



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Ave., S.E.
Washington, DC 20590

01/22/2015

The Honorable Christopher A. Hart
Acting Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW
Washington, DC 20594

Dear Acting Chairman Hart:

I am writing to update you on the status of actions taken to date to address the 24 open National Transportation Safety Board (NTSB) recommendations. The Pipeline and Hazardous Materials Safety Administration (PHMSA) has completed action on Recommendations P-04-3, P-09-1, P-11-16, P-11-19, P-11-20, and P-12-5 and is proposing closure for these recommendations.

PHMSA has a long history of cooperating and collaborating with the NTSB, and we agree that safe pipeline operational practices are important and necessary. We take our responsibility to address all recommendations seriously, and will continue to work diligently to close all open recommendations.

PHMSA's ACTIONS TO ADDRESS THE 24 OPEN NTSB RECOMMENDATIONS

Safety Recommendation P-01-2

Recommendation: *Require that excess flow valves 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.*

Response: PHMSA has drafted a Notice of Proposed Rulemaking (NPRM) titled "Pipeline Safety: Expanding the Use of Excess Flow Valves in Gas Distribution Systems to Applications Other Than Single-Family Residences." The NPRM proposes to require operators to install excess flow valves on all new or replaced distribution service lines serving branched single-family residences, multi-family residences, and small commercial entities consuming gas volumes not exceeding 1,000 Standard Cubic Feet per Hour (SCFH), and to install curb valves (manual service-line shutoff valves) for service lines with meter capabilities exceeding 1,000 SCFH. This rulemaking would capture the remaining service lines not covered under PHMSA's "Pipeline Safety: Integrity Management Program for Gas Distribution Pipelines" (DIMP) final rule published on December 4, 2009.

The NPRM is currently under review with the Office of Management and Budget (OMB), and our anticipated publication date is in 2015.

Safety Recommendation P-04-1

Recommendation: *Remove the exemption in regulations 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) recommended practice RP5L1.*

Response: PHMSA is drafting a final rule titled “Pipeline Safety: Miscellaneous Changes to Pipeline Safety Regulations,” which removes the exemption in 49 C.F.R. § 192.65 and brings the regulation into accordance with the API’s recommended practice RP5L1.

The NPRM comment period closed in February 2012, and PHMSA’s Pipeline Advisory Committee voted in support of the proposed change in July 2012. The final rule is currently under agency review, and our anticipated publication date is Spring 2015.

Safety Recommendation P-04-3

Recommendation: *Evaluate the need for a truck transportation standard to prevent damage to pipe and, if needed, develop the standard and incorporate it into regulations for both natural gas and hazardous liquid line pipe.*

Response: PHMSA proposes to close this recommendation. On August 16, 2013, PHMSA published an NPRM titled “Pipeline Safety: Periodic Updates of Regulatory References to Technical Standards and Miscellaneous Amendments,” which proposed to adopt API Recommended Practice 5LT, “Recommended Practice for Truck Transportation of Line Pipe” (First edition, March 1, 2012). Comments closed for the NPRM on October 15, 2013. On January 5, 2015, PHMSA published the final rule adopting this standard which becomes effective on March 6, 2015. The final rule is available at <http://www.gpo.gov/fdsys/pkg/FR-2015-01-05/pdf/2014-30336.pdf>.

Safety Recommendation P-09-1

Recommendation: *Conduct a comprehensive study to identify actions that can be implemented by pipeline operators to eliminate catastrophic longitudinal seam failures in electric resistance welded (ERW) pipe; at a minimum, the study should include assessments of the effectiveness and effects of in-line inspection tools, hydrostatic pressure tests, and spike pressure tests; pipe material strength characteristics and failure mechanisms; the effects of aging on ERW pipelines; operational factors; and data collection and predictive analysis.*

Response: PHMSA proposes to close this recommendation based on completion of the comprehensive study. In 2011, PHMSA launched a comprehensive study to understand longitudinal ERW seam failures. The objectives of the study were to: 1) integrate data from industry and PHMSA to quantify vintage seam-failure statistics with a focus on low-frequency ERW seams, 2) understand longitudinal ERW seam failure mechanisms, and 3) quantify the effectiveness of inspection and hydrotesting to manage integrity and ensure safety in order to avoid and eliminate catastrophic failures.

