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January 19, 2021

Via Email

Gregory Ochs
PHMSA Central Region, OPS
901 Locust Street, Suite 462
Kansas City, MO 64106
gregory.ochs@dot.gov

Re: Enbridge Energy, LP, CPF 3-2020-5009

Dear Mr. Ochs:

Enbridge Energy, LP (“Enbridge”) responds to the above-referenced Notice of Probable Violation and Proposed Compliance Order (“NOPV”) issued by the Pipeline and Hazardous Materials Safety Administration (“PHMSA”). PHMSA granted Enbridge an extension of time, to and including January 19, 2021, to respond.

In support of its response, Enbridge attaches the following documents:

- Exhibit NOPV-1 – Photos of Valve Stems
- Exhibit NOPV-2 – (a) Review Form with Electronic Signature
- Exhibit NOPV-2 – (b) Declaration
- Exhibit NOPV-3 – Post-accident review
- Exhibit NOPV-6 – Photos of locations where clearing was performed

Enbridge responds to each Item in the NOPV as follows:

1. §195.116 Valves.

(e) Each valve other than a check valve must be equipped with a means for clearly indicating the position of the valve (open, closed, etc.).

Item 1 Allegation: Enbridge failed to maintain a means for clearly indicating the position of the valves. Nine of Enbridge’s valves noted below were identified during PHMSA’s field inspections as not having a clear means of indicating the valve position. Enbridge’s design standard EES124, copied in relevant part below, states that the valve stem position indicator shall have a stem protector of heavy, transparent, UV-resistant plastic. The identified protectors

were not transparent due smoke coloring or grease preventing clear indication of the valve stem position.

4.11.2 – The Vendor shall provide a rising stem position indicator with a stem protector of heavy, transparent, UV-resistant plastic. A 3 mm (0.125 in.) vent hole shall be drilled in the transparent plastic cover on a 45° angle to prevent condensation and water ingress.

| Unit | Valve | Comments |
|-------------|--------------|---|
| Bay City | 532.74-6V | Valve stem cover smoke colored, can't see valve stem. |
| Bay City | 536.42-6-V | Valve stem cover smoke colored, can't see valve stem. |
| Bay City | 576.92-6-V | Valve stem cover smoke colored, can't see valve stem. |
| Bay City | 607.62 | Valve stem cover smoke colored, can't see valve stem. |
| Bay City | 638.45-6-V | Valve stem cover smoke colored, can't see valve stem. |
| Bay City | 576.82-6-V | Valve stem cover smoke colored, can't see valve stem. |
| Bay City | 6-UD-V-21 | Valve stem cover smoke colored, can't see valve stem. |
| Bay City | SK-6-SV-3 | Valve stem cover smoke colored, can't see valve stem. |
| Bay City | 6-TBV-2 | Valve stem cover smoke colored, can't see valve stem. |

All valves listed above are located on Line 78 between the Illinois border and the Stockbridge, Michigan pump and tank station with the earliest installation date being 2014. This line section is new 36" pipe, which is larger than the old line 6B, so all the valves are 2014 or newer.

Enbridge Response: Enbridge respectfully disputes the allegations in this Item. Enbridge complied with Section 195.116 and its own procedure regarding each valve identified in this Item. As reflected in the photographs included in Exhibit NOPV-1, the position of the valve stems for each referenced valve can be seen, clearly indicating whether it is in the open or closed position. All valves are in the open position, except for 6-UDV-21, which is in the closed position. The valve position can be determined by observing the visible light passing through the cover on either side of the threaded valve stems, as seen in the photographs.

The stem of the valve at MP 607.62 is of a larger diameter than the other valves and appears dark in the photograph, which reflects that the valve stem is in the open position. If the valve stem were in the closed position, it would be apparent that the stem was missing, as light would pass through.

The valve protector for the valve at 6-UD-V-21 is clear and not discolored. This valve is located indoors and appears to have been inadvertently included in this NOPV.

