STATE OF NEW YORK

September 29, 2014

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

Re: Comments – Docket No. PHMSA–2012–0082 (HM–251)

Dear Secretary Foxx:

In recent years, the number of trains transporting crude oil through New York has increased significantly, resulting in increased risks of spills, threats to public health and safety, and potential damage to the environment. These risks have been dramatically demonstrated by derailments, spills, and fires in Lac-Megantic, Canada; North Dakota; Pennsylvania; Alabama; Virginia and elsewhere. Four crude oil train car derailments have occurred in New York State in the last year, though fortunately with no spills.

On January 28, 2014, Governor Andrew M. Cuomo issued Executive Order 125 (EO 125), directing a comprehensive evaluation of New York's readiness to prevent and respond to incidents involving the transportation, storage and transshipment of crude oil. In response to EO 125, a report, "Transporting Crude Oil in New York State: A Review of Incident Prevention and Response Capacity," was created as the result of a coordinated review conducted by five state agencies. USDOT reviewed the report with the ten critical federal recommendations and package of state administrative, regulatory, and legislative actions.

The recommendations for federal action include a request for USDOT to expeditiously strengthen its rules by replacing or retrofitting rail tank cars that have been deemed inadequate, as nearly 82 percent of tanks cars carrying Bakken crude across the nation are DOT-111 cars with a poor safety record, Federal investigations have confirmed that designs flaws make them susceptible to damage and loss of hazardous materials during a derailment. In addition, the report calls for USDOT to mandate and strengthen the voluntary railroad industry measures implemented by the American Association of Railroads (AAR) and its members.

Governor Cuomo remains committed to the partnership fostered between New York State and relevant federal agencies on these issues. Further, enhancing practices and strengthening regulations to ensure public health and safety and the protection of natural resources are critical. New York State urges USDOT to expedite the promulgation of these regulations to ensure the safety of those living and working along crude oil transportation corridors.

New York State respectfully submits the following comments for the Notice of Proposed Rule Making (NPRM) for Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains [Docket No. PHMSA–2012–0082 (HM–251)].

A. General comments are presented first, followed by specific comments responding to the questions posed within the NPRM.

1. No single action will fix this problem; need a range of actions to comprehensively address safety issues:

New York State stresses that any new regulations enacted should include actions that enhance safety from multiple approaches influenced by risk analysis. These approaches should include improvements to tank cars carrying crude oil, enhanced braking standards, appropriate speeds for trains with high-hazard contents, attention to the human factors involved in causing incidents, proper classification of contents at the site of shipment, degasifying crude oil at the shipment site, planning for incidents, response drills and training, and partnerships between all levels of government, the railroads and industry. Only with such a comprehensive approach will we reduce the risk involved with shipping high-hazard contents.

2. Establishment of the requirements for "High-Hazard Flammable Train" (HHFT) designation:

New York State strongly supports the intent of this rulemaking in updating and clarifying the regulations to prevent and mitigate the consequences of a train accident involving flammable liquids.

3. Enhanced standards for both new and existing tank cars:

For tank cars constructed after 10/1/15 that will be used for HHFT service, the NPRM has offered three (3) options for establishing a new DOT Specification 117 tank car. New York State strongly recommends adoption of Option 1, the FRA and PHMSA-designed car (or equivalent) which will provide the higher degree of tank car integrity and enhanced safety features as indicated in Table 2, page 45010.

New York State also agrees that existing tank cars will be used in HHFT service should be modified to meet the Option 1 performance requirements (except for top fittings protection). Those cars which are not retrofitted should be retired or repurposed.

New York State stands with other states and communities to reinforce the need to expedite the new tank car standards. Without such standards the tank car industry cannot do their part in building a safer tank car. They stand ready to build safer tank cars, but are waiting on the federal government to set the standards and harmonize them with Canadian standards. This delay is creating a backlog that will take years to clear.

4. Strengthening of the AAR voluntary measures by codifying them in regulation:

New York State appreciates the fact that the AAR and its member railroads voluntarily implemented a number of worthwhile measures which contribute to the safe rail transport of crude oil. However, New York State remains adamant that all eight provisions of the voluntary agreement as outlined in page 45034 need to be codified in regulation in order to ensure that a sustained commitment to the goals of these voluntary measures is maintained.

In addition to recommending the codification of the AAR voluntary measures, New York State again calls upon USDOT to amend its regulations to require that industrial railroad/track facilities be in conformance with the same standards and protocols that apply to the general system of railroads. In a letter to Secretary Foxx on 4/29/14, New York State requested that "FRA should move expeditiously to amend its regulations to require owners of industrial plant rail systems to perform and document periodic track inspections subject to review/audit by federal/state rail inspection staff."

