Table 7: Commenter Composition: NPRM Notification	
Commenter Type	**Signatories**
Non-Government Organization	90,869
Individuals	8,888
Industry stakeholders	22
Government organizations or representatives	77
Totals	99,856

The vast majority of commenters generally supported PHMSA's efforts to establish some level of notification requirements for the operation of trains carrying large quantities of crude oil

as proposed in § 174.310(a)(2). However, commenters were divided on some of the specific requirements of the proposal. Some commenters were opposed to the public dissemination of information, citing business confidentiality or security concerns.

Based on the public comments on the NPRM as well as PHMSA and FRA's analysis of the issues from the HHFT Final Rule, PHMSA did not adopt the notification requirements of proposed § 174.310(a)(2). PHMSA determined that the expansion of the existing route analysis and consultation requirements of 49 CFR 172.820 to include HHFTs would be the best approach to ensuring that emergency responders and others involved with emergency response planning and preparedness would have access to sufficient information regarding crude oil shipments moving through their jurisdictions to enable them to adequately plan and prepare from an emergency response perspective. PHMSA reasoned that expanding the existing route analysis and consultation requirements of § 172.820 (which already apply to the rail transportation of certain hazardous materials historically considered to be highly-hazardous[36]) would preserve the intent of the Emergency Order to enhance information sharing with emergency responders in areas through which HHFTs move and that, in combination with the other new safety requirements in the HHFT Final Rule, obviated the need to continue notification to the SERCs as required by the Order and as proposed in the HHFT NPRM.

After PHMSA published the HHFT Final Rule, FRA, PHMSA and the Department received feedback from stakeholders, expressing concern about the Department's decision to forgo the proactive notification requirements of the Emergency Order and in the NPRM. Those stakeholders include Congressional representatives, State and local government officials, representatives of emergency response and planning organizations, and the public. Generally,

[36] TSA regulations under 49 CFR 1580.100 define certain types and quantities of material as "rail security sensitive materials (RSSM). Class 3 flammable liquids, including crude oil and ethanol are not defined as RSSM.

these stakeholders expressed the view that given the unique risks posed by the frequent rail transportation of large volumes of flammable liquids, including Bakken crude oil, PHMSA should not eliminate the proactive information sharing provisions of the Order and rely solely on the consultation and communication requirements in existing § 172.820. Stakeholders, including emergency responders, expressed concern that the HHFT Final Rule may limit the availability of emergency response information by superseding the Order.

In response to these concerns and after further evaluating the issue within the Department, in a May 28, 2015, notice (Notice), PHMSA announced that it would extend the Order indefinitely, while it considered options for codifying the disclosure requirement on a permanent basis.[37] In the Notice, PHMSA recognized the desire of local communities to know what hazardous materials are moving through their cities and towns and noted that transparency is a critical piece of the Department's comprehensive approach to safety. Further, PHMSA expressed its support for the public disclosure of this information to the extent allowed by the applicable state, local and tribal laws and noted that the Order and HHFT Final Rule all emphasize transparency and information sharing. The Notice explained that longstanding federal law requires shippers and offerors of hazardous materials to carry the critical information necessary for emergency responders to respond appropriately to an incident involving the transportation of any hazardous material and to have someone available to provide emergency response information at all times that the hazardous material is in transportation. See 49 CFR 174.26 and part 172, subpart G. PHMSA issued a safety advisory reminding the regulated community of these legal obligations and outlining the myriad of additional emergency response resources available (e.g., PHMSA's Emergency Response Guidebook and Hazardous Materials

[37] http://www.phmsa.dot.gov/hazmat/phmsa-notice-regarding-emergency-response-notifications-for-shipments-of-petroleum-crude-oil-by-rail.

Information Center, the U.S. Department of Homeland Security's National Operations Center, industry's TRANSCAER® program, as well as AAR's Circular OT-55-N that outlines a procedure whereby local emergency response officials and emergency response planning organizations may obtain a list of the types and volumes of hazardous materials that are transported through their communities). See the detailed discussion of PHMSA's April 17, 2015, Safety Advisory and Stakeholder Outreach in Section II, Subsection C ("Summary of Proposed Oil Spill Response Requirements") above.

On December 4, 2015, President Obama signed into law the "Fixing America's Surface Transportation Act of 2015 ("FAST Act"). The FAST Act includes the ''Hazardous Materials Transportation Safety Improvement Act of 2015" at §§ 7001 through 7311, which provides direction for the hazardous materials safety program. Section 7302 directs the Secretary to issue regulations that require real-time sharing of the electronic train consist information for hazardous materials shipments and require advanced notification of certain HHFTs. The DOT will address the requirements in § 7302 related to electronic train consists in a future rulemaking. The FAST Act directs Class I railroads to provide advanced notification and information on high-hazard flammable trains to each State Emergency Response Commission (SERC), consistent with the notification requirements in the Order. The FAST Act requires that SERCs receiving this advanced notification must provide the information to law enforcement and emergency response agencies upon request. The FAST Act also directs the Secretary to establish security and confidentiality protections for electronic train consist information and advanced notification information.

The FAST Act limits the applicability of the advanced notification requirements for HHFT to the Class I railroads. In this NPRM, PHMSA is proposing that the information-sharing

requirements apply to all railroads with HHFT operations. This proposal fulfills the Congressional mandate and is within PHMSA's regulatory authority. Through the authority of Federal hazmat transportation law and the delegation of this authority to PHMSA by the Secretary, PHMSA is responsible for overseeing a hazmat safety program that protects against the risks to life, property, and the environment inherent in the transportation of hazmat in commerce. In proposing that the information-sharing requirements apply to all railroads with HHFT operations, PHMSA is addressing the provisions of the FAST Act, as well as acting in accordance with our delineated authority by addressing the potential safety risks posed by HHFT operations of all railroads. Requiring advanced notification from Class I, II, and III railroads is consistent with DOT's Order addressing information-sharing. While we acknowledge that the HHFT operations of Class II and Class III railroads are relatively limited in comparison to those of Class I railroads, and thus pose fewer safety risks in the rail transportation system, the HHFT operations of Class II and Class III railroads nonetheless pose safety risks that justify adherence to the proposed information-sharing requirements of this NPRM.

Recent railroad accidents demonstrate that accidents involving HHFTs are not limited to Class I railroads. In particular, the accidents in Aliceville, AL, and New Augusta, MS involved two Class III railroads, the Alabama Gulf Coast Railway and Illinois Central Railroad. If PHMSA were to limit the requirement to Class I railroads as described in the FAST Act, these railroads and other Class II or Class III railroads would not be required to provide advanced notification and information to SERCs or TERCs. Therefore, in order to effectively address the safety risks posed by HHFTs by increasing the level of information sharing between railroads and SERCs, TERCs, and other affected jurisdictions, PHMSA proposes that the information-sharing requirements of this NPRM apply to all classes of railroads that transport HHFTs. The

intent of the information sharing provision of this rule is to ensure that local emergency responders and emergency planning officials have access to sufficient information regarding the movement of HHFTs in their jurisdictions to adequately plan and prepare for emergency events involving HHFTs. This purpose is reaffirmed by the FAST Act's requirements addressing requirements for both sharing and protection of information required by the advanced notification. Under the Emergency Planning and Community Right-to-Know Act (EPCRA) in Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Governor of each state is required to establish a state emergency response commission (SERC). The SERC is responsible for establishing emergency planning districts and appointing, supervising, and coordinating local emergency planning committees (LEPCs). EPCRA section 303 requires LEPCs to develop a comprehensive emergency response plans for their emergency planning districts. The SERC is also responsible for reviewing the emergency response plans and make recommendations to revise the plans as necessary for each community. The emergency response plan includes facilities that handle extremely hazardous substances (EHSs) defined under section 302 of EPCRA as well as transportation routes of EHSs. Many LEPCs include EHSs as well other chemicals that pose a risk in their emergency response plan. As previously noted, another agency is sometimes delegated by the state to be directly involved in emergency response planning and preparedness. In both instances, state delegated agencies are connected to the local response and planning framework. The information required to be shared in this rulemaking is largely consistent with the information required by the Order.

F. Security and Confidentiality for HHFT Information Sharing Notification

In response to the Order's information-sharing provisions, railroads raised particular

concerns that the sharing of routing information for HHFTs required them to reveal proprietary business information. The railroads argued that the routing information, if published or shared widely, could reveal information about customers. After considering the claim in an October 2014 information collection notice, FRA concluded that the information would not constitute business confidential or proprietary under federal law. See the discussion of AAR and ASLRRA's concerns published at 79 FR 59891 on October 3, 2014 (FRA's "Proposed Agency Information Collection Activities; Notice and Request for Comments" related to the Order). In its discussion, the FRA noted that the railroads did not specifically identify any prospective harm caused by the sharing of this information. Nonetheless, if a railroad claims that routing information contains confidential business information, the merits of that claim would be analyzed under state open records and sunshine laws.

Section 7302 of the FAST Act directs the Secretary to "establish security and confidentiality protections, including protections from the public release of proprietary information or security-sensitive information, to prevent the release to unauthorized persons any electronic train consist information or advanced notification or information provided by Class I railroads under this section." In fact, railroads previously raised concerns that the sharing of routing information for HHFTs required them to reveal proprietary business information. As discussed above, railroads argued that the Emergency Order routing information, if published or shared widely, could reveal information about customers. After considering the claim in an October 2014 information collection notice, FRA concluded that the information would not be considered business confidential or SSI under federal law. See the discussion of AAR and ASLRRA's concerns published at 79 FR 59891 on October 3, 2014 (FRA's "Proposed Agency Information Collection Activities; Notice and Request for Comments" related to the Order). In

its discussion, the FRA noted that the railroads did not specifically identify any prospective harm caused by the sharing of this information. DOT's previous analysis and conclusion determined that the information shared by railroads does not qualify for withholding under federal standards on business confidential or SSI. As proposed, DOT will require railroads to share aggregated information about the volumes of crude oil that travel through a jurisdiction on a weekly basis. This information does not include customer information or other business identifying details. Further, it does not provide specifics about the timing of HHFT trains. Accordingly, PHMSA believes it is limited in its ability to establish security and confidentiality protections, particularly in light of the FAST Act's dual mandates for PHMSA to ensure free-flowing information to SERCs and first responders and provide protections for further disclosures. However, as noted in FRA's discussion of this matter in its October 2014 Information Disclosure Notice, State laws control, and may limit, the disclosure and dissemination of this information. Accordingly, PHMSA added the following language to the notification requirements: "If the disclosure includes information that railroads believe is security sensitive or proprietary and exempt from public disclosure, the railroads should indicate that in the notification." This will help guard against inadvertent public disclosure by ensuring that the information that railroads believe to be business confidential is marked appropriately. Before fulfilling a request for information and releasing the information, States will be on notice of which information the railroads consider to be inappropriate for public release. We welcome comments on this discussion and particularly invite comments on means by which PHMSA can fulfill the FAST Act's direction to establish security and confidentiality protections, where this information is not subject to security and confidentiality protections under Federal standards.

G. Initial Boiling Point Test

An offeror's responsibility to classify and describe a hazardous material is a key requirement under the HMR. In accordance with § 173.22 of the HMR, it is the offeror's responsibility to properly "class and describe a hazardous material in accordance with parts 172 and 173 of the HMR." For transportation purposes, classification is ensuring the proper hazard class, packing group, and shipping name are assigned to a particular material. For a Class 3 Flammable liquid, the HMR provide two tests to determine PG. Both the flash point and IBP must be determined to properly classify and assign an appropriate packing group for a Class 3 Flammable liquid in accordance with §§ 173.120 and 173.121. The HMR authorize all of the following IBP tests for classification of flammable liquids:

- ASTM D-86 – Distillation of Petroleum Products at Atmospheric Pressure
- ASTM D-1078 – Standard Test Method for Distillation Range of Volatile, Organic Liquids
- ISO 3405 – Petroleum Products – Determination of Distillation Characteristics at Atmospheric Pressure
- ISO 3924 – Petroleum Products – Determination of Boiling Range Distribution – Gas Chromatography Method
- ISO 4626 – Volatile Organic Liquids – Determination of Boiling Range of Organic Solvents Used as Raw Materials

Table 8 provides a description of the flash point tests currently authorized in the HMR for petroleum liquids.

Table 8: Flash point testing requirements for petroleum liquids currently in the HMR

Material	Flash point test
Homogeneous, single-phase liquid having a viscosity less than 45 S.U.S. at 38 °C (100 °F):	ASTM D-56 – Standard Method of Test for Flash Point by Tag Closed Cup Tester
	ASTM D-3278 – Standard Test Methods for Flash Point by Small Scale Closed-Cup Apparatus
	ASTM D-3828 – Standard Test Methods for Flash Point by Small Scale Closed Tester

All other liquids:	ASTM D-93 – Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester
	ASTM D-3278 – Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus
For mixtures:	Method specified in § 173.120(c)(2)

In 2014, the rail and oil industry, along with PHMSA's input, developed an RP designed to improve rail safety through the proper classification of crude oil and loading practices. This effort was led by API and resulted in the development of an ANSI-recognized recommended practice (see ANSI/API RP 3000, "Classifying and Loading of Crude Oil into Rail Tank Cars"). This recommended practice, which, during its development, went through a public comment period in order to be designated as an American National Standard, addresses the proper classification of crude oil for rail transportation and the quantity measurement for overfill prevention when loading crude oil into rail tank cars. The API RP 3000 provides guidance on the material characterization, transport classification, and quantity measurement for overfill prevention of petroleum crude oil for the loading of rail tank cars.

The API RP 3000 provides best practices for both sampling and testing. The API RP 3000 best practices for flash point testing align with the flash point test options currently in the HMR. For the initial boiling point test, the API RP 3000 concluded that for crude oils containing volatile, low molecular weight components (e.g. methane), the recommended best practice is to test using ASTM D7900. This test ensures a minimal loss of light ends because it determines the boiling range distribution from methane through n-nonane with an IBP defined as the temperature at which 0.5 weight percent loss is observed when determining the boiling range distribution defined in ASTM D7169. This test differs from the boiling point test options currently in the HMR, which do not remove and recover the light ends. The development of this recommended practice demonstrates the importance of proper classification.

In the May 8, 2015, Final Rule HM-251(80 FR 26644), PHMSA adopted requirements for a sampling and testing program. The API RP 3000 was finalized in September 2014, after the HM-251 NPRM was published, and the public was unable to have the opportunity comment on the API RP 3000's incorporation into the HMR. Therefore, PHMSA did not incorporate API RP 3000 by reference; however, we noted that it could be used as a method to comply with certain requirements the testing and sampling program. The sampling requirements adopted in § 173.41 of the HMR are consistent with API RP 3000, but provide greater flexibility. PHMSA stated that:

> shippers may still use API RP 3000 as a voluntary way to comply with the newly adopted sampling requirements. It should be noted that all of the testing provisions of API RP 3000 do not align with the requirements in the HMR. As the testing provisions were not proposed to be modified, shippers must continue to use the testing methods for classification of flammable liquids outlined in § 173.120 and flammable gases in § 173.115.

PHMSA further noted that we might consider the adoption of the non-codified testing provisions of API RP 3000, such as the ASTM D7900 boiling point test in a future rulemaking.

As specified in the final rule, the ASTM D7900 IBP test and practice recommended by industry in the API RP 3000 is not currently aligned with the testing requirements authorized in the HMR, forcing shippers to continue to use the testing methods authorized in § 173.121(a)(2). This misalignment results in a situation where an industry best practice for the testing of crude oil (ASTM D7900 for initial boiling point) that was developed in concert with PHMSA is not authorized by the HMR. Therefore, for initial boiling point determination, PHMSA is proposing to incorporate ASTM D7900 by reference, thus permitting the industry best practice for testing Class 3 PG assignments. We note that the incorporation of ASTM D7900, which aligns with the API RP 3000 will not replace the currently authorized testing methods; rather, it serves as a testing alternative if one chooses to use that method. PHMSA believes this provides flexibility

and promotes enhanced safety in transport through accurate PG assignment.

III. Recent Spill Events

PHMSA collected and reviewed information from various sources pertaining to recent derailments involving discharges of crude oil. In this rulemaking and the accompanying analysis, PHMSA has focused on the following derailments: Watertown, WI (November 2015); Culbertson, MT (July 2015); Heimdal, ND (May 2015); Galena, IL (March 2015); Mt. Carbon, WV (February 2015); La Salle, CO (May 2014); Lynchburg, VA (April 2014); Vandergrift, PA (February 2014); New Augusta, MS (January 2014); Casselton, ND (December 2013); Aliceville, AL (November 2013); and Parkers Prairie, MN (March 2013). In the RIA, PHMSA provides narratives and discussion of the circumstances and consequences of these derailments. PHMSA has identified these derailments as involving trains transporting 20 or more tank cars of petroleum oil in a continuous block or 35 or more tank cars dispersed throughout the train in conformance with the proposed applicability of this rule. Furthermore, these derailments resulted in discharges of petroleum oil that harmed or posed a threat of harm to the nation's waterways or the environment.

By reviewing and analyzing the experience of the response to these derailments, PHMSA seeks to identify oil spill response challenges that have occurred in the past and could occur in future derailment scenarios. PHMSA incorporates this understanding of response challenges into this NPRM, which proposes to amend the requirements of 49 CFR part 130 to improve comprehensive oil spill response plans by way of new and revised requirements. PHMSA holds that improved oil spill response planning will, in turn, improve the actual response to future derailments involving petroleum oil and lessen potential negative impacts to the environment and

communities.

In general, there have been a variety of challenges apparent in the responses to recent derailments involving petroleum oil. In multiple instances, those responding to oil spills have encountered difficulties in assessing the extent of oil spills due to smoke or fire. In several of the derailments discussed in this rulemaking, the relatively remote location of the town or derailment site limited responders' access to the derailment site and encumbered the deployment of response equipment (e.g., heavy machinery) at the site. Response providers have also faced adverse weather or the potential for adverse weather, which can complicate response protocols and compound the adverse effects of spills. Communications between railroads, response providers, and Federal, State, and local officials are often challenging due to the broad array of organizational representation at derailment sites and the lack of formal response communications protocols. Further, derailments involving energetic ruptures and fires can threaten public safety, necessitating evacuations that span multiple days and require significant resources, including personnel and leadership with experience and training in emergency management.

Derailments often require a significant, long-term commitment of personnel and equipment to remediate an oil spill. Moreover, derailments involving petroleum oil typically require diverse technical or scientific response services. For example, monitoring a direct discharge into a waterway requires water sampling services to detect if harmful levels of compounds found in petroleum oils have contaminated affected waterways. Depending on the proximity of an oil spill to rivers, the spill response could also require monitoring of river levels, since rising river levels could rapidly exacerbate the extent of an oil spill. The smoke emanating from fires requires air monitoring services to detect if harmful levels of air pollutants have jeopardized local air quality and public health.

Thus, in the draft RIA, PHMSA has identified and summarized several recent derailments to illustrate the circumstances and consequences of derailments involving petroleum oil transported in higher-risk train configurations. We have outlined some of the challenges faced by the response to each spill event and discussed ways in which comprehensive oil spill response plans may have improved spill response efforts and/or alleviated the adverse consequences to the nation's waterways or environment.

IV. National Transportation Safety Board Safety Recommendations

As previously discussed, in addition to the efforts of PHMSA and FRA, the NTSB has taken a very active role in identifying the risks posed by the transportation of large quantities of flammable liquids by rail, as well as emergency response activities. Table 9 provides a summary of the rail-related NTSB Safety Recommendations related to this rulemaking.

Table 9: NTSB Recommendations Addressed in this Rulemaking

NTSB Recommendation	Summary	Addressed in this Rule?	Description
R-14-02 Issued January 23, 2014	Recommends that FRA develop a program to audit response plans for rail carriers of petroleum products to ensure that adequate provisions are in place to respond to and remove a worst-case discharge to the maximum extent practicable and to mitigate or prevent a substantial threat of a worst-case discharge.	Yes	Propose requirements for FRA to approve comprehensive oil spill response plans for rail.
R-14-05 Issued January 23, 2014	Recommends that PHMSA revise the spill response planning thresholds contained in 49 CFR part 130 to	Yes	Propose to revise the spill planning thresholds to address 20 cars of liquid petroleum oil in a continuous block or 35 cars of liquid petroleum oil in

	require comprehensive response plans to effectively provide for the carriers' ability to respond to worst-case discharges resulting from accidents involving unit trains or blocks of tank cars transporting oil and petroleum products.		a consist.
R-14-14 Issued August 22, 2014	Recommends that PHMSA require railroads transporting hazardous materials through communities to provide emergency responders and local and state emergency planning committees with current commodity flow data and assist with the development of emergency operations and response plans.	Yes	The proposed information sharing requirements in this rulemaking and the adopted routing requirements in final rule HM-251 (80 FR 26643, May 8, 2015) address this recommendation.

V. Summary and Discussion of Public Comments on Oil Spill Response Plans

A. Overview of Comprehensive Oil Spill Response Plans

In the August 1, 2014, ANPRM, PHMSA solicited public comment on questions about potential revisions to its regulations that would expand the applicability of comprehensive oil spill response plans (OSRPs) to high-hazard flammable trains (HHFTs) based on amounts of crude oil in an entire train consist, rather than a single package or tank car. PHMSA received 259 submissions representing more than 70,000 signatories. Over 67,000 signatories included comments directly addressing the ANPRM rulemaking that were submitted to a related docket for the NPRM HM-251, Hazardous Materials: Rail Petitions and Recommendations to Improve the Safety of Railroad Tank Car Transportation (RRR). These comments were identified and

considered to the extent practicable. Comments were received from a broad array of stakeholders, including trade organizations, intermodal carriers, consultants, environmental groups, emergency response organizations, other non-government or advocacy organizations, local government organizations or representatives, tribal governments, state governments, Members of Congress, and other interested members of the public. Comments and all corresponding rulemaking materials received may be viewed on the www.regulations.gov website (Docket ID: PHMSA-2014-0105). Additional comments may be viewed under Docket ID: PHMSA-2012-0082.

In general, comments on the ANPRM were: (1) general statements of support or opposition; (2) personal anecdotes or general statements not specifically related to the proposed changes; (3) comments beyond the scope of the oil spill response planning provisions of the CWA; or (4) identical or nearly identical letter write-in campaigns submitted as part of comment initiatives sponsored by organizations. For example, many commenters recommend insurance or liability requirements for railroads that are not within the scope of PHMSA's statutory authority. Although PHMSA does not have statutory authority to impose insurance or liability requirements, the FAST Act mandates the Secretary initiate a study on the levels and structure of insurance for railroad carriers transporting hazmat under § 7310. That action is underway. The remaining comments reflect a wide variety of differing views on the proposed regulations. The substantive comments received on the ANPRM are organized by topic and discussed in the appropriate section, together with the PHMSA's response to those comments.

Table 10: Overall Commenter Breakdown[38]		
Background	**Signatories**	**Description and examples**

[38] It should be noted that individuals and non-government organization signatories were not categorized consistently due to limitations from transferring capturing comments initially submitted to PHMSA-2012-0082.

Non-Government Organization	65,044	Environmental groups, emergency response organizations, and other non-governmental organizations.
Government	3,299	Local, state, tribal governments or representatives, U.S. Congress members, etc.
Individual	2,079	Public submissions not directly representing a specific organization.
Industry Stakeholder	30	Trade organizations, intermodal carriers, offerors.

B. Plan Scope/Threshold of Comprehensive Oil Spill Response Plans

In order to inquire about the potential impact of different thresholds on the regulated community, PHMSA asked the public to comment on the following question: "When considering appropriate thresholds for comprehensive OSRPs, which of the following thresholds would be most appropriate and provide the greatest potential for increased safety? The following thresholds were provided as examples: (a) 1,000,000 gallons or more of crude oil per train consist; (b) an HHFT of 20 or more carloads of crude oil per train consist; (c) 42,000 gallons of crude oil per train consist; or (d) another threshold. In addition, PHMSA asked: What thresholds would be most cost-effective?"

Comments to the ANPRM on the scope of the rule were wide-ranging. Many commenters commented on this question directly, voicing support of one or more of the proposed thresholds or suggesting a different threshold, while other commenters chose to comment generally.

The first threshold, (a) 1,000,000 gallons or more of crude oil per train consist was not supported by any commenters as a single metric. Two commenters: the Association of American Railroads (AAR) and the American Short Line and Regional Railroad Association (ASLRRA) did incorporate 1,000,000 gallons as part of another threshold, as discussed further below.

In opposition to the first proposed threshold, many commenters have suggested that the

1,000,000 gallons threshold is not effective because oil spills involving quantities below this threshold could cause considerable harm to the environment and in particular, rivers or waterways. On this point, LRT-Done Right has reiterated the significance of PHMSA's derailment data, stating that "…less than one carload of spilled oil or ethanol can present great danger." Similarly, the Delaware Riverkeeper Network commented that, for example, "a spill of 25,000 gallons of oil in Wyoming…resulted in a three mile trail of contamination."

Commenters have also suggested that 1,000,000 gallons is not an adequate threshold because preventing oil spills within the context of rail transport differs substantially from the context of fixed oil facilities. The Delaware Riverkeeper Network has stated, "A threshold of 1,000,000 gallons is…inappropriate because the current 1,000,000 gallon threshold [under EPA regulations] applies to stationary facilities and includes all oil containers, including drums, at the facility. Trains carrying volatile crude oil are substantially different than such facilities." Similarly, the Center for Biological Diversity has said, "[42,000 gallons as a threshold for rail] would be more consistent with established law than a 1,000,000 gallon threshold…since trains are not storing oil in a controlled facility, but rather moving it around the country on rail systems that experience fatigue and unforeseen circumstances such as derailments."

PHMSA's second proposed threshold, (b) an HHFT of 20 or more carloads of crude oil per train consist, was supported at least in part by three commenters.[39] Namely, the Independent Fuel Terminal Operators Association, the Flathead Lakers, and the Honorable Paul D. Tonko submitted comments in support of a threshold aligned with the definition of an HHFT. The Flathead Lakers, in particular, have noted that incidents involving quantities carried by HHFTs

[39] It should be noted that the HMR now define an HHFT as "as a train comprised of 20 or more loaded tank cars of a Class 3 flammable liquid in a continuous block or 35 or more loaded tank cars of a Class 3 flammable liquid across the entire train." The (b) threshold was based on the HHFT definition proposed in the August 1, 2014 NPRM which was "as a train comprised of 20 or more tank cars containing a flammable liquid."

could be catastrophic.

In opposition to a threshold based on the HHFT definition, and similar to commenters' opposition to the first threshold of 1,000,000 gallons, some commenters have indicated that incidents need not involve an HHFT in order to cause considerable harm to the environment. The National Association of SARA Title III Program Officials (NASTTPO) and the Oklahoma Hazardous Materials Emergency Response Commission (OHMERC) have suggested that the threshold for developing a comprehensive oil spill response plan should involve fewer tank cars carrying crude oil because one tank car "is more than enough flammable material to present a risk to first responders and the local community." Various individual commenters have echoed this sentiment and suggested that a threshold based on the HHFT definition would allow significant quantities of crude oil to be transported by rail carriers that lack comprehensive oil spill response plans.

Several commenters supported the third proposed threshold: (d) 42,000 gallons of crude oil per train consist. Commenters have shown that it is at least numerically consistent with current regulations in 49 CFR part 130, even though there is a key distinction in which part 130 upholds a threshold of 42,000 gallons for a single package (i.e., a single tank car) and the ANPRM has proposed 42,000 gallons as a threshold within a single train consist. As the New York State Department of Transportation has stated, "[A 42,000 gallon per train consist threshold] would maintain consistency with the existing threshold for comprehensive Oil Spill Response Plans (OSRP) while recognizing the hazard posed by the derailment of even a small number of crude oil cars."

Many commenters have supported the third proposed threshold (i.e., (d) 42,000 gallons of crude oil per train consist) on the basis that it was the lowest quantity threshold that PHMSA

proposed. Given that approximately 30,000 gallons can be carried in a single tank car, 42,000 gallons amounts to the quantity of crude oil that could be contained and transported in two tank cars. Therefore, among the proposed thresholds, the 42,000 gallons per train consist threshold would plausibly have a high applicability and require the development of a comprehensive plan by the greatest number of railroads. Thus, commenters supporting this threshold have held that it would plausibly result in the greatest amount of prevention and preparation on the part of affected entities and consequently, the greatest amount of risk reduction, enhancement of public safety, and protection of the environment.

Similarly, the threshold of 42,000 gallons received some support from commenters that propose lower quantities of crude oil as a threshold (e.g., 1 gallon, 24,000 gallons, 30,000 gallons, etc.), but acknowledged that a threshold of 42,000 gallons for practical purposes would result in approximately the same amount of applicability and affected entities. Assuming the typical tank car contains 27,000 to 30,000 gallons of crude oil, the main difference between a threshold of 1 gallon and 42,000 gallons would be whether a railroad could legally transport one tank car of crude oil without a comprehensive oil spill response plan. Accordingly, the Delaware Bay & River Cooperative has commented, "…one rail car of 30,000 gallons of crude can have significant environmental impacts if spilled in a sensitive area along the Delaware River or other body of water. Therefore, 42,000 gallons may be the appropriate threshold level to trigger the comprehensive plans requirement."

Nevertheless, some commenters have suggested that the threshold should be one tank car or any quantity of crude oil. The Waterkeeper Alliance has stated, "Whether one car, twenty cars, or one hundred and twenty cars in a train are carrying crude oil, crude-by-rail is inherently dangerous, and PHMSA should require the railroad industry to adequately prepare for any size

spill. In sum, the new PHMSA Response Rule must set the comprehensive oil spill response planning threshold at one railcar." Thus, commenters in support of a threshold of one tank car or any quantity of crude oil hold that even the transport of small amounts of crude oil entail substantial risk and should necessitate a comprehensive oil spill response plan, rather than a basic plan.

In the ANPRM, PHMSA encouraged commenters to provide additional thresholds differing from those that PHMSA explicitly proposed. According to AAR and ASLRRA, the scope of the rule should involve a threshold based on "Petroleum Crude Oil Routes" (PCORs). AAR and ASLRRA define PCORs as "…a railroad line where there is a minimum of twelve trains a year, which is an average of one train a month, that transport 1,000,000 gallons of petroleum crude oil (UN1267 and/or UN3494) or more that is within 800 feet or closer from the centerline of track to a river or waterway that is used for interstate transportation and commerce for more than 10 miles." Assuming each tank car has a capacity of 30,000 gallons, the transport of 1,000,000 gallons of crude oil would require around 33 tank cars.