*As PHMSA acknowledged, the Equipment Standard cited in this Item is a **design** standard, not an operating and maintenance standard, which calls for the installation of transparent valve*

stem protectors. This design standard does not require that the valve stem protectors remain clear after installation. It is axiomatic that some post-installation discoloration will occur in the normal course of operation and is entirely acceptable. The post-installation smoky discoloration that can be seen in the referenced valve protectors does not prevent operator personnel from seeing the valve stem and determining the position of each valve stem. Despite the smoky discoloration, the valve protectors remain transparent.

Given these facts, Enbridge respectfully requests that PHMSA withdraw this violation and the associated civil penalty.

2. §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.

Item 2 Allegation: Enbridge failed to review its operations and maintenance manual at intervals not exceeding 15 months, but at least once calendar year. During PHMSA's records inspection, the inspector found that Enbridge did not review the following procedures in 2017. Specifically, Enbridge did not review Book 3 08-03-02 through 08-03-21 in calendar year 2017 and was unable to provide documentation of such review that contained was signed and dated as required by Enbridge's procedures

Enbridge Response: Enbridge respectfully disputes the allegations in this Item. Enbridge notes that this Item was not identified in the Preliminary Written Findings that PHMSA provided following the audit. If this had been identified, Enbridge would have provided clarification at the time.

Although the initial submittal of the referenced document during the PHMSA audit did not contain the electronic signature, Enbridge clarifies that the original review forms did contain the required signature. By way of explanation, Enbridge had merged multiple review forms to submit them to PHMSA in response to PHMSA's information request. When the review forms were merged, the electronic signature was inadvertently deleted. The review forms containing the proper electronic signature for the procedures in question are included in Exhibit NOPV-2(a). These forms demonstrate that the procedures were reviewed in a timely manner in compliance with Section 195.402(a). This conclusion is supported by the Declaration signed by Len Krissa on January 11, 2021, included in our submittal as part of Exhibit NOPV-2(b).

Given these facts, Enbridge respectfully requests that PHMSA withdraw this violation and the associated civil penalty.

3. §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.

Item 3 Allegation: Enbridge failed to conduct a post-accident review of employee activities for one pipeline accident, which resulted in a release of hazardous liquid, that occurred on February 29, 2016 on the Lakehead system, that was reported to PHMSA on DOT Form 7000-1 [see §195.54]. During PHMSA’s inspection, Enbridge presented its Integrated Contingency Plan (ICP) as the applicable emergency 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. However, § 195.402(e)(2) requires an operator to have procedures for responding to “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.” Section 195.402(e)(2) unambiguously delineates multiple types of emergencies are including, but not limited to, an “accidental release of hazardous liquid.” Therefore, Enbridge failed to conduct a post-accident review of employee activities for the one reportable pipeline accident which involved a release of hazardous liquid on Enbridge’s Lakehead system, in order to determine whether the emergency procedures were effective and corrective actions were taken where deficiencies were found.

Enbridge Response: Enbridge does not contest this finding. Although Enbridge conducted a thorough incident investigation following the referenced incident, the effectiveness of the emergency response procedures was not specifically reviewed and documented.

As required by the Compliance Order, Enbridge performed a post-accident review of the incident identified in this item on December 7, 2020. A copy of this post-accident review, which included a review of the effectiveness of the emergency procedures is included in this submission as Exhibit NOPV-3.

Enbridge notes that PHMSA issued a Notice of Amendment (“NOA”) related to this same issue. As reflected in Enbridge’s response to the NOA and to prevent recurrence, Enbridge is amending its incident investigation procedures to ensure that its emergency response procedures are reviewed for effectiveness.

Enbridge respectfully requests that PHMSA acknowledge compliance with the Compliance Order for this Item.

4. §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.

