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

901 Locust Street, Suite 480
Kansas City, MO 64106

NOTICE OF AMENDMENT

VIA ELECTRONIC MAIL TO: michael.koby@enbridge.com **and**
david.stafford@enbridge.com

November 20, 2020

Mr. Michael Koby
Vice President US Operations
Enbridge Energy, LP
5400 Westheimer Ct.
Houston, Texas 77056

CPF 3-2020-5008M

Dear Mr. Koby:

On January 16, 2018 through July 20, 2018, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected Enbridge Energy, LP procedures for operations and maintenance, public awareness, integrity management and emergency response in Superior, Wisconsin.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within Enbridge Energy, LP plans or procedures, as described below:

1. **§195.222 Welders and welding operators: Qualification of welders and welding operators.**

(a) Each welder or welding operator must be qualified in accordance with section 6, section 12, Appendix A or Appendix B of API Std 1104 (incorporated by reference, see § 195.3), or section IX of the ASME Boiler and Pressure Vessel Code (ASME BPVC), (incorporated by reference, see § 195.3) except that a welder or welding operator qualified under an earlier edition than listed in § 195.3, may weld but may not requalify under that earlier edition.

Enbridge's procedures were inadequate because an incorrect version of Section IX of ASME Boiler and Pressure Vessel Code (ASME BPVC) was referenced. Specifically, under Book 4 "Welding Tests" - Subject No. 01-02-02, the 2011 edition of ASME BPVC was referenced in Table 2 (Welder Performance Qualification Table-USA) as the applicable edition. However, 49 CFR §195.3 incorporates by reference the 2007 edition of ASME BPVC. Enbridge has submitted procedures that satisfactorily addressed this item. No further action is required.

2. §195.402 Procedural manual for operations, maintenance, and emergencies.

(a) . . . . .
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

Enbridge's Operation and Maintenance (O&M) manual is inadequate because procedure "09-03-02 Removing Water/Snow from Tank Roofs" does not reflect the practice that is performed in the field. The Cushing Tank Farm facility keeps all tank roof drains open at all times, including at night and on weekends. The procedure says the tank roof drains must be checked every 30 minutes when open and that the tank roof drains and firewall drains cannot be open at the same time or at night. Enbridge must amend its procedure to reflect the practice of keeping all tank roof drains open at all times in its O&M manual.

3. §195.402 Procedural manual for operations, maintenance, and emergencies.

(a) . . . . .
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

§195.428 Overpressure safety devices and overfill protection systems

(a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, or in the case of pipelines used to carry highly volatile liquids, at intervals not to exceed 7½ months, but at least twice each calendar year, inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.

Enbridge's procedure 03-07-03 in its O&M manual is inadequate because it does not require an inspection of the maintenance work order history to determine if a pressure safety valve (PSV) is adequate from the standpoint of reliability of operation for the service in which is it used. Specifically, a review of the maintenance work order history of a PSV would assist in determining whether it is repeatedly drifting off setpoint and whether it should be replaced rather than adjusted. Additionally, procedure 03-07-03 does not require an inspection of engineering setpoints in addition to nameplate setpoints to verify correct setpoint value before adjusting valve.

4. §195.402 Procedural manual for operations, maintenance, and emergencies.

(a) . . . . .
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

§195.428 Overpressure safety devices and overfill protection systems

(a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, or in the case of pipelines used to carry highly volatile liquids, at intervals not to exceed 7½ months, but at least twice each calendar year, inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.

(d) After October 2, 2000, the requirements of paragraphs (a) and (b) of this section for inspection and testing of pressure control equipment apply to the inspection and testing of overfill protection systems

Enbridge's procedures are inadequate because the job plan (#EP2335Q) associated with performing "level & overfill protection devices" for aboveground tanks cites the incorrect subsection of the code. The job plan cites §195.428(c) rather than §195.428(a) and (d) for the required inspection intervals for overfill protection systems. Enbridge must amend its procedures to cite to the correct subsection of the code.

5. **§195.402 Procedural manual for operations, maintenance, and emergencies.**

(a) . . . . .
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

§195.555 What are the qualifications for supervisors?

You must require and verify that supervisors maintain a thorough knowledge of that portion of the corrosion control procedures established under § 195.402(c)(3) for which they are responsible for insuring compliance.

Enbridge's procedures were inadequate because they do not have a process to require and verify that supervisors maintain a thorough knowledge of corrosion control procedures for which they are responsible for insuring compliance in accordance with §195.555. During the inspection, PHMSA discovered that there were no procedures in place addressing qualifications for corrosion control supervisors. Enbridge has submitted procedures that satisfactorily addressed this item. No further action is required.

6. **§195.402 Procedural manual for operations, maintenance, and emergencies.**

(a) . . . . .
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

§195.573 What must I do to monitor external corrosion control?