The AAR and the ASLRRA also proposed geographical criteria as part of their PCOR definition, differing from PHMSA's proposed thresholds, which are based on a quantity transported or number of carloads within a train consist. As part of its geographical criteria, the AAR suggests that a PCOR must be within 800 feet of a river or waterway used for interstate transportation and commerce for more than 10 miles. The AAR claims that the 800 feet figure is based on a railroad's experience following a discharge. The AAR does not give further details on how the 800 feet figure was developed. The AAR also claims that the 10 miles figure used in its PCOR definition is based on regulations within 49 CFR part 194, which are applicable to oil pipeline owners and operators and are overseen by PHMSA's Office of Pipeline Safety (OPS).

Discussion of this claim can be found in the "Discussion of Public Comments: Plan Scope/Threshold" section.

In addition, the AAR has limited the scope of its proposed threshold to include only those railroad lines that move at least twelve trains a year, an average of one train per month. The AAR did not include any data to support incorporating the parameter of twelve trains per year into the NPRM's thresholds or to show that the use of the PCOR definition as a threshold would improve safety or be cost-effective.

Many other commenters proposed alternative thresholds, such as five carloads or 3,500 gallons per tank car. In support of a five carload threshold, NASTTPO has stated that "it is common for more than one HHFT tank car to be involved [in a derailment]." In support of a 3,500 gallons per tank car threshold, commenters, such as safety consultant John Joeckel, have suggested that the current, 3,500-gallon threshold in 49 CFR part 130 for basic oil spill response plans could become the new threshold that triggers the need to develop a comprehensive plan. These commenters reiterate that the current regulations for comprehensive plans under 49 CFR 130 do not generally apply to railroads given that tank cars used to ship crude oil do not have capacities of 42,000 gallons or greater. They suggest that PHMSA could remove part 130's reference to a basic plan and repurpose the 3,500 gallon per packaging threshold so that it would trigger the need for a comprehensive plan.

In addition, some commenters restated the need to revise the thresholds in 49 CFR part 130 and suggested that they align with probable spill volumes or other planning volumes found in other federal regulations (e.g., "average most probable" or "maximum most probable"). In particular, the Response Group has stated that the threshold should relate to probable spill volumes and historical data but did not specifically propose as a threshold a numerical value.

Similarly, the American Petroleum Institute (API) did not express support for PHMSA's proposed thresholds nor did API specifically propose a new threshold. However, API emphasized that "DOT should choose a threshold that is reasonable and practical…Onerous planning requirements with an extremely low threshold could exponentially increase the cost and burden on the railroads, while vague planning requirements triggered by a baseless threshold would be equally challenging." Thus, API has expressed that the cost to railroads in developing and implementing comprehensive plans could be substantial, and PHMSA should consider and analyze the costs of applying different thresholds.

In addition to API's above comment, PHMSA received additional commenter input on the cost-effectiveness of the proposed thresholds. Environmental groups and others have expressed that cost concerns should be secondary to concerns about the potential benefits of enhancing public safety and reducing damage to the environment. For example, the Center for Biological Diversity has stated that the cost-effectiveness of thresholds "…is somewhat immaterial, and cost should not be considered in establishing a threshold for comprehensive OSRPs for oil trains, since this is an issue of public health." Safety consultant John Joeckel has offered a similar comment, stating, "Are we concerned with the cost to the responsible party to develop and implement the OSRP? Or, should we be concerned of the cost to the public arising from an ineffective response with the consequences of significant environmental damage or risks to public safety?"

Many commenters have suggested that the scope of this rule be expanded to include other materials besides oil. Commenters have asked PHMSA to require comprehensive oil spill response plans for rail cars transporting any type of hazardous materials. The Village of Barrington, IL and the TRAC Coalition, in particular, have stated, "Given the clear authority that

PHMSA has to issue regulations under federal law for a broad range of hazardous goods, TRAC strongly believes the rules being promulgated under this ANPRM should be applied to all hazmat transported on trains." This commenter has cited the Cherry Valley, IL ethanol train derailment to show that, "While the ANPRM is about oil spill response plans, clearly other hazardous material poses similar threats to human and environmental safety." Other commenters, such as LRT-Done Right, have stated that carriers of ethanol should also be subject to comprehensive OSRP requirements.

Conversely, other commenters have suggested that the scope of the rule be limited in order to more specifically address the risks of petroleum crude oil transport. "Petroleum crude oil" (UN1267) is a specific entry in the Hazardous Materials Table (HMT) under 49 CFR 172.101. "Petroleum sour crude oil, flammable, toxic" (UN3494) is a similar entry. On this basis, AAR has asked that the scope of the rule be limited explicitly to these entries in the HMT. The Dangerous Goods Advisory Council (DGAC) has offered an analogous suggestion, stating, "[DGAC] believe[s] that the OPRP [sic] should be limited to crude oil trains only which are comprised of tank cars originating from one consignee to one consignor." In other words, by limiting the scope of the rule to "crude oil" or "petroleum crude oil" only, commenters are suggesting that the transport of refined petroleum products, ethanol, or other flammable liquids should not be relevant to the determination of whether a rail carrier must have a comprehensive OSRP.

Discussion of Comments: Plan Scope/Threshold

PHMSA carefully considered the comments submitted to the ANPRM regarding the scope of the rule in order to apply comprehensive OSRP requirements to address the increased

risks posed by the expansion of domestic energy production and subsequent rail transportation. PHMSA recognizes the importance of establishing a threshold that enhances public safety, protects the environment, is reasonable and practical, and facilitates compliance and enforcement. PHMSA acknowledges that an effective threshold will take into account a range of factors, and might include distinctions regarding the quantity of petroleum oil transported, the number of carloads within a train consist, the definition of different materials subject to regulation, geographic or location-based criteria, and cost/benefit or practical considerations.

PHMSA emphasizes that safety and environmental risks are related to the quantity of oil transported by trains, and the configuration of tank cars loaded with petroleum oil. Thus, PHMSA has proposed in this NPRM to expand applicability for petroleum oil based on the number and configuration of tank cars transporting petroleum oil in a train. Specifically, this rulemaking proposes that comprehensive oil spill response plans be required of railroads that transport 20 or more tank cars loaded with liquid petroleum oil in a continuous block in a single train or 35 or more of such tank cars dispersed throughout the train. We propose the comprehensive OSRP requirements continue to apply to tank cars exceeding 42,000 gallons carrying petroleum or other non-petroleum oil. In this NPRM, we discuss our basis for this proposed applicability, as well as how it may differ from commenters' suggestions or proposals.

The scope of this rule is directly related to the definition of oil because the statutory authority to require OSRPs comes from § 1321 of the CWA, as amended by OPA, which applies solely to oil and hazardous substances. The CWA applies to both petroleum and non-petroleum oils. In the 1996 final rule, PHMSA incorporated the definition of "oil" from OPA into the current requirements 49 CFR part 130 and developed definitions for "petroleum oil" and "other non-petroleum oil" in order to differentiate petroleum oils from non-petroleum oils throughout

the requirements in part 130.

This rulemaking has been initiated to respond to the changing conditions from the increase in the volume of petroleum oil transported by rail and consequences of resulting incidents. PHMSA is not aware of incidents of unit trains carrying other non-petroleum oils which have demonstrated a need to expand the applicability of comprehensive plans for these oils. Therefore, instead of proposing that the expanded applicability of the comprehensive plan apply to all oils (as defined in 33 U.S.C. 1321), PHMSA proposes to limit the proposed expanded applicability to petroleum oils, whether refined or unrefined, transported in certain train configurations. PHMSA proposes to continue to apply the threshold of tank cars exceeding 42,000 gallons carrying petroleum or other non-petroleum oil.

Further, we propose to revise the definition of "petroleum oil" in this rulemaking as "any oil extracted or derived from geological hydrocarbon deposits, including oils produced by distillation or their refined products." This definition continues to include mixtures of both refined products, such as gasoline and unrefined products, such as petroleum crude oil. We are not proposing any changes to the scope in §130.2(c)(1) which clarifies that the requirements of part 130 do not apply to "Any mixture or solution in which oil is in a concentration by weight of less than 10 percent." Therefore petroleum oil in part 130 includes mixtures containing at least 10% petroleum oil, such as denatured ethanol fuel E85 (ethanol containing 15% gasoline). However, mixtures containing less than 10% petroleum oil, such as diluted waste water or E95 (ethanol with 5% gasoline) are not included. Oils which do not contain petroleum, such as synthetic oils or essential oils continue to be defined as "other non-petroleum oil" in § 130.5.

PHMSA disagrees with AAR that the applicability of the comprehensive plans should be limited to petroleum crude oil, as described by HMT entries UN 1267 and UN3494. Limiting

the applicability of comprehensive plans to solely these entries would result in regulating oils that generally present a similar type of risk in an incongruous manner. On this point, PHMSA holds that liquid petroleum oils, such as crude oil, diesel fuel, gasoline, or other petroleum distillates, present similar safety risks in commercial transportation.

There are several factors to consider when determining which hazardous materials should be subject to the new or revised requirements of this proposed rule. In general, PHMSA assesses the risks of hazardous materials in transportation in accordance with the nine different hazard classes under the HMR; however, the regulations we seek to amend in 49 CFR part 130 are not part of the HMR. Namely, part 130 is authorized under 33 U.S.C. 1321 – Oil and hazardous substance liability, not the Federal hazardous materials transportation law of 49 U.S.C. 5101–5128.

Moreover, the proposed applicability in this NPRM generally aligns with the definition of a "High-Hazard Flammable Train" (HHFT) as published in the final rule, "Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains" ("HM-251"). The proposed applicability differs, however, in the types of materials affected. By way of HM-251, the definition of an HHFT involved the transport of all Class 3 flammable liquids; whereas the comprehensive OSRP requirements in this rulemaking involve the transport of petroleum oil for consistency with part 130's statutory authority. Therefore, the proposed expanded applicability applies to those HHFTs which carry petroleum oil. This creates an integrated approach between the planning requirements in this rulemaking and the other operational controls in the HMR. To better facilitate this integration, residue or diluted mixtures of petroleum oils that no longer meet the definition of a Class 3 flammable or combustible liquid per 49 CFR 173.120 are not included in expanded applicability.

In the ANPRM, PHMSA asked if the 1,000,000 gallons threshold is appropriate for safety and cost-effectiveness. No commenters supported using 1,000,000 gallons as a single metric for applicability. Many commenters have suggested that the 1,000,000 gallons threshold is not effective because oil spills involving trains with quantities below this threshold could cause substantial harm to the environment. While commenters provided many examples of thresholds below 1,000,000 gallons, commenters provided insufficient data about the likelihood of a release from these tank car volumes to demonstrate such thresholds are "reasonably expected" to cause substantial harm. Thus, in order to better understand this differential of risk and the most likely number of punctures resulting in a derailment, PHMSA looks to the modeling conducted by FRA in support of HM-251.[40] In particular, HM-251 offered a scientific justification for the HHFT definition and using this threshold of tank cars as an identifier of higher-risk train configurations. Based on modeling and analysis performed by FRA, 20 tank cars in a continuous block loaded with a flammable liquid and 35 tank cars loaded with a flammable liquid dispersed throughout a train display consistent characteristics as to the number of tank cars likely to be breached in a derailment. The operating railroads commented on HM-251 and indicated that this threshold would exclude "manifest" trains and focus on higher risk, "unit" trains. FRA completed an analysis of a hypothetical train set consisting of 100 cars. The analysis assumes 20 cars derailed. The highest probable number of cars losing containment in a derailment involving a train with a 20-car block (loaded with flammable liquid) located immediately after the locomotive and buffer cars would be 2.78 cars. In addition, the most probable number of cars losing containment in a derailment involving a manifest train consisting of 35 cars containing flammable liquids dispersed throughout the train would be 2.59 cars.

[40] 80 FR 26665; 5/8/2015.

Therefore, 20 tank cars in a block and 35 tank cars dispersed throughout a train display consistent characteristics (i.e., 2.78 cars breached vs. 2.59 cars breached). If the number of flammable liquid cars in a manifest train were increased to 40 or 45, the most likely number of cars losing containment would be 3.12 and 3.46 cars, respectively. This analysis served as one basis for the selection of the revised HHFT definition for HM-251, and it also helps to shape our discussion of applicability in this proposed rule for oil spill response plans (HM-251B).

As a result of this modeling, PHMSA holds that a derailment involving a train moving less than 20 tank cars in a continuous block, or less than 35 tank cars throughout the train, would result in relatively fewer punctures than derailments involving more than this number of tank cars. Specifically, as a result of this modeling, PHMSA suggests that the most likely number of tank car punctures for a train with less than 20 tank cars in a block would be less than 2.78, and in a derailment scenario with less than this number of punctures, the derailment is significantly less likely to cause substantial harm to the environment. In more general terms, PHMSA would suggest, as a result of these modeling outcomes from FRA, that a derailment involving two or fewer tank car punctures is less likely, and therefore not "reasonably expected" to cause substantial harm to the environment. Therefore, we believe the applicability proposed in this NPRM appropriately indicates the trains that can reasonably be expected to cause substantial harm to the environment. Consequently, by way of this rulemaking, PHMSA proposes to require these higher-risk train configurations to operate in conformance with comprehensive oil spill response plans.

In addition to the data on the most likely number of tank car punctures in a derailment, PHMSA further maintains that lower-risk train configurations should not be the focus of this rulemaking because extending the requirements of this rule to operators of lower-risk

configurations could be burdensome, costly, and inefficient. There are many costs involved in developing and implementing a comprehensive oil spill response plan, such as retainer fees, training and drill costs, and plan development and submission costs. For more information regarding regulatory flexibility, please see Section VIII, Subsection E ("Regulatory Flexibility Act, Executive Order 13272, and DOT Policies and Procedures"). For more information regarding the costs of this rule on the regulated community, please see the draft RIA and the associated discussion in Section VIII, Subsection A ("Executive Order 12866, Executive Order 13563, Executive Order 13610, and DOT Regulatory Policies and Procedures").

Commenters have also suggested that 1,000,000 gallons, which is used as a threshold in the development of non-transportation-related facility response plans, is not an adequate threshold because the context of rail transport differs substantially from the context of fixed facilities. PHMSA agrees. PHMSA believes that a threshold based on a number of carloads is more effective and practical, and the proposed applicability in this rulemaking is specific to the context of rail transportation. Moreover, as previously discussed, the proposed applicability identifies higher-risk train configurations which could reasonably be expected to cause substantial harm to the environment in the event of a derailment.

A few commenters voiced support for the second threshold of the HM-251B ANPRM, which aligned with the HHFT definition proposed in the HM-251 NPRM and published on August 1, 2014 (i.e., 20 tank cars in a train). Given the proposed applicability in this rulemaking, PHMSA generally agrees with these commenters; however, the nature of the HHFT definition has changed since HM-251B's ANPRM publication. On May 8, 2015, PHMSA published the final HM-251 and revised the HHFT definition to comprise 20 tank cars loaded with a Class 3 flammable liquid in a continuous block or 35 or more tank cars loaded with a

Class 3 flammable liquid dispersed throughout the train. Thus, by way of HM-251, the HHFT definition came to reference the configuration of tank cars in the train as well as an additional threshold for the number of tank cars in a train. Furthermore, PHMSA has adapted the HHFT definition of HM-251 to form the basis for the applicability for comprehensive oil spill response plans, but notably restricts this applicability to liquid petroleum oils, rather than all Class 3 flammable liquids. For these reasons, PHMSA has not proposed to codify the HHFT definition under part 130.

Moreover, this applicability is important because it is likely that trains with less than 20 tank cars of petroleum oil in a continuous block, or less than 35 of such cars dispersed throughout the train, are the result of configuring "manifest" trains. Manifest trains involve combining multiple shipments of potentially various materials from various shippers to form a single train consist. These trains differ substantially from "unit" trains, which generally involve a single commodity offered by a single shipper (the consignor) and delivered to a single entity (the consignee). As discussed in the final rule document for HM-251, the rail industry has noted that manifest trains carrying limited loads of oil along with other commodities pose less of a risk than unit trains with significantly larger loads of oil. Further, the rail industry commented on the NPRM of HM-251, relaying that in many situations it would be difficult to pre-determine when an HHFT would be used and that shippers of smaller volumes of oil would not know if their shipment would ultimately be configured into an HHFT.

PHMSA carries these concerns and related analyses from HM-251 into this proposed rule, as we believe it is still pertinent to the discussion of comprehensive oil spill response plans. In this rulemaking, PHMSA intends to identify higher-risk train configurations that pose a threat of substantial harm to the environment. Conversely, PHMSA does not intend to affect lower-risk

train configurations moving smaller quantities of petroleum oil, which are more likely to be the result of configuring a manifest train. Lower-risk train configurations are significantly less likely to cause substantial harm to the environment and extending the full breadth of the proposed requirements for a comprehensive plan to entities transporting lower-risk train configurations would likely be too burdensome and costly, for the limited safety benefits provided. Furthermore, the proposed quantity provides an integrated approach to the comprehensive OSRP requirements and the requirements of HHFTs.

In opposition to an HHFT-like applicability, many commenters have argued that oil spills involving carloads below this threshold could cause considerable harm to the environment. On this point, PHMSA acknowledges that oil spills of a lesser amount can cause harm, but holds that trains carrying less than 20 tank cars of petroleum oil in a continuous block, or less than 35 of such tank cars dispersed throughout the train, are effectively lower-risk train configurations, and they cannot be reasonably expected to cause substantial harm. In other words, these trains may be capable of causing harm, but the harm they can cause is significantly less likely to qualify as substantial harm. As previously discussed, modeling data from FRA indicates that trains with less than 20 tank cars in a block, or less than 35 tank cars dispersed throughout a train, could not be reasonably expected to cause substantial harm because, in derailment scenarios, relatively few tank cars containing petroleum oil would be breached on average. As previously discussed, this modeling demonstrated that the most likely number of punctures in a derailment scenario involving a train with 20 tank cars in a continuous block would be 2.78.

Furthermore, given the enhanced tank car standards promulgated in HM-251 and resulting improvements in tank car integrity, PHMSA believes the likelihood of a tank car releasing all of its contents in a derailment has been significantly reduced. Thus, in relation to

the derailment modeling data (discussed above), PHMSA maintains that a train with a 20-car block of petroleum oil would not result in 83,400 gallons spilled (2.78 tank car punctures x 30,000 gallons per tank car = 83,400 gallons discharged from the breached tank cars). Rather, a derailment scenario involving 20 tank cars of petroleum oil in a continuous block would most likely result in less than 83,400 gallons discharged. For these reasons, PHMSA cautions against the assumption implicit in some commenters' comments that the derailment of one tank car automatically results in the discharge of 30,000 gallons of product, and the derailment of two tank cars is equivalent to the discharge of 60,000 gallons of product, and so forth. As the modeling data from FRA indicates, the number of tank cars that breach in a derailment scenario is in all likelihood fewer than the number of tank cars that derail. Separately, given the tank car design enhancements promulgated by HM-251, the likelihood that breached tank cars would release all of their contents has been reduced. Accordingly, PHMSA feels that extending the requirement to develop a comprehensive OSRP to entities operating lower-risk train configurations would not be efficient. It would require significant investments on the part of small entities that are not key factors in the transport of petroleum oil by rail, and these investments would not yield analogous safety benefits. Please see Section VIII, Subsection E ("Regulatory Flexibility Act, Executive Order 13272, and DOT Policies and Procedures") for impacts on small entities and the draft RIA for further discussion of safety benefits and costs to industry.

Many commenters voiced support for the third threshold proposed in the ANPRM, which was 42,000 gallons. PHMSA disagrees with these comments because we believe that a threshold based on the number of carloads of petroleum oil in a train would be more practical for compliance and enforcement purposes than a threshold based on gallons. In general, 42,000

gallons as a threshold could be impractical or burdensome. Since tank cars tend to carry around 30,000 gallons of product, a threshold of 42,000 gallons would effectively equate to differentiating a train with one carload of petroleum oil and a train with two carloads and thus, requiring a comprehensive plan for the transport of two carloads of petroleum oil. As previously discussed, PHMSA affirms that higher risk train configurations should be the focus of the proposed rule and that a train transporting two tank cars of petroleum oil simply does not present the same amount of risk as higher-risk train configurations. While a train with two tank cars of petroleum oil could derail, potentially releasing its contents and harming the environment, it is not nearly as likely to cause substantial harm as higher-risk trains with much larger quantities of petroleum oil.

In the ANPRM, PHMSA asked the public if "another threshold" were appropriate or cost-effective. In response to PHMSA's inquiry of "another threshold," many commenters offered thresholds that are less than 42,000 gallons, such as one tank car, 24,000 gallons, 3,500 gallons, or any quantity of petroleum oil. PHMSA disagrees with these suggestions. Rail industry practices demonstrate that there is only a slight distinction between the threshold of 42,000 gallons, which was proposed by PHMSA in the ANPRM, and the lesser quantities proposed by some commenters in response to the ANPRM. In practical terms, the thresholds of any quantity, 3,500 gallons, and 24,000 gallons would result in regulating trains with one tank car of petroleum oil, whereas a 42,000-gallon threshold would result in regulating trains with two tank cars. PHMSA maintains that this distinction is slight and in either case, requiring comprehensive plans of trains that transport merely one or two tank cars of petroleum oil would most likely be burdensome upon implementation and be costly relative to the limited safety benefit it would offer, especially for small entities. As previously discussed, PHMSA also holds

that a threshold based on a number of carloads is more practical than a threshold based on a gallon amount.

In a similar vein, PHMSA holds that imposing an applicability of five tank cars, or any other number of tank cars that is less than 20 in a continuous block or 35 when dispersed throughout a train, would most likely be costly or burdensome and yield limited safety benefits due to the impacts on small entities as well as "manifest" train configurations involving petroleum oil. Please see the draft RIA for further discussion of the costs and benefits of the proposed rule.

In response to the comment by AAR and ASLRRA, PHMSA disagrees with using the definition of a Petroleum Crude Oil Route (PCOR) of "…a railroad line where there is a minimum of twelve trains a year, which is an average of one train a month, that transport 1,000,000 gallons of petroleum crude oil (UN1267 and/or UN3494) or more that is within 800 feet or closer from the centerline of track to a river or waterway that is used for interstate transportation and commerce for more than 10 miles" to determine whether a rail carrier must develop a comprehensive plan. We do not have information on exactly how many rail carriers or trains would be permitted to transport petroleum oil without a comprehensive plan if the applicability of this rulemaking were to incorporate the AAR and ASLRAA's proposed PCOR definition or the quantity of 1,000,000 gallons, and invite public commenters to provide information to assist in further evaluating the benefits and costs of these alternative applicability thresholds. Overall, PHMSA believes that the PCOR definition is overly complicated, and creates uncertainty for FRA, communities, and responders about which unit trains of petroleum oil are excluded from the requirement to have a comprehensive plan. PHMSA seeks to align increased risk with improved oil spill response planning such that higher risk unit train

configurations would require comprehensive plans. PHMSA suggests that AAR and ASLRRA's PCOR definition might permit an unwarranted number of trains which present the potential of substantial harm to the environment to operate without a comprehensive plan. Additional concerns with this definition are described in the following discussion.

Further, as previously discussed, PHMSA disagrees with the PCOR definition because PHMSA believes that using a gallons basis for the threshold could present compliance and enforcement issues, especially relative to the use of a number of tank cars. Since tank cars vary in the quantity of product that they can transport, PHMSA suggests it is much easier to determine the number of tank cars in a train carrying petroleum crude oil than it is to assess the exact amount of gallons carried by any number of tank cars designed with potentially different capacities. For example, a train carrying 35 tank cars of petroleum oil would likely be "around the margin" of 1,000,000 gallons of petroleum oil. In other words, accurately determining if the train as configured has 990,000 gallons of product, versus 1,000,000 gallons, might be difficult for compliance and enforcement purposes; whereas, it is easier to observe that the train as configured has 35 tank cars. While we proposed two thresholds based on gallon amounts in the ANPRM, we have since crafted our proposed threshold in the NPRM to reflect this updated viewpoint and analysis.

Moreover, PHMSA disagrees with the AAR's use of 800 feet as a geographic criterion in the PCOR definition because it might present compliance and enforcement issues. Assessing the need for a comprehensive plan or a potential violation would require a potentially taxing confirmation of the distance of a waterway from the centerline of the track, especially "around the margin" of 800 feet. In addition, this geographic criterion might result in different outcomes of response preparedness despite nearly identical levels of risk. For example, in a scenario

wherein one waterway is 790 feet from the centerline of the track, and another scenario wherein a different waterway is 801 feet from the centerline of the track, the second waterway might be better protected from an oil spill than the first. Thus, the 800 feet geographic criterion appears to be arbitrary given that the commenter has not offered data to suggest that 800 feet would be an appropriate "buffer" zone between a potential derailment site and navigable water and as such, enhance safety and prevent the entry of oil into the waterway. Further, the distance between the centerline of the track and navigable water is but one of the several factors that could influence the probability of a spill damaging navigable water; that is, other geographical factors exist that might increase this probability substantially.

PHMSA also disagrees with AAR's contention that in order to trigger the response plan requirement, the waterway in question must be a maximum distance of 800 feet from the centerline of the tracks and the waterway must be "a river or waterway used for interstate transportation and commerce." Both the distance from and criteria for a waterway as proposed by AAR are inconsistent with the CWA, which provides the statutory authority for this rulemaking. For example, rather than a distance of "800 feet" from navigable waters, the CWA requires oil spill response plans for any facility that "because of its location, could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or the exclusive economic zone." PHMSA is not aware of evidence demonstrating that all spills originating more than 800 feet away from navigable waters could not be reasonably expected to cause substantial harm to these resources. PHMSA assumes that all routes are expected to have the potential to impact navigable waters and that performing an analysis for every point along the route is not practical, as there are various factors that could complicate this analysis and hinder the ability to foresee an impact to navigable waters. For

example, identification of navigable waters requires consideration of geographical features, seasonal variation, vegetation, etc. The possible impact zone surrounding the track could also depend on topography or the viscosity of the petroleum product transported. Therefore, the entire route should be covered by the Oil Spill Response Plan and after a discharge of oil occurs, the Federal On-Scene Coordinator should make the determination of the threat in the specific conditions.

In addition, per AAR's PCOR definition, a track or segment of track over which only eleven crude oil-carrying trains travel per year would not require a comprehensive plan; however, if a twelfth train travels over this same segment or track, it would necessitate a comprehensive plan. Thus, PHMSA suggests that this aspect of the PCOR definition may be impractical for compliance and enforcement efforts. We anticipate that it would not be possible for a railroad to make an accurate, advance prediction of commodity flows and train consists, because that prediction would rely on external factors beyond the railroad's control. For example, commodity flows and train consists would be affected by fluctuations in oil or other commodity prices, decisions by customers to pursue different shipping routes, or overall economic factors.

However, PHMSA recognizes that AAR has proactively identified ways to target the affected entities that present higher safety risks while trying to limit the impact of the proposed rule and associated costs on entities that pose significantly less risk. To that end, PHMSA appreciates the attentiveness to providing regulatory flexibility and holds that it may be acceptable to except certain small entities from the proposed requirements of comprehensive oil spill response plans if they are overly costly or burdensome for these entities. For more information regarding regulatory flexibility, please see Section VIII, Subsection E ("Regulatory

Flexibility Act, Executive Order 13272, and DOT Policies and Procedures"). Moreover, PHMSA seeks comment on ways that might be used to effectively provide regulatory flexibility to bona fide small entities that pose a lesser safety risk and may not be able to comply with the requirements of the proposed rule due to cost concerns, limited benefit, or practical considerations.

C. Contents of Comprehensive Oil Spill Response Plans

Commenters submitted a variety of comments regarding plan contents to the ANPRM. In the ANPRM, PHMSA asked the public two questions that were specific to the area of plan contents. To paraphrase, the first question asked whether the current requirements for comprehensive OSRPs were "clear" or if greater specificity should be added to 49 CFR part 130 ("Part 130"). The second question asked if any comprehensive OSRP elements should be "added, removed, or modified."

Regarding the first question, the majority of commenters stated that they were not clear and needed greater specificity. For example, the Response Group has said that the current requirements under part 130 are "too generic in nature." In addition, API has stated, "The current PHMSA spill response plan requirements applicable to the railroads do not provide the clarity needed to develop comprehensive, responsive and consistent spill response plans… PHMSA should consider revising part 130 to provide better specificity to the regulated community and should look to EPA, USCG and BSEE for examples and practices that would work with the operational requirements of the railroads." Further, DGAC has stated that "it would be advisable to develop training and outreach information" to assist affected entities in the development of comprehensive OSRPs. Overall, commenters from a variety of backgrounds

have asked PHMSA to clarify the current requirements under part 130, reference other agencies' plans (e.g., plans under USCG, BSEE, EPA, or PHMSA's Office of Pipeline Safety), provide further instructions and guidance to affected entities, and ensure that new requirements reflect the context of rail transportation. Commenters such as California's Office of Spill Prevention Response and Washington State's Department of Ecology also highlighted the requirements aligned necessary to align with obligations in the CWA statute.

However, some commenters stated that the existing requirements are adequate as currently written. The New York State Department of Transportation has stated, "The use of comprehensive OSRPs is not a new concept…New York State believes the requirements of OSRPs are clear enough for railroads and shippers to understand what is required of them." The American Fuel & Petrochemical Manufacturers (AFPM) has stated that the "requirements of OSRPs in 49 CFR 130.31 provide sufficient clarity for the railroads to take steps to plan for and address potential discharges of crude oil. The focus of PHMSA's efforts should be…ensuring appropriate oversight and enforcement of existing spill planning obligations, including ensuring that railroads have available the equipment and personnel necessary to address discharges." Similarly, the City of Seattle claims that the current comprehensive OSRP requirements are clear for railroads and shippers, but states that the plan requirements are not clear to the public and "do not properly engage the public." Regarding the City of Seattle's comment and public engagement, please refer to the summary and discussion of comments under Section V, Subsection E ("Confidentiality/Security Concerns for Comprehensive Oil Spill Response Plans").

PHMSA also asked the public if any plan elements within part 130 should be added, removed, or modified. Several commenters identified plan elements that could be added,

removed, or modified, and suggested different means of addressing: adverse weather conditions; topological and geographic risks near rail routes; environmentally sensitive or significant areas; temporary storage of loaded rail cars; worst-case discharge planning; communication between Qualified Individuals and local, state, and federal officials; training standards; drills; equipment inspection; private and public resource contracting; response time requirements; timeframes for reviewing or updating OSRPs; public awareness; alternative plans; and NTSB safety recommendations, among other issues.

