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Docket Management System
U.S. Department of Transportation
West Building, Ground Floor
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1200 New Jersey Avenue SE
Washington, DC 20590

Re: Docket No. PHMSA-2014-0105 (HM-251-B)
Hazardous Materials: Oil Spill Response Plans and Information Sharing for High Hazard Flammable Trains

Dear Administrator Dominguez:

The following constitutes the supplemental comments of Scenic Hudson, Inc. ("Scenic Hudson") and Riverkeeper, Inc. ("Riverkeeper") on the above-referenced proposed rule ("Proposed Rule") noticed by the Pipeline and Hazardous Materials Safety Administration ("PHMSA") in the Federal Register on July 29, 2016. Scenic Hudson and Riverkeeper are also separately submitting comments on the Proposed Rule jointly with Center for Biological Diversity, Sierra Club, Earthjustice, Waterkeeper Alliance, and the NY/NJ Baykeeper.

SCENIC HUDSON'S AND RIVERKEEPER'S INTEREST

Scenic Hudson works to protect and restore the Hudson River as an irreplaceable national treasure and a vital resource for residents and visitors. A crusader for the valley since 1963, today Scenic Hudson is the largest environmental group focused on the Hudson River Valley. Scenic Hudson combines land conservation, support for agriculture, citizen-based advocacy and sophisticated planning tools to create environmentally healthy communities, champion smart economic growth, open up riverfronts to the public and preserve the valley's inspiring beauty and natural resources.

Riverkeeper is a member-supported watchdog organization dedicated to defending the Hudson River and its tributaries and protecting the drinking water supply of nine million New York City and Hudson Valley residents.

Scenic Hudson and Riverkeeper appreciate PHMSA's efforts to "improve oil spill response readiness and mitigate effects of rail incidents involving petroleum oil and certain high-hazard flammable trains," which is "necessary due to the expansion in the United States' energy

production, which has led to significant challenges for the country's transportation system."[1] PHMSA has recognized that "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."[2] And this risk will not go away: U.S. crude oil production volumes are expected to remain high for the next decade and beyond, along with shipment by rail.[3]

Last year's rulemaking addressing tank car design and other aspects of shipment in "high-hazard flammable trains" (Docket No. PHMSA-2012-0082) left a long phase-in period for the switch to new DOT-117 tank cars, leaving the continuing chance for more derailments and oil spills unacceptably high. The question is not if another rail accident resulting in an oil spill will happen, but when. Therefore, the Proposed Rule is exceedingly important to ensuring that environmental and public health and safety impacts of a spill are minimized, and must contain the most effective and comprehensive oil spill response and notification requirements possible.

In the Hudson Valley, where trains carrying crude oil and other petroleum products run along the edge of the Hudson River, it is of utmost importance that in the almost inevitable event of an accident, comprehensive oil spill response plans are in place so that "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."[4] To that end, we offer the following comments on the Proposed Rule.

SIGNIFICANT HUDSON VALLEY RESOURCES ARE AT RISK FROM CRUDE OIL TRANSPORT BY RAIL

A. The Hudson River

The Hudson River is an irreplaceable national treasure and a vital resource for residents and visitors, and is a major driver of the Hudson Valley region's over $4 billion tourism and recreation industry. The River has nationally important historical, cultural, ecological and aesthetic values. Not surprisingly, given its historical and ecological legacy, the river and its communities are the focus of several federal programs that work towards its protection. The Hudson River Valley was designated as a National Heritage Area by Congress in 1996 to recognize the national importance of the Hudson Valley's history and resources. The Hudson River is one of only fourteen American Heritage Rivers in the entire nation, and the Hudson River National Estuarine Research Reserve protects four exemplary wetland sites on the estuary. The U.S. Army Corps of Engineers is working with local communities and not-for-profit organizations to create a comprehensive, federally-recognized Hudson River Restoration Plan, aiming to improve ecosystem function and health and also to enhance regional economic potential.

The estuarine portion of the river – that is, the portion of the River that is subject to tidal influence and upriver flow of salty ocean water - stretches for 153 miles from north of Albany to New York Harbor. It is one of the most productive and biologically diverse ecosystems in the nation. The Hudson River estuary is home to more than 200 species of fish, including key

[1] 81 Fed. Reg. 50069.
[2] 81 Fed. Reg. 50108.
[3] 81 Fed. Reg. 50113.
[4] 81 Fed. Reg. 50114.

commercial and recreational species such as striped bass, bluefish, and blue crab. The River also serves as a nursery habitat for fish species that migrate along other estuaries, bays and offshore areas of the Atlantic Ocean, and so performs a vitally important ecosystem function well beyond the borders of New York State. There are over 13,000 acres of tidal wetlands and vegetated shallow waters in the estuary – the largest and most productive assemblage of freshwater tidal habitats of any river system along the United States' east coast. Tidal wetlands found in the Hudson are critically important habitats, providing nursery grounds for valuable fish species, filtration of pollutants, flood control, and opportunities for education and recreation.

