The TTMA Response to HM-213D

WETLINES

Brief History

- On January 27, 2011, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a notice of proposed rulemaking and a regulatory assessment for a proposed regulation regarding external product piping on cargo tanks transporting flammable liquids.

- PHMSA's proposal would apply to new tankers beginning two years after promulgation of the rule and would allow a ten-year compliance period, beginning after the two-year delay, for retrofitting the existing fleet.
- PHMSA's proposed rule is essentially identical to one previously proposed by the agency in 2004, and then withdrawn in 2006. At the time, PHMSA stated that it "did not identify a cost-effective approach for addressing the risk of wetlines transportation through regulatory action.

- In the current NPRM, PHMSA now states that it has reopened the regulatory action “based on the number of wetlines incidents that continue to occur as well as the open NTSB recommendation, as well as concerns regarding the possibility of a low probability high-consequence event associated with a wetlines incident.

TWO RESPONSES

- Ask that HM-213D be withdrawn.
- Ask that MC 307 & DOT 407 CTMV's be excluded form the rulemaking.

MC 307 & DOT 407 Exclusion

- **No Evidence** - Lack of history of catastrophic fires involving MC 307 and DOT 407 cargo tanks and a release of product from piping.
- **Limited Risk** - A typical MC 307 or DOT 407 CTMV contains less than 8 liters of product in its outlet piping at any given time. In contrast, a typical MC 306 or DOT 406 CTMV typically contains up to 180 liters of product.

MC 307 & DOT 407 Exclusion

- **Cleaning Issues -** Most MC 307's and DOT 407's are in general chemical service and are cleaned out several times a week. The presence of a purging system would make this process substantially more difficult and costly...
- **Contamination Issues -** Even with additional cleaning, we believe it would be nearly impossible to completely eliminate the possibility of cross-contaminated loads...

MC 307 & DOT 407 Exclusion

- **Air-Sensitive Products -** The manual and automatic purging systems currently available require the introduction of air into the external piping. Many products hauled in MC 307 and DOT 407's cannot come into contact with air, due to product purity or safety considerations.
- **Food Contamination -** Many MC 307 and DOT 407 cargo tanks haul flammable, food-grade additives for cosmetics, pharmaceuticals, human consumption, etc. We are concerned that the difficulty in cleaning purging systems would lead to food contamination issues.

MC 307 & DOT 407 Exclusion

- **Crude Oil Transportation -** Crude oil is hauled in single-compartment MC 307 and DOT 407 CTMV's with exposed piping. The particulate matter (sand, dirt and other earthen materials) found in harvested crude oil will render the purging system inoperable. Furthermore, we are not aware of any wetlines incidents involving catastrophic fires and crude oil CTMV's.

TWO RESPONSES

- Ask that HM-213D be withdrawn.
  - Additional Risks
  - Faulty Assumptions
  - Acceptable Alternatives
- Ask that MC 307 & DOT 407 CTMV's be excluded form the rulemaking.

Withdraw HM-213D
Additional Risks

- **Retrofit Risks -** The regulatory assessment again fails to account for the increased risk of retrofit to the cargo tank industry. In the same ten-year time period used for the accident data that showed five fatalities from CTMV incidents, there were twenty fatalities due to "hot work"...
- **Contamination Risks -** Adding many small parts to the loading and unloading system of various types of hazardous materials increases the danger of contamination between incompatible products. Many CTMV"s haul different products in their compartments from day to day, such as ultra-low sulfur diesel, fuel oil or biodiesel.

Withdraw HM-213D
Additional Risks

- **Residual Fuel in Purging System -** Any purging system not fully cleaned will contain residual fuel that can vaporize and cause a potential explosion risk... If a purging system becomes activated after the tank has been cleaned, the activation of the purging system could introduce fuel or fuel vapors to the cargo tank...