New York State has the following comments regarding the proposed regulatory framework for the three voluntary measures considered in the NPRM:

1. *Rail routing risk assessment*

   We support the proposed planning requirement for carriers to perform a routing analysis that considers 27 key safety and security factors in making route selections, as well as the expansion of these planning requirements to apply to HHFTs. These factors should be regularly updated with fresh data and evaluated for relevancy. Further, the factors and manner in which they are weighted in the analysis should be transparent. New York State suggests that the 27 factors should also be used in a risk analysis to determine resource allocation for response scenarios. Finally, New York State suggests adding a factor for economic risk as different potential accident sites vary in their economic vulnerability.

2. *Reduced operating speeds*

   New York State remains committed to the imposition of speed restrictions for HHFTs which contain any tank cars not meeting the enhanced tank car standards proposed by this rulemaking. New York State recognizes that urban settings provide unique vulnerabilities and that a risk analysis-based speed limit that factored in location-specific conditions could be substituted for a blanket speed limit in urban areas. Such an approach, which New York State recommends be funded by the railroads and audited by federal and State agencies, could reduce the impact of uniform speed limitations on passenger and other freight rail services.

3. *Enhanced Braking*

   New York State agrees with the proposed requirement that all HHFTs be equipped with alternative brake signal propagation systems. Additionally, New York State understands that all HHFTs will be operated with either electronic controlled pneumatic brakes, a two-way end of train device or distributed power, depending upon the outcome of the tank car standard proposal and implementation timing.

5. Reducing the volatility of Bakken crude oil prior to presenting a tank car for shipment:

New York State has urged the American Petroleum Institute and its members to commit to reducing the volatility of Bakken crude through a degasification process at the load point. New York State strongly supports PHMSA's efforts to engage the industry through this rulemaking process.

New York State remains committed to reducing the risk posed by the transportation of Bakken crude-by-rail, and industry efforts to advance degasification will significantly mitigate the challenges faced by our first responders related to crude oil transport and HHFTs.

6. PHMSA should consider/recommend the establishment of a unique identification number (UN) for Bakken crude oil unless the commitment is made to reduce its volatile characteristics:

Although classification and characterization of mined liquids and gases are a major topic covered in the NPRM, the specific issue of assigning a unique UN identifier to Bakken crude oil has not been addressed. The only reference in the NPRM to the issue of differentiating Bakken crude from other crude oil products is noted in Section V. B. p. 45042, which states: "With regard to the identification of Bakken crude oil versus crude oil extracted from other geographic locations, DOT acknowledges that the Hazardous Materials Regulations current shipping paper requirements do not distinguish Bakken crude oil from crude oil sourced in other locations. This may present compliance and enforcement difficulties, particularly with regard to subsequent railroads transporting petroleum crude after interchange(s) with an originating or subsequent carrier. DOT explained in the FAQ's document that railroads and offerors should work together to develop a means for identifying Bakken crude oil prior to transport, such as a Standard Transportation Commodity Code (STCC) number that identifies the crude oil by its geographic source."

Unfortunately, the use of a STCC on the waybill will be of little use to local first responders in identifying the tank car contents and associated risks during an incident. A hardcopy waybill in a burning engine car does little to inform first responders as to the threat they face.

7. Addressing human factors that contribute to rail incidents:

Positive Train Control

Positive Train Control (PTC) is set to be completed by 12/31/15, but an extension is under consideration. Given that PTC systems will effectively address many human factors that lead to incidents, USDOT should make every effort to maintain the current implementation schedule.

The NPRM discusses PTC and acknowledges its associated benefits in Section II. C., p. 45027, including the prevention of:

- Train-to-train collisions;
- Over speed derailments;
- Incursion into an established work zone; and
- Movement through a main line switch in the improper position.

Although there is no discussion in this NPRM regarding any extension of the proposed implementation date beyond 12/31/15, we urge USDOT to maintain the current implementation schedule, at least along major crude oil routes.

B. Specific Comments to Questions Posed in the NPRM:

A. High-Hazard Flammable Train (Page 45040)

> *Proposed definition of a "High-Hazard Flammable Train" (HHFT) as 20 or more carloads of flammable liquids (including crude oil and ethanol).*
>
> New York State supports the definition of the HHFT as proposed. While recognizing the hazard posed by the derailment and subsequent spill or fire involving the failure of even one or two DOT-111 rail cars as shown by the Lynchburg, Virginia incident on April 30 of this year, this definition will establish a reasonable threshold for application of the routing and speed requirements proposed for HHFTs.

B. Notification to State Emergency Response Commissions of Petroleum Crude Oil Train Transportation (Page 45040)

> *1. 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.*

The SERC provides an appropriate mechanism to receive and disseminate the information provided by the railroads in response to USDOT's May 7, 2014 Order requiring notification.