The New York State Department of State, working with the State Department of Environmental Conservation ("NYSDEC"), has delineated 40 Significant Coastal Fish and Wildlife Habitats in the Hudson River estuary, comprising 42,825 acres of vitally important aquatic habitat. These significant habitats have been so designated because they:

- are essential to the survival of a large portion of a particular fish and wildlife population (e.g., feeding grounds, nursery areas);
- support populations of species which are endangered, threatened or of special concern;
- support fish and wildlife populations having significant commercial recreational or educational value;
- are of a type which is not commonly found in the State or in a coastal region; or
- are to varying degrees difficult or even impossible to replace in kind. [5]

Additionally, the waters of the Hudson are home to two federally listed endangered species, the Atlantic and shortnose sturgeon. The Hudson is a seasonal home for the largest remaining stock of the endangered Atlantic sturgeon. The National Oceanic and Atmospheric Administration recently announced a proposed rulemaking that would establish the entire stem of the Hudson River between the Troy Lock and Dam and where the main stem river discharges at its mouth at the New York City Harbor as critical habitat for the New York Bight Distinct Population Segment of Atlantic Sturgeon.[6]

B. Waterfront Communities

It is not only the River that is at risk from a crude oil spill. Eighty-four waterfront communities are situated along the River's shorelines. Within one mile of the rail line on the west side of the River that is used for crude transport, there are 239,764 residents; 100,020 households; 12 sewage treatment plants;; 69 K-12 schools; 9 colleges and universities; and 91 State, County and Municipal public parks. There are six municipal drinking water intakes on the Hudson, which are a particularly sensitive resource that require an immediate response time in the event of spills, including for the Town and City of Poughkeepsie, and Port Ewen, Highland, Hyde Park, and Rhinebeck. All of these communities rely on a clean river for recreation.

As one of only 49 National Heritage Areas in the country, the communities along the Hudson River have been designated by the U.S. Congress as a landscape with nationally unique natural, cultural, historic, and/or scenic resources. In 2000, the National Trust for Historic Preservation named the Hudson Valley one of America's "Eleven Most Endangered Historic

[5] New York State Coastal Management Plan at II-6, pp 20-25.
[6] 81 Fed. Reg. 35701 (June 3, 2016).

Places." When announcing its selection, the National Trust characterized the region as "a mix of scenery and history that is unmatched anywhere else in the country".[7] The shores of the Hudson River are also home to six Scenic Areas of Statewide Significance.[8]

The following are just a few examples of landmarks at risk if a crude oil spill occurred on the rail line on the western shore of the Hudson River. All of these resources are within a one mile radius of the rail line:

- **Stony Point State Park** is the site of one of the last Revolutionary War battles in the northeastern colonies. Among the many unique features of the park is the first and oldest lighthouse on the Hudson River.
- **Iona Island** and its surrounding marsh is a designated National Natural Landmark. It is very well-known as a winter nesting place for bald eagles and is also a very popular destination for train and bird watchers.
- **Fort Montgomery**, location of one of the most important battlefields of the Revolutionary War where British, Loyalist and Hessian forces battled the Americans for control of the Hudson River.
- **The West Point NY Military Academy** is the oldest continuous operating Army post in the country and the entire central campus is a National Landmark. It is an irreplaceable mecca of historic sites, buildings, and monuments. Trains on the CSX River Subdivision line travel through a tunnel from the south end of the Academy under historic Thayer Hall.
- Immediately adjacent to the tracks in Ulster County is one of the valley's premier tourist attractions, the **Walkway over the Hudson State Historic Park**. The average amount of people visiting Walkway over the Hudson State Historic Park is nearly 500,000 annually.

C. Economic Resources

The Hudson Valley's natural resource economy is thriving, making significant contributions to the region's quality of life and its ability to attract outside investment and create jobs. Investments made in the natural environment by federal, state and local governments for the past five decades have spurred an era of growth in this sector. There is now broad recognition of the inherent connection between the Hudson Valley's economy and its environment. Tourism remains a primary beneficiary of our healthy environment with the region contributing $4.75 billion in economic activity in the Hudson Valley region annually[9], including $184 million alone from recreational boating in the Hudson River.[10] Clean water, scenic views, natural habitat, public waterfronts and a healthy environment are the foundation of regional economic development. The Hudson Valley Economic Development Corporation has noted that natural resources and quality of life are principal drivers in corporate CEOs deciding to relocate their businesses to the region.

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[7] Silverman, Miriam D., Stopping the Plant: The St. Lawrence Cement Controversy and the Battle for Quality of Life in the Hudson Valley, 2006, at 37.

[8] See New York State Department of State Scenic Areas of Statewide Significance Designations, July 1993, at 282. Available at: http://www.dos.ny.gov/opd/programs/HudsonSASS/Hudson%20River%20Valley%20SASS.pdf.