Withdraw HM-213D
Additional Risks

- **Environmental Risk of Additional Air Pollution -** The CARB submitted a letter on March 24, 2005 to the docket RSPA-99-6223-41 opposing the previous wetlines rulemaking on the grounds that “an air purging system on gasoline cargo tanks will increase air pollution.”...

Withdraw HM-213D
Additional Risks

- **Risk of Introducing Air to a Packaging of Flammable Liquid -** The DOT has recognized the hazard of introducing air to packaging of flammable liquid in its Hazardous Materials Regulations. Specifically section 49 CFR 173.33 (b)(3): “Air pressure in excess of ambient atmospheric pressure may not be used to load or unload any lading which may create an air-enriched mixture within the flammability range of the lading in the vapor space of the tank.” ...

Withdraw HM-213D
Additional Risks

- **Unaccounted Risk of Injuries to Occupants of "Other Vehicles" -** The economic analysis calculates the cost of extra miles driven due to the additional weight of the purging system using the fatality rate for occupants of large trucks. While this addresses some of the additional cost, the number used represents only 16% of the fatalities counted in the NHTSA report...

Withdraw HM-213D
Additional Risks

- **Risk of Non-Factory Mutual Approved Device in Class I Danger Areas -** The available Cargo Tank Concepts system does not appear to be approved by a third-party body such as Factory Mutual...

Withdraw HM-213D
Faulty Assumptions

- **Validity of Including the Yonkers Incident** - TTMA believes the Yonkers incident should be removed from the economic analysis for the following reasons:

  a) It is likely that the resulting fire was not caused by wetlines since an original report concluded that the fire was fed by fuel from the main compartments, which implies a breach in the main tank, and not just a separation of the wetlines.

  b) The incident falls outside of the ten-year window of the analysis.

  c) The statistical certainty of a similar incident ($27 million of economic damage) occurring ever again has not been proved by the economic analysis.

  d) There is no factual data to support the assumption that this is a 20-year catastrophic event.

  e) The passenger vehicle was traveling in excess of the 35-40mph range where the NTSB recognizes that any sudden impact or loss of control is likely to result in a fatality.

Withdraw HM-213D
Faulty Assumptions

- **$285 cost of installation (*new and retrofit*) -** A survey of our membership determined that most manufacturers have charge-out rates for labor of $60-$90/hour. In contrast the NPRM assumes a labor rate of $23.75/hour. Thus, the cost of installation is grossly understated...
- **$3/year maintenance cost for wetlines**

Withdraw HM-213D
Faulty Assumptions

- **Assumption that the Wetlines were the Principal Factor** - In many of the accidents used as examples, the fires resulting from the accident were so severe that both vehicles were completely consumed. How is it possible to conclude that the wetlines were the main cause of the catastrophic injuries and damage? ...

Withdraw HM-213D
Faulty Assumptions

- **Diesel Price at $3.58/gallon** - The rulemaking assumes a static price of $3.58/gallon for diesel over 20 years...
- **Operating Costs** - Installing a purging system requires operational costs that were not factored into this rulemaking...

Withdraw HM-213D
Faulty Assumptions

- **Assumption that Purging Systems will Prevent Catastrophic Fires -**
  ...TTMA requests that PHMSA provide any testing documentation or data that supports the assumption that purging systems substantially improve public safety.

Withdraw HM-213D
Faulty Assumptions

- **Manual System may be Unacceptable to many owners -** The economic analysis is based on the cost of the manually operated purging system. However, many owners will find it necessary to invest in the automatic system due to the following deficiencies with the manual system:

  Drivers can forget to purge the lines, resulting in possible citations.

  Leaky emergency valve seats could allow product into the lines, resulting in possible citations. The automatic system would purge the lines during transit, eliminating the possibility of citations.

Acceptable Alternatives

- **Physics of a "Wetlines" Incident** - TTMA believes that a "wetlines" incident needs to be clearly defined so that a performance standard for evaluating alternatives can be established...PHMSA can commission testing of the current state of CTMV"s, CTMV"s with purging systems, CTMV"s with accident damage protection (ADP) surrounding the wetlines and CTMV"s with devices suggested by the cargo tank industry. The USDOT has a practice of providing performance standards for other safety equipment.

