Enbridge Energy
119 N 25th Street E
Superior, WI 54880
www.enbridgepartners.com

Shaun Kavajecz, Manager
Pipeline Safety Compliance
Tel 715 394 1445
shaun.kavajecz@enbridge.com

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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 4-2010-5008

Dear Mr. Seeley:

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

In response to the Notice of Probable Violation / Compliance Order issued by PHMSA dated March 8, 2010, which was received by Enbridge on March 12, 2010, Enbridge offers the following response. The general format of our response lists the abbreviated probable violations in PHMSA's finding and follows with Enbridge's response.

PHMSA Finding

1. ***§195.432 Inspection of in-service breakout tanks.***

   (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).

   (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.

"The interval for the in-service external visual inspection of a breakout tank that is subject to the requirements of 195.432(b) and API Standard 653, Tank Inspection, Repair, Alteration, and Reconstruction (API 653) is calculated in accordance with Section 6.3.2 of API 653. This inspection is called the "External Inspection" and must be conducted at least every 5 years….

…..Enbridge failed to meet the external inspection intervals for 20 tanks at the Enbridge Terminal. Subsequently, Enbridge has modified its Breakout Inspection procedures to ensure the correct external inspection interval is determined such that it does not exceed the maximum 5 years, defined in API 653, and that the 5 year interval is clearly defined as 5 periods of 365 days instead of 5 calendar years, as previously applied by Enbridge."

Enbridge Response

As stated in PHMSA's finding, Enbridge tank management and inspection procedures previously mandated that external inspections were required every 5 years. Enbridge completed the majority of the subject tanks 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. Enbridge has revised its procedure to be more definitive on the 5 year interval, which is currently going through our manual revision process. Once this is complete the final procedure will be submitted to PHMSA. Preliminary versions have already been reviewed by the Southwest Region PHMSA Inspector.

PHMSA Finding

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

(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).

(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 acquired the Cushing Terminal facilities in 2004. Internal inspection reports and repair data were provided to Enbridge from the previous owner that indicated API Standard 653 (API 653) internal inspections had been performed on all of the existing tanks at various dates prior to the acquisition by Enbridge, except those that were newly constructed. Repair records were available with varying levels of detail about the repairs.

The summary of the tank data and the API 653 inspection dates were provided to the inspectors in the same Excel spreadsheet identified in item 1 of this letter….

....The previous owner's records were not adequate to support the assumption of a corrosion rate of zero. The maximum internal inspection interval for these tanks defaulted to 10 years, unless similar service was available to estimate the corrosion rates. Enbridge had no similar service procedures as an alternative to determine the corrosion rates, as allowed by API 653, and further stated that there were no tanks that met similar service criteria for the 33 tanks in question. The reassessment of the internal inspection intervals by Enbridge identified the following 19 tanks as having exceeded the API 653 maximum 10 year interval when corrosion rates were unknown and similar service was not available.

Table 1

Tank No.	Date Built	Shell Construction	API 653 Internal Current	10 Year Maximum Interval	API 653 Internal Scheduled
3001	1921	Riveted	11/29/94	11/29/04	*11/29/2014
3004	1921	Riveted	08/25/95	08/25/05	*08/25/2015
3006	1921	Riveted	10/13/98	10/13/08	*10/13/2018
3013	1978	Welded	05/25/92	05/25/02	2012
2203	1920	Riveted	10/16/98	10/16/08	2018
2211	1920	Riveted	05/08/92	05/08/02	2012
2223	1975	Welded	11/20/91	11/20/01	2009
2224	1975	Welded	11/20/91	11/20/01	2011
3360	1946	Welded	07/28/94	07/28/04	2014
1395	1953	Welded	02/11/97	02/11/07	2026
1012	1922	Riveted	07/15/91	07/15/01	2011
1016	1927	Riveted	06/01/97	06/01/07	2017
1024	1922	Riveted	07/08/93	07/08/03	2013
1034	1927	Riveted	10/01/92	10/01/02	2012
1035	1927	Riveted	08/23/95	08/23/95	2015
1153	1947	Welded	10/28/93	10/28/03	2013
1155	1947	Welded	09/29/95	09/29/05	2015
1156	1947	Welded	07/12/91	07/12/01	2011
1181	1954	Welded	05/31/96	05/31/06	2016