[9] Hudson Valley Tourism, report prepared by Tourism Economics for Empire State Development, 2012.

[10] SeaGrant New York report; Cornell University Dept. Natural Resources. Available at: www.seagrant.sunysb.edu/nysportfishing/recboating

Green infrastructure provided by the Hudson River, defined as intact natural systems (open space, wetlands, beaches, etc.), provide a myriad of public benefits. For each $1 million spent on water infrastructure, 26 jobs are created.[11] Development of parks returns $5 to the local community for every $1 invested[12], while the state's own Environmental Protection Fund has been shown to return $7 to the economy for every $1 invested in land and water conservation.[13]

D. Revitalization Efforts

Despite – or perhaps because of – its natural and cultural treasures and proximity to the largest metropolis in the United States, the Hudson has endured an unfortunate legacy of industrial pollution. Industrial development in the region changed the river basin's ecology and physical function, and compromised the economic, recreational and cultural activities associated with it.

Throughout much of the twentieth century, the Hudson endured enormous sewage discharges, the filling of wetlands and secondary channels, erosion of scenic vistas, fish kills in industrial cooling water intakes, and toxic chemicals that disrupted the food chain. During the 1960s, bacteria consumed so much oxygen that fish suffocated in the water. The most infamous toxic legacy in the Hudson River is polychlorinated biphenyls (PCBs), primarily from General Electric plants located on the Upper Hudson River. These toxic PCBs enter food webs in the River, leading the state to close most once robust commercial fisheries and the state Department of Health to issue fish consumption advisories aimed at recreational anglers.

The impacts of degraded habitats, hardened shorelines, reduced floodplains and the decline of a once thriving fishery earned the Hudson a reputation as a dirty, industrial river. The public stayed away, and the historical, cultural and scenic treasures of the Hudson Valley were all but forgotten.

Since the 1970s, however, through efforts of federal and state agencies, scientists, and citizens and vast investment of public and private funds[14], water quality in the Hudson River has improved significantly. Many fish species are on their way to recovery, and commercially important species such as striped bass have increased more than tenfold since the 1980s. Since 2009, General Electric has been conducting a cleanup of PCB hotspots in the Upper Hudson River.

The Hudson flows cleaner today than it has in many decades. On warm summer days, the river teems with recreational boaters, diners pack into waterfront restaurants, and visitors from across the nation come to take in the scenic beauty of the Hudson River from Walkway over the Hudson State Park. Tourism is the center of the Hudson Valley's economy. It is unthinkable that, as the Hudson is finally rebounding from its legacy of pollution, it is now under threat from a

[11] *Infrastructure Investment and Economic Growth*, Progressive Policy Institute, March 2014.
[12] The NYS Park System: An Economic Asset to the Empire State, Executive Summary, 2009.
[13] The Economic Benefits of New York's Environmental Protection Fund, Trust for Public Land, 2012.
[14] A sampling of public money invested in restoring the Hudson River and its shorelines through the Hudson River Estuary Program since the 1990s includes: more than $72 million in water quality improvement projects; $83 million in waterfront planning and development; $12 million for conservation and river access; $110 million for water quality and aquatic restoration projects; $15 million for cleanup of contaminated sites on the riverfront; and $11 million for planning and trail projects. (See Hudson River Estuary Program Report, 2010).

crude oil spill that could erase the efforts of so many who fought to bring the River back to health.

A CRUDE OIL SPILL IN THE HUDSON VALLEY WOULD BE DEVASTATING TO NATURAL RESOURCES, PUBLIC SAFETY AND THE ECONOMY

A. The Hudson Valley has Experienced an Enormous Increase in Crude Oil Transport

The dramatic expansion of U.S. shale oil production since 2008 resulted in the Hudson River quickly becoming a "virtual pipeline" for the transport of Bakken crude oil, with hundreds of thousands of barrels per day transported by rail.[15] By 2013, fifteen to 30 trains, each carrying at least 1 million gallons of Bakken crude oil, passed through the Hudson Valley each week, according to information provided to New York State by CSX Transportation.[16] The Hudson River became a key transport corridor for roughly one fifth of all oil produced from the Bakken shale deposits in North Dakota.[17] While domestic crude production may have recently lessened, the lifting of the prohibition on export of crude oil will provide continued pressure for the need to transport it throughout the country, including through the Hudson Valley. Recent proposals to construct a two-way pipeline that would carry both crude and refined products along the New York State Thruway Corridor through the Hudson Valley, and to establish multiple new anchorage grounds for barges on the Hudson River, at the request of industry, in anticipation of increased crude oil transport, provide ample evidence of this fact.[18] And as recognized by PHMSA in the Proposed Rule, "with the expectation of continued domestic production, rail transportation remains a flexible alternative to transportation by pipelines or vessels…."[19] This leaves "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 [and] adjoining shorelines…."[20] The high volume of transport and the value of the resources make that risk unacceptably high for the Hudson Valley.