This study analyzed ERW seams as follows: incident history and operational factors; effectiveness of pressure testing including spike tests to expose near-critical defects; models to predict failure and re-inspection intervals based upon material strength and toughness; and detection and sizing via ILI and in-ditch tools. The final report was published on October 23, 2013. The results-to-date and final report are available at: <https://primis.phmsa.dot.gov/matrix/PrjHome.rdm?prj=390>.

PHMSA communicated the study's findings to industry and the general public through the project web site and presentations, and has used this information to help inform the draft NPRM titled "Pipeline Safety: Safety of Gas Transmission Pipelines" (see *Safety Recommendation P-11-14* below).

Safety Recommendation P-09-2

Recommendation: *Based on the results of the study from NTSB Open Recommendation P-09-1, implement the actions needed.*

Response: To further develop how to evaluate seam issues, PHMSA added a Phase 2 to the efforts described in P-09-1. Phase 2 work began in December 2012 and is scheduled to be completed by the end of 2015. Phase 2 actions are:

- 1) Improve Hydrotesting Protocols for ERW/FW Seams
- 2) Enhance Defect Detection and Sizing via Inspection
- 3) Defect Characterization: Types, Sizes, & Shapes
- 4) Develop and Refine Predictive Models and Quantify Growth Mechanisms
- 5) Develop Management Tools: Manual, Software, Protocols, and Training
- 6) Public Meeting/ Forum

PHMSA will complete this recommendation after Phase 2 is complete. PHMSA anticipates it will take an additional 12 to 18 months after completion of Phase 2 to implement the necessary actions.

Safety Recommendation P-11-8

Recommendation: *Require operators of natural gas transmission and distribution pipelines and hazardous liquid pipelines to provide system-specific information about their pipeline systems to the emergency response agencies of the communities and jurisdictions in which those pipelines are located. This information should include pipe diameter, operating pressure, product transported, and potential impact radius.*

Response: PHMSA is pursuing multiple actions to address this recommendation. Currently, pipeline operators (except for operators of distribution and gathering pipelines) are required to submit geospatial data, attributes, metadata, public contact information, and a transmittal letter to the National Pipeline Mapping System (NPMS) program. Further, emergency responders have access to data on pipe diameter (voluntarily submitted by approximately 75 percent of pipeline operators) and product transported.

On July 30, 2014, PHMSA published the Federal Register notice titled, “Request for Revision of a Previously Approved Information Collection - National Pipeline Mapping System Program,” inviting public comment on our intent to request the OMB’s approval to revise and renew an information collection currently under OMB Control Number 2137-0596. The information collection proposes additional information gathering such as: improved positional accuracy of pipeline maps, pipe diameter (currently an optional submission only), operating pressure, pipe grade, percent of specified minimum yield strength, leak detection, pipe coating, pipe material, pipe join method, year of construction/installation, class location, high consequence “could affect” areas, onshore/offshore designation, inline inspection capability, year of last inline inspection/direct assessment, year and pressure of original and last hydrostatic test, detail on commodities transported, locations of special permits issued by PHMSA, pipe wall thickness, and seam type. As part of the process, we will review each additional data element to determine classification. Comments were due by December 1, 2014 and are currently under review.

PHMSA also convened a Public Awareness Program Working Group (PAPWG). The PAPWG will issue a strengths, weaknesses, opportunities, and threats (SWOT) analysis on gaps in the requirements for pipeline operators to communicate with the affected emergency response stakeholder audience. The SWOT findings will be made available to the public and NTSB in calendar year 2015. PHMSA will also make the findings available to the American Petroleum Institute (API) as input for potential revision to API Recommended Practice 1162, “Public Awareness Programs for Pipeline Operators.” PHMSA will review the findings to determine if additional changes need to be made to Federal regulations regarding communications and information sharing between pipeline operators and local emergency response agencies.

