

BEFORE THE PIPELINE AND HAZARDOUS MATERIALS
SAFETY ADMINISTRATION

DOCKET NO. PHMSA-2014-0105 (HM-251B)

HAZARDOUS MATERIALS: OIL SPILL RESPONSE PLANS FOR HIGH-HAZARD
FLAMMABLE TRAINS

COMMENTS OF THE CENTER FOR BIOLOGICAL DIVERSITY, FRIENDS OF THE
GORGE AND ADIRONDACK MOUNTAIN CLUB

Introduction

The Center for Biological Diversity (“Center”), Friends of the Gorge (“Friends”) and the Adirondack Mountain Club (“ADK”) (together, the “Groups”), on behalf of themselves and their members, submit the following comments in response to the Pipeline and Hazardous Materials Safety Administration’s (“PHMSA”) advance notice of proposed rulemaking (“ANPRM”) addressing oil spill response plans for high hazard flammable trains (“HHFT”). While the Groups are in agreement with the proposal to require that those entities transporting oil by rail submit a comprehensive oil spill response plan (“OSRP”), we remain troubled with the lack of immediate action on this matter. An emergency order requiring the immediate development of comprehensive OSRPs for oil transport is warranted given the risk that rail transport of oil poses to human health and the environment. The Groups further note that PHMSA must complete the appropriate National Environmental Policy Act (“NEPA”) analysis, and undertake consultation with the Fish and Wildlife Service and the National Marine Fisheries Service (the “Services”) regarding the effects of any proposed rule on the environmental and listed species and their critical habitat.

Currently, entities transporting oil by rail must provide only a basic OSRP. PHMSA notes in the ANPRM that there are significant differences between basic and comprehensive OSRPs, including consistency with the National and Area Contingency Plans, and the need for contracts to ensure that personnel and equipment will be available for a worst-case discharge event. The information and commitments that are required in a comprehensive plan are essential to ensuring the safety of the public and the environment, and it is without question in the best interests of the public to require that HHFTs provide comprehensive plans.

As the ANPRM notes, the increasing reliance on HHFTs poses a risk that was not considered when the trigger for comprehensive plans was initially established in 49 CFR 130.31(a). Indeed, the recent spate of fiery derailments across North America are indicative of the need for the

additional information and commitments required for a comprehensive OSRP.¹ The volume of crude oil carried by rail increased 423 percent between 2011 and 2012, and volumes continued to increase in 2013, as the number of rail carloads of crude oil surpassed 400,000. The risk of accidents has thereby increased dramatically, and there is a need for information and resources to ensure that people and the environment are protected when spills do occur. The basic OSRP requirements do not provide sufficient assurances that resources and personnel will be available, and therefore requiring a comprehensive OSRP is warranted.

It is therefore alarming that the PHMSA has chosen to move forward with this matter in the slowest way possible - through an advanced notice of proposed rulemaking, which will presumably lead to a proposed rule and eventually a final rule, with many months of commentary and delay. This is unconscionable in light of the immediate threat that these HHFTs present – a threat that PHMSA itself has described in detail in its notice of proposed rulemaking, Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, Docket No. PHMSA-2012-0082 (HM-251). The PHMSA has the authority to issue an emergency order requiring that all HHFTs be covered by a comprehensive OSRP. *See* 49 U.S.C. § 5121(d) (allowing for an emergency order where “an unsafe condition or practice constitutes or is causing an imminent hazard”). There appears to be no reason for any more delay, and the Groups have therefore submitted a petition (copy attached hereto) under the Administrative Procedures Act along with these comments for the PHMSA to undertake immediately the promulgation of an emergency order requiring that all HHFTs be covered by a comprehensive OSRP while PHMSA further considers the proper threshold in this rulemaking. *See* 5 U.S.C. § 553(e).

Even the National Transportation Safety Board (NTSB), in Safety Recommendation (SR) R-14-5, has requested that PHMSA revise the spill response planning thresholds to require comprehensive OSRPs for HHFTs that provide response measures for worst-case discharges. 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.” ANPRM at 8. However, it is not apparent that local responders are adequately prepared to respond to an oil spill of the magnitude that HHFTs pose.

In Oregon, for example, Governor Kitzhaber has called for a top-to-bottom review of Oregon oil train safety and oil spill responsiveness, citing the lack of information that emergency responders have about the oil being hauled through Oregon communities.² That lack of information makes

¹ Fiery derailments have recently occurred in North Dakota, New Brunswick, Alabama and Quebec, the latter causing the death of 47 people, the evacuation of approximately 2,000 people from the surrounding area, and the incineration of a popular tourist town. Most recently, an oil train derailed in downtown Lynchburg, Virginia, where three of the derailed tank cars containing petroleum crude oil came to rest in the adjacent James River, spilling up to 30,000 gallons of petroleum crude oil into the river. *See* table 3 of the PHMSA Notice of Proposed Rulemaking: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, Docket No. PHMSA-2012-0082 (HM-251), published on the same date as this ANPRM.

² Available at

http://www.oregonlive.com/environment/index.ssf/2014/02/gov_john_kitzhaber_orders_top-.html

it difficult for oil spill responders to properly respond to an accident, because “you have to know what to train for,” said Karmen Fore, Kitzhaber’s transportation policy advisor.³ ODOT hasn’t added any railroad inspectors since the late 1990s, despite the increase in crude oil shipments. Therefore, not only is the potential for a spill rapidly increasing, but there is a very real threat that oil spill responders will not have the information they need to mount a proper response, resulting in harm to people and the environment. In fact, the Northwest Area Contingency Plan states that “Should a catastrophic oil spill occur, it is likely that there will not be adequate response resources in the Northwest Area to manage and clean up the spill.” NWACP at 1000-28. A comprehensive OSRP for HHFTs would help alleviate these concerns, by requiring additional coordination with spill response personnel and ensuring through contract that sufficient personnel and equipment to respond to a worst-case discharge are available.

As the ANPRM notes, “the purpose of an OSRP is to ensure that personnel are trained and available and equipment is in place to respond to an oil spill, and that procedures are established before a spill occurs, so that required notifications and appropriate response actions will follow quickly when there is a spill.” The requirements of a basic OSRP do not fulfill this purpose, since they do not require transporters of oil to ensure that personnel are trained and equipment will be available to respond to a spill. Given the unprecedented recent increase in rail transport of oil throughout North America, and new knowledge concerning the risks of transporting oil by rail, there is a far greater risk for impacts to people and the environment from an oil spill and related response actions than was the case just a few years ago. This new information serves to heighten the immediate need for comprehensive OSRPs for oil trains.

Responses to Specific Questions in the ANPRM

The ANPRM presents a series of questions that PHMSA requests comments on. The Groups provide specific responses below.

Question 1. When considering appropriate thresholds for comprehensive OSRPs, which of the following thresholds would be most appropriate and provide the greatest potential for increased safety? What thresholds would be most cost-effective?

- 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.

Response: The most appropriate threshold would be one that is most protective of public health and the environment, and in the case of oil trains carrying hazardous, flammable materials, the precautionary principle must be followed. Since even a single ruptured tank car containing 35,000 gallons of oil could have adverse impacts on human health and the environment, the Groups believe that a comprehensive response plan should be required of all trains moving oil and ethanol. This would provide the greatest potential for increased safety, since all oil and ethanol shipments would be covered by a comprehensive plan.

³ *Id.*

At the very least, a comprehensive OSRP should be required where there is 42,000 gallons per train consist, given that Federal Response Plan facilities require an approved plan for transfers of oil over water in vessels that have oil storage capacities of 42,000 gallons or more, as discussed in the ANPRM. This would be more consistent with established law than a 1,000,000 gallon threshold, which is applied to FRP oil storage capacity, 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. Oil-by-rail is more analogous to the risk of shipping oil in vessels over water - in fact trains have been shown to be much more dangerous recently - and therefore the 42,000 gallon threshold is more appropriate than a higher trigger.

