

9-21-09

Ms. Cynthia Douglass
Acting Deputy Administrator
Pipeline and Hazardous Materials
Safety Administration
1200 New Jersey Avenue, SE
East Building, 2nd Floor, PH
Washington, DC 20590

Dear Ms. Douglass:

Thank you for the December 4, 2008, letter from Mr. Rick Kowalewski, Assistant Administrator/Chief Safety Officer, updating the status of 12 open safety recommendations (P-98-02, P-99-12, P-01-2, P-04-1 through -3, P-05-1 through -4, and P-07-7 and -8) that the National Transportation Safety Board (NTSB) issued to the Pipeline and Hazardous Materials Safety Administration (PHMSA). Safety Recommendation P-99-12, which is on the NTSB's list of Most Wanted Transportation Safety Improvements and was included in Mr. Kowalweski's letter, was addressed in the NTSB's April 2, 2009, correspondence.

Safety Recommendation P-98-2, stated below, was issued to PHMSA on April 30, 1998, as a result of the NTSB's special investigation report, *Brittle-like Cracking in Plastic Pipe for Gas Service*.

P-98-2

Determine the extent of the susceptibility to premature brittle-like cracking of older plastic piping (beyond that piping marketed by Century Utility Products, Inc.) that remains in use for gas service nationwide. Inform gas system operators of the findings and require them to closely monitor performance of the older plastic piping and to identify and replace, in a timely manner, any of the piping that indicates poor performance based on such evaluation factors as installation, operating, and environmental conditions; piping failure characteristics; and leak history.

On November 18, 2008, the NTSB provided comments to the docket regarding PHMSA's notice of proposed rulemaking (NPRM), "Pipeline Safety: Integrity Management Program for Gas Distribution Pipelines," which was published at *73 Federal Register* 36015 on June 25, 2008. PHMSA proposed to amend the federal pipeline safety regulations, *49 Code of Federal Regulations* Part 192, to require operators of gas distribution pipelines to develop and implement integrity management programs. PHMSA anticipates that this rule will be finalized by summer 2010.

The NTSB notes that the Plastic Pipe Database Committee, with representation from government and industry, recently completed collecting 5 years of data for in-service plastic piping material failures and is in the process of documenting the results. The NTSB further notes that the Gas Distribution Integrity Management Program Report found a need for the American Society for Testing and Materials (ASTM) to consider enhancing performance testing for plastic pipe fittings, and the ASTM is currently addressing these issues. The NTSB is pleased that PHMSA is considering requiring operators to report, either by telephone or through PHMSA's website, suspect older plastic pipe resulting from failure as part of a distribution integrity management program; we encourage PHMSA to implement such a requirement. In the meantime, pending publication of the final integrity management rules, Safety Recommendation P-98-2 is classified "Open—Acceptable Response."

Safety Recommendation P-01-2, stated below, was issued to PHMSA on June 22, 2001, as a result of the NTSB's investigation of the July 7, 1998, natural gas explosion and fire in South Riding, Virginia.

P-01-2

Require that excess flow valves [EFVs] be installed in all new and renewed gas service lines, regardless of a customer's classification, when the operating conditions are compatible with readily available valves.

In its November 19, 2008, letter regarding the June 25, 2008, NPRM, the NTSB pointed out that the Pipeline Integrity, Protection, Enforcement, and Safety (PIPES) Act of 2006 mandated that PHMSA require operators of distribution pipeline systems to install EFVs after June 1, 2008, on all new and replacement service lines to single-family residences. The PIPES Act further mandated that the requirement be incorporated in the integrity management rulemaking for distribution pipeline systems. Because the rulemaking was delayed, PHMSA issued an advisory bulletin (ADB-08-04) on May 30, 2008, which was published in the *Federal Register* on June 5, 2008. The bulletin advised operators that, effective June 1, 2008, EFVs must be installed on new and replacement services for single-family homes that operate continuously at a pressure above 10 pounds per square inch, gauge, and that are not connected to a gas stream with a history of contaminants.