Safety Recommendation P-11-9

Recommendation: *Require operators of natural gas transmission and distribution pipelines and hazardous liquid pipelines to ensure that their control room operators immediately and*

directly notify the 911 emergency call center(s) for the communities and jurisdictions in which those pipelines are located when a possible rupture of any pipeline is indicated.

Response: On October 11, 2012, PHMSA published Advisory Bulletin ADB-12-09, “Communication During Emergency Situations” (77 FR 61826) in the Federal Register. This ADB reminds operators of gas, hazardous liquid, and liquefied natural gas pipeline facilities that, if there are indications of a pipeline facility emergency, operators should immediately and directly notify the Public Safety Access Point (PSAP) that serves the communities in which those pipelines are located. Pipeline operators must include provisions in their emergency plans for coordination with appropriate fire, law enforcement, emergency management, and other public safety officials.

PHMSA is considering additional steps to further address this recommendation.

Safety Recommendation P-11-10

Recommendation: *Require that all operators of natural gas transmission and distribution pipelines equip their supervisory control and data acquisition systems with tools to assist in recognizing and pinpointing the location of leaks, including line breaks; such tools could include a real-time leak detection system and appropriately spaced flow and pressure transmitters along covered transmission lines.*

Response: PHMSA plans to incorporate aspects of this recommendation into a future NPRM titled “Pipeline Safety: Amendments to Parts 192 and 195 to Require Valve Installation and Minimum Rupture Detection Standards,” which would establish performance-based meaningful metrics for rupture detection, focused on large, unsafe, uncontrolled release events. The NPRM is currently being drafted, and we expect to publish it by Spring 2015.

Safety Recommendation P-11-11

Recommendation: *Amend Title 49 Code of Federal Regulations Section 192.935(c) to directly require that automatic shutoff valves (ASV) or remote control valves (RCV) in high consequence areas and in class 3 and 4 locations be installed and spaced at intervals that consider the population factors listed in the regulations.*

Response: PHMSA plans to incorporate aspects of this recommendation into a future NPRM titled “Pipeline Safety: Amendments to Parts 192 and 195 to Require Valve Installation and Minimum Rupture Detection Standards,” which would require mandatory installation of automatic shutoff valves, remote controlled valves, or equivalent technology. The NPRM is currently being drafted, and we expect to publish it in 2015.

Safety Recommendation P-11-12

Recommendation: *Amend 49 CFR 199.105 and 49 CFR 199.225 to eliminate operator discretion with regard to testing of covered employees. The revised language should require drug and alcohol testing of each employee whose performance either contributed to the accident or cannot be completely discounted as a contributing factor to the accident.*

Response: PHMSA is addressing this recommendation in an NPRM titled “Pipeline Safety: Operator Qualification, Cost Recovery, and Other Proposed Changes.” Through this rulemaking, PHMSA is proposing to modify §§ 199.105 and 199.225 by requiring drug testing of employees and allowing exemption from drug testing only when there is sufficient information that establishes the employee(s) had no role in the accident. The NPRM is currently under agency review, and we expect to publish in 2015.

Safety Recommendation P-11-14

Recommendation: *Amend Title 49 Code of Federal Regulations 192.619 to delete the grandfather clause and require that all gas transmission pipelines constructed before 1970 be subjected to a hydrostatic pressure test that incorporates a spike test.*

Response: PHMSA is formalizing an NPRM titled “Pipeline Safety: Safety of Gas Transmission Pipelines,” which will address this recommendation.

PHMSA has developed a proposed Integrity Verification Process (IVP) to assure that pipeline operators take the appropriate steps to ensure safe operations, which includes additional testing requirements to demonstrate seam stability and to confirm material strength of untested gas transmission pipelines. On August 7, 2013, PHMSA conducted a public workshop to present its proposed IVP and seek comment. PHMSA expresses its gratitude to the Honorable Christopher A. Hart, NTSB Acting Chair, for presenting the findings of the San Bruno investigation and providing NTSB’s perspective on integrity verification during the workshop.

