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U.S. Pipelines and Logistics

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

October 10, 2008

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Mr. Chris Hoidal, P.E.
Director, Western Region
Pipeline and Hazardous Materials Safety Administration
12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

RE: Notice of Probable Violation and Proposed Compliance Order CPF 5-2008-5031

Dear Mr. Hoidal:

This letter is in response to Department of Transportation (DOT) Pipeline and Hazardous Materials (PHMSA's) Notice of Probable Violation (NOPV) and Proposed Compliance Order dated September 10, 2008.

On November 6-8, 2007, a representative of PHMSA inspected the BP Exploration Alaska, Inc (BPXA) operated Milne Point Sales Oil Crude Line. Additionally, on February 6 and 7, 2008, PHMSA conducted an inspection of the BPXA Operated Northstar Sales Oil Crude Line. Both of these pipelines are common carrier crude oil pipelines that are owned by separate entities and operated by BPXA. Both carry fully processed sales quality crude oil.

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

1. 195.579 What must I do to mitigate internal corrosion?

DOT Statement:

At the time of the inspection, BPXA had no comprehensive internal corrosion control procedures with regards to investigating whether a corrosive effects analysis is being performed on their Sales Oil Crude Line at both the Milne Point Facility as well as the North Star Facility. Further, there were no records to show that non-corrosive liquids are being transported. No coupons are installed in the DOT-regulated Sales Oil Crude Lines. There are coupons installed upstream at both the Milne Point Facility and the North Star Facility, which may or may not be indicative of the corrosion effects within the downstream DOT -regulated segments.

Following the inspection, a sampling of Milne Point weight loss coupon results were subsequently provided by BPXA on April 23, 2008. Nevertheless, it is still unknown whether BPXA has a comprehensive program to investigate the corrosive effects of, and if found, to mitigate those effects, e.g. cleaning pigs, modified inhibitor concentrations.

BPXA Response:

The product carried in the Northstar and Milne Point sales oil pipelines is non-corrosive. The non-corrosive nature of these fluids has been demonstrated over 23 years of operation for Milne Point and 7 years of operation of Northstar without indication of any internal corrosion rate or damage that would indicate mitigation actions are required. In addition, the potential for internal corrosion is monitored through several independent methodologies as per the Corrosion Management Strategy document, referenced in the BPXA Tier 2 OMER. These methodologies for the Milne Point and Northstar sales oil pipelines are described in more detail below:

Corrosion coupons are installed in piping that carries the same fluids that are transported by the Northstar and Milne Point sales oil pipelines. While not all of these coupons are installed within the DOT regulatory boundaries of the pipeline, they are installed in the same fluid, are similar material as the pipeline, and represent an accurate assessment of the pipeline system. These coupons are pulled and analyzed on a frequency that meets or exceeds the requirements of 195.579(b)(3). Coupon data indicates the fluids are non-corrosive and have been previously provided to PHMSA. We would be happy to provide this data again at your request.

Since 2006, corrosion rate monitoring (CRM) locations are also monitored on both of these pipelines. CRM locations are sites where the wall thickness is measured at the same location every six months using ultrasonic equipment. Unlike coupons, these sites provide a direct measurement of the pipe wall thickness at each location. Any loss of pipe wall thickness could be an indication of active internal corrosion. The Milne Point sales oil pipeline currently has 23 CRM locations, none of which have shown any wall loss or corrosion rate.

The Northstar sales oil pipeline has 26 CRM locations. Of these locations, 25 have not shown any wall loss or corrosion rate to date. The remaining location is at a site of internal wall loss (~10% wall loss). However, at this location wall thickness has not changed and the wall loss is likely an historical condition artifact.

For both pipelines, inline inspection (ILI) is performed on a three year frequency. There have been some internal wall loss indications that have been reported as potential mill defects. Investigation of these sites has not identified internal corrosion but what appear to be manufacturing marks. Many of these sites are now used as CRM sites.

The internal corrosion monitoring methods described above full demonstrate that the fluids transported in the Northstar and Milne Point sales oil pipelines are not corrosive and these pipelines are not experiencing internal corrosion. In the event that internal corrosion is identified through any of the above monitoring programs, appropriate actions to mitigation internal corrosion will be taken.