Recognizing the threats from the sudden increase in rail transport of crude oil through the region, the Coast Guard recently updated the New York/New Jersey Area Contingency Plan ("NY/NJ ACP").[21] The updated NY/NJ ACP acknowledges the continued possibility and risks of rail accidents in the New York and New Jersey coastal zone, including the Hudson River:

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[15] Global Partners LP, 2012 Form 10K 55 (Mar. 15, 2013).

[16] "CSX: 15-30 Oil Trains Move Weekly on Hudson River Line", Poughkeepsie Journal, July 16, 2014. Available at: http://www.poughkeepsiejournal.com/story/news/local/new-york/2014/07/16/csx-releases-oiltrain-data/12740573/

[17] Mouawad, Jad, *Bakken Crude, Rolling Through Albany*, N.Y. Times, Feb. 27, 2014. Available at: http://www.nytimes.com/2014/02/28/business/energy-environment/bakkan-crude-rolling-through-albany.html

[18] *See* http://pilgrimpipeline.com/; 81 Fed. Reg. 37168 (June 9, 2016).

[19] 81 Fed. Reg. 50069.

[20] 81 Fed. Reg. 50070.

[21] Notice of Review and Update of the New York/New Jersey Area Contingency Plan, https://www.federalregister.gov/documents/2014/08/11/2014-18867/notice-of-review-and-update-of-the-new-yorknew-jersey-area-contingency-plan. ("The Coast Guard is aware of reports of increased oil transport in the coastal zone covered by the NY/NJ ACP. We are also aware of an increased national trend to move oil via rail through the Coastal Zone. The Coast Guard is, therefore, particularly interested in receiving public comment regarding the transport of oil via rail through the coastal zone covered by the NY/NJ ACP. Public input will be used to assist the Coast Guard in determining response resource needs in updating the NY/NJ ACP.")

> Environmental concerns could be substantial in some of the more sensitive areas, areas where the remote location could cause substantial delays in the deployment of containment boom and generally slow cleanup operations. Since 2011, there has been a massive increase in crude and other HAZMATs transported via water side railroads in the Port of New York.[22]

B. Transport of Bakken and Tar Sands Crude Oil Presents Particularly Significant Risks

The types of crude oil that are being produced and transported within North America are especially dangerous. Bakken crude oil is described in the U.S. Coast Guard's New York and New Jersey Area Contingency Plan ("ACP") as "particularly explosive and toxic oil produced by hydraulic fracturing" that is being transported in "rapidly increasing amounts." Bakken crude is inherently more volatile than other crudes, with a flash point and vapor pressure similar to gasoline.[23] There is often dissolved natural gas and volatile organic compounds in varying quantities within the crude, which increases the vapor pressure of the oil. Materials with high vapor pressures typically burn more violently, as has been noted in recent rail incidents involving trains carrying Bakken crude.

Volatile Bakken crude is not the only crude oil that poses a significant risk to the Hudson River Estuary. There are pending plans by oil companies to transport heavy crude down the River Subdivision line, which requires heating and/or diluting for rail transport.[24] A spill of heavy tar sands crude would be especially devastating to the aquatic resources of the River. According to the U.S. Coast Guard, "oils with densities higher than the receiving water (above the line) will sink."[25] This characteristic, coupled with evidence that its chemical makeup may be even more toxic than lighter types of crude, presents a significant and distinct risk to water quality, environmental function, and aquatic habitat.

C. Rail Lines Through the Hudson Valley are located Directly on and Adjacent to the Hudson River, Which Would be Unavoidably Impacted by a Derailment or Spill

The "River Subdivision" line owned by CSX Transportation travels directly along the Hudson River's western shoreline for most of its route between Selkirk, New York, outside of Albany, to New Jersey, for a total of 47.7 riverfront miles. Trains to and from oil terminals in Albany, NY, on the Upper Hudson River, transit along this railway next to drinking water supplies, over vital tributaries and down the length of the Hudson, threatening the numerous critical habitats, spawning areas, parks, public access points, densely populated commercial and residential areas, and historical and cultural resources, putting at risk human health and the ecological stability of the entire river system described above. The River Subdivision line

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[22] NY/NJ ACP p. 241.
[23] NYS Div. of Homeland Sec. and Emergency Servs., et. all, *Transporting Crude Oil in New York State*, at 14, 2014.
[24] Nearing, Brian. "Tar sands oil Albany-bound?", Albany Times-Union, September 23, 2014. Available at: http://www.timesunion.com/business/article/Tar-sands-oil-Albany-bound-5773604.php. Global Companies LLC is also seeking a permit from NYSDEC to allow it to heat and transload heavy crude at its Albany terminal.
[25] U.S. Coast Guard, NY and NJ ACP; Annex W - Contingency Planning Annex For Group V Oil (non-floating) 2 (2011).

travels mere feet from dozens of designated Significant Coastal Fish and Wildlife Habitats, and actually transects Iona Island, a National Natural Landmark and National Estuarine Research Reserve site. Some areas of the rail line on the lower Hudson are located on narrow berms with water on both sides. Any derailment, explosion and/or spill from this rail line would almost unavoidably end up in the Hudson, causing immeasurable impacts.