The Association of American Railroads (AAR) and American Short Line and Regional Railroad Association (ASLRRA), in particular, have made several suggestions regarding potential additions or modifications to part 130. AAR and ASLRRA have submitted "proposed regulatory language" for OSRPs. Within this language, they have suggested that rail carriers determine the worst-case discharge amount and provide their methodology within the OSRP. They have referenced National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and Area Contingency Plans (ACP) and provided a description of the requirements that a rail carrier must follow to be "consistent" with the NCP and each applicable ACP. In the same proposed language, AAR and ASLRRA have outlined the format of a possible comprehensive OSRP, which would include requirements for response resources, training, plan summaries and other administrative aspects of an OSRP. AAR and ASLRRA have also asked that an Integrated Contingency Plan (ICP) be acceptable if it "provides equivalent or greater spill protection" than the plan required under part 130. The joint comments also made suggestions related to recordkeeping, plan retention, periodic plan reviews, and submission/approval. For more information regarding the approval of plans, please refer to Section V, Subsection D ("Approval of Comprehensive Oil Spill Response Plans").

The American Petroleum Institute (API) has suggested that comprehensive OSRP requirements be re-structured to be "consistent and complementary with other legal spill prevention rules." API holds that comprehensive OSRP requirements could use a different format. In addition, API asks that DOT consider adopting the "Response Zone" concept that is currently utilized by pipeline operators. API also asks that DOT consider the public awareness programs under 49 CFR part 195 in which pipeline operators take part.

The Village of Barrington, Illinois and the TRAC Coalition have asked that comprehensive OSRP requirements enhance an "ongoing partnership" between railroads and local communities and include requirements for more effective communication between railroads and first responders. The commenter states that railroads must supply railroads with "response information for the particular type of hazmat being transported" and reiterates findings of an NTSB report suggesting a "documented failure of the railroad to provide immediately the emergency response information and…shipping papers, in printed form or electronically, to the incident commander." The commenter also states that communities need to know "where needed response assets are located."

Safety consultant John Joeckel has offered several suggestions for modifying the current OSRP requirements. In general, this commenter has stated that OSRP requirements should be more "prescriptive" and "specific" and follow the example of other agencies' regulations (e.g., 49 CFR part 194—Response Plans for On-shore Oil Pipelines; 33 CFR 155—Tank Vessel Response Plans, etc.). For example, Mr. Joeckel has said that comprehensive OSRPs should include: planning standards to be used in determining potential worst-case discharges and "response planning targets" to specify the amount and types of response resources that would arrive at the scene of an incident within specific timeframes. He also suggests that current OSRP

requirements include more specific instructions for communications between the Qualified Individual and local first responders, and that drills and exercises follow the guidelines within the National Preparedness Response and Exercise Program (NPREP). Mr. Joeckel offers several other areas in need of modifications or additions to part 130, such as training requirements, requirements for assurances of firefighting resources, development of response zone appendices, descriptions of the responsible parties within the response management system, and requirements to address environmentally and economically sensitive areas.

In a similar vein, the Center for Biological Diversity and partner commenters have asked that PHMSA include requirements for rail carriers to analyze environmentally-sensitive or significant areas, mitigate impacts to habitats and ecological services, and "ensure that response actions do not harm endangered species." The Center for Biological Diversity has asked that OSRPs address consultations with the Fish and Wildlife Service as well as the National Marine Fisheries Service.

The Emmett Environmental Law and Policy Clinic of Harvard Law School, in collaboration with other environmental groups such as Sierra Club, have asked for certain modifications to comprehensive OSRP requirements. This commenter asks that the "range of oils carried by the railroad" be described in OSRPs, as well as the "variations in topographical and climatological conditions." Similar to the comment from the Center for Biological Diversity, the commenter also stipulates that plans "minimize the use of oil spill dispersants, whose effects in freshwater environments are not well understood."

Several other commenters have asked that comprehensive OSRP requirements be amended to address specific areas of environmental, cultural, or national significance. For example, the National Parks Conservation Association has recommended that "site-specific

response plans" be required of HHFTs that passes through national park boundaries. The Flathead Basin Commission has relayed similar concerns regarding site-specific response plans. In addition, the Waterkeeper Alliance and partner commenters have stated that specific environmental areas and water resources are at risk of experiencing oil spills, such as the Spokane Valley, Columbia River, Puget Sound, Milwaukee River, Lake Ontario watershed, San Francisco Bay, and Hudson River, and suggested that OSRPs afford these areas consideration.

Washington State's Department of Ecology, Department of Fish and Wildlife, and Department of Natural Resources have proposed adding several plan elements. For example, they have proposed a "robust drills and exercise program" following the National Preparedness Response Exercise Program (NPREP). They have proposed standards for "oiled wildlife," response arrival times, and "Group 5 oils," as well as requirements for financial responsibility, sensitive site strategies, and waste storage and management.

In regard to changing the comprehensive OSRP requirements, New York State's Department of Transportation has stated that an existing requirement in part 130 must address the impacts of discharges upon land and groundwater as well as surface waters. In addition, New York State asks that OSRPs include more specific requirements to identify the roles and responsibilities of rail carriers and their supporting contractors relative to local communities and county/regional or state agencies.

Several firefighting and/or emergency response organizations have commented on the need to add, remove, or modify the elements of part 130. The Pacific States/British Columbia Oil Spill Task Force has said that OSRPs for the rail system should have a regulatory framework that is similar to the United States Coast Guard's. The National Association of SARA Title III Program Officials (NASTTPO) and the Oklahoma OHMERC have said that comprehensive

OSRPs should enable first responders to have "real time information" on the contents of rail cars involved in accidents and require training and drills to be provided by railroads to local first responders. The City and County of Denver's Local Emergency Planning Committee has also commented in support of NASTTPO's suggestions on modifying comprehensive OSRP requirements. The National Fire Protection Association (NFPA) has advised that two NFPA standards be incorporated into the comprehensive OSRP requirements in order to ensure that personnel responding to hazardous materials incidents be adequately qualified and trained.

In addition, the Transportation Trades Department, AFL-CIO (TTD), which represents transportation workers under the International Association of Fire Fighters (IAFF), has offered some suggestions regarding potential modifications or additions to part 130. TTD has noted that the current requirements "appear to require coordination with only private personnel and not public first responders." They advocate that the role of public response personnel should also be incorporated into comprehensive OSRP requirements. Further, they ask that OSRPs be shared with fire fighters and paramedics. Please see Section V, Subsection E ("Confidentiality/Security Concerns for Comprehensive Oil Spill Response Plans") for further discussion regarding the distribution of OSRPs.

With respect to adding elements to part 130, the Oregon Department of Environmental Quality has shared its state planning standards, including "response time objectives" for the use of containment booms as well as oil recovery operations. Oregon also recommends that comprehensive OSRPs require the establishment of equipment caches along HHFT rail corridors.

Similarly, the State of Minnesota shared some of the developments of the state's recent oil transportation safety law. On behalf of the state, Representative Frank Hornstein and Senator D. Scott Dibble have outlined state requirement that ensure accurate train manifests, establish

response timeframes, institute a term of validity of three years for response plans, require that railroads participate in "take home" drills, and encourage the creation of cooperative equipment caches.

The Honorable Edward B. Murray and the City of Seattle have also outlined OSRP elements that need to be added or modified. They have stated that comprehensive OSRPs should provide: a clear understanding of the federal response structure; safety procedures at the response site and for obtaining required state and federal permissions for using alternative response strategies; identification of environmentally and economically sensitive areas; descriptions of the responsibilities of the operator and government officials; and a training program that satisfies the National Preparedness for Response Exercise Program (PREP).

Discussion of Comments: Content of Plan

We agree with the majority of commenters that the current regulations lack specificity and it can be difficult to understand the requirements of the plan. The lack of specificity is reflected in the recommended elements provided by commenters. Commenters from diverse backgrounds suggested that additional requirements for comprehensive oil spill response plans should add greater specificity to existing plan elements. For example, many commenters recommended that drills should satisfy the National Preparedness for Response Exercise Program (PREP). Many commenters also recommended adding elements that were already encompassed in the current comprehensive plan requirements. For example, the requirement to identify environmentally sensitive areas is a component of the current requirement to comply with the National Contingency Plan (NCP) and applicable Area Contingency Plan (ACP). However, the general reference to be consistent with the NCP and ACP in 40 CFR part 300 is

unclear, as this is a voluminous citation with many sections that do not apply to rail. Overall, the input from commenters demonstrated a clear need to improve the comprehensive plan requirements. Therefore, we are proposing to separate the requirements for basic and comprehensive plans. The following discussion focuses on the proposed changes to comprehensive plans. As discussed in the previous section, this rulemaking proposes to require comprehensive plans for tank cars containing more than 42,000 gallons of oil in a single package or railroads that transport 20 or more tank cars loaded with liquid petroleum oil in a continuous block in a single train or 35 or more of such tank cars dispersed throughout the train. Thus, the 12-hour response timeframe applies only to track where covered trains traverse.

While it is not feasible to include every element recommended by commenters, we looked for common themes and recommendations between different commenters, requirements which would address challenges faced in recent spill incidents, and requirements addressed by first responders during PHMSA's stakeholder outreach efforts. We have restructured and clarified the requirements of a comprehensive oil spill response plan to be more similar to other federal agencies and to provide greater specificity to assist in the regulated community's compliance with plan elements. We did not propose to adopt the recommendations from commenters that did not have a clear connection to the statutory requirements or parallel requirements in other federal regulations for oil spill response. Overall, the proposed changes are most similar to PHMSA's Office of Pipeline Safety (OPS) OSRP requirements under 49 CFR part 194, as they address OSRPs which must account for large geographic areas, instead of fixed facilities. However, we note there are some differences between responses to pipelines and railroads and we have tailored the proposed requirements appropriately. The proposed changes are intended to clarify the chain of command and communication requirements, and to provide

more information about the resources available for response and the conditions the plan addresses, while retaining the same overall plan elements described in the statute.

We agree with the multiple commenters such as API and Mr. Joeckel who recommended using a requirement similar to response zones in pipeline regulations. This approach was identified as the best framework to address the unique challenge of creating a plan which spans large geographic distances. The CWA statute requires that the spill response plans make resources available by "contract or other means." It is unlikely and sometimes impossible for the same responders and resources will be available at all points on a particular route. Therefore, it is important that response zones in the plan both identify the response resources, and ensure the response resources are capable of covering the entire response zone.

Commenters provided different recommendations for response times. Washington State's Department of Ecology, Department of Fish and Wildlife, and Department of Natural Resources; California Department of Fish & Wildlife, Office of Spill Prevention & Response (OSPR), and Oregon Department of Environmental Quality provided 6 hours as an example of a possible response time for illustrative purposes. Both the National Association of SERA Title Three Professionals Organization (NASTTPO) and the Oklahoma Hazardous Materials Emergency Response Commission assumed railroads are capable of mobilizing response resources in 4-6 hours. On this issue of response time frames, AAR and ASLRRA proposed that "[e]ach railroad shall identify in the plan the response resources which are available to respond within the time specified, after discovery of a worst case discharge, as follows: (1) [w]ithin 6 hours for designated high volume area as defined by the plan and (2) [w]ithin 24 hours for all other river or waterways used for interstate transportation and commerce." No commenters provided data to support proposed response times.

Commenters also requested that plans more closely align with other federal agencies, such as the OPS requirements. In § 194.115 "Tier 1" response resources must be available in six hours for "High Volume Areas" and 12 hours for "All Other Areas." Tier 2 and 3 require resources to be available between 30 and 60 areas depending on the designation. Part 194 of the 49 CFR does not include a definition for "Tier," when describing the type of resources. OPS defines "High volume area" in 49 CFR 194.5 as "an area which an oil pipeline having a nominal outside diameter of 20 inches (508 millimeters) or more crosses a major river or other navigable waters, which, because of the velocity of the river flow and vessel traffic on the river, would require a more rapid response in case of a worst case discharge or substantial threat of such a discharge. Appendix B to this [40 CFR part 194] part contains a list of some of the high volume areas in the United States. To ensure response resources are adequately placed, USCG gauges whether response resources can make it to a given location by assuming response resources can travel 35 mile per hour.

This rulemaking proposes to provide a single metric of 12 hours to describe the location of response equipment, which is within the 4 to 24 hour range suggested by commenters. The 12 hour metric aligns with the timeframe for 'tier 1' resources for 'all other areas' required by OPS in part 194. We are also proposing to adopt the USCG assumption that that response resources can travel according to a land speed of 35 miles per hour. Therefore, for response resources traveling by land, the comprehensive OSRP will only be approved if response resources are staged within 420 miles of any point in the response zone, or the railroad demonstrates that a faster speed is achievable (e.g. air support to transport resources).

We did not propose a tiered approach to the response resources. The AAR and ASLRRA proposal recommended allowing railroads to define "High Volume Area" within each plan

without any criteria for such a definition. As there is nothing prohibiting railroads from staging resources closer to specific route segments, we disagree that a voluntary designation will increase coverage for sensitive areas. We also disagree that 24 hours provides adequate coverage as a single metric. As described above, OPS provides specific criteria used in determining and defining high volume areas that were absent in the AAR and ASLRRA proposal. However, not all the criteria in the OPS definition of "High Volume Area" translate easily to rail transportation (e.g., pipeline diameter). As we stated previously, we assume the entire route threatens navigable water, and further identification for every point along the route is impracticable. Therefore, we assume if even if a shorter response time for spills more likely to impact navigable waters, and a longer response for spills that are less likely to impact navigable waters, railroads may need to locate response resources using the shorter response time requirement for its entire track network where covered trains traverse. This would increase costs with uncertain corresponding benefit. We note that we solicit comment in both this NPRM and the RIA on whether the rule should define specific track locations where shorter response times might be warranted and provide the defining criteria for these locations.

PHMSA acknowledges that some areas in proximity to certain navigable waters may benefit more than other areas from staging and deploying resources in closer proximity, due to the potentially higher consequences of spills in these areas. Therefore, PHMSA will consider adopting shorter response time requirements than 12 hours in the final rule based on information provided by commenters and other information which may become available before a final rule is published. Specifically, PHMSA solicits comments on whether the 12-hour response time is sufficient for all areas subject to the plan, or whether a shorter response time (e.g., 6 hours) is appropriate for certain areas (e.g. High Volume Areas) which pose an increased risk for higher

consequences from a spill. We request comments on criteria to define such "High Volume Areas" where shorter response time should be required. Additionally, we ask whether the definition for "High Volume Area" in 49 CFR 194.5 (excluding pipeline diameter) captures this increased risk, or if there is other criteria which can be used to reasonably and consistently identify such areas for rail. PHMSA also asks whether requiring response resources to be capable of arriving within 6 hours will lead to improvements in response, and for specific evidence of these improvements. Further, PHMSA requests public comments on whether the final rule should have a longer response time than 12 hours for spills for all other areas subject to the plan requirements in order to offset costs from requiring shorter response times for High Volume Areas.

In addition to the time frame in which response resources must arrive, the effectiveness and adequacy of these resources must also be assessed. To that end, PHMSA has proposed in this rulemaking that affected entities determine a worst-case discharge (WCD) planning volume. PHMSA maintains that, without this particular planning volume, rail carriers that transport petroleum oil in higher-risk train configurations would most likely be unable to "ensure by contract or other means…the availability of, private personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge (including a discharge resulting from fire or explosion), and to mitigate or prevent a substantial threat of such a discharge," as stipulated in the statute of the CWA.

For purposes of understanding what constitutes a worst-case discharge in the context of rail transportation of petroleum oil, PHMSA has identified and analyzed the quantity released from tank cars in the major derailments involving petroleum oil that have occurred in recent years in the U.S. This analysis indicates that the worst-case discharge, in terms of the quantity

released from tank cars that punctured or experienced thermal tears, would be approximately 500,000 gallons of petroleum oil. In particular, PHMSA has identified the quantity released in the Casselton, ND derailment, wherein 474,936 gallons of crude oil was released, as an approximation of a worst-case discharge.[41] Moreover, the Aliceville, AL derailment involved a comparable quantity released: 455,520 gallons.[42] These derailments signal approximately the volume of petroleum oil that would constitute a worst-case discharge in the U.S.

However, PHMSA has not proposed in this rulemaking that the planning volume for a worst-case discharge be 500,000 gallons because we recognize that the tank car design enhancements promulgated in HM-251 would reduce the overall quantity released in a derailment scenario occurring in the future. In other words, the Casselton, ND derailment involved the release of 474,936 gallons of crude oil, but if a similar derailment were to occur in the future, it would most likely involve a lesser quantity released due to improvements in the puncture resistance and thermal protection of tank cars achieved through HM-251. For this reason, PHMSA has proposed a lesser planning volume for worst-case discharges, adjusting the largest quantity released within the crude-by-rail derailment history (i.e., 474,936 gallons) by the forecasted average effectiveness rate (0.33) that we expect as a result of HM-251-related safety improvements over the ten-year period from 2017-2026. This calculation (474,936 x 0.67) yields 318,000 gallons. Therefore, as our determination of an appropriate WCD planning volume for use in comprehensive OSRPs, PHMSA proposes in this rulemaking that a worst-case discharge be equal to 300,000 gallons.

[41] See Appendix B, from the Final Regulatory Impact Analysis from "HM-251: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains."
[42] Ibid.

Nevertheless, PHMSA recognizes that the number of tank cars loaded with petroleum oil in a train consist can vary widely and that 300,000 gallons as a worst-case discharge planning volume may not be appropriate for very large, higher-risk train configurations involving petroleum oil. For example, assuming 30,000 gallons is contained in a single tank car; a 50-tank car train carrying crude oil would carry approximately 1,500,000 gallons, whereas a 100-tank car train would carry approximately 3,000,000 gallons. Thus, PHMSA maintains that a 300,000 gallon planning volume would be appropriate for the 50-tank car train, but it would not be appropriate for the 100-tank car train, which carries substantially more petroleum oil product and as such, presents a much greater risk in the transportation system. Further, PHMSA acknowledges the existence of even larger trains (e.g., 120-tank car trains), as well as the uncertainty surrounding the number of tank cars loaded with petroleum oil that might be transported by rail in the future.

For these reasons, PHMSA has supplemented the 300,000 gallon figure to include another parameter that adequately increases the WCD planning volume for train configurations involving a greater number of tank cars and thus presenting greater risk. The parameter we propose, as a supplementation to the 300,000 gallons WCD planning volume, is the ratio of petroleum oil that could reasonably be expected to release in a derailment to the total quantity of petroleum oil carried within a train consist (i.e., the total petroleum oil lading), most easily expressed as a percentage. PHMSA maintains that a percentage of the total petroleum oil lading in a train consist can be used to identify and differentiate risk among the different types of train configurations that can reasonably be expected to transport large quantities of petroleum oil within a given response zone. Again, we have focused our analysis on the recent U.S. crude-by-rail derailment history and the associated data on the quantity released from the derailed tank

cars in these derailments. Specifically, the quantity released in the Casselton, ND indicates that a worst-case discharge would involve 474,936 gallons. If you express this quantity released as a percentage of the total petroleum oil lading carried by the derailed Casselton, ND train, a worst-case discharge would involve approximately 15% of the total petroleum oil lading. This percentage (15%) results from the following calculation: 474,936 gallons released divided by 3,088,000 gallons, which is approximately the quantity of petroleum oil that the train in the Casselton, ND derailment carried. Namely, 104 tank cars loaded with petroleum oil were involved in that derailment and we have assumed that the all tank cars contained 29,700 gallons.[43]

Furthermore, the statutory requirements of CWA state explicitly that a worst-case discharge includes a discharge resulting from fire or explosion. Per 33 U.S.C. 1321 (j)(5)(D)(iii), a response plan must "identify, and ensure by contract or other means…the availability of, private personnel and equipment necessary to remove to the maximum extent practicable a worst-case discharge (including a discharge resulting from fire or explosion), and to mitigate or prevent a substantial threat of such a discharge." PHMSA understands this statutory language to mean that railroads must consider the *total quantity* of petroleum oil released from tank cars in a derailment, rather than solely the quantity of petroleum oil that does not burn off as a result of fire or explosion and remains to be recovered. Therefore, in this rulemaking, PHMSA has crafted the definition of worst-case discharge to be consistent with the statutory language set forth in 33 U.S.C. 1321 (j)(5)(D)(iii). Moreover, we hold that the worst-case discharge planning volumes used by railroads, and delineated in their comprehensive plans, must take into account the quantity of petroleum oil that is combusted in fiery or explosive derailments.

[43] http://dms.ntsb.gov/pubdms/search/document.cfm?docID=425467&docketID=55926&mkey=88606.

In reflection of these analyses, PHMSA proposes that the worst-case discharge for comprehensive plans be defined as follows:

Worst-case discharge means "the largest foreseeable discharge in adverse weather conditions," as defined at 33 U.S.C. 1321(a)(24). The largest foreseeable discharge includes discharges resulting from fire or explosion. The worst-case discharge from a train consist is the greater of: (1) 300,000 gallons of liquid petroleum oil; or (2) 15% of the total lading of liquid petroleum oil transported within the largest train consist reasonably expected to transport liquid petroleum oil in a given response zone."

As previously discussed, PHMSA used an average effectiveness rate achieved through HM-251 to determine the proposed 300,000 gallon WCD planning volume. However, for the proposed WCD planning volume based on the percentage of the total petroleum oil lading within a train consist, PHMSA has not incorporated the average effectiveness rate because we believe that this percentage should be more conservative such that very large train configurations (e.g., 135-tank car trains) would have an appropriate WCD planning volume commensurate with their presentation of increased risk within the rail transportation system. As an illustration of the WCD definition and its application to WCD planning volumes for use in comprehensive OSRPs, consider a 50-tank car train and a 100-tank car train carrying petroleum oil. For the 50-tank car train, the worst case planning volume would be 300,000 gallons, since 300,000 gallons is greater than 15% of the total petroleum oil lading carried by that train (i.e., 225,000 gallons, assuming each tank car carries 30,000 gallons). For the 100-tank car train, the worst case planning volume would be 450,000 gallons, since 15% of the petroleum oil carried by that train, or 450,000 gallons, is greater than 300,000 gallons. PHMSA maintains that distinguishing larger train configurations from relatively smaller ones is appropriate given differences in risk, and we

further maintain that this calculation is to be used to determine the "planning volume" for worst-case discharges within a given response zone. It is not re-calculated for each and every train in operation within a given response zone; rather, it is based on the largest train configuration that can reasonably be expected to transport petroleum oil within a response zone. At this time, we do not expect that the proposed worst-case discharge definition will result in benefits or costs. Our preliminary analysis assumes railroads will contract with USCG-certified OSROs to comply with the proposed response and mitigations activities requirements in § 130.106, and it suggests that USCG-certified OSRO coverage is sufficient across the country to meet the proposed response time requirement and that the USCG OSRO classification system assures that classified OSROs have sufficient response resources to respond to a worst-case discharge as proposed this rule.[44] We include questions for comment in Section 4 of our RIA about the benefits and costs of our proposed definition of worst-case discharge and alternative definitions.

We generally agree with AAR and ASLRRA with respect to the overall plan format. Our proposal for requirements includes an information summary, core plan, response zone appendices, clarification of which elements are necessary for a minimum consistency with the NCP and applicable ACP, and a separate training section. We also proposed to allow use of an Integrated Contingency Plan (ICP) to provide flexibility, in recognition that railroads may additionally be subject to the OSRP requirements of other agencies. We also added requirements to describe the railroad's response management system which will help clarify the roles of responders and require use of National Incident Management System (NIMS) and Incident Command System (ICS) for common response terminology. Use of a common terminology is

44 http://www.uscg.mil/hq/nsfweb/nsf/nsfcc/ops/ResponseSupport/RRAB/osro_files/0313Classification%20Guidelines.pdf

also necessary for the railroad to be able to certify compliance with the NCP and ACP. The importance of describing the management response system and use of NIMS was highlighted by first responders in the "Crude Oil Rail Emergency Response Lessons Learned Roundtable Report." We further request questions on whether the Qualified Individual (QI) should be trained to the Incident Commander level or whether requiring training in use of plan is sufficient.

We further note that use of dispersants is generally not authorized by the NCP or ACP for use on inland oil discharges. We specify that the plans must identify the procedures to obtain any required federal and state authorization for using alternative response strategies such as in-situ burning and/or chemical agents as provided for in the applicable ACP and subpart J of 40 CFR part 300. We disagree with commenters that requirements for dispersants should be further addressed by DOT.

For equipment testing and drills, we proposed requirements which harmonize with OPS. Specifically, we agree with commenters who recommended the National Preparedness for Response Exercise Program (PREP) as the appropriate standard for drills. On April 11, 2016, USCG announced that the updated 2016 PREP Guidelines have been finalized and are now publicly available. These updates included broadening Section 5 of the PREP Guidelines to allow for the inclusion of other DOT/PHMSA-regulated facilities, such as rail.[45] USCG, EPA, BSEE, and OPS require operators to carry out response plan exercises, or periodic testing that affirms whether the response plans are implementable. Response exercises validate the effectiveness of plans, and ensure any deficiencies or shortcomings in their implementation are discovered and fixed via exercise after action reports, instead of during a worst-case discharge.

We disagree with commenters who recommend adopting requirements which are

[45] 81 FR 21362

duplicative of other regulations, such as shipping paper manifest information or the proposed information sharing requirements. As described in greater detail in Section II, Subsection D ("Related Actions"), on April 17, 2015 PHMSA and FRA issued notices and a safety advisory notice reminding and clarifying shippers and railroads of their existing obligations to provide certain information during transportation and after incidents.

We agree with commenters that highlighting the need to address adverse weather conditions is important for both response activities and under the statutory requirements. Therefore, we have added a definition for adverse weather, and clarified that equipment must be suitable for adverse weather conditions and planning must incorporate adverse weather preparedness.

We agree with commenters that strengthening the communication requirements is important. Recent incidents and input from first responders in the "Crude Oil Rail Emergency Response Lessons Learned Roundtable Report" highlight the need for better communication procedures. Our proposed changes once again are similar to the OPS, as well as the AAR and ASLRRA, by specifying the need to provide checklists which clarify the order and type of notification to be provided.

Overall, our proposed changes build on the existing framework for OSRPs both in the current regulations and the requirements by other federal agencies. The proposed requirements provide greater specificity than the current requirements, but still allow sufficient flexibility for railroads to tailor the requirements to the unique needs of their organizations and the diverse routes covered by their plans. Most importantly, the proposed changes clarify the need for better communication, identification of resources, and information.

D. Approval of Comprehensive Oil Spill Response Plans

In the ANPRM, PHMSA asked the public if any costs would be incurred in submitting comprehensive OSRPs to the Federal Railroad Administration (FRA). In addition, PHMSA asked if other federal agencies with responsibilities under the NCP should review or comment on rail carriers' comprehensive OSRPs. In sum, these questions inquire about the comprehensive OSRP approval process and consequently, the agency that would have the authority to process rail carriers' submissions of comprehensive OSRPs.

In general, industry stakeholders requested that there be one approving federal agency for comprehensive OSRPs, citing concerns about costs, security, and the clarity of the approvals process. In general, environmental groups, government representatives and other commenters supported additional oversight, including oversight or review by federal agencies, states, SERCs, LEPCs, and/or the public. Commenters also had different suggestions as to which federal agency should ultimately fulfill the responsibilities of approval.

For example, AFPM has stated, "…only one agency should ultimately review and comment on a completed comprehensive OSRP. Review by multiple agencies is both duplicative and time-consuming…PHMSA is the appropriate agency to provide review…[and] there are concerns that a multi-agency review may increase the security risk of OSRPs being disseminated to individuals or groups who should not be privy to this information."

Without expressing support for a particular agency to approve comprehensive OSRPs, API has submitted a similar comment, stating, "[w]hile other agencies, such as USCG and EPA, can offer useful guidance on the process and administration of OSRPs, they should not necessarily comment on the specific aspects that relate to rail operations. Federal multiagency review would…likely be an administrative burden for DOT that could be bureaucratically

prohibitive to developing an OSRP process that should be implemented in a reasonable time frame."

AAR also holds that only one federal agency should ultimately be responsible for the approval process, but suggests that FRA be the agency that undertakes this. On behalf of its member railroads, AAR states, "[t]he railroads offer that OSRPs should…be submitted only to FRA, as primary regulator for rail safety issues, for review." AAR further specifies that PHMSA already has rail-specific regulations that stipulate FRA enforcement responsibilities.

Some commenters have given considerations related to the approval process itself. DGAC states, "…if prior FRA approval is required before shipments can be made, serious and costly economic impacts could be expected. Delays in shipments would have a significant negative economic impact on the U.S. economy." Thus, DGAC also acknowledges the notion of FRA approval, but suggests that the approval process should have a regulatory mechanism to allow for shipments of crude oil while the approval process is pending.

States and environmental organizations highlighted the importance of approval as a requirement under the statute. For example, Washington State Department of Ecology (Ecology), the Washington State Department of Fish and Wildlife (WDFW), and the Washington State Department of Natural Resources (DNR) stated "33 USC 1321(j) expressly requires the President to review and approve the oil spill response plans." The Delaware Riverkeeper Network, however, similarly stated: "approval of these plans [comprehensive OSRPs] should be required before transport of petroleum oil products is permitted." In addition, this commenter has suggested that plans should be submitted to, reviewed, and approved by FRA. Safety consultant John Joeckel highlighted NTSB's Safety Recommendations R-14-01 through R-14-03 to the FRA Administrator on January 23, 2014 which stated,

> [a]lthough 49 CFR 130.31 requires comprehensive response plans to be submitted to the FRA, there is no provision for the FRA to review and approve plans, which calls into question why these plans are required to be submitted. The FRA would be better prepared to identify deficient response plans if it had a program to thoroughly review and approve each plan before carriers are permitted to transport petroleum oil products. In comparison to other DOT regulations for oil transportation in pipelines, an operator may not handle, store, or transport oil in a pipeline unless it has submitted a response plan for PHMSA approval. The NTSB strongly believes there must be an equivalent level of preparedness across all modes of transportation to respond to major disasters involving releases of flammable liquid petroleum products.

California's Office of Spill Prevention Response and Washington State's Department of Ecology also reaffirmed the statute's requirement to approve plans and along with partner commenters within these states, have stated that either PHMSA or FRA could be responsible for plan review and approval.

Commenters have suggested that the approval process include review by several federal agencies. For example, safety consultant John Joeckel has said that OSRPs should be submitted to PHMSA for review and approval, with additional review and comments by the USCG, EPA, and appropriate individual States. The Center for Biological Diversity states, "EPA and USCG should not only review the OSRPs, but PHMSA should require coordination with those agencies through a specific consultation and approval process."

With an emphasis on NEPA and the Endangered Species Act, Harvard Law School's Emmett Environmental Law and Policy Clinic, along with partner commenters, have suggested that FRA's "review of draft OSRPs should include public participation under NEPA and the ESA… Similarly, under Section 7 of the ESA, an agency must consult with the U.S. Fish and Wildlife Service or National Marine Fisheries Service when it authorizes a private action."