Although the NPRM and the advisory bulletin may satisfy the mandate of the PIPES Act, they fail to require EFVs for apartment buildings, other multifamily dwellings, and commercial properties, which are susceptible to the same risks from damaged service lines as single-family residences. Safety Recommendation P-01-2 was issued because the NTSB had determined in its investigation of the 1998 South Riding, Virginia, accident that the service line to the home had failed, an uncontrolled release of gas had accumulated in the basement, and the gas had subsequently ignited. Had an EFV been installed in the service line, the EFV would have closed after the hole in the service line developed, and the explosion likely would not have occurred. The NTSB again urges PHMSA to amend its NPRM to require EFVs on all new and renewed service lines for all gas service customers regardless of their classification, as specified in the recommendation, when the operator's conditions are compatible with readily available valves. If

the final rules are not revised as requested, final classification of this recommendation may be “unacceptable.” Pending a response from PHMSA about this requested change, Safety Recommendation P-01-2 remains classified “Open—Acceptable Response.”

Safety Recommendations P-04-1 through -3, stated below, were issued on July 1, 2004, as a result of the NTSB’s investigation of the Enbridge pipeline rupture and crude oil release near Cohasset, Minnesota, on July 4, 2002.

P-04-1

Remove the exemption in 49 *Code of Federal Regulations* [CFR] 192.65(b) that permits pipe to be placed in natural gas service after pressure testing when the pipe cannot be verified to have been transported in accordance with the American Petroleum Institute’s [API’s] recommended practice RP 5L1.

The NTSB notes that PHMSA will submit a report requesting that this recommendation be reconsidered based on information gathered on cyclic fatigue in natural gas transmission pipelines and the unlikely presence of pre-November 12, 1970, line pipe in operators’ inventories. Pending our receipt and review of this report, Safety Recommendation P-04-1 remains classified “Open—Acceptable Response.”

P-04-2

Amend 49 *Code of Federal Regulations* to require that natural gas pipeline operators (Part 192) and hazardous liquid pipeline operators (Part 195) follow the American Petroleum Institute’s recommended practice RP 5LW for transportation of pipe on marine vessels.

The NTSB notes that the API standard RP 5LW *Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels* is nearing revision and that, when it is published, PHMSA will incorporate it by reference in what PHMSA refers to as “a miscellaneous rulemaking.” Pending completion of this effort, Safety Recommendation P-04-2 is classified “Open—Acceptable Response.”

P-04-3

Evaluate the need for a truck transportation standard to prevent damage to pipe, and, if needed, develop the standard and incorporate it in 49 *Code of Federal Regulations* Parts 192 and 195 for both natural gas and hazardous liquid line pipe.

The NTSB notes that PHMSA monitored the research of the Pipeline Research Council International concerning the transportation of pipe by truck, which revealed no known examples of truck transportation-related fatigue failures, and indicated that dynamic stresses induced on pipe transported by truck are up to two times greater than vibrations from transporting by rail. In addition, the NTSB is aware that the API is revising its standard, RP 5L, *Specification for Line Pipe*, to address this issue and anticipates completion of the revision in the first quarter of 2009.

Because PHMSA intends to incorporate by reference the revised API standard by the end of 2009, Safety Recommendation P-04-3 is classified “Open—Acceptable Response” pending completion of this action.

Safety Recommendations P-05-1 through -4, stated below, were issued on December 23, 2005, as a result of the NTSB’s study on supervisory control and data acquisition (SCADA) systems in liquid pipelines.

P-05-1

Require operators of hazardous liquid pipelines to follow the American Petroleum Institute’s Recommended Practice 1165 [API RP 1165] for the use of graphics on the SCADA screens.