Acceptable Alternatives

- **No Wetlines Accidents involving MC 307 / DOT 407 CTMV"s** - TTMA is unaware of any wetlines incident involving an MC 307 or DOT 407 CTMV where there was a release of product from the wetlines, and a related fire causing personal injury or death. Furthermore, none of the preambles to this rulemaking - or any wetlines rulemaking since 1985 - mentions any such incident. (*Please see TTMA's separate letter to the docket on this subject.*)

Acceptable Alternatives

- **Increase Weight Allowance -** If testing suggests that additional ADP around the wetlines is, in fact, a feasible approach, the weights allowed for the subject CTMV should be increased proportionally to preclude the risk of increasing the number of HAZMAT vehicles on the highway system.

Acceptable Alternatives

- **Increase Arbitrary Liquid Limit** - If testing supports the “wetlines” NPRM, we suggest increasing the limit of flammables allowed in wetlines to at least 4 liters. No analysis in the NRPM explains the seemingly arbitrary selection of 1 liter.

CONCLUSION

- In conclusion, since the basis of this NPRM relies heavily on the legitimacy of the economic analysis, and the results of the economic analysis are suspect, the NPRM should be withdrawn. What's more, this NPRM may, in fact, reduce public safety and introduce other unnecessary risks, as outlined above. Third, the assertion that purging systems will indeed prevent catastrophic fires in the case of a “wetlines” accident, has never been proved by physical testing. Finally, this NPRM would come at a cost in excess of $145,000,000 – perhaps as much as $800,000,000: Such a cost cannot be imposed on our society without indisputable benefits.

Where it Stands Today

- **NTTC says halt wetlines, regulatory privatization rulemakings**
- By CCJ Staff
- Published October 5, 2011
- The National Tank Truck Carriers on Wednesday, Oct. 5, says it has asked U.S. Transportation Secretary Ray LaHood to direct the withdrawal of two rulemakings that it considers unnecessary and counterproductive to safety. The first rulemaking would require a ban on gasoline in loading lines on cargo tanks (wetlines), while the other would turn over significant cargo tank regulatory responsibilities to a private third party and restrict public access to the regulatory process, NTTC says.
- NTTC President John Conley said that his organization took this tactic because LaHood can provide political cover to the Pipeline and Hazardous Materials Safety Administration, which developed the wetlines regulation in response to pressure from a congressional committee. PHMSA began the other rulemaking that would abdicate key government safety responsibility if the petitions from two private groups are granted, Conley said.

- “I respectfully submit that there are two rulemakings under way at the Department of Transportation’s Pipeline and Hazardous Materials Safety Administration that fall into the president’s category of regulations that are not needed and which would actually harm the safe transportation of hazardous materials,” Conley wrote. “Neither of these regulations was actually initiated by your agency for safety reasons, but rather were the result in one case from intense congressional pressure and in the other in response to petitions from an industry group that would financially benefit greatly if its petitions are granted.”
- NTTC told LaHood that U.S. Rep. Bill Shuster (R-Pa.) – chairman of the House Transportation and Infrastructure Committee Subcommittee on Railroads, Pipelines and Hazardous Materials – and ranking member U.S. Rep. Corrine Brown (D-Fla.) urged PHMSA Administrator Cynthia Quarterman to not proceed with the wetlines rulemaking. The wetlines regulation resulted from pressure from certain members of the T&I Committee in the last Congress and is not an issue of interest to the majority of the current Congress, according to NTTC.
- Regarding the proposal to turn over key regulatory responsibilities to a private entity through a “no-bid” process, NTTC told LaHood that “while we can respect the gall of these parties to have the government mandate the purchase of their products and services, we urge you to encourage your agency to reject this attempt to fix something that is not broken.”