Thus, several commenters have advised that the review and approval of comprehensive OSRPs include multiple federal agencies, such as the USCG, EPA, PHMSA, FRA, the U.S. Fish and Wildlife Service, and/or the National Marine Fisheries Service.

Some commenters suggested that state-based approval processes be adopted. For example, the League of California Cities has stated, "…in California, there are regional OSPRs that are coordinated through the state. Railroads' OSPRs should also be coordinated and consistent with state and regional plans." Similarly, several members of the concerned public, such as Daniel Wiese, Jared Howe, and Mary Ruth and Phillip Holder, have recommended that the authority for plan approval be granted to states.

In regard to state-based approval processes, some commenters have proposed that state approval be coordinated through SERCs, TERCs, and/or LEPCs. For example, King County, WA has recommended that the "OSRP be developed in consultation…with [the] SERC or other appropriate state delegated entity," and the City of Seattle has asked that SERCs and LEPCs "have the opportunity to review and comment on the OSRPs." Other commenters have noted that SERCs, TERCs, LEPCs and/or other local emergency responders should be provided with the plans, but do not specify whether this type of coordination between rail carriers and these entities would explicitly become part of the plan approval process. For more information regarding the distribution of plans for purposes of disclosure, preparedness, and implementation, please see the comment summaries and discussion within Section V, Subsection E ("Confidentiality/Security Concerns for Comprehensive Oil Spill Response Plans").

Other commenters from the concerned public and departments within city and state governments highlighted state legislation related to oil spill response plans and request that PHMSA provide assurance that such legislation will not be preempted by this rule. Joint comments from the Washington State DNR, Ecology, and WDFW stated "This clearly preserves state authority to adopt requirements for response plans from railroads. PHMSA's rulemaking should confirm this understanding in its Federalism analysis." Specific commenters have

proposed that cities or local governments are considering developing permitting processes to require review and comment on OSRPs at this level. The City of Seattle has stated that the "City of Seattle is developing a new Right of Way Term Permitting process to be applied to expired railroad franchise agreements…and enables local jurisdictions with Rail – Arterial Right of Way impacts to better enforce public safety, environment, and liability issues such as making review and approval of the OSRPs for High Hazard Flammable Trains a mandatory requirement...Unfortunately, until federal legislation is passed requiring all railroad companies to develop and submit OSRPs to municipalities for review, this process will be difficult to enact and enforce." For further discussion of preemption issues, please see the Section VIII, Subsection C ("Executive Order 13132").

Some commenters have indicated that the general public should be allowed to review and comment on OSRPs and as a result, be involved in the plan approval process. Harvard Law School's Emmett Environmental Law and Policy Clinic, along with partner commenters, have recommended that plan approval include a "robust public participation process." This commenter continues, "[t]o this end, the regulations should require the publication of draft OSRPs followed by a period for public comment upon them."

Commenters have suggested terms of validity for plan approval. Safety consultant John Joeckel, in particular, has suggested that the plans be approved for a period of five years. Commenters have also explained that plans should be re-submitted in the event of any significant changes.

Discussion of Comments: Approval of Plans

We agree with industry commenters that mandating multiagency approval could cause

undue delays, burdens, and security risks. Furthermore, 33 U.S.C. 1321 (j)(5)(E) requires a plan that meets the minimum requirements to be approved. Therefore, we disagree with the premise that mandating multi-agency or public participation would provide enough value in an explicit approval process to justify the increased burden and potential delay. Furthermore, the resources for mandatory consultation with other agencies and public participation could potentially divert resources from safety activities. However, we encourage the comments of Federal, State, and local agencies and tribal authorities addressing the proposed requirements for the development of OSRPs.

As FRA is the agency which has delegated authority to approve oil spill response plans for rail tank cars, we are proposing FRA as the sole agency required to approve railroad comprehensive oil spill response plans. Under 33 U.S.C. 1321 (j)(5)(D)(vi), spill response plans must "be resubmitted for approval of each significant change." However, we agree with commenters that ensuring plan consistency with the NCP and ACP is important. We are clarifying that FRA may consult with the EPA or the USCG, if needed. This may be necessary to facilitate the needs of the Federal On-Scene Coordinator, such as verifying compliance with elements related to consistency with the NCP or ACP. This also aligns with the requirements for plan approval under PHMSA OPS.

The current requirements for plan submission are under § 130.31(b)(6), which requires comprehensive plans to be "submitted, and resubmitted in the event of any significant change, to the Federal Railroad Administrator." Under 33 U.S.C. 1321 (j)(5)(E), guidelines for review and approval by the President are specified when "any response plan submitted under this paragraph for an onshore facility that, because of its location, could reasonably be expected to cause significant and substantial harm to the environment by discharging into or on the navigable

waters or adjoining shorelines or the exclusive economic zone." As discussed previously in the background section of this document, the President's authority to approve plans was delegated to the Secretary of Transportation and then to the Federal Highway Administration and the Federal Railroad Administration (FRA) for motor carriers and railroads, respectively. USCG, EPA, BSEE, and PHMSA Office of Pipeline Safety (OPS) were delegated the authority to regulate and approve plans for their respective facility types.

As requested by commenters, we are further clarifying the submission and approval procedures to align with both the statute and other federal agencies. AAR and ASLRRA submitted proposed regulatory text with many similarities to PHMSA OPS requirements. We have proposed to adopt many requirements similar to the OPS submission and approval under sections 194.119 and 194.121. Among other changes, we are clarifying that electronic copies are the preferred format. At this time, railroads may mail copies of plans contained on CD-ROMs, USB flash drive, or similar electronic formats. FRA may make other versions of electronic submission available in the future. We are requiring railroads to review plans every five years, or after an incident requiring use of the plan occurs. Plans must also be updated if a significant change occurs. Significant changes must be approved by FRA. Significant changes are those that affect the operation of the plan, such as establishment of a new railroad route not covered by the previously approved plan, or changing the name of the emergency response organizations identified in the plan.

In accordance with both the statute and requests from commenters, we have clarified the process for railroads to respond to alleged deficiencies in the plan identified by FRA and to allow railroads to continue to operate after they have submitted the plan and are awaiting approval decision. We are further clarifying that railroads may follow the existing procedures under

section 209.11 in the FRA regulations to request confidential treatment for documents filed with the agency, provided the information is exempt by law from public disclosure (e.g., exempt from the mandatory disclosure requirements of the Freedom of Information Act (5 U.S.C. 552), required to be held in confidence by 18 U.S.C. 1905). Under this process, FRA retains the right to make its own determination in this regard. Therefore, this change clarifies the process to comply with existing laws and confidential treatment will not be extended to other information in the plan which is not currently exempt under other existing laws. PHMSA provides similar procedures for similar requests for confidential treatment of documents under § 105.30. Overall, the proposed requirements help create an equivalent level of safety for petroleum oil across all facility types.

E. Confidentiality/Security Concerns for Comprehensive Oil Spill Response Plans

In the ANPRM, PHMSA asked the public the following question: "Should PHMSA require that the basic and/or the comprehensive OSRPs be provided to State Emergency Response Commissions (SERCs), Tribal Emergency Response Commissions (TERCs), Fusion Centers, or other entities designated by each state, and/or made available to the public?" Commenters submitted a variety of comments regarding the distribution of OSRPs and relayed ideas about which entities should be provided with or provided access to comprehensive OSRPs. This distribution might include SERCs, TERCs, Fusion Centers, other state entities, or the general public.

The majority of commenters support the distribution of OSRPs to SERCs or other emergency response organizations. Among the commenters in support are: the National Fire Protection Association (NFPA); the Department of Law, City of Chicago; LRT-Done Right; the

Center for Biological Diversity; NASTTPO; the Riverfront Park Association; the Delaware Riverkeeper Network; the Flathead Basin Commission; King County, WA; New York State Department of Transportation; OHMERC; The Response Group; the Village of Barrington, IL and the TRAC Coalition; Washington State; the Waterkeeper Alliance; and the Solano County Department of Resource Management. In general, these commenters hold that SERCs should have the plans and could oversee the transmission of plan information to emergency response organizations within cities, counties, or other localities. These commenters emphasize that emergency responders would benefit from having the plan so as to prepare more effectively for rail accidents involving crude oil.

Other commenters have expressed support for the distribution or disclosure of OSRPs to SERCs or other appropriate emergency response organizations, but expressed concerns about security risks and the distribution or disclosure of OSRPs to the general public. Among these commenters are: AFPM, AAR, and ASLRRA.

With regard to security concerns, AFPM has said, "[a]lthough communications are vital…SSI [sensitive security information] should be disclosed to only a limited group of people on a "need to know" basis…Broader dissemination raises significant security concerns in light of the possible targeting of rail by terrorist and others." AAR and ASLRRA have provided a similar comment on this issue, stating, "[i]f required by DOT to share very specific OSRP information with the SERCs, the railroads are concerned that a potential bad actor would be able to obtain the information…Releasing to the public the worst case scenarios and the available response resources and equipment in the OSRPs could provide a bad actor with key information crucial to planning environmental terrorism activities." Thus, while acknowledging the potential value of distributing OSRPs, industry commenters have expressed security concerns and advised

there should be limitations imposed on the distribution of OSRPs and certain types of information (i.e., SSI).

AAR and ASLRRA have also articulated that the distribution of OSRPs, even to bona fide emergency response organizations such as SERCs, could result in further dissemination to the general public. Regarding this point, AAR and ASLRRA have referred to the example of Emergency Order Docket No. DOT-OST-2014-0067, which required railroads to make crude oil routing information available to SERCs. AAR states, "[w]hile the railroads do not believe it was DOT's intention, the EO has often resulted in the information it requires railroads to disclose to SERCs being made publically available." AFPM has voiced similar concerns. Thus, according to some industry stakeholders, security concerns would remain even if the distribution of OSRPs were limited to SERCs or other appropriate emergency response organizations.

Other commenters have stated that OSRPs would or would not be restricted due to security concerns. The Waterkeeper Alliance has communicated, "[i]n our view, this data should not be restricted…Furthermore, the data should not be deemed a security issue, nor should there be any restrictions placed on intra-government dissemination of the data. This data is vital to the public welfare…To keep these train movements secret would directly endanger the public." Hence, some commenters disagree that distributing or disclosing OSRPs would entail security concerns.

Commenters have also relayed that the entities developing OSRPs may have rights of confidentiality (i.e., OSRPs are "proprietary"). In relating the context of the State of California, the Office of Spill Prevention and Response has stated, "[i]n California, the oil spill contingency plans submitted to OSPR are available for public review by law, but a plan submitter can request that a portion of a plan that is proprietary or is a trade secret can be designated accordingly."

On the issue of confidential business rights, other commenters have stated that OSRPs should or would not be confidential business information. Accordingly, Harvard Law School's Emmett Environmental Law and Policy Clinic, along with partner commenters, have said, "[m]andatory disclosure only to federal officials, as is currently the case, is inadequate given that state and local authorities will usually be the first responders to an accident and bear the burden of ensuring preparedness and the consequences of failing to do so. PHMSA should also mandate public disclosure of OSRPs. The contents of such plans will not be…confidential business information."

Thus, many commenters suggested that OSRPs be made available to the public. For example, the Delaware Riverkeeper Network has commented, "[t]hese plans should also be made available to the public via an easily accessible web platform. The website should include everything interested parties need or want to know and everything an emergency response team would want to tell them." Other commenters have supported making OSRPs available to the general public, such as: the Riverfront Park Association; the Center for Biological Diversity; the Waterkeeper Alliance; and Harvard Law School's Emmett Environmental Law and Policy Clinic.

A few commenters have agreed that plans can be made available to the public, but clarified that this disclosure would include only non-SSI material. Accordingly, New York State has commented, "[r]elease of the non-security sensitive portions of these plans to the public can also be accommodated using the policies already established for the Area Contingency Plans established by OPA 90." Therefore, disclosure to the public need not include entire copies of comprehensive OSRPs.

On this topic, a safety consultant, John Joeckel stated, "I do not see the need to have the

Comprehensive OSRPs available to the public as long as the local responding agencies have the necessary information contained in the OSRP, e.g., the response zone/geographic zone appendices containing notification procedures, response resource availability, etc." Thus, commenters have also identified that the disclosure of comprehensive OSRPs may not be necessary, irrespective of whether the information within OSRPs is deemed to be SSI or confidential.

Some commenters have asked that the distribution of plans involve processes beyond the provision of OSRPs to appropriate emergency response entities. For example, the Oklahoma OHMERC has said, "[t]he delivery should be more than mailing a plan to the LEPC, the railroad should present the plan in person so that local emergency response planners and responders have the opportunity to ask questions and discuss roles under the OSRP." In addition, the Delaware Riverkeeper Network has expressed that "meetings should be used to educate community members about evacuation plans and how to access up-to-date information in the event of an emergency." Further, The Response Group has asked that railroad companies be required to "follow the precepts that PHSMA expects pipeline companies to follow and align those requirements…[with] API RP 1162."[46] Thus, multiple commenters have stated that plan distribution should involve more than the provision of OSRPs to specific entities; it could also include meetings with local communities, as well as presentations delivered to local emergency responders.

[46] Federal pipeline safety regulations (49 CFR 192.616 and 49 CFR 195.440) require pipeline operators to develop and implement public awareness programs that follow the guidance provided by the American Petroleum Institute (API) Recommended Practice (RP) 1162, "Public Awareness Programs for Pipeline Operators" (incorporated by reference in federal regulations). More information is available at: https://primis.phmsa.dot.gov/comm/PublicAwareness/PARPI1162.htm.

Discussion of Comments: Confidentiality/ Security Information

Transparency is important to PHMSA as the agency provides resources to the emergency response community in many forms. As described in the Section II, Subsection D-5 ("Stakeholder Outreach"), PHMSA and the railroads have been engaged in multiple activities and partnerships to take a comprehensive approach to providing training and emergency response information resources about the hazard of crude oil. We disagree however that providing the entire OSRP to emergency responders will lead to better preparedness. Some elements of the OSRP may be sensitive for security, business, or privacy reasons. Other elements are specific to railroad operations, and will not inform the actions of first responders or communities.

To ensure emergency responders have pertinent information from plans, we are proposing that information describing the response zones and contact information for the qualified individual are provided to SERCs and TERCs as part of the information sharing requirements proposed in section 174.312. This allows emergency responders to understand which communities are included in the same response zone and the appropriate contact for the OSRP information at the railroad. Adding these requirements takes an integrated approach to the regulations and ensures the different types of emergency response information will be presented in a cohesive, usable format. We believe that the current requirements to notify fusion centers under routing information, and the proposed information sharing requirements for SERCs and TERCs described under Section II, Subsection E ("HHFT Information Sharing Notification") will work cumulatively to provide emergency response organizations with the complete information they need about a route to prepare for flammable liquids transiting their communities without compromising security. In addition, by clarifying requirements for the

OSRP (including notification procedures and the roles and responsibilities of individuals within the plan), railroads will be able to more quickly disseminate the information and conditions specific to the incident to appropriate local, state, and Federal agencies.

F. Comprehensive Oil Spill Response Plan Costs

In the ANPRM, PHMSA asked the public what costs the regulated community would incur in order to: (1) develop comprehensive OSRPs; (2) remove or remediate discharges; and (3) conduct training, drills and equipment testing. PHMSA also asked about commenters' assumptions and requested that commenters provide detailed estimates.

With regard to plan development costs, two commenters provided estimates of labor costs; however, PHMSA did not receive any detailed cost estimates. The majority of commenters chose to emphasize other considerations that they deemed to be relevant in estimating the costs of OSRPs.

AAR and ASLRRA, in particular, have stated that PHMSA would need to supply more information about plan requirements in order to develop detailed cost estimates. AAR states, "[w]ithout further guidance from PHMSA…the railroads are unable to provide more specific cost estimates." However, as a general estimate, AAR and ASLRRA estimate that a "petroleum crude oil spill response plan, without equipment cost included, could cost a railroad anywhere from $100,000 – $500,000."

Other commenters provided general cost estimates for plan development. For example, the Response Group has stated that labor would cost $100 per hour and that a new plan would require approximately 120 hours of work. This yields $12,000 as the labor cost component of the overall plan development costs per railroad. John Joeckel, a safety consultant, has offered

another estimate, stating that an individual railroad's "core" plan would cost approximately $31,000. This estimate includes: 250 labor hours, compensated at $115 per hour, and $2,250 in printing and administration costs. The commenter has also estimated that the "core" plan would need to be supplemented by "geographic response zone appendices," which would require 50 labor hours, compensated at $115 per hour, and $250 in printing and miscellaneous costs. Thus, the development of the response zone appendices would add at least an additional $6,000 to overall plan development costs, yielding $37,000 in total. While it is not clear if $6,000 in costs would be incurred for the development of each additional response zone appendix, this commenter has clarified that each railroad will need a different number of response zone appendices, since some railroads have extensive track networks and other rail carriers (e.g., Short Lines and Regional Railroads) do not.

As previously stated, several commenters did not supply cost estimates but chose to draw attention to other considerations, such as the estimated cost of cleaning up oil spills. For example, the Delaware Riverkeeper Network has articulated, "[t]he costs incurred to create and implement a comprehensive OSRP…should be considered the cost of doing business, and are minimal when compared to the costs incurred to clean up and attempt to remedy crude rail accidents. For example, in 2013, over 1.15 million gallons of crude oil were spilled in over 35 accidents, and clean-up costs of one accident alone are estimated to total at least $180 million." In addition, a concerned member of the public has said, "[f]or consideration of costs (see advance notice items 4, 5, and 6), the agency should include costs to communities and their economies from crude oil spills."

In addition to AAR and ASLRRA, other commenters have expressed that they were not certain of the costs of developing a comprehensive OSRP. For example, New York State has

asked PHMSA to "ascertain cost estimates." Similarly, other commenters have communicated that, while they are uncertain of the plan development costs that railroads would face, pipeline oil spill response plans are likely to be analogous in some respects. To that effect, the City of Seattle has commented, "[w]hile we do not have the information necessary to know what costs the railroads and shippers may incur for developing the comprehensive OSRPs, we know that there are current pipeline response plans through the U.S. While they do not directly apply to rail activities, portions of these existing plans are applicable and will provide the railroad industry with a head start toward a comprehensive plan." Thus, multiple commenters have expressed some uncertainty regarding the costs of developing a comprehensive OSRP.

Some commenters have stated that the cost of developing a comprehensive OSRP would be "nominal" or "not significant" since railroads are already compliant with many of the current OSRP requirements under part 130, including the requirements for a basic OSRP. For example, the Oregon Department of Environmental Quality has said, "[m]ost railroad companies currently have basic oil spill response plans. Many of these plans already identify additional equipment and personnel available to them by contract or other approved means. These companies have also identified the equivalent of a qualified individual. Rail companies should not incur significant costs in developing comprehensive OSRPs." Similarly, NASTTPO has stated, "[a]ssuming the rail carriers are already doing a compliant basic OSRP, the incremental cost should be nominal." Further, the City and County of Denver, Office of Emergency Management and Homeland Security, as well as the OHMERC, have expressed their support of the comments by NASTTPO. However, these commenters did not supply additional information to clarify the threshold at which costs could be considered "significant" or "nominal."

In addition to asking the public about plan development costs, PHMSA inquired about

the costs incurred to remove discharges. PHMSA asked about the placement of equipment along the track, the types of equipment needed to remove or contain discharges, and the maximum time needed to contain a worst-case discharge. Some commenters have suggested maximum response times, as well as limited cost estimates, but overall the comments received lack detail and do not identify the range of costs that would be incurred to remove discharges. In addition, commenters have specified some types of equipment, such as containment booms, work boats, skimmers, and foam concentrate, but the commenters' listing of equipment does not appear to be exhaustive.

With regard to discharge removal, AAR and ASLRRA have stated that equipment costs can be substantial. Without providing detailed cost information, AAR has cited that deploying a single containment boom could cost $15,000. AAR has not included other information regarding the costs of response resources and equipment.

Safety consultant John Joeckel has identified a variety of potential costs that might be incurred in removing discharges. On this issue, Mr. Joeckel has stated, "[c]osts will either be directly capitalized by the rail operator for company owned resources to inventory, for membership dues increases for a cooperative to purchase and stockpile resources or for increased "retainer" fees from contractors that will charge the rail operator for their listing as a contracted resource in the OSRP." In addition, Mr. Joeckel clarifies, "there are substantial resources already available throughout the nation in many areas, including locations in near proximity to rail trackage, so it is not necessarily a given that any new response requirements will automatically result in the need to purchase and stockpile and thus won't necessarily entail new significant costs for the railroad industry." Further, this commenter has stated that response resources for discharge removal are generally "secondary" to the resources that would be necessary for ensuring public safety immediately following an incident, such as foam, foam

application systems, and "toxic emission plume monitoring" equipment. As a result, this commenter has suggested that planning standards for response resources should allow for the "cascading" of resources, or in other words, a "tiered" response wherein some types of equipment are required at the site of an incident before others.

NASTTPO has not specified any types of equipment or cost estimates, but has offered relevant assumptions regarding planning and the use of response resources. The commenter states, "[w]e presume that rail carriers should be able to mobilize contract responders to any point on their system within 4-6 hours dependent on weather. Contractors that provide such services are common and the trucking industry along with insurance carriers routinely pre-contract for these services." Thus, according to this commenter and partner commenters, contracting for response resources is "routine" and as a result, industry stakeholders should be able to identify response providers and are aware of the costs involved.

New York State and the Oregon Department of Environmental Quality have emphasized that discharge removal and other response resources must be allocated according to a risk analysis. New York State, in particular, has suggested that the 27 factors that railroads use for routing analyses (under § 172.820) could serve as a way to identify "the areas of highest vulnerability or…areas that have impediments to access for first responders." In addition, this commenter has provided estimates for foam concentrate, stating, "[t]he cost for 600 or more gallons of Class B foam concentrate estimated as necessary for fire control and post-fire vapor suppression for an incident involving a single DOT-111 rail car carrying crude oil, pursuant to the flow rates identified in NFPA II, exceeds $23,000 at current New York State Contract pricing. Combined with the costs of the apparatus needed to apply "finished" foam onto a fire or spill, the estimated cost can total $40,000 or more per unit." Consequently, the potential high

cost of response equipment underscores the commenter's emphasis on risk analyses to determine equipment allocation along train routes.

The City of Seattle has estimated $20,000 as the cost of air monitoring and personal protection equipment (PPE). The commenter states that these costs are not currently budgeted by Seattle Public Utilities, which, according to the commenter, is one of the city's agencies that would respond to an incident.

The Delaware River and Bay Oil Spill Advisory Committee has offered estimates of the capital investments needed to prepare for a "debris mission." The commenter states, "the capital cost to stand up a floating debris collection mission could be in the range of $14 million to $21 million." According to the commenter, city or state authorities would undertake these capital investments, so it is not clear if these costs would be included in cost estimates for a comprehensive OSRP.

With respect to the costs of cleaning up oil spills, The League of California Cities has stated, "[m]ost importantly, these plans [OSRPs] should provide for the obligation to pay for recovery, including all required clean-up." Other commenters have communicated that the costs of discharge removal are "minimal" and are the "cost of doing business." Thus, these commenters seek to stress that the costs to communities that experience an oil spill can be large and must be considered alongside the costs to implement OSRPs.

In the ANPRM, PHMSA also asked the public to comment on training costs, such as the costs of conducting drills or testing equipment. In addition, many commenters discussed which entities would be responsible for providing training or ensuring that training is adequately funded. Commenters have also supplied some basic cost estimates for different components of training.

AAR and ASLRRA have stated that training costs can be substantial and estimated that a single training exercise or drill could cost between $60,000 and $150,000. AAR and ASLRRA have also stated, "[w]ithout further guidance from PHMSA…the railroads are unable to provide more specific cost estimates."

New York State has identified various costs associated with the training of first responders and emergency personnel. The commenters has cited "the costs of providing staffing (backfills) for career fire departments and…consumables required for effective and realistic training such as training foam. Staffing backfill costs will vary by jurisdiction but can be significant, and if not addressed, limit participation of critical response agencies with a corresponding negative impact upon effectiveness." The commenter has not provided any cost estimates related to backfills or consumables.

Some commenters have suggested that the cost of training be funded by railroads. For example, the City of Lockport, IL has said, "[t]he new guidelines proposed by Federal Pipeline and Hazard Materials Safety Administration (PHMSA) must include adequate emergency preparation and response protocols for local agencies responding to these incidents and the Railroads profiting from this transportation should provide this at no cost to local responders." The commenter has not estimated the cost to rail carriers if they were to provide this training.

The League of California Cities has made a similar comment, stating, "[f]ully-funded regular training programs that cover the cost of training, including backfill employee costs, to ensure that first responders are trained, and remain trained, on up-to-date procedures to address the unique risks posed by these shipments." In this case, the commenter has not specified the source of this funding.

Other commenters have suggested that rail carriers should not be expected to pay for the

costs of training local first responders. NASTTPO has expressed, "[w]e have no expectation that the rail carriers would be paying for the attendance of local first responders at training events and exercises." The commenter has also expressed that, since the rulemaking should not require railroads to pay for the training of local first responders, the costs imposed on the regulated community as a result of training requirements should be "nominal." In agreement, the City and County of Denver's Office of Emergency Management and Homeland Security has stated that they support all the comments made by NASTTPO.

Oklahoma's OHMERC has similarly stated that railroads should not be expected to pay the costs of training local first responders, but emphasizes that "given the fact that volunteer fire fighters have other job obligations, training would be most effective delivered locally."

The Dangerous Goods Advisory Council has suggested that ensuring training among emergency responders will be difficult due to practical and financial concerns. DGAC has stated, "DGAC supports the training of emergency responders in how to properly respond to hazardous materials incidents. However, it may be difficult, time consuming, and costly to individually train each emergency response organization in the areas through which a 'key' or 'unit' train transporting crude oil travels. It is unlikely that every local emergency response organization located along the route could afford to develop and maintain the necessary resources to respond to significant incidents involving crude oil derailments." Given this concern, the commenter holds that "regional response teams" may be an effective alternative.

Various commenters have suggested that PHMSA adopt training elements from the National Preparedness, Response and Exercise Program (PREP) guidelines, which have been developed through multi-agency participation and coordination, including DOT, USCG, EPA, and DOI. Safety consultant, John Joeckel, the Office of Spill Prevention & Response (OSPR),

and Washington State have voiced support for NPREP. According to commenters, NPREP training covers a variety of training exercises (e.g., table-top, seminar, announced and unannounced exercises, etc.) which entail different costs.

Commenters have mentioned other standards for training or equipment testing requirements. For example, Safety consultant John Joeckel has referenced a 1994 publication entitled, "Training Reference for Oil Spill Response," as well as the U.S. Coast Guard's Oil Spill Response Organization (OSRO) Classification program for the testing of equipment. Further, the commenter maintains that contractors working with rail carriers would "in all likelihood" already be participating in the OSRO Classification program, suggesting that the industry's available response resources could be compliant with existing equipment testing requirements under USCG. With regard to cost estimates, Mr. Joeckel is unable to quantify a monetary value for relevant training exercises.

OSPR has suggested other training sources, such as the Hazardous Waste Operations and Emergency Response (HAZWOPER), a set of guidelines overseen by the Occupational Safety and Health Administration (OSHA) and regulated in 29 CFR part 1910. OSPR has also mentioned free, online training on the Incident Command System (ICS) offered by the Federal Emergency Management Agency (FEMA). With regard to training cost estimates, OSPR has stated, "In California, OSPR has been informed that an OSRO-managed drill could cost about $2,000 for a small tabletop drill and up to $500,000 or more for a full scale multi-day exercise; but regulated entities could agree to share these costs for a particular drill."

Given the variety of training sources and opportunities available, the National Emergency Management Association (NEMA) has suggested that DOT facilitate the creation of a standardized training curriculum. The commenter states, "U.S. DOT should work with railroads,

the U.S. Fire Administration and fire service organizations toward developing a standardized curriculum for responding to railroad emergencies for the Bakken Crude. This will ensure that firefighters are equally trained in the event of an incident involving more than one state." Regarding the funding of training, this commenter has asked that DOT ensure that the Hazardous Materials Emergency Preparedness (HMEP) Grant Program be used to fund regional and interagency drills for rail safety response.

Discussion of Comments: Plan Costs

We appreciate commenters' efforts to provide initial cost considerations and estimations, despite the challenges they cited in providing data. We have incorporated commenters' cost estimates to the extent possible, but note that these estimates lacked detail and data. We further clarify that the estimated cost of the proposed oil spill response plan requirements is the cost of plan development, submission, and maintenance; contract services for OSROs; and training and exercises.

To elaborate, the costs of plan development were estimated as a function of the time and compensation that a senior railroad employee or contractor needs to develop the plan, as well as the number of response zone appendices needed in connection with the railroad's core plan. PHMSA estimated that on average it would cost a Class I railroad about $15,000 to develop a plan, it would cost a Class II railroad $8000 to develop a plan, and it would cost a Class III railroad $7000 to develop a plan. Plan submission and maintenance were also estimated as a function of the time and compensation of the employee that submits and maintains the plan. PHMSA estimated that on average it would cost a Class I railroad about $1,500 for plan submission and maintenance, it would cost a Class II railroad $800 for plan submission and

maintenance, and it would cost a Class III railroad $700 for plan submission and maintenance. We estimated the cost of OSRO services by interviewing an OSRO and obtaining a range for potential retainer fees. Retainer fees may vary based on the Class (I, II, III) of the railroad as well as the number of response zones that PHMSA-OHMS expects the railroads to have. PHMSA estimated that on average it would cost a Class I railroad about $40,000 annually to retain an ORSO for each of its 8 response zones, it would cost a Class II railroad $6000 annually to retain an ORSO for each of its 2 response zones, and it would cost a Class III railroad $2500 annually to retain an ORSO for its single response zone. The costs of training are estimated as a function of the number of employees requiring training, the duration of the training in hours, and the wage rate applied. Separate from training, we have also estimated costs of exercises, such as those prescribed in PREP guidelines. Since PREP guidelines are consistent across Federal agencies, we used costs estimated by the USCG, including travel costs and additional OSRO fees for drill-related deployment of resources.

Please see the draft RIA for the quantitative aspect of this discussion and further explanation of the anticipated cost impacts of the proposed rule.

G. Voluntary Actions

In the ANPRM, PHMSA asked the public to comment on the role of industry's voluntary and current actions regarding oil spill response planning. In particular, PHMSA asked, "What, if any, aspects beyond the basic plan requirements do these plans voluntarily address?"

In regard to the information contained within basic OSRPs, commenters offered a variety of ideas, but the majority of commenters have relayed that the current knowledge base surrounding basic oil spill response plans is limited. Commenters have stated that this

knowledge of basic plans is limited because many entities, including states, cities, local community groups, and some emergency response organizations, do not have access to rail carriers' basic plans. In addition, some commenters stated that they have encountered issues in coordinating with rail carriers on this issue. Further, other commenters have voiced that basic OSRPs do not provide adequate information to local first responders, even if they are communicated effectively to those responders.