Regarding cost-effectiveness, the Groups believe that this question 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. The routes over which oil trains are moving will see varying amounts of oil, but the majority are experiencing oil trains that are dozens of cars long, carrying well more than 1,000,000 gallons of crude oil. The parties that would be responsible for establishing contracts for personnel and equipment pursuant to a comprehensive OSRP have the opportunity to come together to create joint contracts that are route and area specific, and that would cover all trains carrying flammable liquids such as oil and ethanol. Since these contracts would have to cover the worst-case scenario, all routes should be covered by such contracts, and a lower threshold would do little to alter the cost-effectiveness. The Groups therefore suggest that PHMSA require all routes over which trains are transporting oil to have a comprehensive plan in place to respond to the worst-case potential spill for that route.

Question 2. In exploring the applicability of comprehensive OSRP requirements to trains carrying large volumes of crude oil, are the requirements of comprehensive OSRPs clear enough for railroads and shippers to understand what would be required of them? If not, what greater specificity should be added?

Response: While the requirements for a comprehensive OSRP include that they “reflect the requirements” of the NCP and ACPs, the Groups suggest a more specific requirement of consistency with those plans, and consultation with the EPA and Coast Guard - the agencies that develop and implement ACPs. The Groups also request that PHMSA clarify what is meant by “worst-case discharge”, which should include the potential for spills of millions of gallons of oil, which is the worst-case scenario envisioned in most Area Contingency Plans. *See Northwest Area Contingency Plans at 1000-3 (contemplating a potential worst-case scenario of a spill of as much as millions of gallons of oil); New York / New Jersey Area Contingency Plan at 9430.4 (same).*

Question 3. In exploring the applicability of comprehensive OSRP requirements to trains carrying large volumes of crude oil, are there elements that should be added, removed, or modified from the comprehensive OSRP requirements?

Response: As suggested above, the plans should be developed in consultation with the EPA and Coast Guard to ensure communication with the federal agencies that respond to oil spills, and consistency with the applicable ACPs. Similarly, OSRPs should be developed in consultation

with local responders to ensure that all relevant parties are familiar with the necessary training and location of relevant personnel and equipment.

In addition, the Groups urge PHMSA to include in the comprehensive OSRP requirements an analysis of the potential impacts to environmentally-sensitive or significant areas, and specific means for mitigating impacts to habitat and ecological services. The OSRPs should refer to the rail routing criteria described in the PHMSA Notice of Proposed Rulemaking: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, Docket No. PHMSA-2012-0082 (HM-251), which includes an analysis of environmentally-sensitive or significant areas. The OSRPs should specifically consider the potential impacts to species listed under the Endangered Species Act, and the potential for harm to species and critical habitat from oil spills and response actions taken pursuant to the OSRPs. PHMSA should urge HHFT operators to work with the Fish and Wildlife Service and National Marine Fisheries Service to ensure that response actions do not harm endangered species, which could lead to liability under Section 9 of the ESA.

Question 8. To what extent should recent commitments to the Secretary of Transportation’s “Call to Action,” and other voluntary industry actions, inform the exploration of additional planning requirements for trains carrying large volumes of crude oil? For example, how should voluntary emergency response equipment inventories and hazardous material training efforts be factored into the exploration of additional planning requirements? Should PHMSA require that resources be procured to respond on a per route basis, or at the state/county/city/etc. level? What is the rationale for your response?

Response: Any commitments that the Secretary of Transportation has called for in the “Call to Action” and any voluntary actions that have been undertaken by oil-by-rail shippers should be included in the requirements for a comprehensive OSRP. Planning for oil spill response is a developing field, and any additional information or commitments that have been deemed pertinent should be included as part of the comprehensive plan to ensure that it truly is comprehensive. These commitments and additional voluntary actions are presumably beneficial for oil spill prevention and response planning, otherwise there would be no reason to undertake them. Current actions, such as voluntary emergency response equipment inventories and hazardous material training efforts, should provide a baseline for what is necessary to prevent and reduce the risk and harm of HHFT derailments and subsequent oil spills. PHMSA should use a “best available” approach to establishing the requirements of an OSRP (i.e. using the state of the art for the industry) and include all voluntary efforts that any oil-by-rail shippers currently employ.

Resources should be procured to respond to oil spills both on a per route basis, as well as a state/county/city level. HHFTs are currently moving across this country on several well-established routes, and each route should be fully covered in case of emergency; however, these routes cross many political boundaries, and therefore jurisdictional concerns require a more specific allocation of resources. The purpose of a comprehensive OSRP is to ensure that appropriate response actions will follow quickly when there is a spill, and this requires that spill response resources be procured in a manner that makes them available anywhere along the shipping route, without delay caused by political boundaries and excessive distance.

Question 9: 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? Should other federal agencies with responsibility for emergency response under the National Contingency Plan (e.g. U.S. Coast Guard, EPA) also review and comment on the comprehensive OSRP with PHMSA?

Response: The OSRPs for HHFTs must be shared with SERCs and TERCs, as well as any entity designated by a state for emergency response planning, in order for the plans to be implemented effectively, and to ensure that there is coordination and communication with the pertinent entities. Coordination with states, as well as federal agencies such as EPA and USCG, would provide for more efficient and effective response to HHFT derailment events. As discussed above, EPA and USCG should not only review the OSRPs, but PHMSA should require coordination with those agencies through a specific consultation and approval process.

The OSRPs should also be made available to the public. The public has a right to review this information and be informed as to the actions that are planned in response to train accidents, since these actions may impact their health and environment.

The National Environmental Policy Act and Endangered Species Act Requirements

PHMSA must undertake a full analysis of the environmental ramifications of a potential rule regarding OSRPs for oil trains by completing the required National Environmental Policy Act (“NEPA”) and Endangered Species Act (“ESA”) procedures. This includes the development of an Environmental Assessment to determine whether an Environmental Impact Statement is required, and undertaking consultation with the Fish and Wildlife Service and National Marine Fisheries Service (the “Services”) to ensure that PHMSA’s actions do not harm listed species.

PHMSA must provide a complete NEPA analysis

Congress enacted NEPA in 1969, directing all federal agencies to assess the environmental impact of proposed actions that significantly affect the quality of the environment. 42 U.S.C. § 4332(2)(C). The Council on Environmental Quality (CEQ) has promulgated uniform regulations to implement NEPA, which are binding on all federal agencies. 42 U.S.C. § 4342; 40 C.F.R. §§ 1500-1508.

The CEQ regulations implementing NEPA require the PHMSA to disclose and analyze the environmental effects of the proposed action. 40 C.F.R. § 1500.1(b). Specifically, the regulation explains that “NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.” *Id.* The purpose of this requirement is to ensure that the public has information that allows it to question, understand, and, if necessary, challenge the decision made by the agency.

When it is not clear whether or not an action will significantly affect the environment (and thus require the preparation of an Environmental Impact Statement, or EIS), the regulations direct agencies to prepare a document known as an Environmental Assessment (EA) in order to determine whether an EIS is required. 40 C.F.R. §§ 1501.4(b), 1508.9. An EA is “a concise public document” that “[b]riefly provide[s] sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.” 40 C.F.R. § 1508.9(a). An EA “shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.” 40 C.F.R. § 1508.9(b).

The NEPA regulations require the agency to consider ten “significance factors” in determining whether a federal action may have a significant impact, thus requiring an EIS. 40 C.F.R. § 1508.27. Among other factors, the agency must consider the beneficial and adverse impacts of the project, the effect on public health and safety, unique characteristics of the geographic area, the degree to which possible effects are highly controversial, uncertain, or involve unique or unknown risks, cumulatively significant effects, and whether the proposed action will violate any laws or standards of environmental protection. *Id.* If the agency’s action may be environmentally significant according to any of the criteria, the agency must prepare an EIS. *Id.*

Here, PHMSA is considering whether or not to continue to exempt HHFTs from developing comprehensive OSRPs. This is certainly an issue with a potential to affect public health, and involves unique or unknown risks, given the recent history of fiery derailments and potential for increased oil-by-rail traffic in the near future. The rapid increase in oil by rail traffic over the last 3 years is unprecedented, and has resulted in several emergency orders, safety advisories and proposed rulemakings, as is set forth by PHMSA at length in its Notice of Proposed Rulemaking: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, Docket No. PHMSA-2012-0082 (HM-251). By PHMSA’s own admission in this docket, “the consequences, including environmental impacts, of a derailment of an HHFT have been demonstrated in recent train accidents.” This is due to “the increasing reliance on HHFTs [which] pose[] a risk that was not considered when RSPA made its determination on th[e] threshold.” Due to these rapidly changing circumstances, the regulations that govern the prevention and response to inevitable spills must be subject to scrutiny to ensure that the environment is being appropriately considered, as required by NEPA.

