

**NOTICE OF PROBABLE VIOLATION  
and  
PROPOSED COMPLIANCE ORDER**

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

February 28, 2011

Mr. Hugh Harden  
VP Operations & Engineering  
Kinder Morgan Pipelines (USA), Inc  
5th Avenue SW  
Suite 2700 - 300  
Calgary, Canada  
T2P - 5J2

**CPF 5-2011-5005**

Dear Mr. Harden:

On August 1 to August 6, 2010, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected your Express Pipeline records in Casper, Wyoming and your Express Pipeline facilities in Montana.

- 1. §195.404 Maps and Records.**
  - (a) Each operator shall maintain current maps and records of its pipeline systems that include at least the following information;**
    - (1) Location and identification of the following pipeline facilities;**
      - (i) Breakout tanks;**
      - (ii) Pump stations;**
      - (iii) Scraper and sphere facilities;**
      - (iv) Pipeline valves;**
      - (v) Facilities to which §195.402(c)(9) applies;**

- (vi) **Rights-of-way; and**
- (vii) **Safety devices to which §195.428 applies.**
- (2) **All crossings of public roads, railroads, rivers, buried utilities, and foreign pipelines.**
- (3) **The maximum operating pressure of each pipeline.**
- (4) **The diameter, grade, type and nominal wall thickness of all pipe.**

Kinder Morgan Pipeline USA (KMPUSA) had not revised their Montana Express Pipeline maps and records, including alignment sheets, since 2003. Interviews revealed that many field personnel are still using their 1998 alignment sheets. Meanwhile, KMPUSA documents all new crossings in their Geographic Information System (GIS), however, they neither had printed maps from the GIS to be used by field personnel, nor did field personnel have access to the GIS. Making construction records, maps and operating history available for safe operation and maintenance is a regulator's requirement under §195.402(c)(1). To this end, an operator must maintain their maps and records so they are current.

- 2. **§195.428 Overpressure safety devices and overflow 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.**

KMPUSA did not inspect and test overpressure safety devices at the Wild Horse pump station at intervals not exceeding 15 months, but at least once each calendar year. The Wild Horse station in Canada is operated by another operator, Kinder Morgan (Canada, Inc.), but, it provides the sole pressure and overpressure protection for the US segment of the Express Pipeline from the Canadian Border to Faulkners Coulee pump station. KMPUSA did not have evidence to demonstrate that Kinder Morgan (Canada, Inc.) tested or inspected pressure control devices at the Wild Horse pump station. Per 195.428, an operator is required to test and inspect once each calendar year not to exceed 15 months of pressure limiting devices, relief valves, pressure regulators, or other items of pressure control equipment that protects its pipeline from overpressure.

- 3. **§195.430 Firefighting equipment.**  
**Each operator shall maintain adequate firefighting equipment at each pump station and breakout tank area.**

KMPUSA did not know if they maintained adequate firefighting equipment at its Montana facilities. The potential for inadequate fire equipment existed because KMPUSA failed to distribute tactical fire fighting preplans for their pump stations and breakout tanks to local

firefighting organizations. These tactical preplans describe equipment and products needed for fighting fires at KMPUSA facilities. These preplans are critical for an operator to ensure they have adequate fire fighting equipment at each pump station and breakout tank area for their staff and local firefighters to use. KMPUSA plans to distribute fire fighting preplans and coordinate with the local fire fighting entities this fall to ensure they have the proper equipment, foam product, and training. Determination of adequate fire equipment at each pump station and tank are not complete.

4. **§195.569 Do I have to examine exposed portions of buried pipelines?**  
**Whenever you have knowledge that any portion of a buried pipeline is exposed, you must examine the exposed portion for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated. If you find external corrosion requiring corrective action under Sec. 195.585, you must investigate circumferentially and longitudinally beyond the exposed portion (by visual examination, indirect method, or both) to determine whether additional corrosion requiring remedial action exists in the vicinity of the exposed portion.**

KMPUSA failed to examine exposed portions of its buried pipeline near Gilford, Montana. Right-of-Way (Rev) Activity Report ND 179, dated September 23, 2009, documents a pipe inspection report at Station 1214+90, however, the report indicates an incomplete examination. Section 3-Pipe Inspection of that report was not completed, yet photos attached to that report indicate the pipe was exposed at this location. Per §195.569, an operator is required to inspect the condition of coating and inspect for corrosion on pipe without coating when they expose their buried pipe.

5. **§195.573 What must I do to monitor external corrosion control?**  
**(c) Rectifiers and other devices. You must electrically check for proper performance each device in the first column at the frequency stated in the second column.**

<b>Device</b>	<b>Check frequency</b>
<b>Rectifier.....</b>	<b>At least six times each calendar year, but with intervals not exceeding 2 ½ months</b>
<b>Reverse current switch</b>	
<b>Diode</b>	
<b>Interference bond whose failure would jeopardize structural protection</b>	
<b>Other interference bond.....</b>	<b>At least once each calendar year, but with intervals not exceeding 15 months.</b>

KMPUSA did not adequately check an interference bond whose failure would jeopardize structural protection at least six time each calendar year, but with intervals not exceeding 2 ½ months. At TS 12867+42, the Express Pipeline has a galvanic anode that appears to be

draining around 330 milliamps (mA) back to the Yellowstone Pipeline (YPL) where the Express Pipeline crosses YPL. Express Pipeline picks up foreign current south of this test station when it transects the zone of influence of YPL's foreign ground bed. This current is then discharged through the galvanic anode. Current readings are only taken on this anode annually. This anode is acting in the same manner as a critical bond and thus it must be read at least six times each calendar year, but with intervals not exceeding 2 ½ months.