The NPRM is currently under agency review, and we expect to publish in 2015.

Safety Recommendation P-11-15

Recommendation: *Amend Title 49 Code of Federal Regulations Part 192 of the Federal pipeline safety regulations so that manufacturing- and construction-related defects can only be considered stable if a gas pipeline has been subjected to a post-construction hydrostatic pressure test of at least 1.25 times the maximum allowable operating pressure.*

Response: On August 7, 2013, PHMSA held a workshop to present and allow public comment on its IVP proposal to address issues regarding testing requirements to demonstrate seam stability and to confirm the material strength of untested pre-code legacy gas transmission pipelines. PHMSA will formalize the IVP in the “Pipeline Safety: Safety of Gas

Transmission Pipelines” NPRM. The NPRM is currently under agency review, and we expect to publish it in 2015.

Safety Recommendation P-11-16

Recommendation: *Assist the California Public Utilities Commission in conducting the comprehensive audit recommended in Safety Recommendation P-11-22.*

Response: PHMSA proposes to close this recommendation. PHMSA assisted the California Public Utilities Commission (CA PUC) in conducting a series of comprehensive audits of all aspects of Pacific Gas & Electric’s operations, including control room operations, emergency planning, record-keeping, performance-based risk and integrity management programs, and public awareness programs. The dates the audits were conducted are as follows:

- Public Awareness Plan - November 1-3, 2011;
- Operation, Maintenance, and Emergency Response Plans - February 13-17, 2012;
- Transmission Integrity Management - August 27-31, 2012 and September 10-14, 2012;
- Operation Qualification Program Inspection- October 22 - 26, 2012;
- Control Room Management - October 29-November 2, 2012;
- Distribution Integrity Management Inspection - December 10-14, 2012; and
- Standard Inspection North Bay Operations - April 8-12, 2013.

The CA PUC has confirmed the completion of these audits and the dates in their August 27, 2014, NTSB Status Report, http://www.cpuc.ca.gov/NR/rdonlyres/28318F8D-F574-459E-AB40-40C4DB5CABAA/0/NTSB_Status_Report_August_2014FINAL_2.pdf.

Safety Recommendation P-11-17

Recommendation: *Require that all natural gas transmission pipelines be configured so as to accommodate in-line inspection tools, with priority given to older pipelines.*

Response: In 2012, PHMSA modified its Gas Transmission Annual Report forms to obtain better data on how many miles of gas transmission pipelines accommodate ILI tools and are piggable and how many are difficult to internally inspect. PHMSA received this data in 2013 and continues to analyze it. Of the 301,993 miles of gas transmission pipelines in the Nation, 113,632 (~40 percent) of that mileage do not accommodate ILI tools.

PHMSA’s Pipeline Safety Research and Development Program is developing and deploying new inspection technologies for difficult-to-inspect natural gas pipelines. Our prior investments (\$7.4M to date from 2004) have yielded very promising new, commercialized robotic technologies that are able to pig certain previously difficult-to-inspect portions of lines. PHMSA is now entertaining new research proposals that will integrate these robotic solutions

with sensors that detect crack-like defects, which will further expand their inspection capabilities and improve their ability to detect seam cracks and defects.

PHMSA continues to advocate for natural gas transmission pipeline operators to respond to former Secretary LaHood's "Call to Action" to repair, replace, or rehabilitate high risk pipe. To date, 38 states have pipe replacement initiatives underway and other states are evaluating their abilities to provide relief to operators and the public for similar replacement initiatives.

Further, there are some limitations on PHMSA's statutory authority to apply new design standards to existing infrastructure, and PHMSA has initiated a cost/benefit analysis to determine how to best address this recommendation. As mentioned above, approximately 40 percent of the Nation's natural gas transmission pipelines are difficult to inspect; therefore, requiring that all natural gas transmission pipelines be made piggable entails a major rulemaking. Cost/benefit is critical to informing action as many of these pipelines may need to be modified or existing in-line inspection technology must be improved.

