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AMERICAN FUEL & PETROCHEMICAL MANUFACTURERS' COMMENTS ON NORTH DAKOTA'S, "NOTICE TO AMEND OIL CONDITIONING STANDARDS" CASE NO. 23084

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I. INTRODUCTION

The American Fuel & Petrochemical Manufacturers ("AFPM") is a national trade association representing virtually all U.S. refining and petrochemical manufacturing capacity. AFPM's member companies produce the gasoline, diesel, and jet fuel that drive the modern economy, as well as the chemical building blocks that are used to make the millions of products that make modern life possible–from clothing to life-saving medical equipment and smartphones.

To produce these essential goods, AFPM member companies rely on a reliable and safe transportation system to move materials to and from refineries and petrochemical facilities. AFPM member companies depend upon an uninterrupted, affordable supply of crude oil as a feedstock for the transportation fuels and petrochemicals they manufacture. The United States transportation system is composed of over four million miles of roads,[1] approximately 140,000 miles of freight railroads,[2] an extensive waterway system, and more than 2.7 million miles of pipelines.[3] AFPM member companies utilize all modes of transportation to move their products safely.

AFPM member companies reflect a strong appreciation for safety and environmental responsibility, operations, and practices. Our members are committed to protecting the health and safety of their workers, contractors, customers, and the communities where fuels and petrochemical products are transported. A regulatory scheme that fosters the safe movement of essential products on our nation's transportation system is critical.

AFPM welcomes the opportunity to comment on the North Dakota Industrial Commission's ("NDIC" or the "Commission") proposal to amend NDIC Order No. 25417 regarding oil conditioning standards.[4] The proposal seeks to address the testing frequency in an oil conditioning guidance document and to provide flexibility on the type of testing standards required.

On November 19, 2014, AFPM submitted comments on the Commission's initial proposal to adopt oil conditioning standards noting our concerns with the proposal.[5] While North Dakota's goal of improving the safety of transporting Bakken crude is laudable, AFPM continues to oppose oil conditioning standards as those standards impose significant costs without producing a corresponding improvement in transportation safety.[6]

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[1] *See* "2017 Roads Report Card Overview," May 15, 2017, https://www.infrastructurereportcard.org/wp-content/uploads/2017/01/Roads-Final.pdf.

[2] *See* "Freight Rail Network," May 15, 2017, https://www.fra.dot.gov/Page/P0362.

[3] *See* "Pipeline Mileage and Facilities," https://www.phmsa.dot.gov/pipeline/library/data-stats/pipelinemileagefacilities.

[4] *See* "Notice to amend oil conditioning standards for the Bakken, Bakken/Three Forks, Three Forks, and Sanish Pools" published September 17, 2018, https://www.dmr.nd.gov/oilgas/vapor_pressure/Supporting_Documentation.pdf

[5] See AFPM's Comments on NDIC Docket No.: 23084, November 19, 2014, https://www.afpm.org/uploadedFiles/Content/Policy_Positions/Agency_Comments/AFPM%20NDIC%20Stabilization%20Comments%2011192014.pdf

[6] *See* AFPM's comments on Docket No. PHMSA-2016-0077 (HM-251D), 82 Fed. Reg. 5499 (proposed Jan. 18, 2017) https://www.afpm.org/uploadedFiles/Content/Policy_Positions/Agency_Comments/AFPM%20Comments%20on%2

II. AFPM'S COMMENTS ON NDIC PROPOSAL

As stated in our previous comments to NDIC in November 2014, AFPM continues to oppose a vapor pressure standard. Specifically, vapor pressure is not the key cause of ignition events in rail accidents and does not meaningfully support NDIC's goal of improving the safety of transporting Bakken crude. Further, there is currently no credible evidence on the role of vapor pressure in transportation-related ignition events to warrant a vapor pressure threshold.

Much has changed since the original NDIC order was developed and adopted. Crude oil production from the Bakken Formation in North Dakota and eastern Montana has increased rapidly over the past decade, from less than 0.2 million b/d in 2007 to a peak of more than 1.2 million b/d in 2015.[7] From 2011 to 2016, Bakken crude oil production outstripped the capacity of local refineries to process the crude oil and existing pipeline systems to move the crude to refineries located out of the region. Efforts to expand pipeline capacity began almost immediately; however, to support continued production while proposed pipeline projects were reviewed, approved, and constructed, investments were made in rail loading terminals in the Bakken, rail unloading facilities at the refining centers on the East, West and Gulf coasts, and in new retrofitted rail cars to carry the crude.

At its peak in 2014, as much as 0.8 million b/d of crude oil moved out of the Bakken by rail.[8] With this increased traffic, a corresponding spike in train derailments was observed. This led the U.S. Department of Transportation ("DOT") and Transport Canada to release a series of rulemakings providing operational controls for rail shipment and new tank car standards. These standards included a retrofit schedule for the existing tank car fleet and new standards for tank cars built after the rules were adopted.

The Pipeline and Hazardous Materials Safety Administration ("PHMSA") is the federal regulatory agency with the authority over the transportation of hazardous materials. PHMSA Hazardous Materials Regulations ("HMR") cover product classification, operating rules, and packaging standards for hazardous materials, including crude oil. Despite the marked improvements in the HMR related to crude by rail transportation, some continued to call for crude oil conditioning standards to improve safety. It was at this time that North Dakota adopted their conditioning order. It should be noted that this order was written specifically for rail transportation.