The Response Group has stated, "I have never seen a current railroad oil spill response plan…I have developed a prototype oil spill response plan suitable for rail based upon experience with Coast Guard, EPA, PHMSA and OSHA."

Safety consultant John Joeckel has stated, "[a]nswers [to ANPRM question #7] should be provided by the rail operators…since they are the only entity that currently has access to the Basic OSRPs…and have not been reviewed or approved by State or Federal agencies and have not been seen by the general public." However, Mr. Joeckel comments further, stating that, despite the public's limited knowledge of OSRPs, "I would have to assume that there will be a wide range of differences between basic OSRPs amongst the rail industry sector particularly differences between a Class I rail operator versus a Class II and Class III rail operator." Thus, Mr. Joeckel has explained that only the rail carriers understand what is currently addressed in existing OSRPs, and he suggests that there is a "potential wide variance in response preparedness amongst the industry."

Similarly, New York State has commented that, "[t]o date, the railroads and associated shippers have not shared their OSRPs with New York State as they currently are not required to under federal law or regulations." Thus, New York State has underscored that the knowledge surrounding oil spill response plans and their contents is limited and reiterated that the

requirements under part 130 do currently not address the distribution of plans or which entities might have access to them. For more discussion on plan distribution, please see Section V, Subsection E ("Confidentiality/Security Concerns for Comprehensive Oil Spill Response Plans").

The City of Seattle has made a similar comment. This commenter states, "[w]ithout access to review and comment on OSRP the City of Seattle cannot determine compliance with requirements." As previously noted, the City of Seattle also seeks to make review and approval at the municipal level a part of the permitting and permit renewal processes for "Right of Way Franchise Agreements."

Some commenters have stated that current OSRPs are not adequate, which suggests at least a familiarity with their current form and contents. For example, NASTTPO has stated, "[b]asic OSRPs are not successful as noted…They do not provide adequate information to local first responders even if they are communicated to those responders." OHMERC has also stated, "OSRPs should be more detailed and contain better information for responders."

AAR and ASLRRA have held a different opinion than the majority of commenters due to their unique understanding of OSRPs and industry background. Regarding current OSRPs, AAR and ASLRRA have stated, "[r]ailroads have been very proactive in emergency response planning and outreach…" They cited implementation of the AAR Circular OT-55, training efforts, and efforts to provide an inventory of emergency response resources. However, these comments did not include any details describing whether railroads were providing voluntary compliance with specific comprehensive oil spill response plan requirements.

In the ANPRM, PHMSA specifically asked, "[t]o what extent do current plans meet the comprehensive OSRP requirements, including procurement or contracting for resources to be

present to respond to discharges?" As previously mentioned, the majority of commenters have stated that their knowledge of current OSRPs is limited due to limited access and challenges of coordination with railroads. For this reason, most commenters were unable to answer this question, as it requires an understanding of the form and contents of current OSRPs. Without this understanding, it is difficult to assess to what degree current plans have incorporated response resources contracting as would be required under the part 130 requirements for comprehensive OSRPs.

AAR and ASLRRA have addressed this question, stating, "[p]ursuant to the industry's commitment to Secretary Foxx, AAR has developed an inventory of emergency response resources along routes over which Key Crude Oil Trains operate for responding to the release of large amounts of petroleum crude oil in the event of an incident. This inventory also includes locations for the staging of emergency response equipment and, where appropriate, contacts for the notification of communities." Thus, according to this commenter, voluntary actions combined with compliance to the basic OSRPs currently required already include planning for response resources. However, these comments did not include any additional data or details describing whether railroads were providing voluntary compliance with specific comprehensive oil spill response plan requirements.

Discussion of Comments: Voluntary Actions

While we applaud the voluntary efforts railroads have taken to improve safety, they do not carry the weight of law and the extent to which these voluntary efforts meet the requirements of current comprehensive oil spill response plans is difficult to quantify based on the comments received. The Oil Pollution Act of 1990 requires the creation of oil spill response plans with

specific minimum elements for "an onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or the exclusive economic zone." Furthermore, voluntary actions do not carry the weight of regulations to ensure continued compliance and enforceability.

We agree with NTSB's safety recommendation that the recent spill history demonstrates that unit trains and other trains carrying large quantities of petroleum oil meet this definition of "substantial harm to the environment" and thus require comprehensive plans. Furthermore, basic plans are not sufficient for higher-risk train configurations as they do not require the railroad to ensure the availability of response resources or provide other elements to address the response challenges we have identified in this rulemaking. Comments addressing plan contents describe the clear need to require additional elements for comprehensive plans and to provide additional clarifications to those elements.

VI. Incorporated By Reference

Section 171.7 lists all standards incorporated by reference into the HMR that are not specifically set forth in the regulations. This NPRM proposes to incorporate by reference the ASTM D7900-13 Standard Test Method for Determination of Light Hydrocarbons in Stabilized Crude Oils by Gas Chromatography, 2013, available for interested parties to purchase in either print or electronic versions through the parent organization's website at the following URL: http://www.astm.org/cgi-bin/resolver.cgi?D7900-13e1. The price charged for these standards to interested parties helps to cover the cost of developing, maintaining, hosting, and accessing these standards. This publication (i.e., test method) ensures a minimal loss of light ends for crude oils,

containing volatile, low molecular weight components (e.g. methane) because it determines the boiling range distribution from methane through n-nonane. The specific standards are discussed in greater detail in the Section II, Subsection G. ("Initial Boiling Point Test") of this rulemaking.

VII. Section-by-Section Review

Part 130

We propose to restructure part 130 to establish the following subparts:

Subpart A – Applicability and General Requirements contains current §§ 130.1-21 with minor revisions and clarifications.

Subpart B – Basic Spill Prevention and Response Plans contains current §§ 130.31-33 with minor revisions to remove comprehensive plan requirements.

Subpart C – Comprehensive Oil Spill Response Plans is a new Subpart with new requirements for comprehensive oil spill response plans.

Section 130.2

Paragraph (d) is updated to show that the requirements in § 130.31(b) have moved to subpart C. PHMSA does not propose any other changes to this section.

Section 130.5

The introductory text is reformatted, including moving the definition for "Animal fat" to the correct alphabetical order. Definitions for "Adverse Weather," "Environmentally Sensitive or Significant Areas," "Maximum Potential Discharge," "Oil Spill Response Organization," "On-scene Coordinator (OSC)," "Response activities," "Response Plan," and "Response Zone" are

added in response to commenters. Definitions for "Petroleum Oil" and "Worst-case discharge" are revised to better clarify the applicability of the terms. The term "Person" is revised to clarify railroads are included in the term. The term "Maximum Potential Discharge" is currently used in the requirements for basic plans and is currently "synonymous with Worst-Case Discharge." We are proposing to separate the definitions to facilitate the newly proposed definition for "Worst-Case Discharge" for comprehensive plans. The mailing address for the Office of Hazardous Materials Safety is updated in the note for the definition of "Liquid."

Section 130.31

This section is revised editorially to clarify that it applies to basic oil spill response plans only. References to comprehensive oil spill response plans are removed.

Section 130.33

This section is revised to clarify that it only applies to basic oil spill response plans.

Section 130.101

Establishes a new section which moves the current applicability for comprehensive oil spill response plans of 42,000 gallons per packaging from § 130.31 to § 130.101, and expands the applicability for comprehensive oil spill response plans to include "Any railroad which transports a single train transporting 20 or more loaded tank cars of liquid petroleum oil in a continuous block or a single train carrying 35 or more loaded tank cars of liquid petroleum oil throughout the train consist must submit a comprehensive plan meeting the requirements of this subpart."

Section 130.102

Establishes a new section for general requirements for the overall development of the comprehensive response plan and requires the plan uses the National Incident Management System (NIMS) and Incident Command System (ICS).

This section also establishes general requirements for the plan format including the development a core plan and the establishment of geographic response zones and accompanying response zone appendixes.

This section also allows for use of the Integrated Contingency Plan (ICP) format to provide greater flexibility.

Section 130.103

Establishes a new section which requires a railroad to certify in the comprehensive response plan that it reviewed the NCP and each applicable ACP and that its response plan is consistent with the NCP and each applicable ACP through compliance with a list of minimum requirements.

Section 130.104

Establishes a new section which requires a comprehensive response plan to include an information summary.

Section 130.105

Establishes a new section with requirements for the notification procedures and contact

information that a railroad must include in a comprehensive oil spill response plan.

Section 130.106

Establishes a new section for railroads to describe the response and mitigation activities and the roles and responsibilities of participants in the comprehensive oil spill response plans.

Section 130.107

Establishes a new section for railroads to certify employees are trained in accordance with the requirements of this section.

Section 130.108

Establishes a new section for requirements for equipment testing and drill procedures consistent with PREP requirements for comprehensive oil spill response plans.

Section 130.109

Establishes a new section with requirements for recordkeeping, review, and submission of comprehensive oil spill response plans.

Section 130.111

Establishes a new section with the requirements and procedures to submit comprehensive oil spill response plans for approval to FRA

Section 130.112

Establishes a new section to apply the same plan implementation requirements for comprehensive oil spill response plans formerly under in § 130.33.

Part 171

Section 171.7

Add paragraph 173.121(a)(2)(vi) titled "Petroleum products containing known flammable gases" stating, "Standard Test Method for Determination of Light Hydrocarbons in Stabilized Crude Oils by Gas Chromatography (ASTM D7900). The initial boiling point is the temperature at which 0.5 weight percent is eluted when determining the boiling range distribution."

Part 173

Section 173.121

Add paragraph 173.121(a)(2)(vi) titled "Petroleum products containing known flammable gases" stating, "Standard Test Method for Determination of Light Hydrocarbons in Stabilized Crude Oils by Gas Chromatography (ASTM D7900). The initial boiling point is the temperature at which 0.5 weight percent is eluted when determining the boiling range distribution."

Part 174

The authority is updated to include 33 U.S.C. 1321.

Section 174.310

Section 174.310 provides a list of the additional requirements for the operation of HHFTs. A new paragraph (a)(6) titled "Oil spill response plans" is added for clarity to provide a

reference to the part 130 requirements for HHFTs composed of trains carrying petroleum oil.

Section 174.312

Part 174, subpart G provides detailed requirements for flammable liquids by rail. The HHFT Final Rule added § 174.310 to this subpart to establish requirements for HHFTs. In this NPRM, we are proposing to add a new § 174.312 to subpart G of part 174 to require rail carriers that operate HHFTs to provide monthly notifications to each applicable SERC, TERC, or other appropriate state delegated agencies for further distribution to appropriate local authorities, upon request. New proposed § 174.312 specifies that the notifications must include:

- a reasonable estimate of the number of HHFTs that the railroad expects to operate each week, through each county within the state or through each tribal jurisdiction;
- the routes over which the HHFTs will operate;
- a description of the hazardous material being transported and all applicable emergency response information required by subparts C and G of part 172; at least one point of contact at the railroad (including name, title, phone number and address) with knowledge of the railroad's transportation of affected trains (referred to as the "HHFT point of contact"); and
- If a route is subject to the comprehensive spill plan requirements, the notification must include a description of the response zones (including counties and states) and contact information for the qualified individual and alternate, as specified under § 130.104(a).

As proposed, railroads may provide the required notifications electronically or in hard

copy and will be required to update the notifications monthly. If there are no material changes to the estimates provided in a month, proposed paragraph (a)(2)(i) would require the railroad to provide a certification of no change. As proposed, paragraph (a)(2)(iii) would require that each point of contact be clearly identified by name or title and role (e.g., qualified individual, HHFT point of contact).

Through the expansion of the applicability of the routing requirements in § 172.820 in the HHFT Final Rule to in include HHFTs and this NPRM's new proposed § 174.312, we have established an information sharing framework that enables the railroads to work with state officials to ensure that safety and security planning is occurring. Under existing § 172.820(g) of the HMR, fusion centers and other state, local, and tribal officials with a need-to-know will continue to work with the railroads on routing and risk analysis information conducted pursuant to part 172, subpart I, for information that is deemed SSI. At the same time, proposed new § 174.312 will ensure that SERCs, TERCs or other appropriate state agencies will routinely receive and share non-sensitive information from rail carriers regarding the movement of HHFTs in their jurisdictions that can aid local emergency responders and law enforcement in emergency preparedness and community awareness.

PHMSA seeks public comment on all aspects of this proposal and in particular the issues identified below. When commenting, please reference the specific portion of the proposal, explain the reason for any recommended change, and include the source, methodology, and key assumptions of any supporting evidence.

1. Whether particular public safety improvements could be achieved by requiring the railroads to provide the notification proposed in paragraph § 174.312 directly to organizations other than SERCs, TERCs, or other state delegated agencies?

2. Whether requiring the information sharing notifications to be made by railroads directly to the TERCs is the best approach to provide information to tribal governments or whether providing a notification to the National Congress of American Indians to disseminate to affected tribes or another entity is more appropriate?

3. Whether there are alternative means by which PHMSA can fulfill the FAST Act's direction to establish security and confidentiality protections, where this information is not subject to security and confidentiality protections under Federal standards.

VIII. Regulatory Review and Notices

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

This NPRM is considered a significant regulatory action under section 3(f) of Executive Order 12866 and was reviewed by the Office of Management and Budget (OMB). It is also considered a significant regulatory action under the Regulatory Policies and Procedures order issued by DOT (44 FR 11034; February 26, 1979). PHMSA has prepared and placed in the docket a draft Regulatory Impact Assessment addressing the economic impact of this proposed rule.

Executive Orders 12866 ("Regulatory Planning and Review") and 13563 ("Improving Regulation and Regulatory Review") require agencies to regulate in the "most cost-effective manner," to make a "reasoned determination that the benefits of the intended regulation justify its costs," and to develop regulations that "impose the least burden on society." Executive Order 13610 ("Identifying and Reducing Regulatory Burdens"), 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. DOT believes that streamlined and clear regulations are important to ensure compliance with important safety regulations. As such, the Department has developed a plan detailing how such reviews are conducted.

Additionally, Executive Orders 12866, 13563, and 13610 require agencies to provide a meaningful opportunity for public participation. Accordingly, PHMSA invites comments on these considerations, including information to improve the estimates of costs and benefits; alternative approaches; and relevant scientific, technical, and economic data. These comments will help PHMSA evaluate whether the proposed requirements are appropriate. PHMSA also seeks comment on potential data and information gathering activities that could be useful in designing an evaluation and/or retrospective review of this rulemaking.

The proposed rule became necessary due to relatively recent expansions in U.S. energy production, which has led to significant challenges in the transportation system. Expansion in oil production in North America relative to the 2000s has led to increasing volumes of this product transported to refineries and other transport-related facilities.

The U.S. is now a global leader in crude oil production. With the expectation of continued domestic production, rail transportation remains a flexible alternative to transportation by pipeline or vessel. The number of intra-U.S. rail carloads of crude oil approached 370,000 in 2013, reached approximately 450,000 carloads in 2014, and fell to approximately 390,000 carloads in 2015.[47] Total crude-by-rail movements in the United States and between the United States and Canada were more than 1 million barrels per day (bbl/d) in 2014, up from 55,000

[47] http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=ESM_EPC0_RAIL_NUS-NUS_MBBL&f=M

bbl/d in 2010.[48]

As of April 2016, the Bakken region of the Williston basin was producing over one million barrels of oil per day, which is commonly transported by rail.[49] The U.S. Energy Information Administration's "Annual Survey of Domestic Oil and Gas Reserves" reports that in addition to North Dakota's Bakken region, the shale plays in reserves in North America are extensive.[50]

Expansion in oil production in North America has led to increasing volumes of this product transported to refineries. Traditionally, pipelines and oceangoing tankers have delivered the vast majority of crude oil to U.S. refineries, accounting for approximately 93 percent of total receipts (in barrels) in 2012. Although other modes of transportation—rail, barge, and truck—have accounted for a relatively minor portion of crude oil shipments historically, volumes have risen very rapidly relative to the 2000s. The transportation of large volumes of crude oil and other petroleum products by rail under the current regulatory scheme poses a risk to life, property, and the environment. Figure 1 provides the average monthly U.S. rail movements of crude oil from 2010 through January 2016.

[48] http://www.eia.gov/todayinenergy/detail.cfm?id=20592.
[49] Information regarding oil and gas production is available at the following URL: http://www.eia.gov/petroleum/drilling/#tabs-summary-2 .
[50] EIA ''U.S. Crude Oil and Natural Gas Proved Reserves, 2013,'' available at: http://www.eia.gov/naturalgas/crudeoilreserves/pdf/uscrudeoil.pdf .

Figure 1:

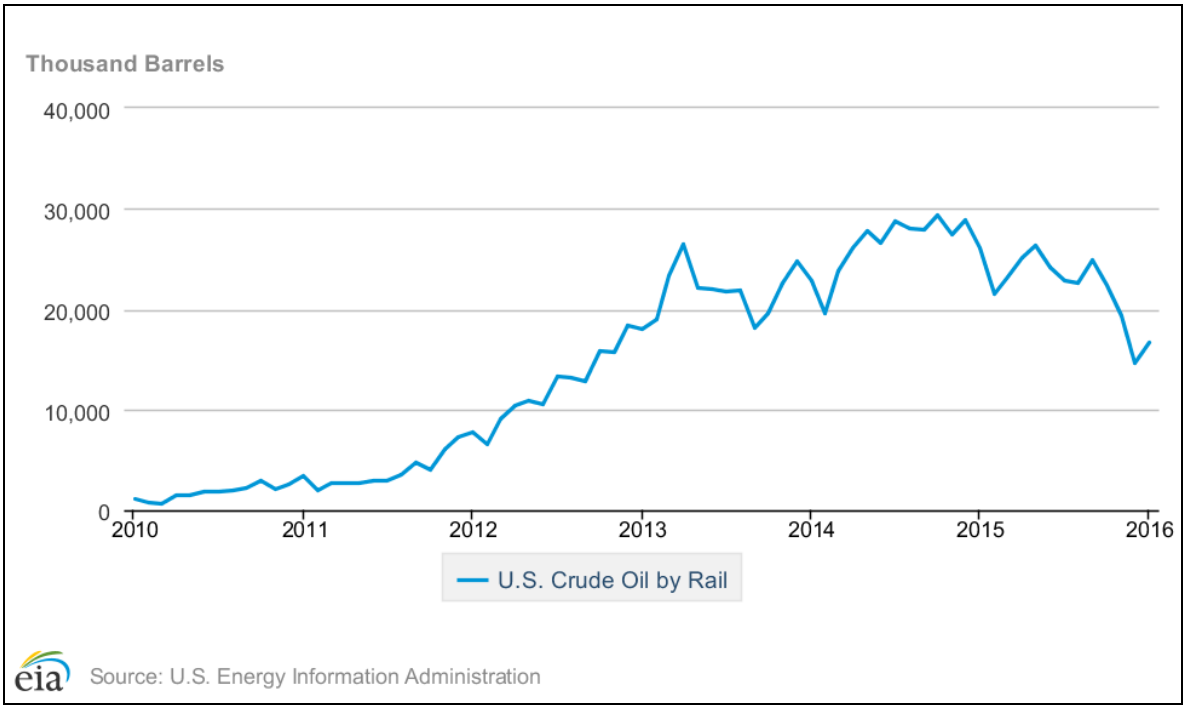
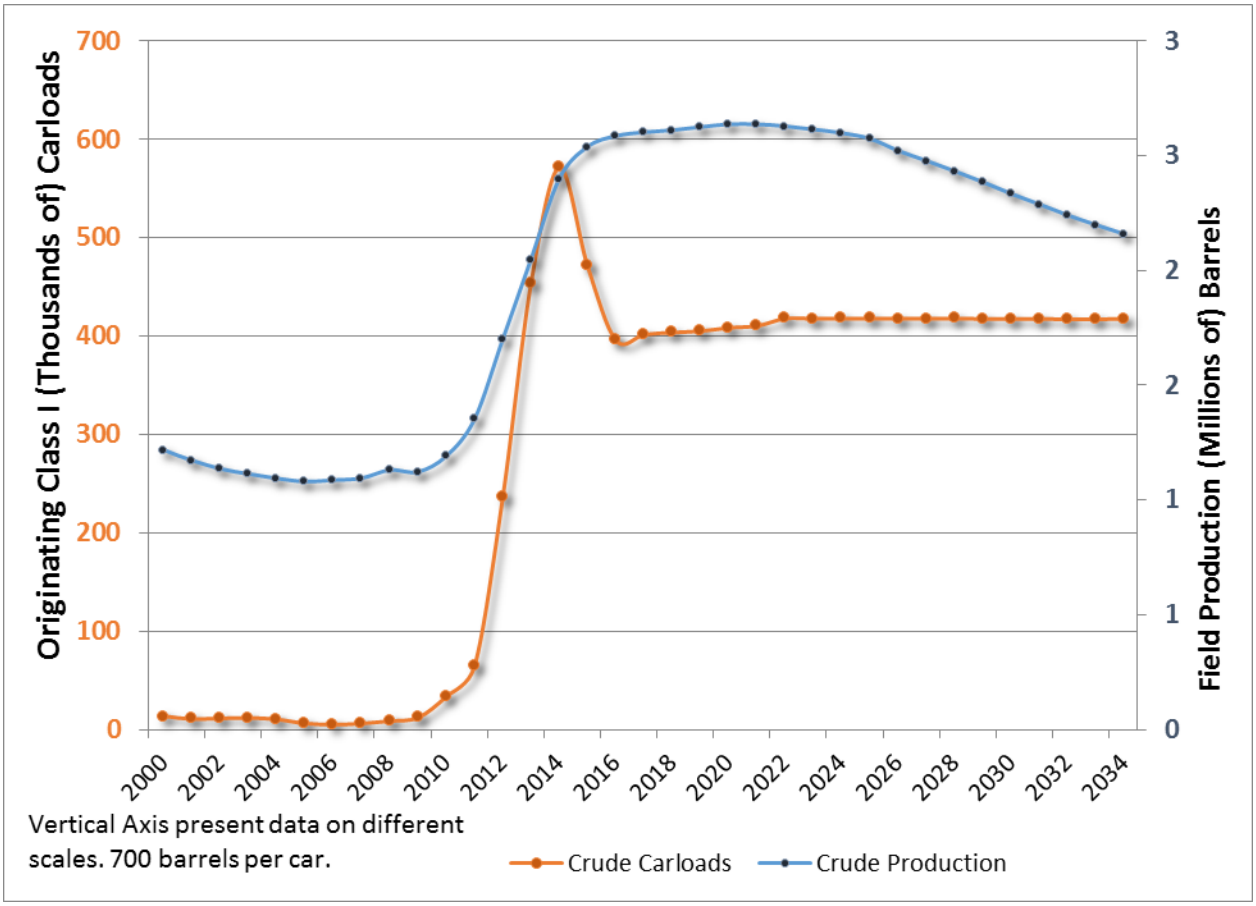


Figure 2 shows the growth in U.S. crude oil production since 2000, as well as growth in the number of rail carloads shipped. Figure 2 also shows forecasted domestic crude oil production from EIA and projections to 2034 for the rail shipment of crude oil.

Figure 2:

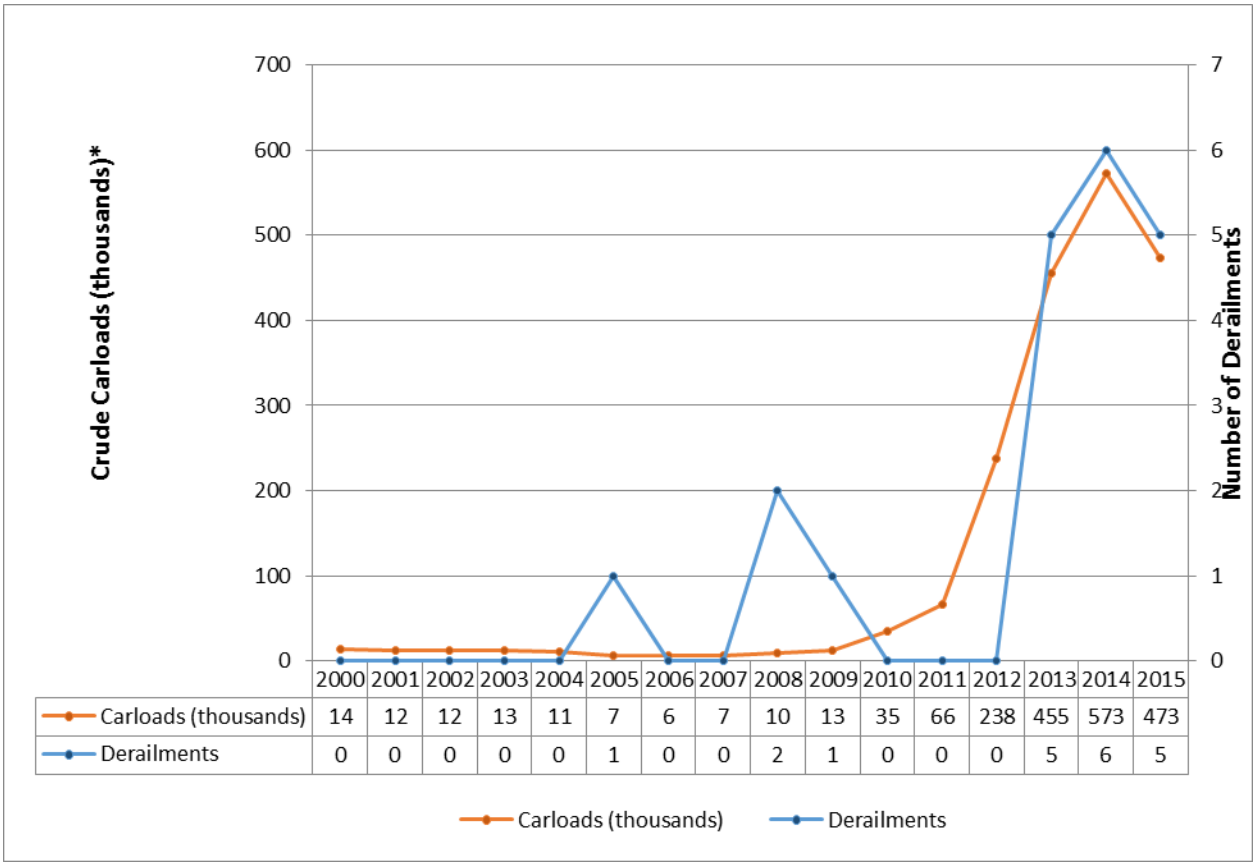


Sources and Notes: Crude Carloads for 2000-2013 obtained from the Surface Transportation Board waybill sample. Forecasts of overall domestic crude oil production and carload figures from 2014-2034 are taken from the report prepared by the Brattle Group on behalf of RSI [Table 14]. Crude production figures were derived from the EIA domestic crude production from 2014 Annual Energy Outlook. Alternative crude oil production forecasts are considered on pages 69-72 in section 3.4 of the draft RIA. The EIA long term production forecast was slightly higher for Annual Energy Outlook 2015, but the EIA's most recent Short Term Energy Outlook forecasts lower production in the near-term.

Rail accidents have risen along with the increase in crude oil production and rail shipments of crude oil relative to the 2000s. Figure 3 below shows this rise.[51]

Figure 3:

[51] Source: STB Waybill Sample and PHMSA Incident Report Database.



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Carloads (thousands)	14	12	12	13	11	7	6	7	10	13	35	66	238	455	573	473
Derailments	0	0	0	0	0	1	0	0	2	1	0	0	0	5	6	5

Sources and notes: Originating Class I Carloads for 2000-2013 obtained from the Surface Transportation Board waybill sample. 2014 and 2015 originating carloads are estimated based on EIA production forecast in millions of barrels per year then converted to carloads per year. Derailments are from the PHMSA and FRA Incident Report Databases and include certain derailments that are not incorporated into the RIA's Appendix C.

Based on these train accidents, the expectation of continued domestic crude oil production, and the number of train accidents involving crude oil, PHMSA maintains that improved oil spill response planning is essential to protecting the environment against the risks of derailments involving large quantities of petroleum oil.

PHMSA has identified several recent derailments to illustrate the circumstances and consequences of derailments involving petroleum oil transported in higher-risk train configurations: Watertown, WI (November 2015); Culbertson, MT (July 2015); Heimdal, ND (May 2015); Galena, IL (March 2015); Mt. Carbon, WV (February 2015); La Salle, CO (May 2014); Lynchburg, VA (April 2014); Vandergrift, PA (February 2014); New Augusta, MS

(January 2014); Casselton, ND (December 2013); Aliceville, AL (November 2013); and Parkers Prairie, MN (March 2013).

For example, on December 30, 2013, a train carrying crude oil derailed and ignited near Casselton, North Dakota, prompting authorities to issue a voluntary evacuation of the city and surrounding area. On November 7, 2013, a train carrying crude oil to the Gulf Coast from North Dakota derailed in Aliceville, Alabama, spilling crude oil in a nearby wetland and igniting into flames.

These derailments of HHFTs transporting crude oil have resulted in releases of petroleum oil that harmed or posed a threat of harm to the nation's waterways. Of note here is Safety Recommendation R-14-5, which recommended that PHMSA revise the spill response planning thresholds prescribed in 49 CFR part 130 to require comprehensive OSRPs that effectively provide for the carriers' ability to respond to worst-case discharges resulting from accidents involving unit trains or blocks of tank cars transporting oil and petroleum products.[52] PHMSA developed the revisions included in this NPRM in response to NTSB's safety recommendations, as well as the aforementioned recent derailments.

On June 17, 1996, DOT's Research and Special Programs Administration (RSPA) published a final rule issuing requirements that sought to meet the intent of the Federal Water Pollution Control Act (Clean Water Act; 61 FR 30533) and Oil Pollution Act of 1990 (see 33 U.S.C. 1321). This rule adopted requirements for packaging, communication, spill response planning, and response plan implementation intended to prevent and contain spills of oil during transportation. Under these current requirements, railroads are required to complete a basic

[52] National Transportation Safety Board. (2014, January 21). *Safety Recommendation R-14-4 through -6*. Retrieved from http://www.ntsb.gov/safety/safety-recs/recletters/R-14-004-006.pdf.

OSRP for oil shipments in a package with a capacity of 3,500 gallons or more, and a comprehensive OSRP is required for oil shipments in a package containing more than 42,000 gallons (1,000 barrels).