The difference between the basic OSRP and comprehensive OSRP requirements are meaningful to the consideration of the impacts of the proposed action. PHMSA must inform its decision by exploring alternative courses of action, including a no action alternative. 40 CFR 1508.9. If PHMSA does not alter 49 CFR 130.31, and only basic OSRPs are required for HHFTs, then there is no assurance of consistency with the National and Area Contingency Plans, and no requirements that adequate personnel and equipment be available to respond to an oil spill. To put this in some context, the Northwest Area Contingency Plan, which covers the Columbia River and Puget sound refineries and transloading facilities, states that “Should a catastrophic oil spill occur, it is likely that there will not be adequate response resources in the Northwest Area to manage and clean up the spill.” NWACP at 1000-28. If a comprehensive OSRP is required of HHFTs, then there would be a requirement that contracts be in place to ensure adequate equipment to respond to a worst-case spill, which is not required for a basic OSRP. There would

also be assurances that proper training for spill response actions takes place. Therefore, whether or not a comprehensive OSRP is required could have far reaching impacts on the environment in the event of a spill.

Pursuant to 40 C.F.R. § 1501.2, agencies must consider the environmental impacts of alternatives at “the earliest possible time.” The Center therefore requests that PHMSA undertake a full NEPA analysis, which due to the risks and uncertainties involved would require the development of an EIS; however, at the very least PHMSA must draft an EA to determine whether an EIS is required. Analyzing the environmental impacts of the proposed action and alternatives would serve to highlight the need for a lower threshold to ensure that there are sufficient plans in place to respond to oil spills.

PHMSA must complete consultation pursuant to the Endangered Species Act

Congress enacted the Endangered Species Act in 1973 to provide for the conservation of endangered and threatened fish, wildlife, plants and their natural habitats. 16 U.S.C. §§ 1531, 1532. The ESA imposes substantive and procedural obligations on all federal agencies and persons with regard to listed species and their critical habitats. *See id.* §§ 1536(a)(1), (a)(2) and 1538(a); 50 C.F.R. § 402.10.

To fulfill the substantive purposes of the ESA, federal agencies are required to engage in Section 7 consultation with the Fisheries Service or the Fish and Wildlife Service, depending on the species at issue, to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined . . . to be critical.” *Id.* § 1536(a)(2). The definition of agency “action” is broad and includes “the promulgation of regulations” such as those at issue here. 50 C.F.R. § 402.02.

In fact, when the PHMSA’s predecessor agency, the Research and Special Programs Administration (“RSPA”), published its final rule in 1996, which exempted most if not all trains moving oil, ethanol and other flammable and toxic products from having to provide a comprehensive OSRP,⁴ it was required to undertake consultation with the Services on that rulemaking. Had it done so, the RSPA, in consultation with the Services, would have considered the impact to listed species and critical habitat along rail-shipping routes, and analyzed the impacts of a potential spill and the risk associated with the lack of information and commitments that are required for a comprehensive plan. It is likely that the risk of harm to endangered species and critical habitat from the lack of a comprehensive OSRP for trains pulling the most common tank cars for oil, ethanol and other flammable and hazardous liquids would have resulted in a determination that such an action would jeopardize the continued existence of listed species. The Services may have required “reasonable and prudent alternatives,” included requiring comprehensive OSRPs for all trains moving hazardous liquids. RSPA’s failure to consider the potential impacts of this rule on listed species was a glaring violation of the Endangered Species Act, and must not be repeated by PHMSA.

⁴ The ANPRM states that “a very limited number of rail tank cars in use would be able to transport a volume of 42,000 gallons in a single package,” and that “the number of railroads required to have a comprehensive OSRP is... possibly non-existent.”

Pursuant to the ESA, PHMSA is obliged to review its actions at “the earliest possible time” to determine whether any action “may affect” listed species or their critical habitat in the “action area.” 50 C.F.R. § 402.14(a). The term “may affect” is broadly construed to include “[a]ny possible effect, whether beneficial, benign, adverse, or of an undetermined character,” and thus is easily triggered. *Interagency Cooperation – Endangered Species Act of 1973, As Amended*, 51 Fed. Reg. 19,926 (June 3, 1986). If a “may affect” determination is made, “consultation” is required.

Oil spills have the potential to cause catastrophic harm to listed species through direct harm and poisoning of the habitat and food chains on which these species rely. Oil spill response activities, if not carefully planned, can cause additional harm, such as through the use of toxic dispersants, dredging and in-situ burning, which can directly impact species and their habitat. Since many oil trains travel through areas where there are listed species and critical habitat, the decision as to whether a comprehensive plan must be in place for responding to oil spills is an action that certainly “may affect” listed species. Therefore, RSPA was required to undertake consultation with the Services on the impacts of its rulemaking on endangered species, and PHMSA, as the predecessor to RSPA, has that same responsibility now.

Pursuant to the ESA, PHMSA must inquire as to the presence of listed species in the areas that are affected by this rule.⁵ The PHMSA must “use the best scientific and commercial data available” to determine whether listed species are likely to be adversely affected by the action. 16 U.S.C. § 1536(a)(2). If the action agency concludes that the proposed action is “not likely to adversely affect” the species, then the Services must concur in writing with this determination in order to avoid formal consultation. 50 C.F.R. §§ 402.13(a) and 402.14(b). If the Services concur in this determination, then consultation is complete. *Id.* § 402.13(a). If the Services’ concurrence in a “not likely to adversely affect” finding is inconsistent with the best available science, however, any such concurrence must be set aside. *See* 5 U.S.C. § 706(2).

However, when the agency concludes that the action is “likely to adversely affect” listed species or critical habitat, as PHMSA must if the threshold is not changed to require comprehensive OSRPs for trains moving oil, it must then enter into “formal consultation.” 50 C.F.R. §§ 402.12(k), 402.14(a). The threshold for triggering the formal consultation requirement is “very

⁵ The Center notes, for example, that oil trains travelling through the Hudson River Albany area may affect Atlantic sturgeon, shortnose sturgeon, piping plover, roseate tern, green sea turtle, hawksbill sea turtle, Kemp’s Ridley sea turtle, leatherback sea turtle, loggerhead sea turtle, blue whale, fin whale, humpback whale, North Atlantic right whale, sperm whale, sei whale, and sea beach amaranth. Oil trains moving through the Columbia River Gorge may affect Southern Oregon/northern California Coasts coho salmon, Oregon Coast coho salmon, Snake River Fall-run chinook salmon, Snake River spring/summer-run chinook salmon, Lower Columbia River chinook salmon, Upper Willamette River chinook salmon, Upper Columbia River spring-run chinook salmon, Hood Canal summer-run chum salmon, Columbia River chum salmon, Snake River sockeye salmon, Upper Columbia River steelhead, Snake River Basin steelhead, Lower Columbia River steelhead, Upper Willamette River steelhead, Middle Columbia River steelhead, Puget Sound chinook salmon, Lake Ozette sockeye salmon, Eulachon, Southern DPS of green sturgeon, Blue whales, Fin whales, Humpback whales, Northern right whales, Sei whales, Sperm whales, Steller sea lion, Green turtles, Leatherback turtles, Loggerhead turtles, Olive Ridley turtles, Marbled Murrelet, Western Snowy Plover, and Oregon Silverspot Butterfly.

low;” “any possible effect . . . triggers formal consultation requirements.” 51 Fed. Reg. 19,926. A decision not to require a comprehensive OSRP for trains moving hundreds of thousands of gallons of flammable, explosive and toxic oil around the country in tank cars that are ill-suited for such purpose⁶ poses a significant risk of harm to listed species. Therefore formal consultation was and is required regarding this regulation.

Formal consultation commences with the action agency’s written request for consultation and concludes with the Services’ issuance of a “biological opinion.” 50 C.F.R. § 402.02. The biological opinion issued at the conclusion of formal consultation states the opinion of the Services as to whether the effects of the action are “likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.” *Id.* § 402.14(g)(4). To “jeopardize the continued existence of” means “to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” *Id.* § 402.02.