2. Whether the 1,000,000-gallon threshold 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.

Replacement of the 1 million gallon threshold with the 20-car proposed definition of an HHFT will provide for consistency between railroads regardless of size and better reflect the hazard posed by these shipments.

3. Comments regarding parallel notification requirements for any affected TERCs.

Recommend parallel sharing of information with TERCs consistent with the Security Sensitive (SSI) determination noted in comment to question 4 below.

4. Comments regarding the other topics addressed in the FAQ's document. In particular, PHMSA seeks comments on the confidential treatment of data contained in the notifications to SERCs, and the adoption of a means for identifying Bakken crude oil prior to rail transportation.

As the information provided to the SERC was limited to the average number of trains, the counties those trains are transiting through and the main rail lines used, the information provided was determined by New York State to not be SSI, nor can this information be readily limited or protected from any individuals motivated to identify it as the main rail lines are not secret or difficult to identify by readily available means and unit trains are readily identifiable by the number and type of rail cars. Adoption of a means to identify Bakken crude oil, or other "sweet" crudes with higher volatility than "traditional" crude oil prior to shipment would be beneficial from a response perspective to allow a more accurate and complete picture of the hazard present. Further, New York State needs to understand where these shipments are growing to determine planning and response needs.

5. 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.

As long as the information provided remains limited to average number of trains, counties impacted, and primary routes, no restriction of the distribution of this information should be enacted by PHMSA.

6. Whether such information should be deemed SSI, and the reasons indicating why such a determination is appropriate, considering safety, security, and the public's interest in information.

See the comment provided in #4 above.

C. Rail Routing (Page 45042)

New York State supports the planning requirement set forth in the NPRM for carriers to perform an increased risk assessment for improving public safety and environmental protection via routing analysis that considers 27 key safety and security factors in making route selections, as well as the expansion of these planning requirements to apply to HHFTs. As mentioned above, these factors, their weighting, and the data that support the analysis should be regularly updated, and a factor reflecting economic risk should be added.

D. Classification and Characterization of Mined Liquids and Gases (Page 45042)

New York State supports this proposed rule requiring offerors to better classify and test the components of mined liquids and gases and to certify the results. Current regulations require certification by the shipper that the package is suitable for the material shipped; "Operation Classification" has shown that the proper identification and classification of Bakken crude oil is commonly being neglected by shippers/oil companies. New York State also encourages industry to implement methods to degasify the crude oil prior to transport. Further processing including the stabilization of crude oil by removing volatile components and pressure would make the resulting crude oil safer to transport in HHFTs.

From a response perspective – while ensuring that products are properly classified, packaged, and labeled is important – response personnel will likely continue to treat all crude oil as a "worst case" scenario involving a higher volatility and more flammable product. Until proven otherwise, this is due to lack of information and is consistent with the initial guidance provided by ERG guide page 128 which covers a wide range of ignitable liquids.

a. Speed Restriction (Page 45046)

New York State supports speed restrictions for all HHFTs with tank cars not meeting or exceeding the proposed performance standards for the DOT Specification 117 tank car.

1. What would the effects be of a 40-mph speed limit for HHFTs on other traffic on the network, including passenger and intermodal traffic, under each of the three described Options?

The enhanced safety from lower speeds from trains transporting crude oil will likely impact passenger trains that share corridors in New York State. The less uniform the speed profile of trains in a given corridor, the more infrastructure is needed to support fluid train operations (to allow for more frequent meeting/passing and overtaking). Similarly, when the infrastructure is held fixed, this condition lowers the overall capacity of the corridor and leads to slower and less reliable train operations.

7. 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?

New York State recognizes that urban settings provide unique vulnerabilities and that a risk analysis-based speed limit that factored in location-specific conditions could be substituted for a blanket speed limit in urban areas. Such an approach, which New York State recommends be funded by the railroads and audited by federal and State agencies, could reduce the impact of uniform speed limitations on passenger and other freight rail services. This analysis should be conducted as the DOT-111 cars are phased out so that when new tank cars are in service any appropriate speed restrictions can be in effect. Further the analysis should be transparent and shared with the appropriate state partners.

8. How would the safety benefits of the proposed speed limits change if combined with the proposed braking systems?

The reduction in kinetic energy, increased reaction time for crews to take precautionary action, and enhanced braking system performance would be additive benefits from a safety perspective. This addresses human factor causes in rail incidents.

b. Alternative Brake Signal Propagation Systems (Page 45048)

As PHMSA has offered evidence that both improved braking and distributed power offer a reduction in kinetic energy of any derailment, with a corresponding reduction in risk of tank failure during a derailment, New York State recommends that these protections be combined with increased protection in tank cars, and not be limited to cars of a certain type (DOT 111) or serve to justify a reduction in those protection standards.