Currently, all of the rail community that transports oil, including crude oil transported as a hazardous material, is subject to the basic OSRP requirement of 49 CFR 130.31(a) since most, if not all, rail tank cars being used to transport crude oil have a capacity greater than 3,500 gallons. However, a comprehensive OSRP for shipment of oil is only required when the quantity of oil is greater than 42,000 gallons per tank car. Accordingly, the number of railroads required to have a comprehensive OSRP is much lower, or possibly non-existent, because a very limited number of rail tank cars in use would be able to transport a volume of 42,000 gallons in a car.[53] Thus, the existing regulatory framework for basic plans in part 130 constitutes the regulatory baseline and PHMSA anticipates that many railroads are likely to meet the basic plan requirements under part 130.

In addition, many railroads may voluntarily exceed the minimum standards set forth by basic plans. Given that similar oil spill response planning requirements are already in place for facilities, pipelines, and vessels, PHMSA anticipates that response resources are currently available across the U.S. As we anticipate that many railroads may voluntarily exceed the minimum standard for compliance, the change to the current planning and response baseline is likely to be less than the change in the regulatory baseline (i.e., the change from basic to comprehensive plans).

PHMSA's preliminary analysis indicates that the planning and response baseline

[53] The 2014 AAR's Universal Machine Language Equipment Register numbers showed five tank cars listed with a capacity equal to or greater than 42,000 gallons, and none of these cars were being used to transport oil or petroleum products.

currently provides for a level of OSRO coverage and response resource availability that is consistent with the proposed rule's response timeframe of 12 hours. In the aggregate, PHMSA-OHMS could not identify any rail routes within the continental U.S. that lack coverage from the network of USCG-certified OSROs analyzed. By our estimation, all potential rail routes transporting large quantities of petroleum oil in the continental U.S. could be serviced by an OSRO in the event of a petroleum oil train derailment within 12 hours. For additional discussion of our baseline analyses, please refer to the "Baseline Analysis" section in the draft RIA for this proposed rule.

In summary, the proposed rule would expand the applicability of comprehensive OSRPs based on thresholds of crude oil that apply to an entire train consist. Specifically, the proposed rule would expand the applicability for OSRPs so that no person may transport a single train transporting 20 or more loaded tank cars of liquid petroleum oil in a continuous block or a single train carrying 35 or more loaded tank cars of liquid petroleum oil throughout the train consist unless that person has implemented a comprehensive OSRP. Furthermore, this NPRM proposes to require railroads to share additional information with state and tribal emergency response organizations (i.e. SERCs and TERCs) to improve community preparedness and to incorporate the voluntary use of the IBP test (ASTM D7900) to determine classification and packing group for Class 3 Flammable liquids.[54]

In the sections that follow, we outline the costs of OSRPs and information sharing

[54] The ASTM D7900 is not currently aligned with the testing requirements authorized in the HMR forcing shippers to continue to use the testing methods authorized in §173.121(a)(2). This misalignment results in a situation wherein an industry best practice for testing of crude oil (ASTM D7900 for initial boiling point) that was developed in concert with PHMSA is not authorized by the HMR. We note that the incorporation of API RP 3000 and consequently ASTM D7900 will not replace the currently authorized testing methods, rather serve as a testing alternative if one chooses to use that method. PHMSA believes this provides flexibility and promotes enhanced safety in transport through accurate PG assignment. This provision would not pose any costs.

provisions, as well as the breakeven analysis we developed in order to proactively generate a benefits outlook for this rule. The provision to incorporate by reference ASTM D7900 is not expected to impose costs on the regulated community; thus, we estimate no quantitative benefits for that particular provision.

Costs

Each railroad subject to the proposed rule must prepare and submit a comprehensive OSRP that includes a plan for responding, to the maximum extent practicable, to a worst-case discharge and to a substantial threat of such a discharge of oil. The OSRP must also be submitted to the FRA, where it will be reviewed and approved by FRA personnel.

The following entities would be subject to the comprehensive plan requirements in the proposed rule:

1. Any railroad transporting any liquid petroleum or non-petroleum oil in a quantity greater than 42,000 gallons per packaging must submit a comprehensive plan meeting the requirements of this subpart.
2. Any railroad transporting any single train carrying 20 or more tank cars of liquid petroleum oil in a continuous block or 35 or more of such cars in a single train must submit a comprehensive plan.
    a. In determining number of tank cars, the railroad is not required to include tank cars carrying mixtures of petroleum oil not meeting the criteria for Class 3 flammable or combustible hazardous material in 49 CFR 173.120 or containing residue.

3. A railroad meeting the requirements for a comprehensive plan need not submit a plan if otherwise excepted in 49 CFR 130.2(c).

For determining the entities that would be affected by the proposed threshold, PHMSA used the definition of "high hazard flammable train" (HHFT) established in the "Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains - Final Rule" published on May 8, 2015.[55] PHMSA narrowed the affected entities to only include railroads that transport crude oil and, in consultation with FRA, revised the estimated number of Class III carriers that would be subject to the rulemaking. Based on this assessment, PHMSA estimates there are 73 railroads (7 Class I, 11 Class II, and 55 Class III) that would be subject to this proposed rulemaking. In addition, PHMSA evaluated several alternatives related to the threshold quantities that trigger the need for a comprehensive plan in order to develop a range for the entities affected by the OSRP provisions proposed in this rule. The results of that analysis are presented further in the draft RIA, available in the docket for this rulemaking.

These estimates were derived for the purpose of estimating the costs and benefits associated with the proposed rule. PHMSA believes that the approach used represents a conservative estimate for the number of affected entities and specifically solicits comment on the approach and estimated values used in this analysis.

The universe of affected entities for the information sharing requirements is different than the number of entities affected under the comprehensive response plan requirement. The applicability of this requirement is derived from the information published in the HM-251 Final Rule; specifically, the definition of a high-hazard flammable train (HHFT) and the information sharing portion of the routing requirements of that final rule. The universe of affected entities

[55] 80 FR 26643, pp 26643 -26750. May 8, 2015.

for this provision includes all HHFTs transporting crude petroleum oil and ethanol, or 178 railroads (7 Class I, 11 Class II, and 160 Class III). For purposes of assessing costs for this provision, however, PHMSA determined there should be no additional costs for Class I railroads to comply with this proposed revision per the AAR Circular OT 55-O revision on January 27, 2015, which required AAR members to provide bona fide emergency response agencies or planning groups with specific commodity flow information covering all hazardous commodities transported through the community for a 12-month period in rank order. We assume this includes the proposed information to be shared with SERCs and TERCs as required in this proposed rule. In addition, on May 7, 2014, DOT issued an Emergency Restriction/Prohibition Order in Docket No. DOT-OST-2014-0067[56] that required each railroad transporting 1,000,000 gallons or more of Bakken crude oil in a single train in commerce within the U.S. to provide certain information in writing to the SERC for each state in which it operates such a train. PHMSA determined that 40 Class II and Class III railroads were part of this order and have already developed the required notification. As such, those entities are only subject to the proposed on-going updates and submission requirements included in this rulemaking. Therefore, we estimate that 131 railroads will be required to develop notifications as a result of the proposed rule and 171 railroads will be affected by the proposed monthly updates and recordkeeping requirements.

Table 11 provides a summary of the estimated per carrier cost associated with the proposed rule requirements for response plans and information sharing. For purposes of this analysis, PHMSA has identified several categories of costs related to the development of a comprehensive response plan. Those costs include: plan development, submission, and

[56] http://www.dot.gov/briefing-room/emergency-order.

maintenance; contract fees for designating an OSRO; training and drills; and plan review and approval costs to the Federal government. For additional information about the development of these cost estimates, see the draft RIA.

Table 11: Undiscounted Unit Cost per Railroad by Railroad Class			
Category	**Frequency**	**Railroad**	**Unit Cost Per Carrier**
Plan Development	Once every 5 years	Class I	$14,777
		Class II	$8,128
		Class III	$7,019
Plan Maintenance	Annual	Class I	$1,478
		Class II	$813
		Class III	$702
Plan Submission	Once every 5 years	Class I	$20
		Class II	$20
		Class III	$20
OSRO Fee	Annual	Class I	$40,000
		Class II	$6,000
		Class III	$2,500
Training and Drills	Varies	Class I	$65,203
		Class II	$41,559
		Class III	$27,373
Information Sharing	Year 1	All Railroads	$7,589
	Annual	All Railroads	$2,319

For purposes of this analysis, PHMSA assumed a 10-year timeframe to outline, quantify, and monetize the costs and benefits of the proposed rule and to demonstrate the net effects of the proposal. Table 12 provides a summary of the undiscounted costs by year for this 10-year period by railroad class, and Table 13 provides a summary of the undiscounted costs by provision for this 10-year period.

Table 12: Summary of Undiscounted 10-year Costs by Railroad Class

Year	Oil Spill Response Plans			Information Sharing	Total
	Class I	Class II	Class III	All Railroads	
1	$850,342	$621,706	$2,068,728	$1,076,029	$4,616,806
2	$416,246	$272,731	$1,165,012	$384,558	$2,238,547
3	$416,749	$273,465	$1,168,636	$387,477	$2,246,327
4	$417,257	$274,208	$1,172,303	$390,430	$2,254,198
5	$865,737	$635,420	$2,111,227	$393,418	$4,005,803
6	$418,293	$275,720	$1,179,767	$396,441	$2,270,220
7	$418,820	$276,489	$1,183,565	$399,499	$2,278,373
8	$419,353	$277,267	$1,187,408	$402,594	$2,286,622
9	$419,892	$278,055	$1,191,296	$405,725	$2,294,969
10	$886,026	$653,493	$2,167,234	$408,894	$4,115,646
Total	**$5,528,716**	**$3,838,553**	**$14,595,175**	**$4,645,065**	**$28,607,509**

Table 13: Summary of 10-Year Costs by Provision (undiscounted)

Year	Plan Development	Plan Maintenance	Plan Submission	OSRO Fees	Training and Drills	Information Sharing	Total
1	$578,907	$57,891	$1,421	$483,500	$2,419,058	$1,076,029	$4,616,806
2	$0	$58,328	$0	$483,500	$1,312,161	$384,558	$2,238,547
3	$0	$58,771	$0	$483,500	$1,316,579	$387,477	$2,246,327
4	$0	$59,219	$0	$483,500	$1,321,049	$390,430	$2,254,198
5	$596,719	$59,672	$1,465	$483,500	$2,471,029	$393,418	$4,005,803
6	$0	$60,130	$0	$483,500	$1,330,149	$396,441	$2,270,220
7	$0	$60,594	$0	$483,500	$1,334,779	$399,499	$2,278,373
8	$0	$61,064	$0	$483,500	$1,339,464	$402,594	$2,286,622
9	$0	$61,539	$0	$483,500	$1,344,205	$405,725	$2,294,969
10	$620,193	$62,019	$1,523	$483,500	$2,539,517	$408,894	$4,115,646
Total	**$1,795,818**	**$599,227**	**$4,409**	**$4,835,000**	**$16,727,990**	**$4,645,065**	**$28,607,509**

Table 14 provides a summary of the total and annualized costs by railroad class discounted at a 3 and 7 percent rate.

Table 14: Summary of Undiscounted and Discounted Total and Annualized Costs

Class of Railroad	Undiscounted		3% Discount Rate		7% Discount Rate	
	10 Year	Annualized	10 Year	Annualized	10 Year	Annualized
OSRPs						

Class I	$5,528,716	$552,872	$4,861,419	$569,907	$4,169,222	$593,603
Class II	$3,838,553	$383,855	$3,374,946	$395,647	$2,894,820	$412,157
Class III	$14,595,175	$1,459,518	$12,825,770	$1,503,572	$10,987,301	$1,564,344
Information Sharing						
All Railroads	$4,645,065	$464,506	$4,159,026	$487,565	$3,650,832	$519,796
Total	**$28,607,509**	***$2,860,751***	**$25,221,160**	***$2,956,689***	**$21,702,175**	***$3,089,901***

Based on this cost analysis, PHMSA believes that the primary costs drivers for this proposed rule are the annual fees associated with the OSRO contracts, the annual training and drill requirements, and the information sharing provisions.

PHMSA solicits comment on the approach and estimated costs used in this analysis, as well as the assumptions and estimates used in these particular costs categories.

Benefits

The proposed response plan requirements are designed to reduce the magnitude and severity of spills, thereby reducing the environmental damages and potential human health impacts that spills may cause. PHMSA faced data uncertainties that limited our ability to estimate the benefits of this proposed rule. Instead, PHMSA performed a breakeven analysis by identifying the number of gallons of oil that the NPRM would need to prevent from being spilled in order for its benefits to at least equal its estimated costs. The analysis estimates that each prevented gallon of oil spilled yields social benefits of $211. Additional benefits may also be incurred due to ecological and human health improvements that may not be captured in the value of the avoided cost of spilled oil. These issues are discussed in more detail in the accompanying draft RIA, and the reader is referred to that document for more detail. PHMSA specifically solicits comment on both the monetized and non-monetized benefits assessed in this analysis.

In order to assess the baseline conditions that would be affected by the proposed rule,

PHMSA evaluated data provided in the Hazardous Material Incident Reports Database.[57] Specifically, PHMSA evaluated reported incidents from 2004–2015 involving liquid petroleum transported by rail. Most of the incidents are relatively minor non-accident releases on which an OSRP would have no effect. Railroads would only be required to develop comprehensive OSRPs along routes where the potential for a worst-case discharge of oil is possible. These are routes on which HHFTs operate, because an accidental release involving a derailment, train collision, or other accident involving trains hauling large quantities of petroleum oil are the only incidents that have the potential to result in a large quantity release of material. Above we presented the significant crude oil derailments graphed against carloads of product shipped by rail for 2000–2015.

A comprehensive OSRP would be required to cover those routes/railroads that haul petroleum oil HHFTs, so the benefits analysis is limited to those derailments involving petroleum oil HHFTs. The Agency has identified 12 such derailments between 2012 and 2015. Specifically, there were 3 events in 2013; 4 in 2014; and 5 in 2015, for a total of 12 incidents.

2015 volumes are still roughly twice the volumes seen in 2012, and EIA predicts U.S. crude oil production volumes to remain high for the next decade and beyond. As a result, we expect volumes going forward to remain relatively high by historic (pre-2012) standards, although we examine a modest decline in production and rail shipment volume in the sensitivity analysis of the draft RIA.

One simple way to predict the number of future events based on the HHFT period is as follows: The period of high volume crude shipments starts in 2012 through 2015, providing a 4-year period. We consider a 10-year analysis period going forward, so the analysis period is 2.5

[57] https://hazmatonline.phmsa.dot.gov/IncidentReportsSearch/IncrSearch.aspx

times longer than the observed period. There were 12 incidents in the observed period, so the predicted number of events over the analysis period would be 12 x 2.5 = 30 incidents. We note that 2012 volumes were much lower than subsequent years, so treating it as a full year results in a conservative estimate of the number of events. Evidence for this can be seen in the data, as all 12 events occurred in 2013–2015, with 4 occurring in 2014 and 5 occurring in 2015. 2013 had 3 HHFT derailments, meeting the 4 year average. 2012 is the only year in the analysis period with fewer than 3 derailments.

To monetize the damages associated with these incidents, PHMSA assumes an equal chance of an incident occurring in any year of the 10 year analysis period. Given 30 events, this assumption means the expected number of events in any given year is 3. Based on the 12 events for which data reporting is reasonably complete, PHMSA estimated that, on average, 140,173 gallons of product are released per crude oil HHFT derailment. In final rule HM-251, the Agency used $200 per gallon to monetize the damages of an incident that results in a spill.[58] That figure is based on the cost per gallon from recent pipeline events and a literature review and data analysis conducted for both crude and ethanol. Since this rule focuses on petroleum oil only (and not ethanol), a slightly different value is applied. We use a value of $211 to estimate baseline damages associated with train derailment releases. (See the draft RIA for this proposed rulemaking, in section 3.1.4, for further discussion of how this cost per gallon figure was derived.)

Table 15 below presents the estimated societal damages associated with HHFT incidents involving crude oil over the 10-year analysis period. The monetary value is obtained by multiplying the expected number of events in a year (3) by the cost per gallon released ($211)

[58] For detail on how this value was derived from PHMSA pipeline data, the reader is referred to pages 85-90 of the HM-251 RIA located in Docket No. PHMSA-2012-0082 (HM-251).

and the average release quantity (140,173). In addition, we adjust this baseline for the implementation of final rule HM-251, which codified new tank car standards for HHFTs and is expected to reduce the societal damages imposed by these incidents by 40 percent once fully implemented. Since this proposed rule will be finalized before implementation of final rule HM-251 is complete (i.e. full phase in of retrofitted tank cars and Electronically Controlled Pneumatic Braking), we apply the final rule HM-251 effectiveness rates for the years 2017–2026 to adjust for the impact of that rule on baseline damages. Societal damage values discounted at 3 and 7 percent are also presented.

Table 15: Summary of Estimated Societal Damages from Crude Oil HHFT Incidents

Year	Events per year	Monetized Value[1]	HHFT Effectiveness	Adjusted Monetized Value
1	3	$88,729,245	22%	$69,030,780
2	3	$88,729,245	28%	$63,774,491
3	3	$88,729,245	34%	$58,717,940
4	3	$88,729,245	36%	$56,486,231
5	3	$88,729,245	38%	$54,802,306
6	3	$88,729,245	38%	$55,154,097
7	3	$88,729,245	38%	$55,196,048
8	3	$88,729,245	38%	$55,288,413
9	3	$88,729,245	38%	$55,211,463
10	3	$88,729,245	38%	$55,211,463
				$578,873,232
			7% discount	**$440,537,002**
			3% discount	**$511,335,291**

1 Calculated by multiplying 140,173 (estimate of gallons released per event) times $211 (estimate of societal cost per gallon released) times 3 (estimate of events per year).

Although the Agency cannot estimate the degree to which comprehensive OSRP requirements would reduce the consequences of these events, it is clear by comparing the

monetized damages with the total costs of the proposed rule that even a minor reduction in damages would result in a rule with positive net benefits. For example, estimated costs as presented in Table 3 above are approximately 4.9 percent of total societal damages, indicating that if this proposed rule reduced the consequences of these events by 5 percent, the rule would have positive net benefits.

Comprehensive plans require training and exercises, staging of equipment, analysis of routes and access points along routes as part of the development of response zone appendices, and pre-establishing of a chain of command and communication protocols, which would likely result in much faster and more effective response to derailments involving large quantities of petroleum oil. As a result, we expect the spilled product would be contained and recaptured more effectively, a smaller area would be contaminated, fewer environmental consequences would result, and less property would be damaged. For example, a better executed response to an incident that contaminates a river might ensure quicker deployment of downriver booms, thereby reducing the amount of shoreline oiling, damage to riparian environments, and impairment of downstream sources of drinking water. The Agency believes that training, better coordinated resource deployment, more clearly delineated communication protocols and command structure, and pre-event contracting of response resources will substantially reduce the impacts of these incidents, and as a result the rule is likely to be cost-justified.

B. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) governs the issuance of Federal regulations that require unfunded mandates. This NPRM does not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. It does not result in costs of $155 million or more, adjusted for inflation, to either State, local, or tribal governments, in the

aggregate, or to the private sector in any one year, and is the least burdensome alternative that achieves the objective of the rule. As such, PHMSA has concluded that the NPRM does not require an Unfunded Mandates Act analysis.

C. Executive Order 13132

This final rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13132 ("Federalism") and the President's memorandum on "Preemption" published in the Federal Register on May 22, 2009 (74 FR 24693). Executive Order 13132 requires PHMSA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" are defined in the executive order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." Under Executive Order 13132, the agency may not issue a regulation with federalism implications that imposes substantial direct compliance costs and that is not required by statute, unless the Federal Government provides the funds necessary to pay the direct compliance costs incurred by state and local governments or the agency consults with state and local government officials early in the process of developing the regulation. Where a regulation has federalism implications and preempts state law, the agency, where practicable, seeks to consult with state and local officials in the process of developing the regulation.

This proposed rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13132. PHMSA has determined that the proposed rule will not

have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. This rule proposes to update the existing 49 CFR part 130 by lowering the applicability threshold and providing more detailed guidelines for comprehensive oil spill response planning. It further proposes to require railroads to share additional information with state and tribal emergency response organizations, and proposes to incorporate by reference an initial boiling point test for flammable liquids as an acceptable testing alternative. The proposed rule does not impose any new requirements with effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among government entities. In addition, PHMSA has determined that this proposed rule will not impose substantial direct compliance costs on State and local governments. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

The Hazardous Materials Transportation Act (HMTA) provides that a state law or Indian tribe requirement is preempted where compliance with both the state law or Indian tribe requirement and the federal requirement is not possible, the state law or Indian tribe requirement creates an obstacle to accomplishing or executing the federal requirement, or where a federal requirement has covered the subject and the state law or Indian requirement is not substantively the same. Covered subjects under the HMTA include: 1) the designation, description, and classification of hazardous material; 2) the packing, repacking, handling, labeling, marking, and placarding of hazardous material; 3) the preparation, execution, and use of shipping documents related to hazardous material and requirements related to the number, contents, and placement of those documents; 4) the written notification, recording, and reporting of the unintentional release

in transportation of hazardous material and other written hazardous materials transportation incident reporting involving state or local emergency responders in the initial response to the incident; and 5) the designing, manufacturing, fabricating, inspecting, marking, maintaining, reconditioning, repairing, or testing a package, container, or packaging component that is represented, marked, certified, or sold as qualified for use in transporting hazardous material in commerce. Under the Federal Railroad Safety Act, "[l]aws, regulations, and orders related to railroad safety and laws, regulations, and orders related to railroad security shall be nationally uniform to the extent practicable." With narrow exceptions for essentially local safety or security hazards, states may not "adopt or continue in force a law, regulation, or order related to railroad safety" once the "Secretary of Transportation . . . prescribes a regulation or issues an order covering the subject matter of the State requirement." 33 U.S.C. 20106(a)(2). This standard applies to federal regulations governing the transportation of hazardous materials by railroad, even where PHMSA or another agency promulgates those regulations.

Comments to the ANPRM from the concerned public and departments within city and State governments highlight state legislation related to oil spill response plans and request that PHMSA discuss the preemptive effects of the changes to part 130 in this proposed rule. Part 130 is issued under authority of 33 U.S.C. 1321(o)(1)(C) and 1321(j)(5).

Regarding the proposed changes to 49 CFR part 130, federal regulation under 33 U.S.C. 1321 accommodates regulation by states and political subdivisions concerning oil spill response plans. See 33 U.S.C. 1321(o)(2). However, the preemption language of 33 U.S.C. 1321 preserves only the ability for states to impose oil spill planning requirements. Elements of state oil spill response plan legislation may be preempted under the preemption standard established by the FRSA and the HMTA. Accordingly, the preemption provision of the FRSA and the

HMTA may apply to any state-imposed requirements on railroad safety or hazardous materials containment. Nonetheless, PHMSA has determined that this proposed rule will not impose substantial direct compliance costs on State and local governments.

PHMSA solicits comment on this Federalism discussion.

D. Executive Order 13175

Executive Order 13175 ("Consultation and Coordination with Indian Tribal Governments") requires agencies to assure meaningful and timely input from Indian tribal government representatives in the development of rules that have tribal implications. Thus, in complying with this Executive Order, agencies must determine whether a proposed rulemaking has tribal implications, which include any rulemaking that imposes "substantial direct effects" on one or more Indian communities, on the relationship between the Federal Government and Indian tribes, or on the distribution of power between the Federal Government and Indian tribes. Further, to the extent practicable and permitted by law, agencies cannot promulgate two types of rules unless they meet certain conditions. The two types of rules are: (1) rules that have tribal implications that impose substantial direct compliance costs on Indian tribal governments and that are not required by statute; and (2) rules that have tribal implications and that preempt tribal law.

PHMSA is committed to tribal outreach and engaging tribal governments in dialogue. Among other outreach efforts, PHMSA representatives attended the National Joint Tribal Emergency Management Conference on August 11-14, 2015 and the Northwest Tribal Emergency Management Conference in May 4-6, 2016. In the spirit of Executive Order 13175 and consistent with DOT Order 5301.1, PHMSA will be continuing outreach to tribal officials

independent of our assessment of the direct tribal implications.

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

Under the Regulatory Flexibility Act of 1980 (RFA) (5 U.S.C. 601 et seq.), PHMSA must consider whether a rulemaking would have a "significant economic impact on a substantial number of small entities," which include small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations under 50,000.

To ensure potential impacts of rules on small entities are properly considered, PHMSA in coordination with the FRA, developed this NPRM in accordance with Executive Order 13272 ("Proper Consideration of Small Entities in Agency Rulemaking") and DOT's procedures and policies to promote compliance with the RFA.

The RFA and Executive Order 13272 (67 FR 53461; August 16, 2002) require agency review of proposed and final rules to assess their impacts on small entities. An agency must prepare an initial regulatory flexibility analysis (IRFA) unless it determines and certifies that a rule, if promulgated, would not have a significant economic impact on a substantial number of small entities.

PHMSA is publishing this IRFA to aid the public in commenting on the potential small business impacts of the requirements in this NPRM. PHMSA invites all interested parties to submit data and information regarding the potential economic impact on small entities that would result from the adoption of the proposals in this NPRM. PHMSA will consider all information and comments received in the public comment process when making a determination regarding the economic impact on small entities in the final rule.

Under the RFA at 5 U.S.C. 603(b), each initial regulatory flexibility analysis is required to address the following topics:

(1) The reasons why the agency is considering the action.

(2) The objectives and legal basis for the proposed rule.

(3) The kind and number of small entities to which the proposed rule will apply.

(4) The projected reporting, recordkeeping and other compliance requirements of the proposed rule.

(5) All Federal rules that may duplicate, overlap, or conflict with the proposed rule.

The RFA at 5 U.S.C. 603(c) requires that each initial regulatory flexibility analysis contains a description of any significant alternatives to the proposal that accomplish the statutory objectives and minimize the significant economic impact of the proposal on small entities. In this instance, none of the alternatives accomplish the statutory objectives and minimize the significant economic impact of the proposal on small entities.

(1) Reasons why the agency is considering the action.

PHMSA, in coordination with the FRA, is issuing this NPRM in order to improve response readiness and mitigate effects of rail incidents involving petroleum oil and certain HHFTs. This is necessary due to the expansion in U.S. energy production, which has led to significant challenges for the country's transportation system. This NPRM has requirements in two areas as shown below: Section I, Subsection A ("Oil Spill Response Plans") and Subsection B ("Information Sharing").[59] The first requirement proposes to modernize the Comprehensive

[59] This rulemaking also proposes incorporation and the voluntary use of the initial boiling point (IBP) test (ASTM D7900) to determine classification and packing group for Class 3 Flammable liquids. We note that the incorporation of API RP 3000 and consequently ASTM D7900 will not replace the currently authorized testing methods, rather

Spill Plan requirements (49 CFR part 130). Additionally, this NPRM proposes to require railroads to share additional information with state and tribal emergency response organizations (i.e., SERCs and TERCs) to improve community preparedness. The proposals in this NPRM work in conjunction with the requirements adopted in the HHFT Final Rule in order to continue the comprehensive approach toward ensuring the safe transportation of energy products and mitigating the consequences of such accidents should they occur. PHMSA is addressing below the potential impacts on small entities with the proposed rule requirements for response plans and information sharing.[60]

(A) Oil Spill Response Plans

PHMSA is promulgating this NPRM in response to recent train accidents involving the derailment of HHFTs. Shipments of large volumes of liquid petroleum oil pose a significant risk to life, property, and the environment. PHMSA has identified several recent derailments to illustrate the circumstances and consequences of derailments involving petroleum oil transported in higher-risk train configurations: Heimdal, ND (May 2015); Galena, IL (March 2015); Mt. Carbon, WV (February 2015); La Salle, CO (May 2014); Lynchburg, VA (April 2014); Vandergrift, PA (February 2014); New Augusta, MS (January 2014); Casselton, ND (December 2013); Aliceville, AL (November 2013); and Parkers Prairie, MN (March 2013).

For example, on December 30, 2013, a train carrying crude oil derailed and ignited near Casselton, North Dakota, prompting authorities to issue a voluntary evacuation of the city and

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serve as a testing alternative if one chooses to use that method. PHMSA believes this provides flexibility and promotes enhanced safety in transport through accurate PG assignment. This provision would not pose any impacts on small entities.

[60] We note that the incorporation of API RP 3000, which contains the ASTM D7900 test will not replace the currently authorized initial boiling point testing methods, but rather serve as a testing alternative if one chooses to use that method. PHMSA believes this provides flexibility and promotes enhanced safety in transport through accurate packing group assignment. This requirement will impose no new costs.

surrounding area. On November 7, 2013, a train carrying crude oil to the Gulf Coast from North Dakota derailed in Aliceville, Alabama, spilling crude oil in a nearby wetland and igniting into flames. These train accidents involving derailments of HHFTs transporting crude oil resulted in discharges of petroleum oil that harmed or posed a threat of harm to the nation's waterways.

Of note here is the NTSB's Safety Recommendation R-14-5,[61] which requested that PHMSA revise the spill response planning thresholds prescribed in 49 CFR part 130 to require comprehensive OSRPs that effectively provide for the carriers' ability to respond to worst-case discharges resulting from accidents involving unit trains or blocks of tank cars transporting oil and petroleum products. In this recommendation, the NTSB raised a concern that, "[b]ecause there is no mandate for railroads to develop comprehensive plans or ensure the availability of necessary response resources, carriers have effectively placed the burden of remediating the environmental consequences of an accident on local communities along their routes." In light of these accidents and NTSB Recommendation R-14-5, PHMSA is now re-examining whether it is more appropriate to consider the train in its entirety when setting the threshold for comprehensive OSRPs. The revisions included in the NPRM were developed to expand the applicability of the comprehensive OSRP requirement. PHMSA holds that improved oil spill response planning will in turn improve the actual response to future derailments involving petroleum oil and lessen the negative impacts to the environment and communities.

On June 17, 1996, RSPA published a final rule issuing requirements that meet the intent of the Clean Water Act. This rule adopted requirements for packaging, communication, spill response planning, and response plan implementation intended to prevent and contain spills of oil during transportation. Under these current requirements, railroads are required to complete a

[61] http://www.ntsb.gov/safety/safety-recs/recletters/R-14-004-006.pdf

basic OSRP for oil shipments in a package with a capacity of 3,500 gallons or more, and a comprehensive OSRP is required for oil shipments in a package containing more than 42,000 gallons (1,000 barrels).

Currently, most, if not all, of the rail community transporting oil, including crude oil transported as a hazardous material, is subject to the basic OSRP requirement of 49 CFR 130.31(a) since most, if not all, rail tank cars being used to transport crude oil have a capacity greater than 3,500 gallons. However, a comprehensive OSRP for shipment of oil is only required when the quantity of oil is greater than 42,000 gallons per tank car. Accordingly, the number of railroads required to have a comprehensive OSRP is much lower, or possibly non-existent, because a very limited number of rail tank cars in use would be able to transport a volume of 42,000 gallons in a car.[62]

The proposed rule expands the applicability of comprehensive OSRPs based on thresholds of crude oil that apply to an entire train consist. Specifically, the proposed rule would expand the applicability for OSRPs so that no person may transport a HHFT quantity of liquid petroleum oil unless that person has implemented a comprehensive OSRP.