If PHMSA fails to lower the threshold for OSRPs, it will be continuing to put endangered species at risk, in violation of the Endangered Species Act. The Center therefore hereby petitions PHMSA to initiate consultation with the Services regarding this proposed rulemaking, to ensure that the regulations are not jeopardizing the continued existence of listed species.

Conclusion

The Center urges PHMSA to undertake immediate action to require that all trains carrying oil and ethanol are covered by a comprehensive OSRP to ensure that human health and the environment will be protected from a potential worst-case accident. We appreciate your attention to these comments.

Respectfully submitted,

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⁶ See PHMSA Notice of Proposed Rulemaking: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, Docket No. PHMSA-2012-0082 (HM-251)

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HAZARDOUS MATERIALS: ENHANCED TANK CAR STANDARDS AND
OPERATIONAL CONTROLS FOR HIGH-HAZARD FLAMMABLE TRAINS

COMMENTS OF THE CENTER FOR BIOLOGICAL DIVERSITY, FRIENDS OF THE
GORGE AND ADIRONDACK MOUNTAIN CLUB

1. Introduction

The Center for Biological Diversity (“Center”), Friends of the Gorge (“Friends”) and the Adirondack Mountain Club (“ADK”) (together, the “Groups”), on behalf of themselves and their members, submit the following comments in response to the Pipeline and Hazardous Materials Safety Administration’s (“PHMSA”) notice of proposed rulemaking (“NPRM”) addressing enhanced tank car standards and operational controls for high-hazard flammable trains (“HHFTs”).

The Center is very concerned that the PHMSA has chosen to move forward with this matter in the slowest way possible – through an advanced notice of proposed rulemaking followed many months later by a proposed rule and eventually a final rule, with many months of commentary and delay. This is unconscionable in light of the immediate threat that these HHFTs present – a threat that PHMSA itself has described in detail in its notice of proposed rulemaking. Given the unprecedented recent increase in rail transport of oil throughout North America, and new knowledge concerning the hazards of transporting oil by rail, there is a far greater risk for impacts to people and the environment from a derailment and oil spill than was the case just a few years ago. This new information serves to heighten the immediate need for a ban on the use of DOT-111 tank cars, and the promulgation of rules that ensure sufficient protections for people and the environment. The proposed rules, which allow unsafe DOT-111 tank cars to remain in service for several years and allow for HHFT speeds that exceed safe levels, are insufficient to protect people and wildlife. More must be done to prevent fiery derailments and spills that will continue to endanger Americans in their homes and wild animals and ecosystem along busy rail corridors.

The undersigned submit that PHMSA has taken an inappropriate approach to fulfilling its self-proclaimed mission “to protect people and the environment from the risks of hazardous materials

transportation.”¹ PHMSA claims that its “vision is that no harm results from hazardous materials transportation,” and that it will “work continuously to find new ways to reduce risk toward zero deaths, injuries, environmental and property damage, and transportation disruptions;”² however, while the proposed rules talk about prevention of rail accidents, they state that their “focus... is on mitigating the damages of train accidents,” and not on preventing train accidents. NPRM at 33. Moreover, they do not do enough to safeguard the public and the environment from spills that could otherwise be prevented with stricter regulations and safer tank car standards.

This is inconsistent with the best interests of the public, and the tenets of the Hazardous Materials Transportation Act (“HMTA”), which directs the Secretary of Transportation to “prescribe regulations for the *safe transportation*, including security, of hazardous materials in intrastate, interstate, and foreign commerce.” (emphasis added). If we as a Nation are going to allow highly hazardous flammable liquids to hurtle across our landscape on trains prone to derailment, then at the very least PHMSA should promulgate rules that provide for the safest possible means of conveyance. A focus on mitigating damages, rather than preventing accidents, does not ensure protection for people and the environment. We need safer tank cars travelling at lower speeds, and if it is not possible to prevent accidents, then oil should not be transported by rail.

The Groups further note that PHMSA must complete the appropriate National Environmental Policy Act (“NEPA”) analysis, and undertake Endangered Species Act (“ESA”) consultation with the Fish and Wildlife Service and the National Marine Fisheries Service (the “Services”) in order to fully assess the effects of the proposed rule on the environment, listed species and their critical habitat.

2. A Moratorium on the Use of DOT 111 Tank Cars is Warranted

The continued use of legacy DOT 111 tank cars for flammable liquid transport poses an imminent hazard to people and the environment and should be stopped immediately. The Center hereby supports and incorporates by reference the petition of Sierra Club and ForestEthics for an Emergency Order Prohibiting the Shipment of Baaken Crude Oil in Unsafe Tank Cars (July 15, 2014).

The NPRM itself states that “[i]t has been demonstrated that the DOT Specification 111 tank car provides insufficient puncture resistance, is vulnerable to fire and roll-over accidents, and the current bottom outlet valves are easily severable in HHFT accidents. These risks have been demonstrated by recent accidents of HHFTs transporting flammable liquids.” NPRM at 137. It further states that the National Transportation Safety Board has published findings indicating “that the DOT Specification 111 tank car can almost always be expected to breach in the event of a train accident resulting in car-to-car impacts or pileups.” NPRM at 30. Moreover, the NPRM predicts 5 to 15 accidents per year – an estimate that is too low, as discussed in detail below – and it is evident that tank car penetration has occurred at speeds as low as 9 miles per hour. Together, these facts demonstrate that the pertinent question is not one of the *degree of risk* that tank cars may be involved in accidents and may be punctured, releasing their content and doing

¹ <http://www.phmsa.dot.gov/about/mission>

² *Id.*

great harm. Instead, *it is a certainty* that derailments and spill events will occur if DOT allows the legacy DOT 111s to remain in service.

It is therefore unconscionable to allow these tank cars to continue to be used. This poses an imminent hazard to life, property and the environment, and PHMSA should use its authority pursuant to 49 U.S.C. § 5121(d) to immediately ban the use of DOT-111s for HHFTs. Any rule that allows for their continued use, even during a phase-out period, puts economic interests above the safety and health of the public and would seriously undermine confidence in the agencies that are supposed to be protecting us from harm. Economic feasibility provides no valid basis for accepting certain damage to people and the environment from further fiery derailments.

The Groups therefore strongly object to PHMSA's proposal to allow the DOT 111 tank cars to be in service through 2020, given that the agency knows them to be defective and unsafe. The National Highway Transportation Safety Administrations (NHTSA) is investigating GM for exactly that type of decision (i.e. delay in resolving safety issues) and has imposed the maximum penalty on the company for this type of conduct.³ Yet, the only apparent justification for allowing these bombs trains to continue to be used is the avoidance of a *fleet shortage*. NPRM at 45043. PHMSA's mandate is not to allow unsafe and hazardous cars to continue on the rails until safe cars can be built, but to remove the identified hazard. Until the hazardous cars are removed, none of the other proposed steps, including the reclassification of flammable materials, lower speeds and rerouting efforts, will be effective in preventing harm to people, property and the environment.

In other similar contexts, risk and hazard prevention measures are intended to identify a safety or security hazard, and once identified, the hazard must be eliminated; it may be minimized only if elimination is not possible. However, where human death is a highly likely outcome of an identified hazard, business operations that involve this hazard should be curtailed entirely. (See, for example, FDA regulations that prohibit the sale of unsafe pharmaceuticals). The NPRM acknowledged this, and expresses the concept as follows: "A Risk Reduction Program is a structured program with proactive processes and procedures . . . to identify hazards and to mitigate, if not eliminate, the risks associated with those hazards on its system." NPRM at 45027. Here, the hazard consists of tank cars that are certain to release hazardous content upon impact, with consequences likely to include loss of life; however, the proposed rules will not result in tank cars that are brought up to a standard requisite to remove the hazard. The discussion in the NPRM demonstrates that human error, deteriorating tracks and other factors leading to collisions cannot be eliminated, making continuing derailments a certainty; but tank cars known to contain safety defects that cause the damage after derailment can be removed. No effective Risk Reduction Program that identifies a defective product that is highly likely to cause human death and other severe consequences – here, the tank cars – can allow that product to stay in use. The NPRM violates these basic policies and maxims. PHMSA should immediately ban the use of these dangerous tank cars.