Item 4 Allegation: Enbridge failed to inspect and test each overpressure safety device, at intervals not exceeding 15 months, but at least each calendar year, to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity. Specifically, the five (5) pressure safety devices listed below were not inspected and tested within the required time period as identified during PHMSA’s records inspection.

| Pressure Safety Valve | In Service Date | First Inspection Date | Comments |
|------------------------------|------------------------|------------------------------|---|
| FN-203-PSV-11 | November 2015 | June 2017 | Missed 2016 inspection |
| FN-203-PSV-21 | November 2015 | June 2017 | Missed 2016 inspection |
| FN-203-PSV-31 | November 2015 | June 2017 | Missed 2016 inspection |
| Transmitter | | | |
| SK-207-PT-1BD | 1-7-16 | 4-22-17 | Regulatory interval of 15 month was exceeded by 15 days |
| SK-208-PT-1BS | 1-7-16 | 4-22-17 | Regulatory interval of 15 month was exceeded by 15 days |

Enbridge Response: Enbridge does not contest this finding. To prevent recurrence, Enbridge has taken the following actions.

Maintenance Management Systems (“MMS”) is developing an Asset Turnover Process to ensure the accurate application of Preventative Maintenance (“PM”) inspections for new project assets going into service, so that they are maintained at the adequate frequency to comply with Book 6 maintenance job plan specific regulations & standards. Book 6 maintenance job plans have a section on regulations & standards which determine the frequency at which the maintenance should be done on the specific asset.

As part of this process, Engineering Information Management (“EIM”) engages MMS prior to the In-Service Date (“ISD”) with the list of specific project assets that are to go into service. MMS assigns the proper job plan to the project asset and then works with Regional Maximo Analysts (“RMAs”) to assign due dates to complete the inspections on these assets and who should perform the work. This sets the initial dates on when inspection activities are to be performed. After which, the project team provides a final confirmation to MMS with the final ISD of the project assets. Upon receipt of this confirmation, MMS works with the RMAs to do a final verification to make any adjustments to the initial dates that were set up for maintenance activities. Depending on the final ISD, these initial dates are either pushed back or moved up to ensure the asset is maintained at the adequate job plan frequency to comply with regulations & standards.

We anticipate this process will be complete by the end of Q2 2021. Enbridge will provide supporting documentation as soon as it is completed.

5. §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.

Item 5 Allegation: Enbridge did not, 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 (HVLs), at intervals not to exceed 7 ½ months, but at least twice each calendar year, test and inspect each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it had adequate capacity from the standpoint of capacity for the service in which it was used. Specifically, PHMSA’s records inspection found that a total of 39 devices (i.e. HVL pressure relief valve full flow (PRVFF) and non-HVL PRVFF) in the Lakehead system did not have a calculated capacity review to determine them to be adequate from the standpoint of capacity for the service in which it was used from 2016 through 2017 as

listed in the table below. A total of 98 capacity checks for adequacy were not performed in accordance with the regulation and Enbridge’s procedure, “Pressure Control Valve Capacity and Reliability Assessment.” The following table details how these figures were calculated.

| System | Type | Number | Require # of Tests or Capacity checks per year | Number of years (2016-2017) | Total |
|---------------|---------------|---------------|---|------------------------------------|--------------|
| Lakehead | HVL PRVFF | 10 | 2 | 2 | 40 |
| Lakehead | Non-HVL PRVFF | 29 | 1 | 2 | 58 |
| | | | Lakehead Total | | 98 |

Enbridge Response: Enbridge does not contest this finding. To prevent recurrence, Enbridge is taking the following actions.

Enbridge plans to implement a surge relief valve calculated capacity verification process by the end of Q2 2021. This will include the establishment of a documented calculated capacity review process to comply with 49 CFR Part 195 schedule requirements.

Notwithstanding the violation in this item, Enbridge’s practices have included the following measures to ensure that full flow relief devices have adequate capacity.

A critical design check for any project and/or system change managed by Enbridge’s Management of Change (“MOC”) process to verify the overpressure protection provided by the existing or new surge relief device is sufficient.

Before a project is put into service, one of the major design considerations in the formal Enbridge project review and approval processes is this confirmation of sufficient overpressure protection. It is the accountability of the project team to confirm the appropriate surge relief design per Enbridge Engineering Design Standard D12-104 (Overpressure Protection) and a transient report per Enbridge Engineering Design Standard D02-109 (Pipeline Transient Hydraulics) is performed as a final deliverable.

The model, size and setpoint of the surge relief are included as a critical design parameter during transient analysis. Any potential issues with capacity would be identified by a relief system failing to prevent a simulated overpressure.