The use of coupons with a six month analysis frequency is an accepted method to determine and assure the effectiveness of corrosion inhibitors when corrosive fluids are transported in pipelines. BPXA believes use of monitoring coupons and CRM locations on a frequency of six-months or less, backed with periodic ILI is a more comprehensive and effective method of determining the potential for corrosive affects of the fluids transported in the pipeline than an analytical process applied to periodic fluid samples. The coupons and the CRM sites provide both direct and indirect measurements of the corrosivity of the actual fluids under the conditions to which the pipe wall is exposed.

In addition to corrosion monitoring, maintenance pigs are run in the Milne Point sales oil pipeline on a quarterly basis and in the Northstar sales oil pipeline on a biweekly frequency. Maintenance pigging manages water, sediment, and wax that could contribute to microbiologically influenced corrosion of the pipelines. The biweekly pigging frequency for the Northstar pipeline is designed for wax control. During the audit, PHMSA requested and was provided the maintenance pigging schedule and pigging performance metrics for the Northstar and Milne Point sales oil pipelines.

2. 195.583 What must I do to monitor atmospheric corrosion control?

DOT Statement:

At the time of the inspection, BPXA provided their OMER Tier 2 Operations and Maintenance Manual which on page 48 outlined an adequate procedure to comply with CFR 195.583, however no paper or electronic record of this required inspection could be provided to PHMSA. During the field inspection several locations on the North Star and Milne Point sales oil pipelines were found with inadequate coating.

Subsequently, on April 23, 2008 PHMSA received documentation that all of the Milne Point piping noted to have inadequate coating had been recoated as necessary. Regardless, a comprehensive atmospheric program needs to be routinely monitored and recorded as called out in the BPXA Tier 2 O&M Manual procedures.

BPXA Response:

Since the PHMSA inspections and our subsequent conversations with your staff following the inspections, BPXA has been enhancing the Periodic Maintenance activity to more comprehensively document the requirements, timing and findings associated with the atmospheric corrosion inspections. The required inspections and mitigation work identified has been completed. The modifications to the PM system to support the next inspection cycle will be completed by year end.

The segments of these pipelines that are designed without insulation or where insulation has been permanently removed are included in the atmospheric corrosion monitoring program. Sites where insulation is temporarily removed to allow for inspection follow up from other inspection programs such as ILI, Tangential Radiography, or CRM are inspected under those programs and are not part of the atmospheric corrosion monitoring program.

Atmospheric corrosion inspections of both the Milne Point and Northstar sales oil pipelines have been completed. The inspection on the Milne Point sales oil pipeline found no evidence of atmospheric corrosion or coating damage. The Northstar sales oil pipeline launcher has been coated and the inspection found no coating damage or atmospheric corrosion. The Northstar sales oil pipeline receiver is insulated and has been inspected with Tangential Radiography and no corrosion indications were identified.

BPXA procedures applicable to these lines require monitoring atmospheric corrosion in accordance with 195.583. When atmospheric corrosion is identified, the piping will be protected against atmospheric corrosion in accordance with 195.581. The piping will be coated unless BPXA can demonstrate that it falls under the provisions of 195.581(c)(1) or 195.581(c)(2).

3. 195.420 Valve Maintenance

DOT Statement:

BPXA did not provide records to document mainline valve inspection records for the North Stare Pipeline facility for early 2006. Suitable valve inspection records were provided for July/August 2005 and October/November 2006. BPXA

appears to have missed the required twice per calendar year valve inspection requirement in 2006.

BPXA Response:

Corrective actions were immediately taken upon discovery of the discrepancy with the valve inspections. The frequency for valve inspections was reviewed for all of the BPXA operated DOT regulated pipelines to assure that the frequencies met the requirements of 195.420 and that the appropriate documentation was generated and retained.

BPXA believes that the practices and actions taken as described in the responses herein address the issues identified in the NOPV and Proposed Compliance Order. If you have any questions, please contact me at 630-836-3435 or Glen Pomeroy at 907-564-5921.

Sincerely,

David Barnes

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

cc: Tony Brock, Sr. Vice President and Technical Director
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