6. **§195.577 What must I do to alleviate interference currents?**  
**(a) For pipelines exposed to stray currents, you must have a program to identify, test for, and minimize the detrimental effects of such currents.**

KMPUSA had not identified or alleviated apparent stray currents at all locations on their pipeline. During the inspection at TS 15775+34, cathodic protection "on" levels was observed to fluctuate between 1130 to 805 mV. These fluctuations were observed to be swinging between high and low levels approximately every 5 minutes. AC voltage was observed at this test station to be around 3V. This location is in a right-of-way with other pipelines and an electric transmission power line. Per §195.577, an operator is required to identify, test for, and minimize effects of stray currents on their pipelines yet this area does not appear to have been addressed.

7. **§195.579 What must I do to mitigate internal corrosion?**  
**(b) Inhibitors. If you use corrosion inhibitors to mitigate internal corrosion, you must--**  
**(1) Use inhibitors in sufficient quantity to protect the entire part of the pipeline system that the inhibitors are designed to protect;**  
**(2) Use coupons or other monitoring equipment to determine the effectiveness of the inhibitors in mitigating internal corrosion; and**  
**(3) Examine the coupons or other monitoring equipment at least twice each calendar year, but with intervals not exceeding 7 1/2 months.**

KMPUSA failed to examine coupons or other monitoring equipment twice each calendar year exceeding 7 ½ months to determine the effectiveness of the inhibitors that was used to mitigate internal corrosion. Records show that KMPUSA has been "shock" treating breakout tanks (BOT) with biocides in an effort to eliminate bacteria leading to microbiologically induced corrosion (MIC) within those tanks. In 2009, testing of the Buffalo Station BOTs showed high levels of MIC bacteria. These tanks were shock treated with a biocide inhibitor and the contractor reported that they believed the MIC had been eliminated. However, KMPUSA did not use coupons or other monitoring equipment to subsequently monitor the effectiveness of these inhibitors. When an operator uses inhibitors to mitigate internal corrosion then an operator must use coupons or other monitoring equipment to monitor twice each calendar year not to exceed 7 ½ months and determine the effectiveness of those inhibitors in mitigating internal corrosion.

### Proposed Compliance Order

With respect to item numbers 1, 2, 3, 5, and 7 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Kinder Morgan Pipelines (USA) Inc. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

### Warning Items

With respect to item numbers 4 and 6, we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct these items. Be advised that failure to do so may result in Kinder Morgan Pipelines (USA) Inc being subject to additional enforcement action.

### Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

In your correspondence on this matter, please refer to **CPF 5-2011-5005** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Chris Hoidal  
Director, Western Region  
Pipeline and Hazardous Materials Safety Administration

cc: PHP-60 Compliance Registry  
PHP-500 G. Davis (#128420)

Enclosures: *Proposed Compliance Order*  
*Response Options for Pipeline Operators in Compliance Proceedings*

## **PROPOSED COMPLIANCE ORDER**

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

1. In regard to Item Number 1 of the Notice, KMPUSA must revise their maps and records, including alignment sheets, with current information to include new pump stations, breakout tanks and crossings of public roads, buried utilities, and foreign pipelines. KMPUSA must distribute current alignment sheets to all field personnel who will need them to operate and maintain the Express Pipeline safely. Alternatively, if GIS is to be the method of keeping maps current then KMPUSA must ensure that field personnel have access to those maps either electronically or by hard copy. KMPUSA must submit to PHMSA Western Region evidence to show that alignment sheets within Montana have been revised to include current information within 180 days after receipt of the Final Order.
2. In regard to Item Number 2 of the Notice, KMPUSA must test and inspect overpressure protection and pressure controls at the Wild Horse pump station within 30 days after receipt of the Final Order. In addition, KMPUSA must ensure that this testing and inspection occurs at an interval not to exceed 15 months but at least once each calendar year. KMPUSA must submit to PHMSA Western Region evidence that testing and inspection of the Wild Horse pump station has occurred.
3. In regard to Item Number 3 of the Notice, KMPUSA must liaison with all local firefighting organizations that would respond to a fire at any Montana KMPUSA pump station or breakout to ensure that all equipment and products needed to fight a fire at these facilities is available to those local firefighting organizations. Those liaison activities must occur and any identified deficiencies corrected within 180 days after receipt of the Final Order and evidence of adequate firefighting equipment supplied to PHMSA.
4. In regard to Item Number 5 of the Notice, KMPUSA must electrically check its TS 12867+42 foreign current drain. KMPUSA must submit their findings within 30 days after receipt of the Final Order.
5. In regard to Item Number 7 of the Notice, KMPUSA must use coupons or other monitoring equipment and examine these devices twice each calendar year not to exceed 7 ½ months to determine the effectiveness of the inhibitors being used at the Buffalo Station. KMPUSA must submit evidence to show that coupons or other monitoring equipment have been installed the Buffalo Station within 60 after receipt of the Final Order.
6. KMPUSA shall maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Chris Hoidal, Director, Western 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.