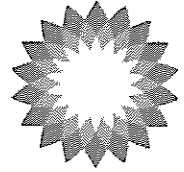




05-21-10A08:50 RCVD



**U.S. Pipelines and Logistics**

BP Pipelines (North America) Inc.  
28100 Torch Parkway  
Warrenville, Illinois 60555

May 20, 2010

Mr. Dennis Hinnah  
Deputy Director, Western Region  
Pipeline and Hazardous Materials Safety Administration  
188 W. Northern Lights Blvd., Suite 520  
Anchorage, AK 99503

**Re: Warning Letter CPF 5-2010-5010W**

Dear Mr. Hinnah:

This letter is in response to Department of Transportation (DOT) Pipeline and Hazardous Materials (PHMSA's) Warning Letter dated April 20, 2010.

On June 22-23, 2009, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) inspected the BP Exploration, Alaska, Inc (BPXA) Endicott Sales Oil Crude Pipeline. Endicott Pipeline is a common carrier pipeline that is owned by separate entities and operated by BPXA.

For ease of response, the code citation and DOT's statements to us have been copied below in italics and are followed by BPXA's response.

**DOT Statement:**

1. *§195.579 What must I do to mitigate internal corrosion?  
(a) General. If you transport any hazardous liquid or carbon dioxide that would corrode the pipeline, you must investigate the corrosive effect of the hazardous liquid or carbon dioxide on the pipeline and take adequate steps to mitigate internal corrosion.*

*BPXA failed to provide any records, other than ILI data, to show that it investigates the corrosive effects of the hazardous liquid transported in the Endicott pipeline. BPXA is required by §195.579 (a) to investigate the corrosive effects of the hazardous liquid in the Endicott pipeline and take steps to mitigate internal corrosion. BPXA failed to provide records indicating they are mitigating corrosion. The 2005 and 2008 MFL pig runs of the Endicott Pipeline identified internal corrosion is occurring, the maximum wall loss reported to be about 20%.*

**BPXA Response:**

BPXA recognized the potential for internal corrosion on the Endicott Pipeline from the ILI data. BPXA has completed the installation of corrosion coupons in the Endicott pipeline to measure and monitor the bulk corrosivity of the transported fluid. The fluid flow regime, maintenance pigging frequency, and locations of CRM sites are currently being evaluated to determine what changes in the mitigation program may be required.

2. **§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:**

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

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

**DOT Statement:**

*BPXA failed to provide records, other than ILI data, to show that they conduct atmospheric corrosion monitoring in accordance with §195.583 (a). During field inspection, PHMSA personnel discovered the following indications of atmospheric corrosion on the Endicott pipeline.*

- 1) The 2005 and 2008 MFL pig runs identified external corrosion under insulation. The maximum wall loss reported was 39%.*
- 2) Cased Road Crossing # 14 – Removable fabric insulation jacket appeared to be full of water.*
- 3) Cased Road Crossing # 09 – Water stain on insulation jacket indicated that water may have saturated insulation.*
- 4) Cased Road Crossing # 03 – The easing seal designed to prevent water from entering the casing was torn open.*
- 5) Vault and Cased Road Crossing #2 – At the Badami ice road there is water in the vault to the bottom of the bare pipe, and the insulation jacket stain indicates that water may have saturated the insulation.*
- 6) Vault and cased road crossing #1 – At the Badami pipeline tie-in on the Causeway, there is water in the vault up to the bottom of the pipe.*

**BPXA Response:**

For the sections of the Endicott Pipeline that can be inspected by an inline inspection (ILI) tool, BPXA believes that such inspections fully meet the intent and the requirement of 195.583. BPXA utilizes ILI as the primary tool for detection of both internal and external corrosion on the Endicott Pipeline. ILI tools are run on a three-year frequency in the Endicott pipeline. This frequency of ILI runs allows for the monitoring of the onset of corrosion under insulation and mitigation of corrosion sites. The ILI run frequency meets the time frame for atmospheric corrosion inspection that is specified in 195.583.

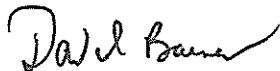
BPXA also performs a walking speed survey of the Endicott pipeline on an annual basis. One component of this survey is the identification of penetrations or damage to the insulation or the insulation jacketing that could allow for water infiltration.

BPXA is unaware of any other atmospheric inspection methodology that can be applied to foam and jacket insulated piping systems that would not require the removal of the insulation. BPXA does remove insulation when necessary to mitigate corrosion. However, if corrosion is not present, removal of the insulation system can be detrimental to the integrity of the pipeline through the creation of additional water ingress points. BPXA does not believe that insulation removal to simply allow for a visual inspection of atmospheric corrosion is prudent when ILI is available.

BPXA believes that the practices and actions taken as described in the response herein address the issues identified in the Warning Letter.

If you have any questions, please contact me at 630-836-3435 or Glen Pomeroy at 907-564-5921.

Sincerely,



David O. Barnes, P.E.  
DOT & Integrity Manager  
BP Pipelines (North America) Inc.

cc:

John Eldred, SPU Engineering Authority (acting HSSE & Engineering VP)  
Mike Utsler, VP Operations  
Don Turner, Pipelines Delivery Advisor  
Bill Flanders, DOT PHMSA Alaska  
Truman Dickeson, BP Pipelines North America  
Glen Pomeroy, BPXA – Pipeline TA  
Bill Hedges – CIC Manager