Each railroad subject to the proposed rule must prepare and submit a comprehensive OSRP that includes a plan for responding, to the maximum extent practicable, to a worst-case discharge and to a substantial threat of such a discharge of oil. The OSRP must also be submitted to the FRA, where it will be reviewed and approved by FRA personnel.

(B) Information Sharing

On May 7, 2014, DOT issued Emergency Restriction/Prohibition Order in Docket No.

[62] The 2014 AAR's Universal Machine Language Equipment Register numbers showed five tank cars listed with a capacity equal to or greater than 42,000 gallons, and none of these cars were being used to transport oil or petroleum products.

DOT-OST-2014-0067,[63] which required each railroad transporting 1,000,000 gallons or more of Bakken crude oil in a single train in commerce within the U.S. to provide certain information in writing to the SERC for each state in which it operates such a train. In the HM-251 (RIN 2137-AE91) NPRM published last year (79 FR 45015; Aug. 1, 2014), PHMSA proposed to codify and clarify the requirements of the Order in the HMR and requested public comment on the various facets of that proposal. Unlike many other requirements in the August 1, 2014 NPRM, the notification requirements were specific to a single train that contains one million gallons or more of UN 1267, Petroleum crude oil, Class 3, sourced from the Bakken shale. In the HHFT Final Rule, PHMSA did not adopt the separate notification requirements proposed in the NPRM and instead relied on the expansion of the existing route analysis and consultation requirements of § 172.820 to include HHFTs to satisfy information sharing needs.

Based on all the intense interests and issues revolving around information sharing, we are proposing in this HM-251B NPRM to add § 174.312 to add a new information sharing provisions to the additional safety and security planning requirements for transportation by rail. This proposed addition will create a tiered approach to information sharing, whereas fusion centers will continue to act as the focal point for risk analysis information deemed SSI and SERCs and TERCs will actively be provided with non-sensitive security information that can aid in emergency preparedness and community awareness. The proposed requirements provide emergency responders with an integrated approach to receiving information about HHFTs.

(2) The objectives and legal basis for the proposed rule.

PHMSA is addressing below the two requirement areas in this proposed rule, Oil Spill

[63] http://www.dot.gov/briefing-room/emergency-order

Response Plans and Information Sharing.

(A) Oil Spill Response Plans

PHMSA, in coordination with FRA, is issuing this NPRM in order to improve response readiness and mitigate effects of rail incidents involving petroleum crude oil transported in HHFTs. The proposed rule is necessary due to the expansion in U.S. energy production, which has led to significant challenges for the country's transportation system. This rule proposes to modernize the OSRP requirements in 49 CFR part 130. This NPRM adjusts the applicability for comprehensive oil spill response plans and clarifies the comprehensive plan requirements. Additionally, this rulemaking proposes to restructure and clarify the requirements of the comprehensive oil spill response plan. The proposed changes respond to commenter requests for requirements for more detailed guidance and provide a better parallel to other federal oil spill response plan regulations promulgated under the OPA 90 authority. A full summary of the changes to the plan requirements are described in the NPRM. Each comprehensive plan must include:[64]

I. Core Plan: A core plan includes an information summary, as proposed in 49 CFR 130.104(a)(2), and any components which do not change between response zones. Each plan must:

- Describe the railroad's response management system, including the functional areas of finance, logistics, operations, planning, and command.
- Demonstrate that the railroad's response management system uses common terminology (e.g., the National Incident Management System) and has a

[64] The following text is provided as an overview of the rule and does not replace regulatory text included in the NPRM.

manageable span of control, a clearly defined chain of command, and sufficiently trained personnel to fill each position.

- Include an information summary as required by § 130.104.
- Certify that the railroad reviewed the National Contingency Plan (NCP) and each applicable Area Contingency Plan (ACP) and that its response plan is consistent with the NCP and each applicable ACP and follows Immediate Notification procedures, as required by § 130.103.
- Include notification procedures and a list of contacts as required in § 130.105.
- Include spill detection and mitigation procedures as required in § 130.106.
- Include response activities and resources as required in § 130.106.
- Certify that applicable employees were trained per § 130.107.
- Describe procedures to ensure equipment testing and a description of the drill program per § 130.108.
- Describe plan review and update procedures per § 130.109.
- Submit the plan as required by § 130.111.

II. Response Zone Appendix: For reach response zone, a railroad must include a response zone appendix to provide the information summary, as proposed in 49 CFR 130.107(b), and any additional components of the plan specific to the response zones. Each response zone appendix must identify:

- A description of the response zone, including county(s) and state(s);

- A list of route sections contained in the response zone, identified by railroad milepost or other designation determined by the railroad;
- Identification of any environmentally sensitive areas per route section; and
- Identification of the location where the response organization will deploy and the location and description of equipment required by § 130.106 (c)(6).

In addition, the proposed rule would require plan holders to identify an OSRO, provided through a contract or other approved means, to respond to a worst-case discharge to the maximum extent practicable within 12 hours.

(B) Information Sharing

In HM-251B NPRM, we are proposing to add to § 174.312 to add new information sharing provisions to the additional safety and security planning requirements for transportation by rail. The proposed requirements provide emergency responders with an integrated approach to receiving information about HHFTs. As proposed, § 174.312 will require a rail carrier of an HHFT to provide a monthly notification to the SERC, TERC, or other appropriate state delegated entities in which it operates. As proposed the notification must meet the following requirements:

- A reasonable estimate of the number of HHFT that the railroad expects to operate each week, through each county within the State or through each tribal jurisdiction;
- The routes over which the HHFTs will operate;
- A description of the hazardous material being transported and all applicable emergency response information required by subparts C and G of part 172 of this subchapter;

- An HHFT point of contact: at least one point of contact at the railroad (including name, title, phone number and address) related to the railroad's transportation of affected trains;
- If a route is additionally subject to the comprehensive spill plan requirements, the notification must include a description of the response zones (including counties and states) and contact information for the qualified individual and alternate, as specified under § 130.104(a);
- On a monthly basis railroads must update the notifications. If there are no changes, the railroad may provide a certification of no change.
- Notifications and updates may be transmitted electronically or by hard copy.
- Each point of contact must be clearly identified by name or title and role (e.g. qualified individual, HHFT point of contact) in association with the telephone number. One point of contact may fulfill multiple roles.
- Copies of HHFT notifications made must be made available to the Department of Transportation upon request.

The proposed changes build upon the requirements adopted in HHFT Final Rule to continue to the comprehensive approach to ensuring the safe transportation of energy products.

The Secretary has the authority to prescribe regulations for the safe transportation, including the security, of hazardous materials in intrastate, interstate, and foreign commerce (49 U.S.C. 5103(b)) and has delegated this authority to PHMSA via 49 CFR 1.97(b).

(3) A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply.

The universe of the entities considered in an IRFA generally includes only those small entities that can reasonably expect to be directly regulated by the regulatory action. Small railroads are the types of small entities potentially affected by this proposed rule.

A "small entity" is defined in 5 U.S.C. 601(3) as having the same meaning as "small business concern" under section 3 of the Small Business Act. This includes any small business concern that is independently owned and operated, and is not dominant in its field of operation. Title 49 U.S.C. 601(4) likewise includes within the definition of small entities non-profit enterprises that are independently owned and operated, and are not dominant in their field of operation.

The U.S. Small Business Administration (SBA) stipulates in its size standards that the largest a "for-profit" railroad business firm may be, and still be classified as a small entity, is 1,500 employees for "line haul operating railroads" and 500 employees for "switching and terminal establishments." Additionally, 5 U.S.C. 601(5) defines as small entities governments of cities, counties, towns, townships, villages, school districts, or special districts with populations less than 50,000.

Federal agencies may adopt their own size standards for small entities in consultation with SBA and in conjunction with public comment. Pursuant to that authority, FRA has published a final Statement of Agency Policy that formally establishes small entities or small businesses as being railroads, contractors, and hazardous materials offerors that meet the revenue requirements of a Class III railroad as set forth in 49 CFR 1201.1-1, which is $20 million or less in inflation-adjusted annual revenues,[65] and commuter railroads or small governmental jurisdictions that serve populations of 50,000 or less. See 68 FR 24891 (May 9, 2003) (codified

[65] For 2012 the Surface Transportation Board (STB) adjusted this amount to $36.2 million.

as appendix C to 49 CFR part 209). The $20 million limit is based on the Surface Transportation Board's revenue threshold for a Class III railroad. Railroad revenue is adjusted for inflation by applying a revenue deflator formula in accordance with 49 CFR 1201.1-1. PHMSA is using this definition for the rulemaking.

Railroads

Not all small railroads would be required to comply with the provisions of this rule. Most of the approximately 738 small railroads that operate in the United States do not transport hazardous materials. Based on the requirements of this proposed rule, the entities potentially affected by requirement are as described below:

(A) Oil Spill Response Plans

For determining the entities that would be affected by the requirements proposed in this rulemaking, PHMSA used the definition of "HHFT" established in the HHFT Final Rule.[66] Based on an evaluation of the 2013 Waybill Sample data and consultation with FRA, PHMSA estimated that 55 small railroads could potentially be affected by this proposed rule as they transport crude oil in HHFTs. Therefore, this proposed rule would impact 7.5 percent of the universe of 738 small railroads.

(B) Information Sharing

The applicability of this requirement is derived from the information published in the HHFT Final Rule. Specifically, the definition of a High-Hazard Flammable Train and the information sharing portion of the routing requirements are related to this NPRM. The HHFT Final Rule defined "High-Hazard Flammable Train" as a continuous block of 20 or more tank cars in a single train or 35 or more cars dispersed through a train loaded with a flammable liquid.

[66] 80 FR 26643, pp 26643–26750. May 8, 2015.

This definition also served as the applicable threshold of many of the requirements in the HHFT rulemaking, including routing requirements. Section 172.820 prescribes additional safety and security planning requirements for transportation by rail. In the HHFT Final Rule, the applicability for routing requirements in § 172.820 were revised to require that any rail carrier transporting an HHFT comply with the additional safety and security planning requirements for transportation by rail. The routing requirements adopted in the HHFT Final Rule are related to this NPRM, as the proposed requirements will create a tiered approach to information sharing; whereas fusion centers will continue to act as the focal point for risk analysis information deemed SSI in § 172.820, SERCs and TERCs will actively be provided with non-sensitive security information in a monthly HHFT notification that can aid in emergency preparedness and community awareness in § 174.312.

The universe of affected entities for the information sharing requirements is different than the number of entities affected under the comprehensive response plan requirement. The applicability of this requirement is derived from the information published in the HHFT Final Rule. Specifically, the definition of an HHFT and the information sharing portion of the routing requirements are related to this NPRM. The number of small entities impacted under this requirement is different from the number of entities impacted under the comprehensive OSRP requirement due to the different applicability of these two requirements. In particular, the comprehensive OSRP requirement applies to HHFTs transporting crude oil (and potentially other petroleum oils), while the information sharing requirement applies to HHFTs transporting both crude oil and ethanol (and potentially other Class 3 flammable liquids). As described under the impact on the small entities section with the routing requirements in the HHFT Final Rule, there are 160 affected small entities under the routing requirements. Thus, the proposed requirement

in this NPRM could potentially affect 160 small railroads transporting flammable liquids in HHFTs. Therefore, this proposed rule would impact 22 percent of the universe of 738 small railroads.

(4) A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule.

For a thorough presentation of cost estimates, please refer to the draft RIA, which has been placed in the docket for this rulemaking. PHMSA is addressing below the two requirements areas in this proposed rule, Oil Spill Response Plans and Information Sharing.

(A) Oil Spill Response Plans

This rule proposes to modernize the requirements by changing the applicability for comprehensive oil spill response plans and clarifying the comprehensive plan requirements. The proposed rule expands the applicability of comprehensive OSRPs to railroads transporting a single train of 20 or more loaded tank cars of liquid petroleum oil in a continuous block or a single train carrying 35 or more loaded tank cars of liquid petroleum oil throughout the train consist. These railroads, that are currently required to develop a basic plan, would now be required to develop a comprehensive plan.

PHMSA describes below the impact on the small railroads that would be required under the proposed alternative which any railroad carrying 20 or more tank cars of liquid petroleum oil in a continuous block or 35 such cars on a single train to submit a comprehensive OSRP. The total cost estimate with the proposed requirements for small railroads in the proposed alternative is conservative, when compared to the cost estimates of the other several alternatives evaluated by PHMSA. PHMSA evaluated several alternatives related to the threshold values for the

universe of affected entities that would be required to submit a comprehensive response plan.[67] For additional information about the development of these cost estimates, the specific differences between a basic and comprehensive OSRP including the estimated cost per railroad by railroad class please refer to the draft RIA, which has been placed in the docket for this rulemaking. For determining the entities that would be affected by the proposed threshold, PHMSA used the definition HHFT from the HHFT Final Rule.[68] PHMSA narrowed the affected entities to only include railroads that transported crude oil and, in consultation with FRA, revised the estimated number of Class III carriers that would be subject to the rulemaking. Based on this assessment, PHMSA estimates there are 73 railroads (7 Class I, 11 Class II, and 55 Class III) that would be subject to this proposed rulemaking. PHMSA specifically requests comment on the approach and estimated values used in this analysis. Each comprehensive plan must include:

I. Core Plan: A core plan includes an information summary, as proposed in 49 CFR 130.104(a)(1), and any components which do not change between response zones.

II. Response Zone Appendix: For reach response zone, a railroad must include a response zone appendix to provide the information summary, as proposed in § 130.107(a)(2), and any additional components of the plan specific to the response zones.

In addition, the proposed rule would require plan holders to identify an OSRO, provided through a contract or other approved means, to respond to a worst-case discharge to the maximum extent practicable within 12 hours.

[67] Under each of these alternatives, the number of Class I and Class II railroads affected by the proposed thresholds does not change. However, the number of Class III railroads that would be subject to the proposed rule ranges from 55 to 20 railroads. Based on evaluation of the 2013 Waybill Sample data and in consultation with the FRA, PHMSA determined that 55 small railroads is the largest number of small railroads that is subject to the proposed option requirements. Please, refer to the draft RIA for additional information regarding the number of impacted entities under the other several alternatives.

[68] 80 FR 26643, pp 26643 -26750. May 8, 2015.

PHMSA has identified several categories of costs related to the development and implementation of a comprehensive response plan. Those costs include the following: plan development, submission, and maintenance; contract fees for designating an OSRO; training and drills; and plan review and approval. For additional information about the development of these cost estimates, please refer to the draft RIA, which has been placed in the docket for this rulemaking.

As noted in section 3 of this IRFA, approximately 55 small railroads carry crude oil in train consists large enough that they would potentially be affected by this rule.

PHMSA considers the average annual cost per railroad relevant for the purposes of this analysis instead of presenting first year and subsequent year cost per railroad due to the nature of frequency of requirements with the development of a comprehensive plan, which varies between annual and every five years. The total undiscounted cost with the plan for the small railroads is $14,595,175 over the ten year period of the analysis. PHMSA estimates the total cost to each small railroad to be $37,613 in the first year and an annual average cost of $25,306 in subsequent years taking into account the costs growing with increases in real wages.[69] Small railroads have annual operating revenues that range from $3 million to $20 million. Previously, FRA sampled small railroads and found that revenue averaged approximately $4.7 million (not discounted) in 2006. One percent of average annual revenue per small railroad is $47,000. Thus, the costs associated with this requirement amount to less than one percent of the railroad's annual operating revenue. PHMSA realizes that some small railroads will have lower annual revenue

[69] Costs per railroad are derived in the draft RIA, with costs for all Class III railroads divided by the 55 impacted railroads. The Year 1 total costs are calculated at $2,068,728. The estimated Year 1cost per railroad is then calculated at $37,613 = $2,068,728/55 small railroads. The average annual cost for the subsequent years is calculated at $1,391,827.4 = $12,526,448/9 years. The estimated average annual cost per small railroad for the subsequent years is then calculated at $25,306 = $1,391,827.4 /55 small railroads.

than $4.7 million. However, PHMSA is confident that this estimate of total cost per small railroad provides a good representation of the cost applicable to small railroads, in general.

In conclusion, PHMSA believes that although some small railroads will be directly impacted, the impact will amount to less than one percent of an average small railroad's annual operating revenue.

(B) Information Sharing

Based on all industry interests and issues revolving around information sharing, in this NPRM we are proposing to add new information sharing provisions to the additional safety and security planning requirements for transportation by rail in a new § 174.312. As discussed previously, § 172.820(g) provides the requirements for rail carrier point of contact on routing issues for SSI. In this NPRM, we are proposing to add § 174.312 to add additional information sharing requirements. As proposed, a rail carrier of a HHFT as defined in § 171.8 of this subchapter must provide the following notification to SERC, TERC, or other appropriate state delegated entities in which it operates. As proposed, information required to be shared must consist of the following:

- A reasonable estimate of the number of affected HHFTs that are expected to travel, per week, through each county within the state.
- The routes over which the affected trains will be transported.
- A description of the materials shipped and applicable emergency response information required by subparts C and G of part 172 of this subchapter.
- At least one point of contact at the railroad (including name, title, phone number and address) responsible for serving as the point of contact for the SERC, TERC, and

relevant emergency responders related to the railroad's transportation of affected trains.

- The information summary elements (e.g. response zone description and contact information for qualified individuals) for the comprehensive oil spill response plan required by § 130.104(a), when applicable.
- Railroads must update notifications made under section 174.312 on a monthly basis.
- Copies of railroad notifications made under section 174.312 of this section must be made available to DOT upon request.

Approximately 160 small railroads carry crude oil and ethanol in train consists large enough that they would potentially be affected by this rule.

PHMSA estimates the total cost of information sharing to each small railroad to be $7,589 in the first year and $2,319 for subsequent years, with costs growing with increases in real wages.[70] Small railroads' annual operating revenues range from $3 million to $20 million. Previously, FRA sampled small railroads and found that revenue averaged approximately $4.7 million (not discounted) in 2006. One percent of average annual revenue per small railroad is $47,000. Thus, the costs associated with this rule amount to less than one percent of the railroad's annual operating revenue. PHMSA realizes that some small railroads will have lower annual revenue than $4.7 million. However, PHMSA is confident that this estimate of total cost per small railroad provides a good representation of the cost applicable to small railroads, in general.

Total Burden on Small Entities

Table 16 provides the total burden on small railroads with the comprehensive OSRP and

[70] Please refer to the draft RIA for full description on how these costs per railroad are derived.

information sharing requirements:

Table 16: Summary undiscounted annual burden on Class III railroads:			
Requirement area	**Number of impacted small railroads**	**Year 1 cost per small railroad - undiscounted**	**Average annual cost in subsequent years per small railroad - undiscounted**
Oil Spill Response Plans	55	$37,613	$25,306
Information Sharing	160	$7,589	$2,319
Total burden per small railroad ($)		$45,202	$27,625

In conclusion, PHMSA believes that although some small railroads will be directly impacted, the impact will amount to less than one percent of an average small railroad's annual operating revenue.

This proposed rule will not have a noticeable impact on the competitive position of the affected small railroads or on the small entity segment of the railroad industry as a whole. The small entity segment of the railroad industry faces little in the way of intramodal competition. Small railroads generally serve as "feeders" to the larger railroads, collecting carloads in smaller numbers and at lower densities than would be economical for the larger railroads. They transport those cars over relatively short distances and then turn them over to the larger systems, which transport them relatively long distances to their ultimate destination, or for handoff back to a smaller railroad for final delivery. Although their relative interests do not always coincide, the relationship between the large and small entity segments of the railroad industry is more supportive and co-dependent than competitive.

It is also rare for small railroads to compete with each other. As mentioned above, small railroads generally serve smaller, lower density markets and customers. They tend to operate in

markets where there is not enough traffic to attract or sustain rail competition, large or small. Given the significant capital investment required (to acquire right-of-way, build track, purchase fleet, etc.), new entry in the railroad industry is not a common occurrence. Thus, even to the extent the proposed rule may have an economic impact, it should have no impact on the intramodal competitive position of small railroads.

In the NPRM, PHMSA seeks information and comments from the industry that might assist in quantifying the number of small offerors who may be economically impacted by the requirements set forth in the proposed rule.

(5) An identification, to the extent practicable, of all Federal rules that may duplicate, overlap, or conflict with the proposed rule

PHMSA is not aware of any relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule. PHMSA will collaborate and coordinate with FRA to ensure that our actions are aligned to the greatest extent practicable. This proposed rule would support most other safety regulations for railroad operations. The proposals in this NPRM work in conjunction with the requirements adopted in the HHFT Final Rule to continue the comprehensive approach to ensuring the safe transportation of energy products, mitigate the consequences of such accidents should they occur.

PHMSA is publishing this IRFA to aid the public in commenting on the potential small business impacts of the proposals in this NPRM. PHMSA invites all interested parties to submit data and information regarding the potential economic impact that would result from adoption of the proposals in this NPRM. PHMSA will consider all comments received in the public comment process when making a determination in the final RFA.

F. Paperwork Reduction Act

PHMSA will request a revision to the information collection from the Office of Management and Budget (OMB) under OMB Control No. 2137-0682, entitled "Flammable Hazardous Materials by Rail Transportation." This NPRM may result in an increase in annual burden and costs under OMB Control No. 2137-0682 due to proposed requirements pertaining to the creation of oil spill response plans and notification requirements for the movement of flammable liquids by rail.

Under the Paperwork Reduction Act of 1995, no person is required to respond to an information collection unless it has been approved by OMB and displays a valid OMB control number. Section 1320.8(d) of Title 5 of the CFR requires that PHMSA provide interested members of the public and affected agencies an opportunity to comment on information and recordkeeping requests.

This document identifies a revised information collection request that PHMSA will submit to OMB for approval based on the requirements in this proposed rule. PHMSA has developed burden estimates to reflect changes in this proposed rule and specifically requests comments on the information collection and recordkeeping burdens associated with this NPRM.

Oil Spill Response Plans

PHMSA estimates that there will be approximately 73 respondents, based on a review of the number of railroad operators in existence that transport trains with 20 or more tank cars loaded with liquid petroleum oil in a continuous block or 35 or more tank cars loaded with liquid petroleum oil throughout the train. PHMSA estimates that it will take a rail operator 80 hours to produce a comprehensive oil spill response plan as proposed in this NPRM. In addition, the oil

spill response plan will have an addendum for each response zone that the applicable trains pass through. It is estimated this addendum will take 15 hours per response zone. In addition, the oil comprehensive response plans will require annual maintenance as well. This annual maintenance is expected to take 20 hours for Class I railroads, 11 hours for Class II railroads, and 9.5 hours for Class III railroads. The hourly labor rate used to estimate the cost of initial plan development and its maintenance is $73.89. This labor rate is based on the median wage estimate from the Bureau of Labor Statistics (BLS) Occupational Employment and Wages, May 2014 for the wage series "11-1021 General and Operational Managers."

Initial Oil Spill Response Plan – Developed and then reviewed by the railroad in full every 5 years

There are 7 Class I railroads in existence that will be required to create a comprehensive oil spill response plan at 80 hours per plan resulting in 560 burden hours. Each Class I railroad is expected to have 8 response zones at 15 hours per response zone resulting in 840 burden hours. Combined this will result in a total of 1,400 burden hours Class I railroad oil spill response plans. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in a burden cost of $103,446.00.

There are 11 Class II railroads in existence that will be required to create a comprehensive oil spill response plan at 80 hours per response plan resulting in 880 burden hours. Each Class II railroad is expected to have 2 response zones at 15 hours per zone resulting in 330 burden hours. Combined this will result in a total of 1,210 burden Class II railroad oil spill response plans. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in a burden cost of $89,406.90.

There are 55 Class III railroads in existence that will be required to create a

comprehensive oil spill response plan at 80 hours per response plan resulting in 4,400 burden hours. Each class III railroad is expected to pass through 1 response zones at 15 hours per zone resulting in 825 burden hours. Combined this will result in a total of 5,225 burden hours for Class III railroads oil spill response plans. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in a burden cost of $386,075.25.

The total annual burden hours for all oil spill response plans is 8,795 burden hours. The total burden cost is $649,862.55. The review of a comprehensive plan is required every 5 years resulting in an annual burden of 1,567 hours per year and a total annual cost of $115,785.63. Presented below is a summary of the numbers describe above:

Initial Oil Spill Response Plan – Developed and then reviewed by the railroad in full every 5 years

Class I – (7 Responses X 80 Hours per plan) + (7 responses x 8 Response Zones x 15 hours per zone) = 1,400 burden hours x $73.89 hourly rate = $103,446.00

Class II – (11 Response x 80 Hours per plan) + (11 response x 2 Response Zones x 15 hours per zone) = 1,210 burden hours x $73.89 hourly rate = $89,406.90.

Class III – (55 Response x 80 Hours per plan) + (55 responses x 1 Response Zone x 15 hours per zone) = 5,225 burden hours x $73.89 hourly rate = $386,075.25.

Total Hours = 7,835 / 5 years = **1,567** Annual Burden Hours x $73.89 = **$115,785.63** in Annual Cost.

<u>Oil Spill Response Plan Maintenance – Done Annually</u>

There are 7 Class I railroads in existence that will be required to annually maintain their oil spill response plan at 20 hours per plan resulting in 140 annual burden hours. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in an annual

burden cost of $10,344.60.

There are 11 Class II railroads in existence that will be required to annually maintain their oil spill response plan at 11 hours per plan resulting in 121 annual burden hours. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in an annual burden cost of $8,940.69.

There are 55 Class III railroads in existence that will be required to annually maintain their oil spill response plan at 9.5 hours per plan resulting in 525.5 annual burden hours. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in an annual burden cost of $38,829.20

The sum of the total annual burden hours presented above is 783.5 burden hours.

Presented below is a summary of the numbers describe above:

Class I – 7 Responses x 20 Hours per response = 140 annual burden hours x $73.89 = $10,344.60 annual burden cost.

Class II – 11 Response x 11 Hours per response = 121 annual burden hours x $73.89 = $8,940.69 annual burden cost.

Class III – 55 response x 9.5 hours per response = 522.5 annual burden hours x $73.89 = $386,075.25 annual burden cost.

Total Hours for Plan Maintenance = **783.5** Annual Burden Hours x $73.89 per hour = **$57,892.81** annual burden cost.

Notifications to Emergency Response Commissions

For the creation of the initial HHFT information sharing notification PHMSA estimates that there will be approximately 178 respondents based on a review of the number of railroad operators shipping class 3 flammable liquids. PHMSA estimates that it will take a rail operator

30 hours to create initial notification plan for the State Emergency Response Commissions (SERCs), 30 hours to create initial notification plan for the Tribal Emergency Response Commissions (TERCs), and 15 hours to create the initial plan for other state delegated agencies.

Class I Railroads.

PHMSA expects 7 responses (30 hours per response) resulting in 210 burden hours for SERC plans. PHMSA expects 7 responses (30 hours per response) resulting in 210 burden hours for TEPC plans. PHMSA expects 7 responses (15 hours per response) resulting in 105 burden hours for other state delegated agency plans. This will result in an initial one year total burden of 525 hours for Class I railroads. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in an annual burden cost of $38,792.25.

Class II Railroads.

PHMSA expects 11 responses (30 hours per response) resulting in 330 burden hours for SERC plans. PHMSA expects 11 responses (30 hours per response) resulting in 330 burden hours for TERC plans. PHMSA expects 11 responses (15 hours per response) resulting in 115 burden hours for other state delegated agency plans. This will result in an initial one year total burden of 775 hours for Class II railroads. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in an annual burden cost of $57,264.75.

Class III Railroads.

PHMSA expects 160 responses (30 hours per response) resulting in 4,800 burden hours for SERC plans. PHMSA expects 160 responses (30 hours per response) resulting in 4,800 burden hours for TERC plans. PHMSA expects 160 responses (15 hours per response) resulting in 2,400 burden hours for other state delegated agency plans. This will result in an initial one year total burden of 12,000 hours for Class III railroads. This task will be performed by an

operations manager at an hourly wage of $73.89 resulting in an annual burden cost of $886,680.00.

Initial plan creation (year one- one time)

Class I – 7 responses x 30 hours for SERC plan = 210 burden hours

7 responses x 30 hours for TERC plan =210 burden hours

7 responses x 15 hours for other state delegated agency plan = 105 burden hours

Class II – 11 responses x 30 hours for SERC plan = 330 burden hours

11 responses x 30 hours for TERC plan = 330 burden hours

11 responses x 15 hours for other state delegated agency plan = 115 burden hours

Class III – 160 responses x 30 hours for SERC plan = 4,800 burden hours

160 responses x 30 hours for TERC plan = 4,800 burden hours

160 responses x 15 hours for other state delegated agency plan = 2,400 burden hours

Total initial year burden = **13,300** burden hours/ **$982,737.00** burden cost.

For the maintenance of the notification plan PHMSA estimates that there will be approximately 178 respondents based on a review of the number of railroad operators shipping class 3 flammable liquids. PHMSA estimates that it will take a rail operator 12 hours to maintain notification plan for the SERCs, 12 hours to maintain notification plan for TERCs, and 6 hours to maintain the plan for other state delegated agencies.

Class I Railroads.

PHMSA expects 7 responses (12 hours per response) resulting in 84 burden hours for SERC plans. PHMSA expects 7 responses (12 hours per response) resulting in 84 burden hours for TERC plans. PHMSA expects 7 responses (6 hours per response) resulting in 42 burden hours for other state delegated agency plans. This will result in an annual total burden of 210

hours for Class I railroads. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in an annual burden cost of $15,516.90.

Class II Railroads.

PHMSA expects 11 responses (12 hours per response) resulting in 132 burden hours for SERC plans. PHMSA expects 11 responses (12 hours per response) resulting in 132 burden hours for TERC plans. PHMSA expects 11 responses (6 hours per response) resulting in 66 burden hours for other state delegated agency plans. This will result in an initial one year total burden of 775 hours for Class II railroads. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in an annual burden cost of $57,264.75.

Class III Railroads.

PHMSA expects 160 responses (12 hours per response) resulting in 1,920 burden hours for SERC plans. PHMSA expects 160 responses (12 hours per response) resulting in 1,920 burden hours for TERC plans. PHMSA expects 160 responses (6 hours per response) resulting in 960 burden hours for other state delegated agency plans. This will result in an initial one year total burden of 4,800 hours for Class III railroads. This task will be performed by an operations manager at an hourly wage of $73.89 resulting in an annual burden cost of $35,240.00.