Enbridge also has in place formal MOC processes for operational asset, system or component changes. These change management systems ensure that any new assets or potential changes to an existing full flow surge relief valve capacity are fully assessed prior to implementation. The latest LP MOC procedure clearly identifies that a MOC is required for any modifications or replacements of a safety system/relief valve asset, system, or component that:

- *Materially changes the asset in form or make up*
- *Changes the performance, capacity, or functionality*
- *Changes the way other systems or personnel interact*

If an MOC is identified to potentially impact the full flow surge relief valve, the Pipeline Engineering and Transient Hydraulics (PETH) department will complete a review of any existing applicable transient analysis or perform a new transient analysis to confirm whether overpressure protection is sufficient and ensure any required modifications, such as surge relief valve setpoint, operating pressure or flowrate changes, are implemented.

Enbridge currently utilizes these project design requirements as well as the formal MOC processes to ensure that the surge relief valves have sufficient capacity.

6. §195.412 Inspection of rights-of-way and crossings under navigable waters.

(a) Each operator shall, at intervals not exceeding 3 weeks, but at least 26 times each calendar year, inspect the surface conditions on or adjacent to each pipeline right-of-way. Methods of inspection include walking, driving, flying or other appropriate means of traversing the right-of-way.

Item 6 Allegation: Enbridge failed to conduct an effective inspection of the surface conditions on or adjacent to each pipeline right-of-way. Specifically, Enbridge used aerial patrol inspection methods, but at the time of the inspection, the locations noted below were found with vegetation overgrowth such that surface of the right-of-way was not visible by aerial patrol. The following three locations on Enbridge’s pipeline right-of-way had excess growth and tree canopy blocking aerial visibility of the surface conditions:

| Unit | MP | Description | Comments |
|------------------------------|-----------|---|--|
| Fort Atkinson (Wisconsin) | 360.903 | At MP 360.903 there was an issue with ROW Clearance | Dense cover restricting aerial view of ground on ROW |
| Line 5 (Michigan) | 1429.289 | ROW needs clearing | Aerial view of ground restricted by foliage. |
| Line 5 (Michigan) | 1436.91 | West side of this exposure needs ROW clearing | Dense cover for 100 feet each side of this exposure. |

Enbridge Response: Enbridge does not contest this finding. As reflected in the photographs in Exhibit NOPV-6, Enbridge cleared each of the referenced locations. Each location is now visible to patrol pilots year-round.

7. §195.432 Inspection of in-service breakout tanks.

(a) Each operator must inspect the physical integrity of in-service atmospheric and low-pressure steel above-ground breakout tanks according to API Std 653 (except section 6.4.3, Alternative Internal Inspection Interval) (incorporated by reference, see §195.3). However, if structural conditions prevent access to the tank bottom, its integrity may be assessed according to a plan included in the operations and maintenance manual under §195.402(c)(3). The risk- based internal inspection procedures in API Std 653, section 6.4.3 cannot be used to determine the internal inspection interval.

Section 6 of API Standard 653 3rd Edition, December 2001

6.3.1 Routine In-Service Inspections

6.3.1.1 The external condition of the tank shall be monitored by close visual inspection from the ground on a routine basis. This inspection may be done by owner/operator personnel, and can be done by other than authorized inspectors as defined in 3.6. Personnel performing this inspection should be knowledgeable of the storage facility operations, the tank, and the characteristics of the product stored.

6.3.1.2 The interval of such inspections shall be consistent with conditions at the particular site, but shall not exceed one month.

6.3.1.3 This routine in-service inspection shall include a visual inspection of the tank's exterior surfaces. Evidence of leaks; shell distortions; signs of settlement; corrosion; and condition of the foundation, paint coatings, insulation systems, and appurtenances should be documented for follow-up action by an authorized inspector.

Item 7 Allegation: Enbridge violated 49 C.F.R. § 195.432(b) by failing to adequately inspect the physical integrity of in-service atmospheric and low-pressure steel above-ground breakout tanks according to API Std. 653 (except section 6.4.3, Alternative Internal Inspection Interval). Specifically, Enbridge's annual inspection records documented deficiencies on three above ground breakout tanks in Superior, Wisconsin that should have been documented and addressed in the company's monthly pursuant to Enbridge Procedure 09-02-02.

