



April 12, 2010

Mr. Rodrick M. Seeley
Director, Southwest Region
Pipeline and Hazardous Materials Safety Administration
8701 South Gessner, Suite 1110
Houston, Texas 77074

RE: CPF 4-2010-5009M

Dear Mr. Seeley:

On September 21, 2009 through September 24, 2009, and December 7 through December 11, 2009, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) Southwest Region inspected the Enbridge Pipelines (Ozark) L.L.C., Cushing Terminal facility in Cushing, Oklahoma. As the result of these inspections and subsequent discussions between Enbridge and PHMSA, PHMSA has identified apparent inadequacies within Enbridge's plans or procedures.

In response to the Notice of Amendment issued by PHMSA dated March 8, 2010, which was received by Enbridge on March 12, 2010, Enbridge offers the following response.

Enbridge will be submitting amended procedures within 90 days of receipt of this notice to your office. Enbridge will advise PHMSA and request any extensions required to allow the new procedures to be properly managed and approved through the appropriate Enbridge management of change processes.

PHMSA Finding

1. §195.402 Procedural manual for operations, maintenance, and emergencies.

(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:

(5) Analyzing pipeline accidents to determine their causes.

Enbridge's procedure Subject Number 02-02-04 Investigating Piping Failures Book 1: General Reference lacked adequate detail and steps to carry out the procedure to ensure that investigations were conducted on appropriate pipeline accidents, and that all accidents were analyzed to determine their causes, and ensure adequate records were kept to demonstrate that the investigations had been carried out. The procedure was focused on piping failures and leaks that resulted in releases. This definition was too narrow to meet the intent of this subpart.

During the December 2009 field inspection, draft revisions to Enbridge's Investigation Piping Failures procedure were provided to the PHMSA inspector that addressed the classification and investigation of pipeline accidents that should be investigated. Enbridge's procedure should be revised to ensure that all pipeline accidents are analyzed to determine their cause and that the investigation or analysis is adequately documented.

Additionally, Enbridge is reminded of the requirements found in §195.50, §195.52, and §195.54 with respect to the reporting of accidents. During the inspection, Enbridge indicated that the procedures associated with these three subparts were in draft form. While Enbridge is not required to have a procedure to carry out its reporting activities, the reporting in compliance with the applicable subparts is a requirement, and procedures would ensure that the requirements of these three subparts are clearly communicated to employees to ensure that reports and any supplemental updates are made in a timely manner.

Enbridge Response

Enbridge incident investigation procedures are being revised and will be submitted to PHMSA.

It should be noted that Enbridge's incident reporting procedures with respect to the reporting of accidents per the requirements found in §195.50, §195.52, and §195.54 were not found to be deficient. The deficiency was that the current procedures lacked direction with respect to the need to provide supplemental updates to the accident reports in a timely manner. This requirement will be clearly identified in Enbridge's reporting procedures.

PHMSA Finding

2. §195.432 Inspection of in-service breakout tanks.

(a) Except for breakout tanks inspected under paragraphs (b) and (c) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, inspect each in-service breakout tank.

(b) Each operator shall inspect the physical integrity of in-service atmospheric and low-pressure steel aboveground breakout tanks according to section 4 of API Standard 653. However, if structural conditions prevent access to the tank bottom, the bottom integrity may be assessed according to a plan included in the operations and maintenance manual under §195.402(c)(3).

(c) Each operator shall inspect the physical integrity of in-service steel aboveground breakout tanks built to API Standard 2510 according to section 6 of API 510.

(d) The intervals of inspection specified by documents referenced in paragraphs (b) and (c) of this section begin on May 3, 1999, or on the operator's last recorded date of the inspection, whichever is earlier.

Enbridge's procedure Subject Number 09-02-02 Tank Inspections, Book 3: Pipeline Facilities stated the above requirements, but lacked sufficient detail to ensure that the inspection intervals were calculated in accordance with API Standard 653. As a result, 23 tanks exceeded the 10 year maximum internal inspection interval and 20 tanks exceeded the 5 year maximum external inspection interval specified by API Standard 653.

Enbridge proposed revisions to its tank inspection procedures and facility integrity program that pertains to breakout tanks during a meeting at the PHMSA Southwest Region office on February 3, 2010. The revisions proposed by Enbridge addressed the specific steps to calculate the internal inspection intervals, the requirements for when a zero corrosion rate can be assumed, and the maximum intervals to ensure that the maximum internal inspection intervals are not exceeded for in-service breakout tank inspections. Enbridge should formalize their proposed revisions for inclusion in its Operations and Maintenance procedures.