Safety Recommendation P-11-18

Recommendation: *Revise your integrity management inspection protocol to (1) incorporate a review of meaningful metrics; (2) require auditors to verify that the operator has a procedure in place for ensuring the completeness and accuracy of underlying information; (3) require auditors to review all integrity management performance measures reported to the Pipeline and Hazardous Materials Safety Administration and compare the leak, failure, and incident measures to the operator's risk model; and (4) require setting performance goals for pipeline operators at each audit and follow up on those goals at subsequent audits."*

Response: PHMSA has modified several components of our inspection and enforcement processes and procedures regarding meaningful metrics and their inclusion or use in pipeline operators' integrity management (IM) programs.

PHMSA has revised and improved the IM inspection questions in the Inspection Assistant (IA) application. We made significant enhancements, including the addition of more detailed guidance and considerations to the gas IM questions. We bolstered our liquid IM questions as well so that the evaluation of meaningful metrics is similar for both gas and liquid IM. The incorporation of the new questions and modification of other questions has provided for the specific incorporation of meaningful metrics. Moreover, these metrics are trending towards performance goals within the operators' IM program. The new questions were available in IA to support inspections beginning in CY2014.

Similar to the revised IM inspection questions in the IA application, changes were implemented in the HL and Gas IM Inspection Protocols used by State Programs to conduct IM inspections. These revised questions are posted on the public websites. The new protocol forms, guidance and other related reference material can be found on our gas and liquid IM

public web sites, <https://primis.phmsa.dot.gov/gasimp/> and <https://primis.phmsa.dot.gov/iim/index.htm> respectively, so they can be shared with operators and all stakeholders. State Programs were notified to begin using these new protocol forms for upcoming IM inspections beginning in CY2014.

We have also revised our hazardous liquid and gas transmission enforcement guidance documents to address these topics. Both documents are available now at <http://www.phmsa.dot.gov/foia/e-reading-room>. Inspectors now have additional resources to help them evaluate the effectiveness of an operator's use of meaningful metrics and to develop enforcement cases when necessary.

During the course of an inspection of an operator's IM program, an inspector gains insight into the threats and consequences specific to the operator's unique operating environment. Based on these insights, the inspector is well equipped to evaluate the adequacy or inadequacy of the metrics an operator is utilizing to measure the performance of its IM program. Enforcement can be handled by requiring modifications to the IM program in the case of inadequate metrics or by use of orders if the trends in the metrics' data are not proving satisfactory and their actions not in compliance. The results of the inspection are documented in the inspection reports along with enforcement data, when applicable, for follow-up evaluations at subsequent audits.

In addition, PHMSA is developing a data analysis program that looks at performance metrics derived from our incident and annual report data sets. The specific performance data for operators will be evaluated, and key metrics evaluated and compared to other operators in a comparable peer group (e.g., according to the size of operator based on mileage or the type of commodities transported by operator). Operators who perform significantly worse than their peers according to these metrics (i.e., do not meet the goal) would be identified as operators whose safety performance must be improved. These operators would be targeted for possible further action by PHMSA. The actions would depend on the specific operator performance and other factors. We are preparing to implement this program in CY2015.

We also are considering posting the operator metrics and goals on PHMSA's website so each company's performance is clearly visible to the public. We anticipate repeating this process annually as new performance data become available. A process will be established to enhance continuous improvement of operators' safety programs, and adjustments to the criteria for selection of operators targeted for some intervention action by PHMSA will be made over the years. PHMSA will encourage operators to do more than move towards the "industry mean average" for performance, and to strive to continuously improve their safety records.

While we believe that our past inspections and enforcement actions have directed operators to consider performance measures (in cases where appropriate), these new questions and written guidance will provide additional assurance that meaningful and appropriate performance measures are considered and implemented by operators in their IM programs.