0PHMSA%20ANPRM%20for%20CBR%20Volatility_19%20May%202017.pdf and AFPM's comments on Docket No. DOT-OST-2017-0069, "Notice of Regulatory Review", 82 Fed. Reg. 45750, proposed October 2, 2017 https://www.afpm.org/uploadedFiles/Content/Policy_Positions/Agency_Comments/AFPM_Comments_DOT_Reg_Review_12.1.17.pdf

[7] U.S. Department of Energy, Energy Information Administration. Drilling Productivity Report. Accessed April 9, 2018.

[8] ND Pipeline Authority. Rail Transportation. https://northdakotapipelines.com/rail-transportation/ Accessed April 9, 2018.

Given that increased pipeline construction in the Bakken region has changed transportation dynamics, the September 17, 2018 NDIC proposal should provide an opportunity for a much-needed update of the standards. Below are AFPM's specific comments.

A. The Department of Transportation Has Exclusive Jurisdiction over the Classification of Hazardous Materials in Transportation

The HMR are already robust and complex; this is especially true for regulations that address the risks of crude oil transportation. The federal government in recent years has adopted numerous new requirements to address the perceived risks from crude oil. Yet, most of DOT's regulatory efforts related to the transport of flammable liquids have been focused on the characteristics of the materials transported and the tank car specifications, neither of which are a causal factor of derailments. Improvements in track integrity would significantly reduce both the frequency and consequences of derailments.

AFPM sees no incremental risk reductions from establishing a vapor pressure ceiling on the transportation of flammable liquids. Further, we believe a focus on accident prevention (i.e., preventing train derailments) would provide the largest safety benefits. Any effort to enhance rail safety must begin with addressing the primary root causes of derailments and other accidents: track integrity.

B. The Cost of the NDIC Testing and Sampling Requirements Far Outweigh the Limited Benefits of Such Testing

Per the NDIC proposal, nearly 60,000 quarterly vapor pressure tests have been conducted since April 1, 2015. Some estimates have calculated the total cost of this testing as exceeding $120 million. The results of these tests show little variance with the overwhelming majority of the vapor pressure readings not exceeding 13.7 psi. Specifically, vapor pressure readings do not exceed 13.7 psi during many of the warmer months of any given year. The Commission believes production facilities operating during certain months of any given year will produce crude oil with a vapor pressure of no greater than 13.7 psi. Data collected by the NDIC clearly shows that future analysis only needs to occur when temperatures vary by 20 to 40 degrees and back again (*i.e.,* late fall, early spring).

Requiring vapor pressure tests means imposing significant costs for testing that has consistently produced the same results, showing vapor pressure readings under 13.7 psi. There is no proven safety benefit from such testing as vapor pressure readings alone are not an accurate indicator of transportation safety. There is currently no credible evidence on the role of vapor pressure in transportation-related ignition events to warrant a vapor pressure threshold. Specifically, vapor pressure is not the key cause of ignition events in rail accidents. Further, there are ample Class 3 liquids with low vapor pressures—ethanol, gasoline blend stocks, heavy naphthas, iso-octane, benzene, toluene, and the xylene isomers—that present similar ignition risks to Bakken or Permian Basin crude and other unrefined petroleum products. Beyond vapor pressure there is a more direct explanation for ignition events from rail accidents: (1) the

presence of a flammable liquid (regardless of its vapor pressure) and (2) the proximity of heat above the liquid's flashpoint.

Given these test results and the absence of any credible evidence on the role of vapor pressure in transportation-related ignition events, it would be arbitrary and capricious for NDIC to continue requiring vapor pressure testing. While AFPM strongly believes that the North Dakota oil conditioning standard should be rescinded, should it remain, AFPM supports a reduction in the sampling and testing requirements from a quarterly to a semi-annual basis based on the data presented.

C. Crude Oil Pipelines should be Exempt from the NDIC Testing and Sampling Requirements

Since reaching its peak in 2015, rail transport out of the Bakken region has significantly decreased. With the completion of the Dakota Access pipeline, over 470,000 barrels per day of crude oil are now transported out the region by pipeline. Pipeline operators already determine vapor pressures of crude oil before transporting it to a distribution point as a matter of their normal operating procedures. With wellhead crude oil, gas has to be removed to meet stringent pipeline, storage and tanker specifications as well as downstream emission standards. The pipeline, storage and tanker specifications with which pipeline operators comply are often more stringent than NDIC's 13.7 psi vapor pressure. While the NDIC's original order was drafted to address rail transport, the changing transportation dynamics have led to duplicative testing for crude oils moved by pipeline. Absent a rescission of the North Dakota oil conditioning standard completely, AFPM supports exempting crude oil to be transported by pipeline from NDIC sampling, testing, and reporting requirements.

III. CONCLUSION

AFPM thanks NDIC for its time and consideration of our comments related to revisions of crude oil conditioning requirements. While AFPM sees no incremental risk reductions from establishing a vapor pressure ceiling on the transportation of flammable liquids, we appreciate the opportunity to improve the current requirements. We share NDIC's commitment to transportation safety. We look forward to the opportunity to work together on this. Please contact me at (202) 457-0480 or rbenedict@afpm.org if you wish to discuss these issues further.

Sincerely,

Rob Benedict
Senior Director,
Transportation & Infrastructure