Additionally, Enbridge should consider the formalization of procedures for tanks that have gunite or concrete coatings over the top of the tank bottoms in accordance with 195.432(b) when the tank bottom is not accessible. Enbridge does not have similar service procedures in their tank inspection program at this time. A copy of draft guidelines were provided to PHMSA during the December 2009 field inspection. Enbridge should consider inclusion of these guidelines in its tank inspection procedures if Enbridge chooses to apply the similar service options allowed by API Standard 653, in the future.

Enbridge Response

Enbridge tank management and inspection procedures are being revised and will be submitted to PHMSA.

It should be noted that of the 20 tanks that exceeded the 5 year maximum external inspection interval specified by API Standard 653, 17 of these tanks were inspected by Enbridge within a period of "5 calendar years" as opposed to PHMSA's definition of "5 periods of 365 days". This was a result of a different interpretation of the required 5 year inspection interval by Enbridge. The updated procedures will reflect the PHMSA interpretation.

PHMSA Finding

3. §195.581 Which pipelines must I protect against atmospheric corrosion and what coating material may I use?

(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.

*Enbridge acquired 4 tanks from the previous owner, and constructed 14 new tanks all of which are not painted. The 4 acquired tanks have no paint, and the 14 tanks constructed by Enbridge have paint at the shell and bottom area and in areas where water may accumulate. Enbridge provided a paper presented at the 2008 International Pipeline Conference as the basis for their determination that the corrosion will not affect the safe operation of the pipeline before the next scheduled inspection. The paper, titled **IPC2008-64501 Shell Corrosion Allowance for Aboveground Storage Tanks**, addresses corrosion allowance calculations and provides a design basis for the initial decisions to not paint the tanks. However, this document does not prescribe the monitoring requirements*

that Enbridge should use to meet the requirements of this subpart. Additionally, Enbridge's atmospheric corrosion monitoring procedures found in **Corrosion Control Guidelines' Chapter 3: Preventing Atmospheric Corrosion** did not include monitoring of breakout tanks.

Enbridge should revise its atmospheric corrosion monitoring procedures to incorporate breakout tanks, and ensure that the evaluation of the corrosion will be only a light surface oxide; or not affect the safe operations of the pipeline before the next scheduled inspection in accordance with the inspection cycle required by **§195.583** is carried out. The procedure should include documentation to demonstrate the test, investigation or experience upon which the decision not to coat the tanks is based, when an inspection performed in accordance with **§195.583** finds atmospheric corrosion.

Enbridge Response

Enbridge atmospheric corrosion monitoring procedures are being revised and will be submitted to PHMSA.

PHMSA Finding

4. §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:

<i>If the pipeline is located:</i>	<i>Then the frequency of inspection is:</i>
<i>Onshore</i>	<i>At least once every 3 calendar years, but with intervals not exceeding 39 months.</i>

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

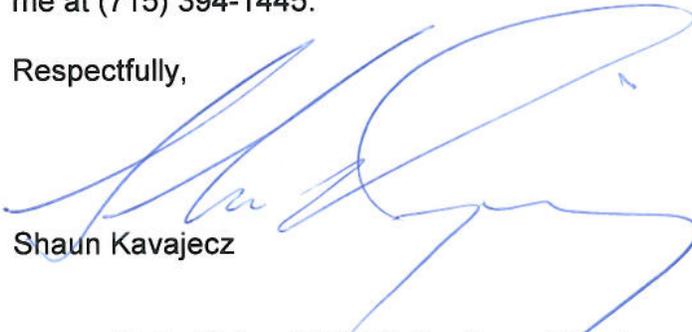
Enbridge's **Corrosion Control Guidelines' Chapter 3: Preventing Atmospheric Corrosion** did not address the monitoring of breakout tanks. Enbridge is reminded that the definition of pipeline found in **§195.3** includes breakout tanks. Enbridge should revise its procedures to ensure that breakout tanks are inspected in accordance with this subpart.

Enbridge Response

Enbridge Corrosion Control Guidelines' are being revised to include the monitoring of breakout tanks for Atmospheric Corrosion. The revised procedures will be submitted to PHMSA.

Should you have any question regarding Enbridge's response, please feel free to contact me at (715) 394-1445.

Respectfully,



Shaun Kavajecz

cc. Molly Atkins, PHMSA Southwest Region
Brian Johnson, General Manager, Cushing Region
Rich Adams, VP US Operations
Steve Irving, Director, System Integrity & Compliance