# Executive Summary of the American Fuel \& Petrochemical Manufacturers on the Pipeline and Hazardous Materials Safety Administration's ("PHMSA's") Notice of Proposed Rulemaking for Hazardous Materials: Enhanced Car Standards and Operational Controls for High-Hazard Flammable Trains, DOCKET No. PHMSA-2012-0082 (HM-251), 79 Fed. Reg. 45,015 (Aug. 1, 2014) 

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## Executive Summary of AFPM's Comments

Domestic oil and gas production has grown dramatically in recent years, with crude oil projected to soon reach levels last seen in 1970. Rail has played a critical role in facilitating the growth of domestic energy production and manufacturing, spurring the creation of tens of thousands of new jobs. Recent increases in crude oil output are transported mainly by rail. For example, producers in the Bakken formation use rail to ship 70\% of crude oil to refineries and midstream companies. Similarly, 70\% of ethanol reaches refineries by rail.

Although transportation by rail is very safe - with $99.997 \%$ of all hazardous materials moving by rail reaching its destination without incident - our industry is committed to a culture of continuous improvements and focused on zero incidents as the goal. AFPM respectfully submits that any effort to enhance rail safety must begin with addressing the primary root causes of derailments and other accidents: (1) track integrity and (2) human factors. Eighty-eight percent of derailments occur due to track defects. Human error is the predominant cause of other train accidents (e.g., collisions with other trains). Investment in accident prevention would result in the greatest reduction in the risk of rail incidents.

In particular, DOT should consider recommendations made by the National Transportation Safety Board ("NTSB") to improve track safety standards and reduce human error. Those recommendations include requiring railroads to regularly report track service failure data, so that the Federal Railroad Administration ("FRA") may review high-stress, at risk areas of track. FRA rejected NTSB's safety recommendation, deferring to the railroads' claim that they could not obtain sufficient equipment and personnel to test high-stress areas of track. The Proposal continues the pattern of ignoring accident prevention: Nothing in this rulemaking would require railroads to buy one more piece of track inspection equipment, hire one more qualified inspector or inspect one more mile of track. The Proposal would instead mandate that shippers spend billions of dollars on tens of thousands of new and retrofitted tank cars to mitigate the impacts of accidents.

AFPM supports the "Option 3" specification for new and retrofitted rail tank cars shipping crude and ethanol in unit trains of 75 cars or more. The Option 3 specification tank car is an enhanced CPC 1232 tank car with a $7 / 16$ " shell and other enhanced safety features. The Option 1 and 2 tank cars with a $9 / 16$ " shell provide only negligible safety benefits at a substantial incremental cost. For example, an independent DOT study in 2009 concluded that shell thickness played a "relatively weak" role in determining whether an accident would result in a tank car puncture and loss of lading.

By comparison, PHMSA's cost-benefit analysis of the tank car options appears to be results-oriented, unreliable and based on data that PHMSA declined to place in the administrative record. PHMSA did not follow basic Office of Management and Budget
procedures, such as preparing a "Statement of Energy Effects" analyzing how the rule may affect the supply of crude, its price, and the ability to meet demand with domestic crude. Indeed, the Proposal would create a significant risk of disrupting gasoline supplies. The numerous procedural and substantive flaws of PHMSA's cost-benefit analysis make it clear that Options 1 and 2 would cost far more and provide little in the way of additional safety improvements.

PHMSA's proposed three-year schedule for retrofits of existing tank cars is infeasible and would damage the economy. The Proposed Rule represents the largest tank car retrofit in history, affecting more than 67,000 tank cars. AFPM requested that Alltranstek, LLC, a leading rail consulting company, assess the capacity of retrofit shops to perform the retrofits required under the Proposal. Based on that analysis, AFPM concludes that a ten-year retrofit schedule would be achievable. Insisting upon a more aggressive schedule would risk tank car shortages, a significant loss in crude and ethanol rail capacity, higher prices for consumers of petroleum products, and steep opportunity costs for refiners who would no longer be able to maintain current business levels.

Equally infeasible is PHMSA's proposal that the new tank car standards, the retrofit standards, speed restrictions and other requirements of the rule apply to "high-hazard flammable trains" ("HHFT"), i.e., a single train carrying 20 or more carloads of a Class 3 flammable liquid. While the purpose of the Proposed Rule is to regulate crude and ethanol rail shipments, the HHFT definition would have the practical effect of requiring that all flammable liquids transported in HHFTs comply with the tank car standards and other obligations of the rule. Shippers sending a manifest train of only a few cars of flammable liquids cannot reasonably predict whether a railroad might gather additional cars down the line, triggering the 20 car threshold for HHFT. Regulating all flammable liquids would require a separate risk assessment and cost-benefit analysis, procedural steps that PHMSA failed to take.

In place of the unworkable HHFT definition, AFPM proposes that PHMSA tie the tank car standards and other requirements of the rule to a definition of "unit train," meaning a train of 75 or more cars in crude or ethanol service. This definition more accurately addresses the purpose of the rule: mitigating risks of release from large, multi-car derailments. An AFPM member survey showed that the smallest unit train in crude and ethanol service was 86 cars. Thus, setting a 75 -car threshold for the definition of a unit train should capture all crude and ethanol in unit train service.

AFPM supports the Option 3 rail speed limit. That option will impose a 40 mph speed limit in high-threat urban areas ("HTUAs") for HHFTs unless all shipments meet the proposed tank car standards. AFPM agrees with the railroads that this is an appropriate speed limit, but suggests that it be tied to AFPM's proposed unit train definition, rather than HHFTs. The other speed limit options under consideration in the Proposal would unduly restrict rail capacity and risk supply disruptions of crude oil and other commodities throughout the rail system.

PHMSA's proposed classification and testing program for crude oil is unnecessary, unduly prescriptive, and burdensome. The properties of crude oil, including Bakken crude, are well understood. However, if PHMSA does decide to go forward with the proposed classification and testing program, these comments provide several suggestions to appropriately tailor the program.

Finally, stabilization of Bakken crude is unnecessary and inappropriate because the properties of Bakken fall within the normal range for several other light crudes and stabilization would not reduce the risk of transporting this flammable liquid.