*These tanks are scheduled for demolition prior to their next scheduled internal inspection

In total, Enbridge failed to inspect the 23 tanks, 4 of which were newly constructed and had no previous inspections to establish a corrosion rate, and 19 of which were existing but did not have adequate information to determine an appropriate corrosion rate and subsequently exceeded the maximum 10 year internal inspection interval allowed by API 653."

Enbridge Response

In part due to the acquisition and previous owner's records, Enbridge lacked sufficient detail to demonstrate to the inspector that inspection intervals were calculated in accordance with API Standard 653, particularly as it relates to what constitutes "Similar service" tanks and the requirements for when a zero corrosion rate can be assumed. As a result, 23 tanks were deemed to have exceeded the most conservative 10 year internal inspection interval.

Enbridge is currently working to clarify similar service procedures as well as the process required to demonstrate/document adequate cathodic protection and corrosion rates for tank bottoms. Enbridge tank management and inspection procedures are being revised to address these items. Once this is complete they will be submitted to PHMSA.

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Enbridge Pipelines, L.L.C. (Enbridge) a Compliance Order incorporating the following remedial requirements to ensure the compliance of Enbridge with the pipeline safety regulations:

1. *In regard to Item Number 2 of the Notice pertaining to exceeding the maximum API Standard 653 internal inspection interval for 23 breakout tanks identified in the following table at Cushing Tank Farm. Enbridge shall prepare a schedule for completion of the out of service internal inspections and submit it to PHMSA no later than 30 days from this Final Order. Upon approval of the proposed inspection schedule by PHMSA, Enbridge shall carry out the inspections and any necessary repairs.*

2. *Enbridge shall provide quarterly updates on the progress of the tank inspections to the PHMSA Southwest Region Office until such time that the tank inspections identified in the approved schedule developed in Item 1 of this Final Order have been completed. The quarterly updates shall identify the schedule, inspection results and recommended repairs as well as a repair schedule and results for the tanks listed in Item 1 of this Final Order.*

3. *Enbridge shall maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to R. M. Seeley, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. Costs shall be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.*

Enbridge Response

Below is Enbridge's proposed schedule for completion of the out of service internal inspections and upon approval of the schedule by PHMSA, Enbridge will carry out the inspections and any necessary repairs.

Table 1. Proposed Tank Inspection Schedule

Tank Number	Out of Service Date	Return to Service Date
2223	Dec-09	Jul-10
2225	Jul-10	Dec-10
1156	Aug-10	Mar-11
2227	Aug-10	Jan-11
1181	Feb-11	Sep-11
3013	May-11	Dec-11
1155	May-11	Dec-11
2224	Sep-12	Apr-13
1153	Dec-12	Jun-13
2226	Dec-13	Jun-14
2228	Dec-13	Jul-14

Proposed Tank Demolition Schedule	
1035	Sep-12
1034	Sep-12
3360	Sep-12
1016	Sep-13
2203	Nov-13
2211	Nov-13
1012	Nov-13
3006	Nov-13
1024	Nov-13
1395	Nov-13
3004	Nov-13
3001	Nov-13

Enbridge will provide quarterly reports to Southwest which will update the schedule, identify inspection results and recommended repairs as well as a repair schedule and results for the tanks listed in Item 1 of this Final Order.

Enbridge will also document costs associated with fulfilling this Compliance Order and submit the total to R. M. Seeley, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. Costs shall be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.

In addition to providing quarterly reports Enbridge welcomes representatives from Southwest Region to visit the site anytime during the process to monitor the inspections and subsequent repairs.

Enbridge appreciates the cooperative manner in which the inspection was conducted.

A wire transfer in the amount of $28,800 is being processed in the manner outlined in the Notice. 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