5. How would the safety benefits of the proposed braking systems change if combined with the proposed speed limits and tank car standards?

Again, New York State considers these complementary benefits to be additive from a safety perspective. Redundancy of safety systems/features would generally be considered a positive or desired outcome.

F. New Tank Cars for High-Hazard Flammable Trains (Page 45051)

New York State strongly recommends the selection of the FRA/PHMSA Designed Car described as (Option 1) for new car construction. The increased tank thickness, head

shields, rollover protection, and enhanced braking requirements will contribute significantly to the survivability of the tank car protections. The establishment of new tank car standards must be set as soon as possible so that the rail car production industry can begin production of safer tank cars.

4. What additional safety features not discussed here, if any, should PHMSA consider? If so, please provide detailed estimates on the costs and benefits of individual safety features.

New York State recommends consideration be given to recessing or utilizing an internal valve for the bottom outlet, as is referenced in the discussion on Bottom Outlet Protection on p. 42, and as is in place on DOT-406/407 tank trucks, in order to provide increased protection for that valve should a derailment occur.

b. DOT Specification 117- Performance Standard (Page 45057)

New York State supports the goal of the proposed performance standard which is intended to encourage innovation in tank car designs (including materials of construction and tank car protection features) while providing an equivalent level of safety as the DOT Specification 117. This will avoid a narrowly prescriptive approach which may preclude new and beneficial design alternatives which may be able to achieve an equivalent performance outcome.

G. Existing Tank Cars for High-Hazard Flammable Trains (Page 45058)

4. Should the CPC-1232 cars be exempted from some or all of the retrofitting requirements described here? If so, what are the benefits and costs of those exemptions?

The incident in Lynchburg, VA on April 30th of this year may suggest that the CPC-1232 cars have not solved the problem. However, New York State looks forward to the NTSB's recommendations to craft a regulatory action on this question.

In addition, while DOT's September 6, 2013 ANPRM, NTSB Recommendation R-12-5, and some commenters and petitions linked enhanced tank car specifications and retrofitting of existing tanks cars to only packaging group I and II materials, this NPRM proposes packaging requirements for all flammable liquids in a HHFT, regardless of packing group. Table 22 provides PHMSA's rational for including flammable liquids in packing groups I, II, and III (Page 45062).

1. Are there any relatively lower hazard, lower risk flammable liquids that could potentially be exempt from the enhanced car standards for HHFT?

New York State is not aware of any lower risk flammable liquids that should be exempt from the enhanced HHFT car standards. Any flammable liquid in trains of 20 cars or more (as in the proposed definition of HHFT) would represent a significant flammability risk should a derailment or spill occur.

2. Is the current exception for combustible liquids sufficient to incentivize producers to reduce the volatility of crude oil for continued use of existing tank cars?

New York State is not positioned to evaluate the economics of reducing volatility. However, given that degasification equipment is standard in other oil production regions, New York State finds it hard to believe that oil producers cannot make the economics work.

6. Fire and explosion risk of Class III Flammable liquids

a. What characteristics of a released flammable liquid significantly affect the likelihood and consequence of fire or explosion upon release?

b. What physical or environmental features of a release affect the likelihood and consequence of fire or explosion upon release?

c. What existing scientific information is available concerning the explosion hazards of hydrocarbons and other liquids?

d. What types of flammable liquids are most susceptible to a high-consequence detonation explosion upon release?

e. What data exists on the relationship between liquid properties and fire and blast zone size?

In general, additional data and evaluation is required to better identify the answers sought. Specific to Bakken crude oil transportation by rail, actual incidents have indicated that ignition related to the derailment itself is likely. As the spilled product is unconfined, "explosions" may have been primarily due to the failure of tanks from fire exposure, resulting in heat induced tears, and as such, likely produce more of a thermal event than an explosion with true blast effects.

7. Should shippers be allowed to petition PHMSA for an exemption from the requirements for HHFT based on the properties of Class III liquids? What should be considered (e.g. chemical properties, historical data, scientific information) before issuing an exemption?

Other than public safety or national security issues, significant justification should be required for any exemption considered for a Class III liquid. Regular operations should not be justification for exemption.

We greatly appreciate your consideration of these comments as well as your continued efforts to work with New York State and our other federal partners in striving to improve the safety of crude oil transportation by rail.

Sincerely,

Joan M. McDonald, Commissioner
New York State Department of Transportation

Joseph J. Martens, Commissioner
New York State Department of Environmental Conservation

Jerome M. Hauer, Ph.D., MHS, Commissioner
New York State Division of Homeland Security and Emergency Services