Annual Maintenance

Class I – 7 responses x 12 hours for SERC plan = 84 burden hours

7 responses x 12 hours for TERC plan =84 burden hours

7 responses x 6 hours for other state delegated agency plan = 42 burden hours

Class II – 11 responses x 12 hours for SERC plan = 132 burden hours

11 responses x 12 hours for TERC plan =132 burden hours

11 responses x 6 hours for other state delegated agency plan = 66 burden hours

Class III – 160 responses x 12 hours for SERC plan = 1,920 burden hours

160 responses x 12 hours for TERC plan = 1,920 burden hours

160 responses x 6 hours for other state delegated agency plan = 960 burden hours

Total annual maintenance burden **5,785/ $427,021.65**

Total Additional Burden

OMB No. 2137-0682: Flammable Hazardous Materials by Rail Transportation

Additional One Year Annual Burden:

Additional Annual Number of Respondents:	178
Additional Annual Responses:	1,127
Additional Annual Burden Hours:	21,435.5
Additional Annual Burden Cost:	$1,583,437.09

Additional Subsequent Year Burden:

Additional Annual Number of Respondents:	593
Additional Annual Responses:	593
Additional Annual Burden Hours:	8,135.5
Additional Annual Burden Cost:	$595,700.09

Please direct your requests for a copy of the information collection to T. Glenn Foster or Steven Andrews, U.S. Department of Transportation, Pipeline & Hazardous Materials Safety Administration (PHMSA), East Building, Office of Hazardous Materials Standards (PHH-12), 1200 New Jersey Avenue Southeast Washington DC, 20590, Telephone (202) 366-8553.

G. Environmental Assessment

PHMSA has analyzed this rule in accordance with the National Environmental Policy Act

of 1969 (NEPA) (42 U.S.C. 4321, et seq.), as amended; the Council on Environmental Quality Regulations (CEQ) regulations implementing NEPA (40 CFR parts 1500-1508); the U.S. Department of Transportation (DOT) Order 5610.C (September 18, 1979, as amended on July 13, 1982 and July 30, 1985), entitled Procedures for Considering Environmental Impacts; and other pertinent environmental regulations, Executive Orders, statutes, and laws for consideration of environmental impacts of PHMSA actions. The agency relies on all authorities noted above to ensure that it actively incorporates environmental considerations into informed decision-making on all of its actions, including rulemaking. A "Draft Environmental Assessment" (Draft EA) and a draft "Finding of No Significant Impact" (FONSI) are available in the docket PHMSA-2014-0105 (HM-251B). PHMSA has concluded that this action would have a positive effect on the human and natural environments since these response plan and information requirements would mitigate environmental consequences of spills related to rail transport of certain hazardous materials by reducing the severity of incidents as follows:

Oil Spill Response Planning	• Improved Response Times • Improved Communication / Defined Command Structure • Better Access to Equipment • Trained Responders
Information Sharing	• Improved Communication • Enhanced Preparedness

A NEPA Environmental Checklist is available in the docket PHMSA-2014-0105 (HM-251B).

H. Privacy Act

In accordance with 5 U.S.C. 553(c), DOT solicits comment 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. The electronic form of these written communications and comments can be searched by the name of the individual submitting the document (or signing the document, if submitted on behalf of an association, business, labor union, etc.). The DOT's complete Privacy Act Statement is available at http://www.dot.gov/privacy.

I. Statutory/Legal Authority for this Rulemaking

This NPRM is published under the authority of 33 U.S.C. 1321, The Federal Water Pollution Control Act (FWPCA), which directs the President to issue regulations requiring owners and operators of certain vessels and onshore and offshore oil facilities to develop, submit, update, and in some cases obtain approval of oil spill response plans. Executive Order 12777 delegated responsibility to the Secretary of Transportation for certain transportation-related facilities. The Secretary of Transportation delegated the authority to promulgate regulations to PHMSA and provides the FRA with approval authority for railroad ORSPs. A Memorandum of Understanding (MOU) between the DOT and EPA further establishes jurisdictional guidelines for implementing OPA (36 FR 24080). The proposed changes to part 130 in this rule address minimizing the impact of a discharge of oils into the navigable waters or adjoining shorelines.

This NPRM is also published under the authority of 49 U.S.C. 5103(b), The Federal hazardous materials transportation law, which authorizes the Secretary of Transportation to "prescribe regulations for the safe transportation, including security, of hazardous materials in intrastate, interstate, and foreign commerce." The proposed changes in this rule to §§ 171.7, 173.121, and 174.312 address safety and security vulnerabilities regarding the transportation of

hazardous materials in commerce. The requirements proposed in § 174.312 are also mandated by Public Law 114-94, commonly known as the Fixing America's Surface Transportation Act, or the "FAST" Act.

The Federal railroad safety laws, at 49 U.S.C. 20103, provide the Secretary of Transportation with authority over all areas of railroad transportation safety and the Secretary has delegated this authority to the FRA. See 49 CFR 1.89. Pursuant to its statutory authority, FRA promulgates and enforces a comprehensive regulatory program (49 CFR parts 200-244) addressing issues such as railroad track, signal systems, railroad communications, and rolling stock. The FRA inspects railroads and shippers for compliance with both FRA and PHMSA regulations.

J. 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.

K. Executive Order 13211

Executive Order 13211 ("Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use"), published May 22, 2001 [66 FR 28355], requires Federal agencies to prepare a Statement of Energy Effects for any "significant energy action." Under the Executive Order, a "significant energy action" is defined as any action by an agency (normally published in the **Federal Register**) that promulgates, or is expected to lead to the promulgation

of, a final rule or regulation (including a notice of inquiry, advance NPRM, and NPRM) that (1)(i) is a significant regulatory action under Executive Order 12866 or any successor order and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action.

PHMSA has evaluated this action in accordance with Executive Order 13211. See Section VIII, Subsection G ("Environmental Assessment") for a more thorough discussion of environmental impacts and the supply, distribution, or use of energy. PHMSA has determined that this action will not have a significant adverse effect on the supply, distribution, or use of energy. Consequently, PHMSA has determined that this regulatory action is not a "significant energy action" within the meaning of Executive Order 13211.

IX. List of Subjects

49 CFR Part 130

Oil Spill Prevention and Response.

49 CFR Part 171

Exports, Hazardous materials transportation, Hazardous waste, Imports, Incorporation by reference, 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, Rail carriers, Reporting and recordkeeping

requirements, Security measures.

In consideration of the foregoing, we propose to amend title 49, chapter I, as follows:

PART 130 — OIL SPILL RESPONSE PLANS

1. In part 130, revise the Table of Contents to read as follows:

Subpart A – Applicability and General Requirements
130.1 Purpose.
130.2 Scope.
130.3 General requirements.
130.5 Definitions.
130.11 Communication requirements.
130.21 Packaging requirements.
Subpart B – Basic Spill Response Plans
130.31 Basic spill response plans.
130.33 Basic response plan implementation.
Subpart C – Comprehensive Oil Spill Response Plans
130.101 Applicability for comprehensive plans.
130.102 General requirements for comprehensive plans.
130.103 National Contingency Plan (NCP) and Area Contingency Plan (ACP) compliance for comprehensive plans.
130.104 Information summary for comprehensive plans.
130.105 Notification procedures and contacts for comprehensive plans.
130.106 Response and mitigation activities for comprehensive plans.
130.107 Training procedures for comprehensive plans.
130.108 Equipment testing and drill procedures for comprehensive plans.
130.109 Recordkeeping and plan update procedures for comprehensive plans.
130.111 Submission and approval procedures for comprehensive plans.
130.112 Response plan implementation for comprehensive plans.

2. The authority citation for part 130 continues to read as follows:

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

3. Add a heading for Subpart A immediately before § 130.1 to read as follows:

Subpart A — Applicability and General Requirements

§ 130.2 [Amended]

4. In § 130.2 amend paragraph (d) to remove "§ 130.31(b)" and addd in its place "subpart C".

5. In § 130.5:

a. The introductory text is amended to redesignate the definition for "animal fat" in alphabetical order.

b. The definitions for "Adverse Weather," "Environmentally Sensitive or Significant Areas," "Maximum Potential Discharge," "Oil Spill Response Organization," "On-scene Coordinator (OSC)," "Response activities," "Response Plan," and "Response Zone" are added in alphabetical order.

c. The definitions for "Liquid," "Person," "Petroleum Oil," and "Worst-case discharge" are revised.

The additions and revisions read as follows:

§ 130.5 Definitions.

In this subchapter:

Adverse weather means the weather conditions (e.g., ice conditions, temperature ranges, flooding, strong winds) that will be considered when identifying response systems and equipment to be deployed in accordance with a response plan.

Animal fat means a non-petroleum oil, fat, or grease derived from animals, not specifically identified elsewhere in this part.

* * * * *

Environmentally sensitive or significant areas means areas that may be identified by their legal designation or by evaluations of Area Committees (for planning) or members of the Federal On-Scene Coordinator's spill response structure (during responses). These areas may include wetlands, National and State parks, critical habitats for endangered or threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and State lands that are research national areas, heritage program areas, land trust areas, and historical and archaeological sites and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats.

* * * * *

Liquid means a material that has a vertical flow of over two inches (50 mm) within a three-minute period, or a material having one gram or more liquid separation, when determined in accordance with the procedures specified in ASTM D 4359-84, "Standard Test Method for Determining Whether a Material is a Liquid or a Solid," 1990 edition, which is incorporated by reference.

NOTE: This incorporation by reference has been approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. A copy may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103. Copies may be inspected at the Office of Hazardous Materials Safety, Standards and Rulemaking Division, DOT headquarters East Building, 1200 New Jersey Avenue, SE., Washington, DC 20590, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

* * * * *

Maximum potential discharge means a planning volume for a discharge from a motor vehicle or rail car equal to the capacity of the cargo container.

* * * * *

Oil spill response organization (OSRO) means an entity that provides response resources.

On-scene Coordinator (OSC) means the Federal official pre-designated by the Administrator of the United States Environmental Protection Agency (EPA)or by the Commandant of the United States Coast Guard (USCG)to coordinate and direct federal response under subpart D of the National Contingency Plan (40 CFR part 300).

* * * * *

Person: means an individual, firm, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body, as well as a department, agency, or instrumentality of the executive, legislative or judicial branch of the Federal Government. This definition includes railroads.

Petroleum oil means any oil extracted or derived from geological hydrocarbon deposits, including oils produced by distillation or their refined products .

* * * * *

Response activities means the containment and removal of oil from navigable waters and adjoining shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to the environment.

Response plan means a basic plan meeting requirements of subpart B or a comprehensive plan meeting requirements of subpart C. For comprehensive plans this definition includes both the railroad's core plan and the response zone appendices for responding, to the maximum extent practicable, to a worst case discharge of oil or the substantial threat of such a discharge.

Response zone means one or more route segments identified by the railroad utilizing the response resources which are available to respond within 12 hours after the discovery of a worst-case discharge or to mitigate the substantial threat of such a discharge for a comprehensive plan meeting requirements of subpart C.

* * * * *

Worst-case discharge means "the largest foreseeable discharge in adverse weather conditions," as defined at 33 U.S.C. 1321(a)(24). The largest foreseeable discharge includes discharges resulting from fire or explosion. The worst-case discharge from a train consist is the greater of: (1) 300,000 gallons of liquid petroleum oil; or (2) 15% of the total lading of liquid petroleum oil transported within the largest train consist reasonably expected to transport liquid petroleum oil in a given response zone.

* * * * *

6. Add a new subpart B heading immediately before § 130.31 to read as follows:

Subpart B — Basic Spill Response Plans

7. In § 130.31:

   a. Revise the section heading.

   b. Revise paragraph (a) introductory text and paragraph (b).

   The revisions read as follows:

§ 130.31 Basic spill response plans.

(a) No person may transport liquid petroleum oil in a packaging having a capacity of 3,500 gallons or more unless that person has a current basic written plan that:

* * * * *

(b) A person with a comprehensive plan in conformance with the requirements of subpart C of this part 130 is not required to also have a basic spill prevention plan.

7. Revise § 130.33 heading to read as follows:

§130.33 Basic response plan implementation.

* * * * *

8. Add subpart C to read as follows:

Subpart C — Comprehensive Oil Spill Response Plans

§ 130.101 Applicability for comprehensive plans.

(a) Any railroad which transports any liquid petroleum or other non-petroleum oil subject to this part in a quantity greater than 42,000 gallons (1,000 barrels) per packaging must have a current comprehensive written plan meeting the requirements of this subpart; or

(b) Any railroad which transports a single train transporting 20 or more loaded tank cars of liquid petroleum oil in a continuous block or a single train carrying 35 or more loaded tank cars of liquid petroleum oil throughout the train consist must have a current comprehensive written plan meeting the requirements of this subpart. Tank cars carrying mixtures or solutions of petroleum oil not meeting the criteria for Class 3 flammable or combustible material in

§ 173.120 of this chapter, or containing residue, are not required to be included when determining the number of tank cars transporting liquid petroleum oil in paragraph (b) of this section.

(c) The requirements of this subpart do not apply if the oil being transported is otherwise excepted per § 130.2(c).

(d) A railroad required to develop a response plan in accordance with this section may not transport oil (including handling and storage incidental to transport) unless—

(1) The response plan is submitted, reviewed, and approved as required by § 130.111 of this part or in conformance with paragraph (e) of this section; and

(2) The railroad is operating in compliance with the response plan.

(e) A railroad required to develop a response plan in accordance with this section may continue to transport oil without an approval from FRA provided all of the following criteria are met:

(1) The railroad submitted a plan in accordance with the requirements of § 130.111(a);

(2) The submitted plan includes the certification in § 130.106(a)(1);

(3) The railroad is operating in compliance with the submitted plan; and

(4) FRA has not issued a final decision that all or part of the plan does not meet the requirements of this subpart.

§ 130.102 General requirements for comprehensive plans.

(a) Each railroad subject to this subpart must prepare and submit a plan including resources and procedures for responding, to the maximum extent practicable, to a worst-case discharge, and to a substantial threat of such a discharge, of oil. The plan must use the National

Incident Management System (NIMS) and Incident Command System (ICS):

(b) Response plan format. Each response plan must be formatted to include:

(1) *Core plan*: The response plan must include a core plan containing an information summary required by § 130.104(a)(1) of this part and information which does not change between different response zones; and

(2) *Response Zone Appendix or Appendices*: For each response zone included in the response plan, the response plan must include a response zone appendix that provides the information summary required by § 130.104(a)(2) of this part and any additional information which differs between response zones. In addition, each response zone appendix must identify all of the following:

(i) A description of the response zone, including county(s) and state(s);

(ii) A list of route sections contained in the response zone, identified by railroad milepost or other identifier;

(iii) Identification of environmentally sensitive or significant areas per route section as determined by § 130.103 of this part; and

(iv) The location where the response organization will deploy, and the location and description of the response equipment required by § 130.106(c)(6) of this part.

(c) Instead of submitting a response plan, a railroad may submit an Annex of an Integrated Contingency Plan (ICP) if the Annex provides equivalent or greater spill protection than a response plan required under this part. Guidance on the ICP is available in the Federal Register or electronically from the National Service Center for Environmental Publications (NSCEP) (https://www.epa.gov/nscep)

§ 130.103 National contingency plan (NCP) and area contingency plan (ACP) compliance for comprehensive plans.

(a) A railroad must certify in the response plan that it reviewed the NCP (40 CFR part 300) and each applicable ACP and that its response plan is consistent with the NCP and each applicable ACP as follows:

(1) At a minimum, for consistency with the NCP, a comprehensive response plan must:

(i) Demonstrate a railroad's clear understanding of the function of the federal response structure, reflecting the relationship between the response organization's role and the Federal-On-Scene Coordinator's role in pollution response (e.g. inclusion of the OSC in a Unified Command, and a statement that the OSC has highest authority on-scene).

(ii) Include procedures to immediately notify the National Response Center; and

(iii) Establish provisions to ensure the protection of safety at the response site.

(2) At a minimum, for consistency with the applicable ACP (or Regional Contingency Plan (RCP) for areas lacking an ACP), the comprehensive response plan must:

(i) Address the removal of a worst-case discharge, and the mitigation or prevention of the substantial threat of a worst-case discharge, of oil;

(ii) Identify environmentally sensitive or significant areas as defined in section 130.5 of this part, along the route, which could be adversely affected by a worst-case discharge and incorporate appropriate deflection and protection response strategies to protect these areas;

(iii) Describe the responsibilities of the persons involved and of Federal, State, and local agencies in removing a discharge and in mitigating or preventing a substantial threat of a discharge; and

(iv) Identify the procedures to obtain any required federal and state authorization for

using alternative response strategies such as in-situ burning and/or chemical agents as provided for in the applicable ACP and subpart J of 40 CFR part 300.

(b) Reserved.

§ 130.104 Information summary for comprehensive plans.

(a) Each person preparing a comprehensive response plan is subject to the following content requirements of the plan:

(1) The information summary for the core plan must include all of the following:

(i) The name and mailing address of the railroad;

(ii) A listing and description of each response zone, including county(s) and state(s); and

(iii) The name or title of the qualified individual(s) and alternate(s) for each response zone, with telephone numbers at which they can be contacted on a 24-hour basis.

(2) The information summary for each response zone appendix must include all of the following:

(i) The name and mailing address of the railroad;

(ii) A listing and description of the response zone, including county(s) and state(s);

(iii) The name or title of the qualified individual(s) and alternate(s) for the response zone, with telephone numbers at which they can be contacted on a 24-hour basis;

(iv) The quantity and type of oil carried; and

(v) Determination of the worst-case discharge and supporting calculations.

(b) *Form of information*: The information summary should be listed first before other information in the plan or clearly identified through the use of tabs or other visual aids.

§ 130.105 Notification procedures and contacts for comprehensive plans.

(a) The railroad must develop and implement notification procedures which include all of the following:

(1) Procedures for immediate notification of the qualified individual or alternate;

(2) A checklist of the notifications required under the response plan, listed in the order of priority;

(3) The primary and secondary communication methods by which notifications can be made;

(4) The circumstances and necessary time frames under which the notifications must be made; and

(5) The information to be provided in the initial and each follow-up notification.

(b) The notification procedures must include the names and addresses of the following individuals or organizations, with the ten-digit telephone numbers at which they can be contacted on a 24-hour basis:

(1) The oil spill response organization(s);

(2) Applicable insurance representatives or surveyors for each response zone;

(3) The National Response Center (NRC);

(4) Federal, state, and local agencies which the railroad expects to have pollution control responsibilities or support; and

(5) Personnel or organizations to notify for the activation of equipment and personnel resources identified in § 130.106.

§ 130.106 Response and mitigation activities for comprehensive plans.

(a) Each railroad must certify that they have identified and ensured by contract or other means the private response resources in each response zone necessary to remove, to the maximum extent practicable, a worst-case discharge. The certification must be signed by the qualified individual or an appropriate corporate officer.

(b) Each railroad must identify and describe in the plan the response resources which are available to arrive onsite within 12 hours after the discovery of a worst-case discharge or the substantial threat of such a discharge It is assumed that response resources can travel according to a land speed of 35 miles per hour, unless the railroad can demonstrate otherwise.

(c) Each plan must identify all of the following information for response and mitigation activities:

(1) Methods of initial discharge detection;

(2) Responsibilities of and actions to be taken by personnel to initiate and supervise response activities pending the arrival of the qualified individual or other response resources identified in the response plan that are necessary to ensure the protection of safety at the response site and to mitigate or prevent any discharge from the tank cars;

(3) The qualified individual's responsibilities and authority;

(4) Procedures for coordinating the actions of the railroad or qualified individual with the actions of the U.S. EPA or U.S. Coast Guard On-Scene Coordinator responsible for monitoring or directing response and mitigation activities;

(5) The oil spill response organization's responsibilities and authority; and

(6) For each oil spill response organization identified under this section, a listing of:

(i) Equipment, supplies, and personnel available and location thereof, including equipment suitable for adverse weather conditions and the personnel necessary to continue

operation of the equipment and staff the oil spill response organization during the response; or

(ii) In lieu of the listing of equipment, supplies, and personnel, a statement that the response organization is an Oil Spill Removal Organization that has been approved by the United States Coast Guard under 33 CFR 154.1035 or 155.1035.

§ 130.107 Training procedures for comprehensive plans.

(a) A railroad must certify in the response plan that it conducted training to ensure that:

(1) All railroad employees subject to the plan know—

(i) Their responsibilities under the comprehensive oil spill response plan; and

(ii) The name of, and procedures for contacting, the qualified individual or alternate on a 24-hour basis;

(2) Reporting personnel also know—

(i) The content of the information summary of the response plan;

(ii) The toll-free telephone number of the National Response Center; and

(iii) The notification process required by § 130.105 of this subpart.

(b) Recurrent training. Employees subject to this section must be trained at least once every five years or, if the plan is revised during the five-year recurrent training cycle, within 90 days of implementation of the revised plan. New employees must be trained within 90 days of employment or change in job function.

(c) *Recordkeeping*. Each railroad must create and retain a record of current training of all railroad personnel engaged in oil spill response, inclusive of the preceding five years, in accordance with this section for as long as that employee is employed and for 90 days thereafter. A railroad must make the employee's record of training available upon request, at a reasonable

time and location, to an authorized official of the Department of Transportation. The record must include all of the following:

(1) The employee's name;

(2) The most recent training completion date of the employee's training;

(3) The name and address of the person providing the training; and

(4) Certification statement that the designated employee has been trained, as required by this subpart.

(d) Nothing in this section relieves a person from the responsibility to ensure that all personnel are trained in accordance with other regulations. Response personnel may be subject to the Occupational Safety and Health Administration (OSHA) standards for emergency response operations in 29 CFR 1910.120, including volunteers or casual laborers employed during a response who are subject to those standards pursuant to 40 CFR part 311. Hazmat employees, as defined in § 171.8, are subject to the training requirements in subpart H of part 172 of this chapter, including safety training.

§ 130.108 Equipment testing and drill procedures for comprehensive plans.

(a) The plan must include a description of the methods used to ensure equipment testing meets the manufacturer's minimum recommendations or equivalent.

(b) A railroad must implement and describe a drill program following the National Preparedness for Response Exercise Program (PREP) guidelines, which can be found using the search function on the USCG's web page, http://www.uscg.mil. These guidelines are also available from the TASC DEPT Warehouse, 33141Q 75th Avenue, Landover, MD 20875 (fax: 301-386-5394, stock number USCG-X0241). A railroad choosing not to follow PREP guidelines

must have a drill program that is equivalent to PREP. The plan must include a description of the drill procedures and programs the railroad uses to assess whether its response plan will function as planned, including the types of drills and their frequencies.

(c) *Recordkeeping*. Railroads must keep records showing the exercise dates and times, and the after action reports that accompany the response plan exercises, and provide copies to Department of Transportation representatives upon request.

§ 130.109 Recordkeeping and plan update procedures for comprehensive plans.

(a) *Recordkeeping*. For purposes of this part, copy means a hardcopy or an electronic version. Each railroad must:

(1) Maintain a copy of the complete plan at the railroad's principal place of business;

(2) Provide a copy of the core plan and the appropriate response zone appendix to each qualified individual and alternate; and

(3) Provide a copy of the information summary to each dispatcher in response zones identified in the plan.

(b) Each railroad must include procedures to review the plan after a discharge requiring the activation of the plan in order to evaluate and record the plan's effectiveness.

(c) Each railroad must update its plan to address new or different conditions or information. In addition, each railroad must review its plan in full at least every 5 years from the date of the last approval.

(d) If changes to the plans are made, updated copies of the plan must be provided to every individual referenced under paragraph (a) of this section.

(e) If new or different operating conditions or information would substantially affect the

implementation of the response plan, the railroad must immediately modify its plan to address such a change and must submit the change to FRA within 90 days in accordance with § 130.111. Examples of changes in operating conditions or information that would substantially affect a railroad's response plan are:

(1) Establishment of a new railroad route, including an extension of an existing railroad route, construction of a new track, or obtaining trackage rights over a route not covered by the previously approved plan;

(2) The name of the oil spill response organization;

(3) Emergency response procedures;

(4) The qualified individual;

(5) A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities; or

(6) Any other information relating to circumstances that may affect full implementation of the plan.

(f) If FRA determines that a change to a response plan does not meet the requirements of this part, FRA will notify the operator of any alleged deficiencies, and provide the railroad with an opportunity to respond, including an opportunity for an informal conference, to any proposed plan revisions, as well as an opportunity to correct any deficiencies.

(g) A railroad who disagrees with a determination that proposed revisions to a plan are deficient may petition FRA for reconsideration, within 30 days from the date of receipt of FRA's notice. After considering all relevant material presented in writing or at an informal conference, FRA will notify the railroad of its final decision. The railroad must comply with the final decision within 30 days of issuance unless FRA allows additional time.

§ 130.111 Submission and approval procedures for comprehensive plans.

(a) Each railroad must submit a copy of the response plan required by this part. Copies of the response plan must be submitted to: Associate Administrator for Railroad Safety, Federal Railroad Administrator (FRA), 1200 New Jersey Avenue, SE, Washington, DC 20590-0001. Note: Submission of plans contained in an electronic format is preferred.

(b) If FRA determines that a response plan requiring approval does not meet all the requirements of this part, FRA will notify the railroad of any alleged deficiencies and provide the railroad an opportunity to respond, including the opportunity for an informal conference, to any proposed plan revisions, as well as an opportunity to correct any deficiencies.

(c) A railroad who disagrees with the FRA determination that a plan contains alleged deficiencies may petition FRA for reconsideration within 30 days from the date of receipt of FRA's notice. After considering all relevant material presented in writing or at an informal conference, FRA will notify the operator of its final decision. The railroad must comply with the final decision within 30 days of issuance unless FRA allows additional time.

(d) FRA will approve the response plan if FRA determines that the response plan meets all requirements of this part. FRA may consult with the U.S. Environmental Protection Agency (EPA) or the U.S. Coast Guard (USCG) allowing an On-Scene Coordinator (OSC) to identify concerns about the railroad's ability to respond to a worst-case discharge or implement the plan as written. EPA or the USCG would not be responsible for plan approval.

(e) If FRA receives a request from an OSC to review a response plan, FRA may require a railroad to give a copy of the response plan to the OSC. FRA may consider OSC comments on response techniques, protecting fish, wildlife and environmentally sensitive environments, and

on consistency with the ACP. FRA remains the approving authority for the response plan.

(f) A railroad may ask for confidential treatment in accordance with the procedures in 49 CFR 209.11.

§ 130.112 Response plan implementation for comprehensive plans.

If, during transportation of oil subject to this part, a discharge of oil occurs—into or on the navigable waters; on the adjoining shorelines to the navigable waters; or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of, the United States—the person transporting the oil must implement the plan required by §130.101, and in a manner consistent with the National Contingency Plan, 40 CFR part 300, or as otherwise directed by the On-Scene Coordinator.

PART 171--GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

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

Authority: 49 U.S.C. 5101–5128, 44701; Pub. L. 101–410 section 4 (28 U.S.C. 2461 note); Pub. L. 104-121, sections 212-213; Pub. L. 104–134, section 31001; 49 CFR 1.81 and 1.97.

10. In 171.7, redesignate paragraphs (h)(45) through (h)(51) as (h)(46) through (h)(52) and add new paragraph (h)(45) to read as follows:

§ 171.7 Reference material.

* * * * *

(h) * * *

(45) ASTM D7900-13 Standard Test Method for Determination of Light Hydrocarbons in Stabilized Crude Oils by Gas Chromatography, 2013, into §173.121.

* * * * *

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

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

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

12. In § 173.121 add paragraph (a)(2)(vi) to read as follows:

§ 173.121 Class 3—Assignment of packing group.

* * * * *

(a) * * *

(2) * * *

(vi) Petroleum products containing known flammable gases – Standard Test Method for Determination of Light Hydrocarbons in Stabilized Crude Oils by Gas Chromatography (ASTM D7900). The initial boiling point is the temperature at which 0.5 weight percent is eluted when determining the boiling range distribution.

* * * * *

PART 174—CARRIAGE BY RAIL

13. The authority citation for part 174 is revised to read as follows:

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

14. In § 174.310 add paragraph (a)(6) to read as follows:

§ 174.310 Requirements for the operation of high-hazard flammable trains.

* * * * *

(a) * * *

(6) Oil Spill Prevention and Response Plans. The additional requirements for petroleum oil transported by rail in accordance with part 130 of subchapter B.

* * * * *

15. Add section § 174.312 to read as follows:

§ 174.312 HHFT information sharing notification for emergency responders.

(a) Prior to transporting a high-hazard flammable train (HHFT) as defined in § 171.8 of this subchapter, a railroad must provide each State Emergency Response Commission (SERC), Tribal Emergency Response Commission (TERC), or other appropriate state delegated agency for further distribution to appropriate local authorities, upon request, in each state through which it operates a HHFT the information as described in paragraphs (a)(1) and (2) of this section.

(1) At a minimum, the information railroads are required to provide to the relevant state or tribal agencies must include the following:

(i) A reasonable estimate of the number of HHFTs that the railroad expects to operate

each week, through each county within the state or through each tribal jurisdiction;

(ii) The routes over which the HHFTs will operate;

(iii) A description of the hazardous material being transported and all applicable emergency response information required by subparts C and G of part 172 of this subchapter;

(iv) A HHFT point of contact: at least one point of contact at the railroad (including name, title, phone number and address) with knowledge of the railroad's transportation of affected trains and responsible for serving as the point of contact for the SERC, TERC, or other state or tribal agency responsible for receiving the information; and

(v) If a route identified in paragraph (a)1)(ii) of this section is additionally subject to the comprehensive spill plan requirements in subpart C of part 130 of this chapter, the information must include a description of the response zones (including counties and states) and the contact information for the qualified individual and alternate, as specified under §130.104(a);

(2) Recordkeeping and transmission. The HHFT notification must be maintained and transmitted in accordance with all of the following requirements:

(i) On a monthly basis, railroads must update the notifications. If there are no changes, the railroad may provide a certification of no change.

(ii) Notifications and updates may be transmitted electronically or by hard copy.

(iii) If the disclosure includes information that railroads believe is security sensitive or proprietary and exempt from public disclosure, the railroads should indicate that in the notification.

(iv) Each point of contact must be clearly identified by name or title and role (e.g., qualified individual, HHFT point of contact) in association with the telephone number. One point of contact may fulfill multiple roles.

(v) Copies of the railroad's notifications made under this section must be made available to the Department of Transportation upon request.

(b) Reserved.

Issued in Washington, DC on July 13, 2016, under the authority of 49 U.S.C. 5103(b), 33 U.S.C. 1321, and the authority delegated in 49 CFR 1.97.

William Schoonover,
Acting Associate Administrator for Hazardous Materials Safety,
Pipeline and Hazardous Materials Safety Administration.
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