Oil causes harm to fish and wildlife through physical contact, ingestion, inhalation and absorption. Fish can be impacted directly through uptake by the gills, ingestion, or through the skin, and eggs and larval survival are significantly affected by changes in the ecosystem such as the presence of oil.[26] The egg and larval stages of organisms are impacted more quickly, and spills can wipe out entire age classes and cause population dips and cascading food chain impacts that have a lasting impact. It wasn't until four years after the 1989 Exxon Valdez oil disaster that the herring population collapsed; 25 years later, it still has not recovered.[27]

Adult fish may experience reduced growth, enlarged livers, and changes in heart and respiration rates, fin erosion and reproductive impairment, as well as significant reproductive impacts.[28] Floating light oil such as Bakken crude can contaminate plankton, including fish eggs and larvae, and then fish feeding on these organisms can subsequently become contaminated through ingestion of contaminated prey or by direct toxic effects of oil.[29] Crude oil has been detected in sediment more than thirty years after a spill.[30]

A spill of highly volatile Bakken crude not only threatens the estuary's wildlife and water quality, but public safety and onshore resources. The Hudson River shoreline is a heavily populated area, and all along the waterfront, revitalization efforts are underway. Restaurants, boat launches, and parks draw people to the shoreline just feet away from the River Subdivision line. In addition to the devastating loss of human life that could occur in the event of derailment of a train carrying Bakken crude, the economic impact of a spill on water or fire on the shore would be devastating to the Hudson Valley.

Disasters such as the oil spill and explosion in Lac-Megantic, Quebec on July 6, 2013 that killed forty-seven people are stark reminders of the consequence of transport of such volatile materials in heavily populated areas. On April 30, 2014, 17 cars of a train carrying Bakken crude oil derailed in Lynchburg, Virginia, bursting into flames and spilling oil into the James River causing shutdown of water supplies. On June 3, 2016, a derailment, fire and spill in the Columbia River Gorge along the Oregon-Washington border due to track maintenance failures released 42,000 gallons of crude oil and sparked a massive fire that burned for 14 hours, causing evacuations. These are nightmare scenarios for the Hudson Valley, where an oil spill and/or explosion could occur in densely populated areas and invaluable unique habitats.

[26] U.S. Fish and Wildlife Service, Effects of Oil on Wildlife and Habitat, June 2010.
[27] Exxon Valdez Oil Spill Trustee Council Pacific Herring Fact Sheet, available at: http://www.evostc.state.ak.us/index.cfm?FA=status.herring
[28] U.S. Fish and Wildlife Service, Effects of Oil on Wildlife and Habitat, June 2010.
[29] Id.
[30] Woods Hole Oceanographic Institution, *Oil Found in Marsh Sediments 30 Years After Spill*, November 2002.

D. Oil Spill Response on the Hudson River Would be Especially Difficult and Could Cause Further Harm

The characteristics of the Hudson –heavy tidal exchange flowing both ways, shifting shoals, arrow navigational channels and unique habitat diversity – would make any spill response challenging. Due to the tidal nature of the estuary, oil could be quickly transported both up and downriver. Top speeds of the tidal flow of the Hudson River during ebb flow are approximately 2.4 knots (2.8 miles per hour). At that tidal velocity spilled oil could cross the entire width of the river within just a couple of hours. Because of the tidal nature of the estuary, surface and subsurface oil recovery would be extremely difficult, if not impossible, resulting in very low recovery rates.

A spill of crude oil into the Hudson River ecosystem would cause long-lasting, if not permanent, damage to the estuary's populations of aquatic species and the entire ecosystem. Wave action, like that seen in the Hudson, causes emulsification, or a mixture of small droplets of oil and water, which hampers weathering and cleanup processes. These water-in-oil emulsions may linger in the environment for months or even years.[31]

Additionally, sections of the Hudson River often freeze completely during the winter. Due to snow and ice on the water, winter spills can be harder to detect and much more difficult to clean up. According to the U.S. Department of State, an oil spill during freeze up or ice breakup periods can result in ice being transported several miles under the ice or in broken ice before it can be contained. It can also be more difficult to detect oil under the ice and implement measures to recover spilled oil.[32]