³ See <http://www.nhtsa.gov/About+NHTSA/Press+Releases/2014/DOT-Announces-Record-Fines,-Unprecedented-Oversight-Requirements-in-GM-Investigation>.

3. Responses to Specific Questions in the NPRM

The NPRM presents a series of questions that PHMSA requests comments on. Specific responses to several of these are provided below.

Question: Whether codifying the requirements of the Order in the HMR is the best approach for the notification requirements, and whether particular public safety improvements could be achieved by requiring the notifications be made by railroads directly to emergency responders, or to emergency responders as well as SERCs or other appropriate state delegated entities.

Response: The conditions that resulted in DOT's promulgation of an emergency order have not been, and will not be, abated by the proposed rules. The rapid increase in oil-by-rail traffic is projected to increase,⁴ and therefore continuing to ensure that information is provided to State emergency responders is critical to ensuring the safety of the public and the environment. Since this is an ongoing issue, codification of the order is warranted. The information should be provided directly to SERCs and emergency responders to ensure that all entities have sufficient up-to-date information in the event of a discharge.

Question: Whether the 1,000,000-gallon threshold [for reporting requirements] is appropriate, or whether another threshold such as the 20-car HHFT threshold utilized in this NPRM's other proposals is more appropriate. If you believe that a threshold other than 1,000,000 gallons is appropriate, please provide any information on benefits or costs of the change, including for small railroads.

Response: The 1,000,000-gallon threshold may have been appropriate for an emergency order to abate an imminent hazard, but moving forward DOT should institute a lower threshold to ensure that emergency responders have information on all trains carrying hazardous flammable liquids in an amount that poses a danger to people and the environment. At the very least, all HHFTs (i.e. 20 car threshold) must provide information to emergency responders, and the undersigned Groups believe that an even lower threshold is warranted, so that any and all trains carrying tank cars with flammable liquids are covered by the order. The Groups recommend a 35,000 gallon per train consist threshold, since even if one tank car ruptures it poses a significant risk to the public and the environment. The costs associated with this should be minimal, since this is only a reporting requirement, while the benefits of providing this information to first responder are numerous, including an increase in preparedness, and the potential to avoid harm to life, property and the environment.

⁴ Data shows that at the end of 2013, North American rail terminals had the capacity to load at least 3.5 million barrels per day, with even more capacity planned in the near future. *See* Oil Change International, *Runaway Train: The Reckless Expansion of Crude-By-Rail in North America*, May, 2014 (available at http://priceofoil.org/content/uploads/2014/05/OCI_Runaway_Train_Single_reduce.pdf)

Question: Whether PHMSA should place restrictions in the HMR on the disclosure of the notification information provided to SERCs or to another state or local government entity.

Response: There should be no restrictions on the disclosure of information provided to SERCs or other emergency responders. The public has a right to review this information and be informed as to the movement of flammable liquids through their communities, since these actions may impact their health and environment.

Question: PHMSA requests comments on the proposed timelines for discontinuing use of DOT Specification 111 tank cars in HHFT service.

Response: Given the imminent hazard posed by the use of HHFTs—which has been detailed at length by DOT/PHMSA in this very docket as well as DOT’s Emergency Order dated May 7, 2014,⁵ Sierra Club’s July 15, 2014 petition for an emergency order, and the American Association of Railroads and the National Transportation Safety Board’s comments on the hazards posed by DOT-111s—the proposed timeline for discontinuing use of DOT-111 tank cars is completely unacceptable. PHMSA has admitted in this very docket that “[t]he growing reliance on trains to transport large volumes of flammable liquids poses a significant risk to life, property, and the environment.” It is therefore unconscionable, arbitrary and capricious for DOT to allow for the continued use of DOT-111 tank cars for any period of time. An immediate prohibition on the use of these unsafe tank cars is necessary to protect people and the environment from further harm.

Question: PHMSA requests comments on the proposed speed restrictions.

Response: The proposed speed restrictions are insufficient to ensure that people and the environment are protected from further spills—especially if DOT is going to allow the DOT-111 tank cars to be used over the next several years as they are phased out. The NPRM notes that “speed can influence the probability of an accident, as it may allow for a brake application to stop the train before a collision. Speed also increases the kinetic energy of a train resulting in a greater possibility of the tank cars being punctured in the event of a derailment.” It further states that “a slower speed may allow a locomotive engineer to identify a safety problem ahead and stop the train before an accident occurs, which could lead to accident prevention.” PHMSA is considering several options for speed restrictions, including a maximum speed of 40 mph in high population or HTUA areas; however, it is readily apparent that even a 40 mph limit will not resolve the imminent hazard posed by the continued use of DOT-111 tank cars over the next 5 years, or the DOT 117 (i.e. Option 1 in the NPRM) tank cars thereafter.

The NPRM notes that the Option 1 tank car (PHMSA’s preferred alternative) must be equipped with “protective structure capable of sustaining, without failure, a rollover accident at a speed of **9 mph**, in which the structure strikes a stationary surface assumed to be flat, level, and rigid and the speed is determined as a linear velocity, measured at the geometric center of the loaded tank

⁵ Docket No. DOT-OST-2014-0067. The Emergency Order states that “[t]he number and type of petroleum crude oil railroad accidents... that have occurred during the last year is startling, and the quantity of petroleum crude oil spilled as a result of those accidents is voluminous in comparison to past precedents.”

car as a transverse vector.” NPRM at 125. It further states that “The combination of the shell thickness and head shield of Options 1 and 2 provide a head puncture resistance velocity of **18.4 mph** (21% effectiveness rate).” NPRM at 120.

The 117P performance standards provide similar indications regarding the safest maximum speed for HHFTs using the modified (upgraded) tank car design. Pursuant to § 179.202b-2 Puncture Resistance, the performance standards would provide “Minimum side impact speed: **12 mph** when impacted at the longitudinal and vertical center of the shell by a rigid 12-inch by 12-inch indenter with a weight of 286,000 pounds,” and “minimum head impact speed: **18 mph** when impacted at the center of the head by a rigid 12-inch by 12-inch indenter with a weight of 286,000 pounds.” For top fittings protections, § 179.202b-5 of the performance standards states “tank car tanks must be equipped with a top fittings protection system and a nozzle capable of sustaining, without failure, a rollover accident at a speed of **9 miles per hour**, in which the rolling protective housing strikes a stationary surface assumed to be flat, level, and rigid and the speed is determined as a linear velocity, measured at the geometric center of the loaded tank car as a transverse vector.” This is supported by the RIA, which states that “Modeling and simulation of puncture velocity indicate a puncture velocity of approximately... 12.3 mph for the cars under Options 1 and 2.” RIA at f. 78.

It must be noted that the above velocity resistance ratings are for the more protective tank cars that DOT envisions for future HHFT traffic. The DOT-111 tank cars currently being used, and which will remain in use for up to 5 more years pursuant to the proposed rules, may breach at even lower speeds. Furthermore, these ratings are based on modeling that is limited to tank cars striking a flat, level surface. It is more likely that when oil trains derail they will hit uneven and variable terrain, which may result in punctures and loss of top fittings at even lower speeds.

If the performance standards and proposed tank car designs can only withstand accidents in the 9-18 mph range without suffering top fitting damage or punctures that would result in spilled oil, then it is arbitrary and capricious for PHMSA to allow these trains to travel at speeds greater than that, and as much as 40 or even 50 mph. Therefore, the Groups believe that the proposed rule is not protective of public health and the environment, and that HHFTs should not be operated at speeds that exceed the established safe limits to prevent top fitting loss and punctures in the event of a derailment.

If PHMSA allows HHFTs to travel in excess of the 9-18 mph that would prevent punctures and top fitting loss, then at the very least speeds should be limited to 30 mph. The proposed rule states that:

In evaluating train accidents involving HHFTs listed in Table 3 above, we found that all but one of the derailments occurred in excess of 20 mph. Only two of the derailments occurred at a speed of between 20 mph and 30 mph, four occurred between 30 and 40 mph and six occurred at speeds in excess of 40 mph.... The documented derailment speeds exceed the puncture velocity of both the DOT Specification 111 tank car and the Options proposed in this rule.