Enbridge Procedure 09-02-02, dated 05-01-2014, outlines the steps that the company must take to comply with API Standard 653 and 49 C.F.R. § 195.432. Routine monthly inspections must identify the following issues on breakout tanks:

- Leaks on shell, flanges and mixers
- Shell distortions, settlement or heaving, active corrosion, oil or water in tank or on roof
- Foundation condition, paint coatings, floating roof, insulation and appurtenances

During its annual inspection, Enbridge identified issues with three breakout tanks, as described in the table below, that should have been addressed in the company's monthly inspections but were not. Enbridge informed PHMSA that further training maybe needed to correct this matter.

| Superior Unit Inspection Item | Tank 10 July 2016 | Tank 1 August 2016 | Tank 12 July 2016 |
|--|---|---|--|
| Annual Note: | Peeling paint on pontoon deck, corrosion on roof leg sleeves, ground shunts not in contact with shell, vac breaker leak, bent stair treads. | Ring wall cracks and spalls, roof corrosion, bent stairs on roof, ground shunts not in contact with shell, corroded platform stair. | Water pooling at clean out area on E & N sides, cavity under roof drain valve, shell paint peeling, damaged stair grating. |
| Monthly Required API 653: | | | |
| Leaks | | | |
| Shell Distortions | | | |
| Settlement | | | |
| Corrosion | Missing | Missing | Missing |
| Foundation | | Missing | Missing |
| Coatings | Missing | | |
| Insulation | | | |
| Appurtenances | Missing | Missing | Missing |
| Monthly Required 0902-02 Procedure: | | | |
| Above items include roof | | | |

Enbridge Response: Enbridge does not contest this finding. To prevent recurrence, Enbridge is taking the following actions.

Enbridge is in the process of revising the monthly and annual tank inspection procedures to ensure the findings are consistent. When the revision is complete, training will be conducted across the US Liquid Pipeline system.

The revisions and training will be completed system-wide within the time frame specified in the proposed Compliance Order. A copy of the training materials and training rosters will be provided to PHMSA when the training sessions are complete as specified in the Compliance Order.

8. §195.573 What must I do to monitor external corrosion control?

(e) Corrective action. You must correct any identified deficiency in corrosion control as required by § 195.401(b). However, if the deficiency involves a pipeline in an integrity management program under § 195.452, you must correct the deficiency as required by § 195.452(h) §195.401 General requirements.

(a) . . .

(b) An operator must make repairs on its pipeline system according to the following requirements:

(1) *Non Integrity management repairs.* Whenever an operator discovers any condition that could adversely affect the safe operation of its pipeline system, it must correct the condition within a reasonable time. However, if the condition is of such a nature that it presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until it has corrected the unsafe condition.

Item 8 Allegation: Enbridge did not correct identified deficiencies in corrosion control within a reasonable time as required by § 195.401(b). PHMSA’s records inspection identified that Enbridge did not correct identified cathodic protection deficiencies to bring structure potentials up to the level of "target potentials" as defined by the operator within a reasonable time. According to Enbridge’s procedures Book 3: Performing CP Surveys - Annual – Sub # 08-03-20, discovered deficiencies should be corrected prior to the next scheduled inspection. Deficiencies were found at the following five locations that were not corrected prior to the next inspection:

| Unit | MilePost | Description | Target On Voltage | 2015 On Reading | 2016 On Reading |
|-------------|-----------------|--|--------------------------|------------------------|------------------------|
| Bay City | 678.6230 | C679 Howell Facilities CP Valve 6-SDV-1 | -1.206 | -.769 | -1.18 |
| Bay City | 1628.635 | Line 5 Mainline CP | -1.443 | -1.406 | -1.427 |
| Bay City | 1734.301 | Line 5 Mainline CP | -1.047 | -.968 | -.958 |
| Escanaba | 1571.481 | LINE 5 - Mainline CP – (Valve 1571.48-5-V) | -1.533 | -.924 | -1.084 |

| | | | | | |
|----------|--------|--|--------|--------|--------|
| Griffith | 341.69 | | -1.332 | -1.236 | -1.277 |
|----------|--------|--|--------|--------|--------|

Enbridge Response: Enbridge does not contest this finding. To prevent recurrence, the following actions have been taken.