Recovery of heavy crude oils can be more difficult, costly and time consuming than typical oil recovery. Once spilled, finding pockets of crude oil can be impossible, as "[e]xisting methods of tracking spills are not effective for tracking nonfloating oils."[33] Even if found, NOAA warns that containment can also be problematic. Once oil is suspended in the water column, little can be done to clean it up. Even the methods used to respond to oils spills have negative impacts on aquatic ecosystems. The dispersants, surfactants, biological additives, bioremediation, in situ burning and dredging that are used during response can also have adverse effects on aquatic organisms.[34]

For all of the above reasons, it is critically important that the railroads used for carrying any liquid petroleum oil through the Hudson Valley are subject to stringent oil spill response planning requirements. The unique ecological, scenic, historic, cultural and economic value of the Hudson River to one of the most densely populated areas in the country could be irreparably damaged if the Proposed Rule is adopted as is. For the reasons set forth below, we urge PHMSA

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[31] Global Marine Oil Pollution Gateway, Facts: What Happens to Oil in Water?, Available at: http://oils.gpa.unep.org/facts/fate.htm.

[32] Final EIS for Proposed Keystone XL Project, Section 3, Environmental Analysis 3.13-52.

[33] National Research Council Committee on Marine Transportation of Heavy Oils, Marine Board Commission on Engineering and Technical Systems, Spills of Nonfloating Oils, Risks and Response 53 (1999).

[34] Ramachandran, Shahunthala D., "Oil dispersant increases PAH uptake by fish exposed to crude oil", Ecotoxicology and Environmental Safety, November 2004.

to revise the proposed rule in order to meet its statutory mandate to provide for the safe transportation of hazardous materials.[35]

COMMENTS ON THE PROPOSED RULE

The Proposed Rule includes three main parts: (1) comprehensive oil spill response planning requirements for certain High Hazard Flammable Trains ("HHFTs"), which term was defined in the "Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains – Final Rule" published on May 8, 2015; (2) information sharing requirements; and (3) testing methodology for crude oil classification for loading onto tank cars.

A. Comprehensive Oil Spill Response Planning

The Proposed Rule is meant to "modernize the comprehensive oil spill response plan ["COSRP"] requirements under 49 CFR Part 130 for petroleum oils." The Proposed Rule purports to address the risk of increased shipments of large quantities of petroleum oil being shipped by rail and clarifies and adds new requirements for COSRPs. In order to be as effective as possible in mitigating the potential impacts of an oil spill from a train derailment, the Proposed Rule should be amended per the discussion below.

a. Applicability

Currently, CFR Part 130 does not require that railroads prepare comprehensive written plans, and requires only basic plans for tank car shipments of petroleum oil. The Proposed Rule continues to require that 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 … have a current [COSRP]" (a threshold that is rarely met, if at all).[36] It also expands the applicability or COSRPs 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 transporting 35 or more loaded tank cars of liquid petroleum oil throughout the train consist." This latter category, however, excludes tank cars carrying mixtures or solutions of petroleum oil not meeting the criteria for Class 3 flammable or combustible material, which are not required to be included when determining the number of tank cars transporting liquid petroleum oil."[37]

This exemption conflicts with the Oil Pollution Act, which does not distinguish among types of oil subject to its discharge prohibition. While the Proposed Rule is precipitated by the huge increase in the transport of Bakken crude oil in "HHFTs", as recognized by PHMSA, the applicable governing statute for oil spill response planning is the Clean Water Act, not the Hazardous Materials Transportation Act.[38] A spill of "diluted petroleum oil that no longer meets the definition of a Class 3 flammable or combustible liquid" may nevertheless inflict damage on human health and the environment. Therefore, the exemption should be eliminated, and COSRPs should be required for any type of petroleum oil transported.

[35] 49 USC 5103(b)(1)
[36] Approximately 30,000 gallons can be carried in a single tank car. 81 Fed. Reg. 50088.
[37] 81 Fed. Reg. 50125.
[38] 81 Fed. Reg. 50090.

PHMSA should also reject the premise that "safety and environmental risks are related to the quantity of oil transported by trains, and the configuration of the tank cars loaded with petroleum oil" as a basis for only requiring COSRPs for "railroads transporting a single train containing 20 or more tank cars loaded with 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." A single drop of oil can contaminate 100 gallons of water. As seen in Oregon in the recent Columbia River Gorge derailment, accidents occur due to track conditions. A train carrying a single tank car of petroleum oil can derail, releasing its contents and resulting in significant environmental damage. This focus only on "higher-risk train configurations that pose a threat of substantial harm to the environment" also fails to recognize the environment itself. Here in the Hudson Valley, where the railroad track is so close to so many vulnerable and vital resources, even the derailment of a "manifest" train would be disastrous, requiring significant oil spill response efforts, which may even not be entirely effective. Therefore, we disagree with PHMSA's conclusion that "these trains may be capable of causing harm, but the harm they can cause is significantly less likely to qualify as substantial harm"[39]

b. Response Zones, Response Time and Worst-Case Discharge

The Proposed Rule requires railroads to divide their routes into "response zones" and connect notification procedures and available response sources to the specific geographic route segments that comprise the response zones. The Proposed Rule includes a definition of "response zone" as follows: "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 threat of such a discharge for a comprehensive plan meeting requirements of [130 CFR Subpart C]." The 12-hour response timeframe applies only to track where trains subject to the Proposed Rule traverse.