Safety Recommendation P-11-19

Recommendation: *(1) Develop and implement standards for integrity management and other performance-based safety programs that require operators of all types of pipeline systems to regularly assess the effectiveness of their programs using clear and meaningful metrics, and to identify and then correct deficiencies; and (2) make those metrics available in a centralized database.*

Response: PHMSA proposes closure of this recommendation. PHMSA collects annual reports and incident reports from pipeline operators in a centralized database and continuously seeks to modify data collection activities to improve this collected information. PHMSA has made significant progress in posting this information to our website that summarize and display trends in key performance metrics based on the data from these reports. Our website provides a view of the trend and access to the operator-specific data comprising the overall trend. This operator-specific data is used extensively to compare pipeline operators as discussed in the response to P-11-18-4.

Performance metrics displayed on the PHMSA website include, but are not limited to, data on incidents, IM performance, and pipeline materials. Data available to stakeholders in PHMSA's centralized databases allows operators to review their specific metrics as well as Industry-wide metrics to support the identification of areas of concern where the implementation of additional meaningful metrics would support program and system integrity improvements.

Additionally, on October 15, 2014, PHMSA issued ADB-2014-05, "Pipeline Safety: Guidance for Strengthening Pipeline Safety Through Rigorous Program Evaluation and Meaningful Metrics," available online at <https://www.federalregister.gov/articles/2014/10/15/2014-24439/pipeline-safety-guidance-for-strengthening-pipeline-safety-through-rigorous-program-evaluation-and>, to inform owners and operators of natural gas and hazardous liquid pipelines of our expectations. The advisory provides more extensive guidance on the elements and characteristics of a mature IM program evaluation process using meaningful metrics.

PHMSA also developed a supporting guidance document, "Guidance for Strengthening Pipeline Safety through Rigorous Program Evaluation and Meaningful Metrics," which is incorporated into ADB-2014-05. The guidance builds on existing standards and regulations to provide a more detailed and comprehensive description of the steps involved in program evaluations, as well as the selection of meaningful performance metrics to support these evaluations. The guidance expands and clarifies PHMSA's expectations for operator processes when measuring IM program effectiveness. The guidance is posted on the public website at <https://www.federalregister.gov/articles/2014/10/15/2014-24439/pipeline-safety-guidance-for-strengthening-pipeline-safety-through-rigorous-program-evaluation-and>.

Safety Recommendation P-11-20

Recommendation: *Work with state public utility commissions to (1) implement oversight programs that employ meaningful metrics to assess the effectiveness of their oversight programs and make those metrics available in a centralized database, and (2) identify and then correct deficiencies in those programs.*

Response: PHMSA proposes closure of this recommendation. PHMSA met with the National Association of Pipeline Safety Representatives (NAPSR) in February and April of 2013 to develop draft metrics and preliminary criteria for screening those metrics. The draft state metrics have been identified and approved by NAPSR. These metrics are available on PHMSA's new State Program Performance Metrics pages, which can be accessed through the State Pages directory on the Stakeholder Communications website at <http://primis.phmsa.dot.gov/comm/States.htm?nocache=7437>. New links have also been added to the primary stakeholder pages that point to the State Pages directory for access to the metrics pages.

A thorough review of the metrics will be conducted with each state pipeline program as part of their annual on-site program evaluation. Each state program will be asked to address and correct any noted deficiencies.

Safety Recommendation P-12-3

Recommendation: *Revise Title 49 Code of Federal Regulations 195.452 to clearly state (1) when an engineering assessment of crack defects, including environmentally assisted cracks, must be performed; (2) the acceptable methods for performing these engineering assessments, including the assessment of cracks coinciding with corrosion with a safety factor that considers the uncertainties associated with sizing of crack defects; (3) criteria for determining when a probable crack defect in a pipeline segment must be excavated and time limits for completing those excavations; (4) pressure restriction limits for crack defects that are not excavated by the required date; and (5) acceptable methods for determining crack growth for any cracks allowed to remain in the pipe, including growth caused by fatigue, corrosion fatigue, or stress corrosion cracking as applicable.*

Response: PHMSA believes that incorporating recently developed consensus standards will assure better consistency, accuracy, and quality of pipeline assessments that are conducted using these techniques. To this end, PHMSA is developing an NPRM titled "Pipeline Safety: Safety of On-Shore Hazardous Liquid Pipelines." Among other things, the NPRM proposes to incorporate by reference consensus standards governing conduct of assessments of the physical condition of in-service pipelines using in-line inspection, internal corrosion direct assessment, and stress corrosion cracking (SCC) direct assessment.