NPRM at 139. This indicates that allowing speeds over 30 mph drastically increases the potential for a derailment and subsequent spill. Trains carrying highly hazardous flammable liquids should therefore be limited to speeds that are known to be safe. Allowing these trains to move any faster would pose an imminent hazard to the public and the environment.

Question: PHMSA has asked what other geographic delineations—in addition to HTUAs and cities with 100,000 people or more—should PHMSA consider as an Option for a 40-mph speed restriction in the absence of a proposed DOT 117 tank car?

Response: The Center believes that speed restrictions should focus not only on public health, but on environmental and habitat considerations as well. Speed restrictions should be used to protect sensitive environmental areas and important habitat, including species listed as threatened or endangered under the Endangered Species Act, and their critical habitat. As set forth in more detail below, PHMSA must initiate consultation with the Services on these proposed rules, and through that process it must identify areas where HHFTs have the potential to impact listed species and critical habitat, and ensure that the final rules do not jeopardize these species, which may include speed restrictions near habitat areas. PHMSA must also complete an EIS pursuant to NEPA, and should use that process to identify other environmentally sensitive features to be used to implement speed restrictions. Speeds should be limited to ensure that trains carrying oil will not puncture or suffer valve loss in the event of a derailment (see above).

Question: 5. What are the economic impacts of the proposed phase out date for existing DOT Specification 111 tank cars used to transport PG III flammable liquids?

Response: The Groups submit that this question cannot be looked at in isolation, and what PHMSA needs to consider are the economic impacts of keeping dangerous cars in service, even over a five year phase-out period. The potential harm to people, property and the environment, which may include damage to ecological services and harm to endangered species that are invaluable, must also be considered. As discussed further below, these issues must be analyzed further by PHMSA through the development of an EIS pursuant to NEPA, and in consultation with the Fish and Wildlife Service and National Marine Fisheries Service pursuant to the ESA.

4. Other Comments

Proposed Brake Requirements

PHMSA is proposing to require that HHFTs be equipped with a two-way EOT device as defined in 49 CFR 232.5, by October 1, 2015, and to be equipped with a distributed power system as defined in 49 CFR 229.5 or an ECP brake system as defined in 49 CFR 232.5, by October 1, 2016. The information provided in the NPRM, however, suggests that distributed power systems are half as effective as an ECP brake system. Given that the ECP system would only reduce the potential for tank car punctures by 36%, it is unconscionable to allow the option of a potentially cheaper distributed power system, which would only reduce accident severity by 18%. NPRM at 105. Given the imminent hazard that HHFTs pose to human health and the environment, the most effective brake system that has been shown to be readily available for these trains must be

employed, and PHMSA must not offer a choice that would drastically increase the severity of accidents.

The NPRM further proposes that if a rail carrier does not comply with the proposed braking requirements above, the carrier may continue to operate HHFTs at speeds not to exceed 30 mph. As discussed above, even at 30 mph these trains pose a hazard to people and the environment, since they are only designed to withstand a derailment at speeds in the 9-18 mph range. Trains without the proper brakes should therefore be limited to 18 mph, to ensure head puncture resistance in case of derailment.

Proposed New Tank Cars Must Be Safest Possible And Travel At Slower Speeds

If we as a nation are going to allow highly hazardous flammable liquids to hurtle across our landscape on trains prone to derailment, then at the very least PHMSA should promulgate a rule that provides for the safest possible means of conveyance. Option 1 in the proposed rules is the safest that has been provided as an option; however, the Groups urge PHMSA to do more, consistent with its own mission and goals.⁶ Pursuant to the NPRM, these improved tank cars would still only have a 17% effectiveness rate puncture force, and would not be required to be designed to withstand a rollover accident at more than 9 mph without sustaining a failure. The proposed rules allow these high hazard trains to move at 50 mph, with limits of 40mph in certain areas. Allowing these dangerous trains to travel at such high speeds creates a ticking time bomb, and poses an imminent hazard to people and the environment. It is PHMSA's duty to do more to ensure our safety. We need safer tank cars travelling at lower speeds, and if that is not possible then oil should not be transported by rail. Economic feasibility provides no valid basis for putting people and the environment at risk from further fiery derailments.

Costs and Benefits Not Accurately Portrayed

The Groups are concerned that PHMSA may not be accurately stating the costs and benefits associated with its proposed rules, and as set forth in the NPRM at Table 6.⁷ On page 95, the NPRM states that "PHMSA only quantifies benefits in this proposed rule from mitigating the severity of accidents." What is left unresolved, then, are the related benefits to the environment from measures that would prevent spills, such as lower speed limits and sturdier tank car design. Loss of ecological services and natural resource damages from a spill can be in the millions of dollars, and without taking these values into account PHMSA has not accurately compared the actual cumulative benefits of the strictest possible regulations to the estimates of the amount the oil and gas industry would have to pay to upgrade tank cars (which will then be used to make the industry more money). Stricter standards and additional protections may be warranted—even if they pose a higher cost—if the full range of benefits are considered. As discussed further below, these issues must be analyzed further by PHMSA through the development of an EIS pursuant to

⁶ PHMSA's website states that: "Our vision is that no harm results from hazardous materials transportation. We cannot accept death as an inevitable consequence of transporting hazardous materials, so we will work continuously to find new ways to reduce risk toward zero deaths, injuries, environmental and property damage, and transportation disruptions." (<http://www.phmsa.dot.gov/about/mission>)

⁷ In fact, the RIA admits that cost assessments from many accidents are still incomplete, including the incident in Quebec that led to the death of over 40 people and the incineration of a town.

NEPA, and in consultation with the Fish and Wildlife Service and National Marine Fisheries Service pursuant to the ESA.

Flawed Risk Assessment

There are several errors in PHMSA's risk modeling. In particular, the Regulatory Impact Analysis ("RIA") states that its low-end risk analysis is based on the rate of accidents over the period between 2006 to 2014, and extrapolates the potential risk from those numbers. RIA at 5. The data for crude shipments show, however, that the number of accidents for crude oil shipments spiked dramatically much later, with the most drastic spike from mid-2012 to 2013 (and data for 2014 is still incomplete). *See* the RIA at 7. While the data for ethanol shipment derailments shows less of a spike, the increase in crude shipment accidents of 423 percent between 2011 and 2013 is drastic.

Including earlier years in which the number of accidents was much lower (i.e. 2006-2010) necessarily skews the results, contributing to the projection of a low of 15 mainline derailments for 2015, falling to 5 by 2034. The trend is much starker than the rulemaking reflects and certainly is contrary to a projected decrease in accidents in later years. The high end estimates, which are adjusted by adding just 10 large derailments to the total over the next 20 years, is based on the same skewed numbers and therefore no more credible. The risk modelling should be redone to reflect the drastic rise in oil train derailments over the 2011-2014 period, in order to more accurately reflect the potential for accidents in the future.

Lack of Explanation for Increased Oil-By-Rail Accidents

PHMSA fails to explain why the rate of accidents for crude and ethanol shipments has drastically increased over the past few years, while the overall accident rate for every other rail transport has decreased. NPRM at 12. The agency should understand and account for this anomaly.

The RIA suggests that the length and weight of HHFTs may be responsible for this incongruity. PHMSA notes that "there are many unique features to the operation of unit trains to differentiate their risk ... [they] are longer, heavier in total, more challenging to control, and can produce considerably higher buff and draft forces which affect train stability. In addition, these trains can be more challenging to slow down or stop, can be more prone to derailments when put in emergency braking, and the loaded tank cars are stiffer and do not react well to track warp which when combined with high buff/draft forces can increase the risk of derailments." RIA at 24.

However, the NPRM does nothing to address the risks posed by the use of long, heavy oil trains. The NPRM even states that the additional safety features it has proposed will not negatively impact capacity because "DOT believes the railroads will optimize unit train length which may result in longer trains." NPRM at 128. Based on the analysis provided in the RIA, PHMSA should consider including limitations on the overall length and weight of HHFTs to reduce the risk of derailment.

Effect of Safety Advisory

The NPRM notes that the PHMSA and FRA issued a Safety Advisory on May 7, 2014, which urged carriers of Bakken crude to select and use only tank cars of the highest integrity, and to

avoid using the DOT 111 tank cars for shipments of Bakken crude. The NPRM, however, sets a lower standard and, in fact, allows the older, dangerous DOT 111 tank cars to be used, without additional safety features, until 2020 as they are phased out. PHMSA should explain whether the NPRM is intended to nullify the Safety Advisory and, if not, how it can justify setting standards below those of the Safety Advisory.