The Proposed Rule requires that in its CORSP, each subject railroad must "certify that they have identified and secured by contract or other means the private response resources in each response zone necessary to remove, to the extent practicable, a worst case discharge," and identify and describe the resources available to arrive onsite within 12 hours after the discovery of a worst-case discharge or the substantial threat of a worst-case discharge.[40] It further provides that if, during transport of oil subject to the regulations, a discharge of oil occurs, the person transporting the oil must implement the COSRP.[41]

PHMSA has specifically requested comment on whether the 12-hour response time in the Proposed Rule is sufficient for all areas subject to the plan, or whether a shorter response time is appropriate for certain areas. Under the Proposed Rule, assuming travel at 35 miles per hour, response resources could be staged 420 miles away from any point in the response zone and still meet the 12-hour response time requirement.[42] 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 that

[39] 81 Fed. Reg. 50092.
[40] 81 Fed. Reg. 50127.
[41] 81 fed. Reg. 50128.
[42] 81 Fed. Reg. 50096.

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."[43]

As described above, several factors make it imperative that response equipment be staged as close as possible to the rail line along the Hudson River:

- The "River Subdivision" line owned by CSX Transportation travels directly along the Hudson River's western shoreline for most of its route between Selkirk, New York, outside of Albany, to New Jersey, for a total of 47.7 riverfront miles, next to drinking water supplies, over vital tributaries, threatening numerous critical habitats, spawning areas, parks, public access points, densely populated commercial and residential areas, and historical and cultural resources. Some areas of the rail line on the lower Hudson are located on narrow berms with water on both sides. Any derailment, explosion and/or spill from this rail line would immediately the River.
- Due to the tidal nature of the estuary, oil could be quickly transported both up and downriver. Top speeds of the tidal flow of the Hudson River during ebb flow are approximately 2.4 knots (2.8 miles per hour). At that tidal velocity spilled oil could cross the entire width of the river within just a couple of hours.
- Wave action, like that seen in the Hudson, causes emulsification, or a mixture of small droplets of oil and water, which hampers weathering and cleanup processes.
- Sections of the Hudson River often freeze completely during the winter. Due to snow and ice on the water, winter spills can be harder to detect and much more difficult to clean up. According to the U.S. Department of State, an oil spill during freeze up or ice breakup periods can result in ice being transported several miles under the ice or in broken ice before it can be contained. It can also be more difficult to detect oil under the ice and implement measures to recover spilled oil.

For these reasons and many others, the Proposed Rule should provide for much shorter response times. The 420 mile radius that would be allowed by the Proposed Rule is an unacceptable radius for staging. For instance, a derailment and spill near a drinking water uptake would require immediate response. In the Hudson River, this would mean staging of both land-based and water-based oil spill response equipment on the Hudson River itself and capable of meeting this response time requirement. The identification of such areas requiring faster response times should be based on factors such as designation as an "environmentally sensitive and significant area" (discussed below), rather than relying on the definition of a "High Volume Area" as set forth in 49 CFR 194.5, as that term is applicable and relevant only to pipelines, and does not lend itself to use for rail transport of oil. Therefore, PHMSA should develop a different standard for identification and definition of areas necessitating faster response times.

"Worst-case discharge is defined by the Proposed Rule as "the largest foreseeable discharge in adverse weather conditions." This includes discharges resulting from fire or explosion. Despite this broad definition, however, the Propose Rule inexplicably limits the planning threshold for a discharge form a train consist as "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

[43] 81 Fed. Reg. 50096-7.

largest train consist reasonably expected to transport liquid petroleum oil in a given response zone."[44]

The Proposed Rule is inconsistent with the recently updated NY/NJ ACP, which states:

> OPA 90 requires that, every ACP, when implemented in conjunction with the NCP "be adequate to remove a worst case discharge, and to mitigate or prevent substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the area." 40 CFR 300.5 as defined by section 311(a)(24) of the CWA, means, "in the case of a vessel, a discharge in adverse weather of its entire cargo; and in the case of an offshore or onshore facility, the largest foreseeable discharge in adverse weather conditions." For the purposes of this plan the worst case discharges are the total loss of cargo from the largest ship operating in the port *or a derailment of an entire unit train (80-100 cars) resulting in total cargo loss*, under adverse weather conditions.[45]

PHMSA should not rely on the enhanced tank car standards adopted in 2015 as justification for setting such a low "worst case discharge" threshold. The required improvements in tank car puncture resistance under that rule are to be phased-in over ten years, leaving a long time of high-risk transport in unsafe DOT-111 and CPC-1232 tank cars, which could result in much higher spill volumes.