(a) Protected pipelines. You must do the following to determine whether cathodic

protection required by this subpart complies with § 195.571:

(1) . . . . .
(2) Identify not more than 2 years after cathodic protection is installed, the circumstances in which a close-interval survey or comparable technology is practicable and necessary to accomplish the objectives of paragraph 10.1.1.3 of NACE SP 0169 (incorporated by reference, see § 195.3).

Enbridge's procedure D04-101-2015 is inadequate because it only states Close Interval Survey (CIS) is required within 2 years of application of cathodic protection (CP) on newly constructed pipelines. However, the procedure does not indicate when the next CIS would be required. Enbridge stated during the inspection that after the initial CIS is complete, it uses in-line inspection data to determine when the next CIS is required. Enbridge must amend its procedure to address when and how a CIS is determined to be required. .

7. **§195.402 Procedural manual for operations, maintenance, and emergencies.**

(a) . . . . .
(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(13) Periodically reviewing the work done by operator personnel to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found.

Enbridge's O&M manual is inadequate because procedure 05-02-01 Procedure and Training Effectiveness insufficiently addresses periodically reviewing the work done by the operator's personnel to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found. Specifically, Enbridge's procedures does not do the following:

1) The procedure does not define periodically or clearly state how often the effectiveness review will take place.
2) The procedure does not clearly indicate who will perform the effectiveness review. Enbridge uses Technical Committees for determining procedure effectiveness but the Committees are also tasked with performing annual reviews using procedure 07-02-02 OMM Annual Reviews. A review of the records showed that the focus of the Technical Committee meetings is on annual reviews which is not an acceptable method of determining procedure effectiveness pursuant to §195.402(c)(13).
3) Enbridge states that it encourages employees to submit proposed changes through the change management site, however, this is not included in the procedure.
4) There are no documentation requirements mentioned within the procedure.
5) The procedure fails to detail clear guidelines on how a review of work done by operator personnel to determine the effectiveness of the procedures should be done. A

list of possible methods of review are shown on the procedure but some of the methods listed would not constitute an acceptable effectiveness review.

Enbridge must amend its procedures to set forth a process that sufficiently addresses the requirements of §195.402(c)(13), as well as the inadequacies listed above.

8. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(a) *General.* Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

(e) Emergencies. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when an emergency condition occurs;

(9) Providing for a post accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found.

Enbridge's procedures are inadequate regarding post accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found. During PHMSA's inspection, Enbridge presented its Integrated Contingency Plan (ICP) as the applicable procedures for §195.402(e)(9). In replies to OPS Central Region, on April 20, 2018 and December 5, 2018, Enbridge asserted that "emergency" is not defined in 49 CFR Part 195. Enbridge used the Occupational Safety and Health Administration's (OSHA) definition of an *emergency response* per 29 CFR §1910.120(a)(3) for when a post accident review is to be performed.

However, the definition used by Enbridge does not correspond to §195.402(e)(2) which requires an operator to have procedures for: "Prompt and effective response to a notice of each type emergency, including fire or explosion occurring near or directly involving a pipeline facility, accidental release of hazardous liquid or carbon dioxide from a pipeline facility, operational failure causing a hazardous condition, and natural disaster affecting pipeline facilities." Multiple types of emergencies are described in §195.402(e)(2), and is not limited to spills or responses of a certain size. Therefore, Enbridge must amend its procedures for §195.402(e)(9) so that a post accident review of employee activities is performed after emergencies occur, as described in 49 CFR Part 195, to determine if the procedures were effective and taking corrective action where deficiencies are found.

9. §195.452 Pipeline integrity management in high consequence areas.

(a) . . . . .
(b) *What program and practices must operators use to manage pipeline integrity?* Each operator of a pipeline covered by this section must:

(1) Develop a written integrity management program that addresses the risks on each segment of pipeline in the first column of the following table not later than the date in the second column:

Pipeline	Date
Category 1	March 31, 2002.
Category 2	February 18, 2003.
Category 3	1 year after the date the pipeline begins operation.

(5) Implement and follow the program.

Enbridge's IMP is inadequate because it its employees no longer use the procedures library referenced in the plan. Per Enbridge's Risk Management personnel, Enbridge no longer uses or maintains the ORM Procedures Library referenced in several of its IMP risk procedures. This change occurred with Enbridge's shift to a company-wide Governance Documents Library. Now a list of the data sources for each of the different variables used in the risk model is maintained in an Excel file. Enbridge must update all appropriate IMP risk procedures to account for the new system.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.206. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

Following the receipt of this Notice, you have 30 days to submit written comments, revised procedures, or a request for a hearing under §190.211. If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue an Order Directing Amendment. If your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.206). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 30 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that Enbridge maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Allan C. Beshore, Director, Central Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 3-2020-5008M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

GREGORY OCHS

Digitally signed by GREGORY OCHS
Date: 2020.11.20 12:24:57 -06'00'

Gregory A. Ochs
Director, Central Region, OPS
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Enforecment Proceedings*

Copy:

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