The NPRM is currently under review with the Office of Management and Budget, and our anticipated publication date is May 2015.

Safety Recommendation P-12-4

Recommendation: *Revise Title 49 Code of Federal Regulations 195.452(h)(2), the "discovery of condition," to require, in cases where a determination about pipeline threats has not been obtained within 180 days following the date of inspection, that pipeline operators notify the Pipeline and Hazardous Materials Safety Administration and provide an expected date when adequate information will become available.*

Response: PHMSA has drafted an NPRM titled "Pipeline Safety: Safety of On-Shore Hazardous Liquid Pipelines," which proposes to amend the existing "discovery of condition" language in the pipeline safety regulations to require pipeline operators to provide PHMSA with an expected date when adequate information will become available in cases where a determination about pipeline threats has not been obtained within 180 days following the date of inspection.

The NPRM is currently under review with the Office of Management and Budget, and our anticipated publication date is May 2015.

Safety Recommendation P-12-5

Recommendation: *Conduct a comprehensive inspection of Enbridge Incorporated's integrity management program after it is revised in accordance with Safety Recommendation P-12-11.*

Response: PHMSA proposes closure of this recommendation. PHMSA has developed a comprehensive approach to improving Enbridge's safety record, including reviewing its IM program for the entire Lakehead system. The Lakehead Plan addressed multiple IM elements, including improvements to risk modeling, pipeline integrity verification, in-line inspection, pipe replacement programs, valve placement, leak detection systems, and other safety improvements.

Det Norske Veritas Germanischer Lloyd (DNV GL), retained under our Corrective Action Order as an independent third-party verification agent, completed its review of the Lakehead Plan and considers the Plan adequate and anticipates an improvement in safety performance when the plan is fully implemented. At this stage, DNV GL is currently monitoring the implementation of the Lakehead Plan to evaluate its effectiveness. Through our inspection and enforcement program, PHMSA will continue to review and closely monitor the ongoing efforts of both DNV GL and Enbridge to ensure implementation of the Lakehead Plan and requirements contained in PHMSA enforcement actions and regulations. Our goal is to ensure improvements occur not only to Enbridge's integrity management program, but to its overall safety performance.

PHMSA will also continue to review and improve its regulations. PHMSA has drafted an NPRM titled “Pipeline Safety: Safety of On-Shore Hazardous Liquid Pipelines,” which proposes changes to integrity management requirements. The NPRM is currently under review with the Office of Management and Budget, and our anticipated publication date is May 2015.

Safety Recommendation P-12-7

Recommendation: *Develop requirements for team training of control center staff involved in pipeline operations similar to those used in other transportation modes.*

Response: While a number of the sections in the current Control Room Management regulations, the inspection guidance, and related Frequently Asked Questions already relate to the concept of team training for control room personnel (controllers) and others who would likely work together as a team during normal, abnormal, and emergency situations, PHMSA agrees that a requirement for control room team training would better prepare all individuals who would be reasonably expected to interface with controllers during these situations. Therefore, PHMSA is considering revisions to the Control Room Management regulations in §§ 192.631 and 195.446 of the Pipeline Safety Regulations to more explicitly require team training. PHMSA plans to consider this option through the NPRM titled “Pipeline Safety: Operator Qualification, Cost Recovery, and Other Proposed Changes.” The NPRM is currently under agency review, and we expect to publish it in spring or summer 2015.

In addition to considering rulemaking action, PHMSA incorporated guidance on team training in ADB-14-02, “Pipeline Safety: Lessons Learned from the Release at Marshall, Michigan” (<https://www.federalregister.gov/articles/2014/05/06/2014-10248/pipeline-safety-lessons-learned-from-the-release-at-marshall-michigan>). The ADB cites the NTSB’s conclusion that Enbridge’s failure to train the control center staff in team performance resulted in poor communication and a lack of leadership. The ADB reinforces and recommends that operators consider training control room staff to recognize and respond to emergencies or unexpected conditions as a team.

