National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: JUL 25 2012

In reply refer to: P-12-3 through -10 (New)
P-11-8 (Reiterated)

The Honorable Cynthia L. Quarterman
Administrator
Pipeline and Hazardous Materials
Safety Administration
Washington, DC 20590

On July 10, 2012, the National Transportation Safety Board (NTSB) adopted its report concerning the July 25, 2010, accident, in which a segment of a 30-inch-diameter pipeline owned and operated by Enbridge Incorporated ruptured in a wetland in Marshall, Michigan.[1] Additional information about this accident and the resulting recommendations may be found in the report of the investigation, which can be accessed at our website, http://www.ntsb.gov.

As a result of this investigation, the NTSB reiterated Safety Recommendation P-11-8 to the Pipeline and Hazardous Materials Safety Administration (PHMSA) and issued 19 new recommendations, including 2 to the U.S. Secretary of Transportation, 6 to Enbridge Incorporated, 1 to the American Petroleum Institute, 1 to the Pipeline Research Council International, 1 to the International Association of Fire Chiefs and the National Emergency Number Association, and the following 8 recommendations to PHMSA:

P-12-3

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

[1] *Enbridge Incorporated Hazardous Liquid Pipeline Rupture and Release, Marshall, Michigan, July 25, 2010*, Pipeline Accident Report NTSB/PAR-12/01 (Washington, D.C.: National Transportation Safety Board, 2012).

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.

P-12-4

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.

P-12-5

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

P-12-6

Issue an advisory bulletin to all hazardous liquid and natural gas pipeline operators describing the circumstances of the accident in Marshall, Michigan—including the deficiencies observed in Enbridge Incorporated's integrity management program—and ask them to take appropriate action to eliminate similar deficiencies.

P-12-7

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

P-12-8

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.

P-12-9

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.

P-12-10

Issue an advisory bulletin to notify pipeline operators (1) of the circumstances of the Marshall, Michigan, pipeline accident, and (2) of the need to identify deficiencies in

facility response plans and to update these plans as necessary to conform with the nonmandatory guidance for determining and evaluating required response resources as provided in Appendix A of Title 49 *Code of Federal Regulations* Part 194, "Guidelines for the Preparation of Response Plans."

The NTSB also reiterated one recommendation previously issued to PHMSA:

P-11-8

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.

These recommendations are derived from the NTSB's investigation and are consistent with the evidence we found and the analysis we performed. Chairman HERSMAN, Vice Chairman HART, and Members SUMWALT, ROSEKIND, and WEENER concurred in these recommendations.

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate receiving a response from you within 90 days addressing the actions you have taken or intend to take to implement these recommendations. When responding, please refer to Safety Recommendations P-12-3 through -10 and P-11-8. We encourage you to submit updates electronically to correspondence@ntsb.gov. If your response includes attachments that exceed 5 megabytes, please e-mail us at the same address for instructions. To avoid confusion, please do not submit both an electronic copy and a hard copy of the same response.

Sincerely,

Deborah A.P. Hersman
Chairman