Based on a review of data provided by Enbridge, deficiencies at five (5) locations were not corrected prior to the next scheduled inspection as per Enbridge’s Book 3: Performing CP Surveys – Annual – Subject 08-03-20. Those deficiencies occurred in 2015 and 2016 when On potential readings were not brought up to the target On potential values. In 2017 an On/Off (or IR free) survey was completed and the IR free potentials at the five locations achieved compliance with criteria.

Starting in 2017, Enbridge took significant steps to prevent recurrence of this type of an issue:

- 1. Consolidation of corrosion prevention efforts in each region under the Pipeline Integrity group and consolidation of survey procedures and standardization of specifications. This resulted in each region performing the same types of surveys using the same standardized specifications.*
- 2. Begin conducting On/Off surveys to determine the IR free potential at each location and not rely on “target” voltages. This step provides Enbridge with more meaningful IR free data to evaluate the structure.*
- 3. Creation of the Corrective Action Reporting (CAR) database – In 2017 Enbridge developed the CAR database. This database is used to track the progression and resolution of identified maintenance and compliance issues. Once an issue such as “target potential not achieved” is identified, a CAR is created documenting the discovery date and information about the issue (location information, detailed descriptions, pictures, data, etc.). As work progresses on the issue, new information is updated to the CAR database. Issues can be tracked by their compliance due date and are color coded for prioritizing. As a process, now any time a corrosion prevention compliance issue is identified, a CAR is created to track it through to completion.*

Through standardization and procedural changes, deficiencies such as the five locations in this scenario would have a CAR created and be tracked through to completion.

9. §195.581 Which pipelines must I protect against atmospheric corrosion and what coating material may I use?

- (a) You must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section.**
- (b) Coating material must be suitable for the prevention of atmospheric corrosion.**
- (c) Except portions of pipelines in offshore splash zones or soil-to-air interfaces, you need not protect against atmospheric corrosion any pipeline for which you**

demonstrate by test, investigation, or experience appropriate to the environment of the pipeline that corrosion will-

- (1) Only be a light surface oxide; or**
- (2) Not affect the safe operation of the pipeline before the next scheduled inspection.**

Item 9 Allegation: Enbridge failed to provide suitable coating on its pipeline to protect against atmospheric corrosion, as required by 49 C.F.R. § 195.581. Enbridge did not maintain a suitable coating at the following 8 exposed pipe locations identified during PHMSA’s field inspection as shown in the field inspection photographs in Exhibit E of the Pipeline Safety Violation Report.

| Unit | Pipeline | Location Description 1 |
|-------------|-----------------|-------------------------------|
| MN | 1 | MP1082 |
| MN | 3 | MP820 |
| MN | 2 | MP886.953 |
| MN | 3 | MP973.7 |
| MN | 2 | MP1013 |
| Superior | 1 | MP 1090.22 |
| Escanaba | 5 | MP 1456.48 |
| Griffith | 62 | MP 66.98 |

Enbridge Response: Enbridge does not contest this finding. The locations identified in the table above have been or are scheduled to be remediated as shown in the table below:

| Unit | Pipeline | Location Description 1 | Resolution |
|-------------|-----------------|-------------------------------|---|
| MN | 1 | MP1082 | Site remediated January 2019 |
| MN | 3 | MP820 | Will be remediated by Line 3 replacement |
| MN | 2 | MP886.953 | Site remediated July 2019 |
| MN | 3 | MP973.7 | Will be remediated by Line 3 replacement |
| MN | 2 | MP1013 | Will be remediated as described in response |
| Superior | 1 | MP 1090.22 | Will be remediated as described in response |
| Escanaba | 5 | MP 1456.48 | Will be remediated as described in response |
| Griffith | 62 | MP 66.98 | Will be remediated as described in response |

A project has been initiated to remediate the remaining locations. Enbridge will provide progress updates as information becomes available.