Discount Rate

In PHMSA's calculations of future benefits, it uses a discount rate of 7%. This is too high for environmental benefits. PHMSA should compare the use of a 3% discount rate in greenhouse gas rulemakings, such as the proposed CAA section 111(d) rulemaking for power plants, and use a similar discount rate here. *See* Federal Register Volume 79, Number 117 (Wednesday, June 18, 2014).

Transfer of Legacy DOT 111 Tank Cars to Alberta Canada Will Not Resolve the Hazards they Pose

The proposed rulemaking states that:

As a result of this rule, PHMSA expects all DOT Specification 111 Jacketed and CPC 1232 Jacketed crude oil and ethanol cars (about 15,000 cars) to be transferred to Alberta, Canada tar sands services. It does, however, expect the majority of DOT 111 Un-Jacketed and CPC 1232 Unjacketed cars (about 66,000 cars) to be retrofitted; some DOT Unjacketed and CPC 1232 Unjacketed cars (about 8,000 cars) will be transferred to Alberta, Canada tar sands services. No existing tank cars will be forced into early retirement.

NPRM at 141. This, however, does not provide a reasonable means of removing the threat that these tank cars pose to people and the environment. Derailments of trains carrying heavy tar sands bitumen strip-mined in Alberta, Canada in DOT 111s would pose the same threat of puncture and spills as the transport of fuel from the Bakken oil formation in North Dakota. Tar sand oil persists longer and can smother shorelines and the biota that live there. This viscous type of oil, once spilled into aquatic environments, creates a nightmare clean up scenario with lasting and perhaps irreversible impacts to water quality and aquatic ecosystems. Tar sands oil is not only dangerous for its inherent corrosive and acidic properties and for its tendency to sink in water bodies, but since it is generally only transported when blended with toxic gas condensates, tar sands present a one-two punch to the environment in the event of a spill.

Any rule that continues to allow the DOT 111 tank cars to remain in use for the transportation of hazardous materials poses a threat to the environment. Allowing these tank cars to remain in service, and creating a rule that simply pushes them towards another use that poses just as much of a threat to aquatic species and habitats is unjustifiable.

5. The Endangered Species Act Section 7(a)(2) Duty to Ensure No Jeopardy to Listed Species

Congress enacted the Endangered Species Act in 1973 to provide for the conservation of endangered and threatened fish, wildlife, plants and their natural habitats. 16 U.S.C. §§ 1531, 1532. The ESA imposes substantive and procedural obligations on all federal agencies with regard to listed species and their critical habitats. *See id.* §§ 1536(a)(1), (a)(2) and 1538(a); 50 C.F.R. § 402.10.

To fulfill the substantive purposes of the ESA, federal agencies are required to engage in Section 7 consultation with the Fisheries Service or the Fish and Wildlife Service, depending on the species at issue, to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined . . . to be critical.” *Id.* § 1536(a)(2).⁸ The definition of agency “action” is broad and includes “the promulgation of regulations” such as those at issue here. 50 C.F.R. § 402.02.

Each federal agency must review its actions at “the earliest possible time” to determine whether any action “may affect” listed species or their critical habitat in the “action area.” 50 C.F.R. § 402.14(a). The “action area” encompasses all areas that would be “affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” 50 C.F.R. § 402.02. The term “may affect” is broadly construed to include “[a]ny possible effect, whether beneficial, benign, adverse, or of an undetermined character,” and thus is easily triggered. *Interagency Cooperation – Endangered Species Act of 1973, As Amended*, 51 Fed. Reg. 19,926 (June 3, 1986). If a “may affect” determination is made, “consultation” is required.

Therefore, pursuant to the ESA, PHMSA must inquire as to the presence of listed species in the areas that are affected by this rule⁹ and must “use the best scientific and commercial data available” to determine whether listed species are likely to be adversely affected by the action. 16 U.S.C. § 1536(a)(2). If the action agency concludes that the proposed action is “not likely to adversely affect” the species, then the Services must concur in writing with this determination in

⁸ It is apparent from the NPRM that PHMSA has not consulted with the Services, since the “Agencies Consulted” section on page 182 does not include FWS and NMFS.

⁹ The Groups note, for example, that HHFTs travelling through the Hudson River Albany area may affect Atlantic sturgeon, shortnose sturgeon, piping plover, roseate tern, green sea turtle, hawksbill sea turtle, Kemp’s Ridley sea turtle, leatherback sea turtle, loggerhead sea turtle, blue whale, fin whale, humpback whale, North Atlantic right whale, sperm whale, sei whale, and sea beach amaranth. HHFTs moving through the Columbia River Gorge may affect Southern Oregon/northern California Coasts coho salmon, Oregon Coast coho salmon, Snake River Fall-run chinook salmon, Snake River spring/summer-run chinook salmon, Lower Columbia River chinook salmon, Upper Willamette River chinook salmon, Upper Columbia River spring-run chinook salmon, Hood Canal summer-run chum salmon, Columbia River chum salmon, Snake River sockeye salmon, Upper Columbia River steelhead, Snake River Basin steelhead, Lower Columbia River steelhead, Upper Willamette River steelhead, Middle Columbia River steelhead, Puget Sound chinook salmon, Lake Ozette sockeye salmon, Eulachon, Southern DPS of green sturgeon, Blue whales, Fin whales, Humpback whales, Northern right whales, Sei whales, Sperm whales, Steller sea lion, Green turtles, Leatherback turtles, Loggerhead turtles, Olive Ridley turtles, Marbled Murrelet, Western Snowy Plover, and Oregon Silverspot Butterfly.

order to avoid formal consultation. 50 C.F.R. §§ 402.13(a) and 402.14(b). If the Services concur in this determination, then consultation is complete. *Id.* § 402.13(a). If the Services' concurrence in a "not likely to adversely affect" finding is inconsistent with the best available science, however, any such concurrence must be set aside. *See* 5 U.S.C. § 706(2).

However, when the agency concludes that the action is "likely to adversely affect" listed species or critical habitat, as PHMSA must here due to the proposed continued use of DOT-111 tank cars over a five-year phase-out period, it must then enter into "formal consultation" with the Services. 50 C.F.R. §§ 402.12(k), 402.14(a). The threshold for triggering the formal consultation requirement is "very low;" "any possible effect . . . triggers formal consultation requirements." 51 Fed. Reg. 19,926.

In this case, it is readily apparent that the proposed actions may affect listed species or their critical habitat. The continued use of DOT 111 tank cars poses a risk of future accidents and spills, and the proposed rule merely reduces the risk, but does not eliminate it. Oil spills have the potential to cause catastrophic harm to listed species through direct harm and poisoning of the habitat and food chains on which these species rely. Oil spill response activities, if not carefully planned, can cause additional harm, such as through the use of toxic dispersants, dredging and in-situ burning, which can directly impact species and their habitat. Furthermore, the proposed rules would allow HHFTs to travel in excess of speeds at which they are able to withstand a derailment without suffering head punctures or top fitting loss. Since many oil trains travel through areas where there are listed species and critical habitat, the regulation of High Hazard Flammable Trains certainly "may affect" listed species. Therefore, PHMSA is required to undertake formal consultation with the Services on the impacts of its rulemaking on endangered species.

"Formal consultation" commences with the action agency's written request for consultation and concludes with the Services' issuance of a "biological opinion." 50 C.F.R. § 402.02. The biological opinion issued at the conclusion of formal consultation states the opinion of the Services as to whether the effects of the action are "likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat." *Id.* § 402.14(g)(4). To "jeopardize the continued existence of" means "to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." *Id.* § 402.02.

The "effects of the action" include all direct and indirect effects of the proposed action, plus the effects of actions that are interrelated or interdependent, added to all existing environmental conditions - that is, added to the environmental baseline. "The environmental baseline includes the past and present impacts of all Federal, state, and private actions and other human activities in the action area . . ." The effects of the action must be considered together with "cumulative effects," which are "those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation." *Id.* § 402.02.