Safety Recommendation P-12-8

Recommendation: *Extend operator qualification requirements in Title 49 Code of Federal Regulations Part 195 Subpart G to all hazardous liquid and gas transmission control center staff involved in pipeline operational decisions.*

Response: While a number of the sections in the current Control Room Management regulations, along with the inspection guidance and related Frequently Asked Questions, touch on the topic of qualification of supervisors or others intervening in control room operations, PHMSA believes a more explicit requirement would help reinforce the need to qualify these

other individuals. PHMSA is proposing changes to operator qualification requirements in the NPRM titled “Pipeline Safety: Operator Qualification, Cost Recovery, and Other Proposed Changes” that to address the recommendation. Specifically, PHMSA proposes to take action to modify Sections 192.631 and 195.446 to include the roles, responsibilities, and qualifications of those who have the authority to direct, or supersede, the specific technical actions of controllers. The NPRM is currently under agency review, and we expect to publish it by Summer 2015.

Safety Recommendation P-12-9

Recommendation: *Amend Title 49 Code of Federal Regulations Part 194 to harmonize onshore oil pipeline response planning requirements with those of the U.S. Coast Guard and the U.S. Environmental Protection Agency for facilities that handle and transport oil and petroleum products to ensure that pipeline operators have adequate resources available to respond to worst-case discharges.”*

Response: PHMSA is revisiting and revitalizing its oil spill response plan program and collaborating on these efforts with other Federal agencies.

- On January 28, 2014, PHMSA issued ADB-2014-01, “Conforming Facility Response Plans (FRPs) to Appendix A to Part 194—“Guidelines for the Preparation of Response Plans” and Identifying Deficiencies” to remind operators of the circumstances of the Marshall, Michigan, pipeline accident and the need to update FRPs every five years and when new or different operating conditions would affect the implementation of a response plan.
- We have revised our Facility Response Plan review processes to include checks for consistency with 33 CFR Part 154, Appendix C, “Guidelines for Determining and Evaluating Required Response Resources for Facility Response Plans,” cited in Appendix A to Part 194.
- We are participating in the update of the National Preparedness for Response Exercise Program (PREP) Guidelines with the EPA, USCG and BSEE.

PHMSA continues its study and evaluation of ways to better harmonize Part 194 – Response Plans for Onshore Pipelines with regulations promulgated by other agencies and intends to incorporate any needed harmonization or other changes in the next Part 194 update rule.

Safety Recommendation P-14-1

Recommendation: *Revise Title 49 Code of Federal Regulations Section 903, Subpart O, Gas Transmission Pipeline Integrity Management, to add principal arterial roadways including interstates, other freeways and expressways, and other principal arterial roadways as defined in the Federal Highway Administration’s Highway Functional Classification Concepts, Criteria and Procedures to the list of “identified sites” that establish a high consequence area.*

Response: Aspects of this recommendation will be addressed in PHMSA's NPRM titled "Pipeline Safety: Safety of Gas Transmission Pipelines." The NPRM is currently under agency review, and we expect to publish it in 2015. PHMSA's initial response to NTSB on this recommendation was completed on May 29, 2014.

CONCLUSION

PHMSA continues to make significant strides to improve our pipeline safety program, and takes its responsibility to fully address all NTSB recommendations seriously. PHMSA will continue to work with your office in the future as we continue our efforts to ensure the safe, reliable, and environmentally sound operation of the Nation's pipeline transportation system.

We request your consideration for closing Recommendations P-04-3, P-09-1, P-11-16, P-11-19, P-11-20, and P-12-5. We will continue to work aggressively and without delay to close all remaining open recommendations.

If you have any questions or require additional information, please do not hesitate to contact me at 202-366-4433.

Sincerely,



Timothy P. Butters
Acting Administrator