The NTSB has reviewed the NPRM “Pipeline Safety: Control Room Management/Human Factors,” issued on September 12, 2008, and has provided comments to the docket. The NTSB is pleased that the NPRM proposes to require that, whenever a SCADA system is used, the operator must implement API RP 1165 in its entirety unless the operator can adequately demonstrate that a provision of API RP 1165 is not applicable or is impracticable in the particular SCADA system used. The NTSB believes that if the applicable text in the proposed rule is adopted in its current form in the final rule, the recommendation will be satisfied. Accordingly, pending publication of the final rule, Safety Recommendation P-05-1 is classified “Open—Acceptable Response.”

P-05-2

Require pipeline companies to have a policy for the review/audit of alarms.

The NTSB is pleased that the September 2008 NPRM addresses alarm management for Parts 192, 193, and 195, requiring each operator using a SCADA system to ensure appropriate controller response to alarms and notifications. Operators are required to review SCADA operations at least once a week and review SCADA configuration and alarm management operations at least once per calendar year and at intervals not to exceed 15 months. The NTSB believes that if the applicable text in the proposed rule is adopted in its current form in the final rule, the recommendation will be satisfied. Accordingly, pending publication of the final rule, Safety Recommendation P-05-2 is classified “Open—Acceptable Response.”

P-05-3

Require controller training to include simulator or non-computerized simulations for controller recognition of abnormal operating conditions, in particular, leak events.

The NTSB is pleased that the September 2008 NPRM addresses training for Parts 192, 193, and 195, requiring the use of simulator or non-computerized (tabletop) methods to train controllers to recognize abnormal operating conditions, in particular leak and failure events. The

NPRM further requires that simulations and tabletop exercises include communications between controllers and operators that are representative of those that occur during actual events. In addition, controllers will be required to participate in the improvement and development of tabletop or simulation training scenarios. The NTSB is also pleased that PHMSA will require operators to conduct training in recognizing and responding to abnormal operating conditions.

The NTSB commends PHMSA for requiring controller input in developing the operator's emergency response procedures and believes that if the applicable text in the proposed rule is adopted in its current form in the final rule, the recommendation will be satisfied. Accordingly, pending publication of the final rule, Safety Recommendation P-05-3 is classified "Open—Acceptable Response."

P-05-4

Change the liquid accident reporting form (PHMSA F 7000-1) and require operators to provide data related to controller fatigue.

The NTSB notes that PHMSA developed a draft accident form as requested, had it reviewed by industry and state pipeline partners, published the draft form for comment in the September 4, 2008, *Federal Register*, and anticipates having the new form in place in early 2010. Accordingly, pending publication of the revised form F-7000-1 and its required use by operators in providing data related to controller fatigue, Safety Recommendation P-05-4 is classified "Open—Acceptable Response."

Safety Recommendations P-07-7 and -8, stated below, were issued on June 25, 2007, as a result of the NTSB's investigation of the October 27, 2004, anhydrous ammonia pipeline rupture that occurred near Kingman, Kansas.

P-07-7

Require in 49 *Code of Federal Regulations* 195.52 that a pipeline operator must have a procedure to calculate and provide a reasonable initial estimate of released product in the telephonic report to the National Response Center [NRC].

P-07-8

Require in 49 *Code of Federal Regulations* 195.52 that a pipeline operator must provide an additional telephonic report to the National Response Center if significant new information becomes available during the emergency response.

The NTSB is pleased that PHMSA is modifying the hazardous liquid operator telephonic notification regulation to require operators to have a procedure to calculate and provide a reasonable initial estimate of released product and maintain a record of the procedure used. In addition, PHMSA intends to issue an NPRM modifying its requirement that operators provide an additional telephonic report to the NRC if significant new information becomes available during the emergency response phase. The NTSB notes that the NRC will give these telephonic updates

a new report number and will provide reference to the old report number for tracking purposes, if such information is available. Pending publication of the final rules and the revised telephone reporting form, Safety Recommendations P-07-7 and -8 are classified “Open—Acceptable Response.”

Thank you for your commitment to pipeline safety. We would appreciate receiving periodic updates on these initiatives as they near completion.

Sincerely,

/s/

Deborah A. P. Hersman
Chairman

cc: Ms. Linda Lawson, Director
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