In addition, beyond simply basing it on a certain planning volume and adverse weather conditions, the concept of worst-case discharge contemplated in a COSRP, especially on the Hudson River, must consider the environmental factors that are in existence, including factors such as the tidal nature, wave action, and other conditions that will impact the effectiveness of a spill response at removing the oil "to the extent practicable." Dischargers cannot be allowed to blame a poor level of cleanup (which is extremely difficult and low to start with) on being unprepared for the physical conditions at a spill site.

c. Identification of Environmentally Sensitive Areas

The Proposed Rule includes a new definition of "environmentally sensitive or significant areas": "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."[46] The Proposed Rule requires that COSRPs be consistent with the applicable ACP by identifying the environmentally sensitive or significant areas along the route that could be adversely affected by a worst case discharge and incorporate appropriate deflection and protection response strategies to protect these areas, and must include a Response Zone Appendix that identifies such environmentally sensitive or significant areas per route section.[47]

[44] 81 Fed. Reg. 50125.
[45] NY/NJ ACP, p. 63 (emphasis added).
[46] 81 Fed. Reg. 50124.
[47] 81 Fed. Reg. 50126.

We agree that environmentally sensitive and significant areas should be identified in a COSRP, which should contain specific measures as "deflection and protection response strategies to protect these areas." The most obvious of these measures is to provide for staging of oil spill response resources on both land and water with a response time of an hour or less, as described above. As noted above, the NY/NJ ACP was recently updated. The Proposed Rule should include a provision that requires the identification of environmentally sensitive and significant areas be updated, and the COSRP should be appropriately revised, any time the applicable ACP is updated.

Altogether, and at the minimum, the COSRP developed under the Proposed Rule for a response zone that covers the Hudson River must: (1) ensure that the planning volume is based on the largest train configuration that can be reasonably expected in the zone (which has seen unit trains of over 100 cars); (2) achieve a response time appropriate for mitigating the spill to the maximum extent practicable; (3) identifies additional deflection and protection response strategies necessary to protect the environmentally sensitive and significant resources of the River, its tributaries and its shores, as identified in the NY/NJ ACP; and (4) will achieve the maximum cleanup practicable, given both the weather, the physical conditions and other factors at the spill site. Finally, COSRPs must be made available to the public and first responders for review and comment.

B. Regulatory Flexibility

PHMSA has specifically requested comment on providing 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."[48] While we are not insensitive to the costs of complying with the Proposed Rule, we question the assumption that small entities pose less risk. As described numerous times herein, the possibility of any amount of oil spilling into the Hudson River, which provides drinking water, critical endangered species habitat, recreational places and other vital services, could result in huge consequences. Therefore, any railroad or person that carries out the transport of oil by rail that meets the thresholds of the Proposed Rule, must comply.

C. Information Sharing

In compliance with the FAST Act, the Proposed Rule includes a requirement expanding notification requirements to apply to all HHFTs and requires monthly notifications. Railroads must share information with State and Tribal emergency response commissions ("SERCs" and "TERCs").

The limitation in the Proposed Rule that requires notification only by railroads with HHFT operations is insufficient. All trains shipping any amount of oil should be subject to the notification mandate. In addition, the Proposed Rule must provide that the notification be made available to the public. Reporting entities should not be allowed to hide behind a claim of competitive harm when the potential impacts on public safety and the environment are so great.

[48] 81 Fed. Reg. 50078.

D. Testing Methodology

The Proposed Rule would amend hazardous materials classification requirements in the Hazardous materials Regulations ("HMR") to incorporate by reference the test method developed by the rail and oil industry as recommended practice (RP) for classification and loading practices. It does not replace currently authorized initial boiling point testing methods in the HMR, but provides an alternative, which PHMSA believes will "provide flexibility and [promote] enhanced safety in transport through accurate packing group assignment."[49] Given that the industry best practice test incorporated by reference in the Proposed Rule was developed and recommended by industry was designed to *improve* rail safety, it is unclear why exactly PHMSA proposes to include it only as an alternative. In the Proposed Rule, PHMSA must ensure that only the most effective and best-practice testing for the important purpose of classification of crude oil for loading purposes may be used.

CONCLUSION

Overall, Scenic Hudson and Riverkeeper agree with PHMSA that comprehensive oil spill response planning, measures meant to improve community preparedness for rail accidents, and proper classification of shipped hazardous materials are critical and necessary for both public and environmental health and safety. The regulatory amendments proposed in this rulemaking must be revised in accordance with the foregoing comments in order to be more comprehensive and effective, especially as applied in such a sensitive and at-risk region as New York's Hudson Valley. Thank you for your consideration of these comments.

Respectfully submitted,

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[49] 81 Fed. Reg. 50074.