If jeopardy is likely to occur, the Services must prescribe in the biological opinion “reasonable and prudent alternatives” to avoid “take” of listed species. *Id.* § 402.14(g). If the Services concludes that a project is not likely to jeopardize listed species, it must provide an “incidental take” statement with the biological opinion, specifying the amount or extent of incidental take, “reasonable and prudent measures” necessary or appropriate to minimize such take, and the “terms and conditions” that must be complied with by the action agency to implement any reasonable and prudent measures. 16 U.S.C. § 1536(b)(4), 50 C.F.R. § 402.14(i).

After the issuance of a final biological opinion and “where discretionary Federal involvement or control over the action has been retained or is authorized by law,” the agency must reinitiate formal consultation if, *inter alia*:

- the amount or extent of taking specified in the incidental take statement is exceeded;
- new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;
- the identified action is subsequently modified in a manner that causes an effect to the listed species ... that was not considered in the biological opinion; or
- a new species is listed or critical habitat designated that may be affected by the identified action.”

50 C.F.R. § 402.16. If PHMSA allows for the continued use of DOT-111 tank cars and allows HHFTs to travel at unsafe speeds, it will be continuing to put endangered species at risk, in violation of the Endangered Species Act. The Groups hereby petition PHMSA to initiate consultation with the Services regarding this proposed rulemaking, to ensure that the regulations are not jeopardizing the continued existence of listed species.

6. An Environmental Impact Statement is Required Pursuant to NEPA

Congress enacted the National Environmental Policy Act (“NEPA”) in 1969, directing all federal agencies to assess the environmental impact of proposed actions that significantly affect the quality of the environment. 42 U.S.C. § 4332(2)(C). The Council on Environmental Quality (CEQ) has promulgated uniform regulations to implement NEPA, which are binding on all federal agencies. 42 U.S.C. § 4342; 40 C.F.R. §§ 1500-1508.

The CEQ regulations implementing NEPA require the PHMSA to disclose and analyze the environmental effects of the proposed action. 40 C.F.R. § 1500.1(b). Specifically, the regulation explains that “NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.” *Id.* The purpose of this requirement is to ensure that the public has information that allows it to question, understand, and, if necessary, challenge the decision made by the agency.

When it is not clear whether or not an action will significantly affect the environment (and thus require the preparation of an Environmental Impact Statement, or EIS), the regulations direct

agencies to prepare a document known as an Environmental Assessment (EA) in order to determine whether an EIS is required. 40 C.F.R. §§ 1501.4(b), 1508.9. An EA is “a concise public document” that “[b]riefly provide[s] sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.” 40 C.F.R. § 1508.9(a). An EA “shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.” 40 C.F.R. § 1508.9(b).

The NPRM, at page 177, contains a cursory discussion of NEPA issues; however, the analysis that has been provided does not encompass the full requirements of NEPA, and does not come even close to providing sufficient information and analysis to inform PHMSA’s decision. It also provides no indication as to whether the analysis suggests that a full EIS is warranted, or whether PHMSA plans on issuing a Finding of No Significant Impact (“FONSI”) for the proposed rules.

While the Center believes that a full EIS is warranted, as discussed further below, at the very least an Environmental Assessment must be provided that explores the environmental impacts of the reasonable alternatives to the proposed action. The NPRM merely discusses a no action alternative, PHMSA’s preferred alternative and an alternative discussed in the advanced notice of proposed rulemaking that would only apply the proposed changes to packing groups I and II; however, there appears to have been no consideration of an immediate ban on the use of DOT 111s for HHFTs, or a limit on the number of cars that may be used in HHFTs, which has been noted as a cause of oil train derailments. RIA at 24. This is in clear violation of NEPA, which requires PHMSA to analyze reasonable alternatives, other than just the preferred alternative and no-action alternative, pursuant to NEPA Section 102(2)(E) and 40 CFR 1501.2(c).

Furthermore, the proposed rule’s discussion of the Probable Environmental Impacts of the Proposed Action and Alternatives is entirely deficient. For the preferred alternative, there is no discussion of the impacts of continuing to use the DOT-111 tank cars over a 5-year phase out period, which the rulemaking itself suggests will lead to oil spills from train derailments in the near future. The proposed rule merely states that the environmental risks would be reduced and protections increased if the proposed rule is implemented; however, this does not provide any actual analysis of the environmental impacts of the proposed rule. The only analysis that is included regarding why the proposed rule will reduce the risk of oil spills is in the RIA, where PHMSA claims, without any support, that “The proposed materials, minimum thickness of 9/16 inch, and jacket provide a 68 percent improvement in the puncture force for Options 1 and 2 relative to the current specification requirements for a DOT Specification 111 tank car. This translates to a 17 percent effectiveness rate.” This, however, suggests that spills are still likely to occur, yet no analysis has been provided as to the environmental harm that will result, even with these added safety measures in place.

Similarly, on page 180, the proposed rule states that PHMSA “believes that the use of routes that are less sensitive could mitigate the safety and environmental consequences of a train accident and release, were one to occur.” This belief is entirely unsupported by any specific facts or data. PHMSA provides no discussion of the actual routes that are available, or the location of sensitive environmental areas that would be avoided.

PHMSA continues to make unsupported assertions regarding the environmental impacts of the proposed rules, such as on page 181, where it states that “PHMSA believes that the proposed braking and speed restrictions, especially for older DOT Specification 111 tank cars, will reduce the likelihood of train accidents and resulting release of flammable liquids.” There is no discussion provided as to the actual reduction in the likelihood of accidents, and more importantly, no comparison to the environmental benefits of an immediate ban on the use of DOT-111 tank cars, which as discussed above is within PHMSA’s authority and should have been included in the alternatives analyzed pursuant to NEPA.

The proposed rules further state that “PHMSA believes that the phasing out of DOT Specification 111 tank cars in HHFTs would reduce risk of release because of the improved integrity and safety features,” and that “the gradual nature of the phase out is intended to decrease burden on the rail industry,” but these are nothing more than unsupported assertions designed to justify the preferred alternative. This does not provide any analysis of the environmental impacts of the reasonable alternatives available, as required by NEPA.

Furthermore, it is readily apparent that a full EIS is warranted for these proposed rules. The NEPA regulations require the agency to consider ten “significance factors” in determining whether a federal action may have a significant impact, thus requiring an EIS. 40 C.F.R. § 1508.27. Among other factors, the agency must consider the beneficial and adverse impacts of the project, the effect on public health and safety, unique characteristics of the geographic area, the degree to which possible effects are highly controversial, uncertain, or involve unique or unknown risks, cumulatively significant effects, and whether the proposed action will violate any laws or standards of environmental protection. *Id.* If the agency’s action may be environmentally significant according to any of the criteria, the agency must prepare an EIS. *Id.*

Here, PHMSA is proposing revisions to the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) that establish requirements for “high-hazard flammable train” (HHFT) that update and clarify the regulations to prevent and mitigate the consequences of a train accident involving flammable liquids. This includes, among other things, new requirements for rail routing risk assessment, speed limitations for HHFTs in certain areas, enhanced standards for new tank cars for HHFTs, and a phase-out of the use of DOT-111 tank cars for HHFTs over the next 5 years. As the proposed rule itself makes clear, these are certainly issues with a potential to affect public health and safety, and involve unique or unknown risks, given the recent history of fiery derailments and potential for increased oil-by-rail traffic in the near future.

The rapid increase in oil by rail traffic over the last 6 years is unprecedented, and has resulted in several emergency orders, safety advisories and proposed rulemakings, as is set forth by PHMSA at length in the NPRM. Due to these rapidly changing circumstances, the regulations that govern the use of tank cars for the transportation of oil must be subject to scrutiny to ensure that the environment is being appropriately considered, as required by NEPA. Pursuant to 40 C.F.R. § 1501.2, agencies must consider the environmental impacts of alternatives at “the earliest possible time.” The Center therefore requests that PHMSA undertake a full NEPA analysis, which due to the risks and uncertainties involved would require the development of an EIS.

7. Conclusion

The Groups urge PHMSA to undertake immediate action to ban the use of legacy DOT 111 tank cars, and promulgate regulations that would ensure the safe transport of crude oil by rail. We appreciate your attention to these comments.

Respectfully submitted,

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