Enbridge seeks to amend the proposed Compliance Order as follows: Enbridge will complete the remediation work for the remaining locations within eighteen (18) months from the date of the Final Order. Enbridge reserves the right to request and obtain a reasonable extension of time to complete the remediation work based on circumstances beyond its control, such as, but not limited to, weather conditions and permitting delays.

In support of this request for an extension of time to complete the remediation work, Enbridge notes that in-line inspection data at the locations of these coating anomalies demonstrate that Enbridge has ensured that at no time did these conditions present any threat to the integrity of the pipeline.

10. §195.583 What must I do to monitor atmospheric corrosion control?

(a) You must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

| | |
|------------------------------------|--|
| If the pipeline is located: | Then the frequency of inspection is: |
| Onshore | At least once every 3 calendar years, but with intervals not exceeding 39 months. |
| Offshore | At least once each calendar year, but with intervals not exceeding 15 months. |

(b) During inspections you must give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.

(c) If you find atmospheric corrosion during an inspection, you must provide protection against the corrosion as required by §195.581.

§195.581 Which pipelines must I protect against atmospheric corrosion and what coating material may I use?

(a) You must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section.

(c) Except portions of pipelines in offshore splash zones or soil-to-air interfaces, you need not protect against atmospheric corrosion any pipeline for which you demonstrate by test, investigation, or experience appropriate to the environment of the pipeline that corrosion will-

- (1) Only be a light surface oxide; or
 (2) Not affect the safe operation of the pipeline before the next scheduled inspection.

Item 10 Allegation: Enbridge failed to protect its pipeline against atmospheric corrosion, in violation of 49 C.F.R. § 195.581. Specifically, Enbridge did not maintain coating at soil-air interfaces at the following 7 locations identified during PHMSA’s field inspection as shown in the field inspection photographs in Exhibit F of the Pipeline Safety Violation Report.

| Unit | Pipeline | Location Description 1 |
|---------------|----------|------------------------|
| MN | 4 | MP1065.7 |
| MN | 1 | MP915.141 |
| MN | 2 | MP915.141 |
| MN | 3 | MP913 |
| MN | 2, 1, 3 | MP 914 |
| Fort Atkinson | 6 | MP 82 |
| Fort Atkinson | 6 | MP 98 |

Enbridge Response: Enbridge does not contest this finding. The locations identified in the table above have been or are scheduled to be remediated as shown in the table below:

| Unit | Pipeline | Location Description 1 | Resolution |
|---------------|----------|------------------------|---|
| MN | 4 | MP1065.7 | This segment of Line 4 will be replaced during the Line 3 project |
| MN | 1 | MP915.141 | Site remediated Jan/Feb 2020 |
| MN | 2 | MP915.141 | Site remediated Jan/Feb 2020 |
| MN | 3 | MP913 | Will be remediated by Line 3 replacement |
| MN | 2, 1, 3 | MP 914 | Lines 1 and 2 remediated Jul-Oct 2019. Line 3 being replaced |
| Fort Atkinson | 6 | MP 82 | Will be remediated as described in response |
| Fort Atkinson | 6 | MP 98 | Will be remediated as described in response |

Enbridge seeks to amend the proposed Compliance Order as follows: Enbridge will complete the remediation work for the remaining locations within eighteen (18) months from the date of the Final Order. Enbridge reserves the right to request and obtain a reasonable extension of time to complete the remediation work based on circumstances beyond its control, such as, but not limited to, weather conditions and permitting delays.

In support of this request for an extension of time to complete the remediation work, Enbridge notes that in-line inspection data at the locations of these coating anomalies demonstrate that Enbridge has ensured that at no time did these conditions present any threat to the integrity of the pipeline.

Should you have any questions or require any additional information regarding Enbridge's responses to any of the Items in this NOPV, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dave Stafford", is written over a horizontal line.

Dave Stafford
Manager, US Pipeline Compliance

Cc: Michael Koby