



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

WARNING LETTER

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 25, 2016

Mr. Ron McClain
Vice President of Operations and Engineering
Kinder Morgan Energy Partners, L. P., Products Pipelines
500 Dallas Street
Houston, TX 77002

CPF 5-2016-6006W

Dear Mr. McClain:

On June 9-13, 2014, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected your refined products pipeline, Line Section 14 (LS-14), from Portland to Eugene, Oregon. After completion of our inspection, our staff had on-going concerns regarding Kinder Morgan's integrity management program for this pipeline. Your representatives and PHMSA staff met in Lakewood on June 30, 2016 to gather more data about your integrity management program, specifically how Kinder Morgan was complying with the Federal pipeline safety requirements on Preventative and Mitigative measures for Integrity Management.

As a result of the inspection and our recent follow up compliance meeting, it appears that you have committed a probable violation of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violation is:

1. **§195.452 Pipeline integrity management in high consequence areas.**
 - (i) **What preventive and mitigative measures must an operator take to protect the high consequence area?—(1) General requirements. An operator must take measures to prevent and mitigate the consequences of a pipeline failure that could affect a high consequence area. These measures include conducting a risk analysis of the pipeline segment to identify additional actions to enhance public**

safety or environmental protection. Such actions may include, but are not limited to, implementing damage prevention best practices, better monitoring of cathodic protection where corrosion is a concern, establishing shorter inspection intervals, installing EFRDs on the pipeline segment, modifying the systems that monitor pressure and detect leaks, providing additional training to personnel on response procedures, conducting drills with local emergency responders and adopting other management controls.

(4) Emergency Flow Restricting Devices (EFRD). If an operator determines that an EFRD is needed on a pipeline segment to protect a high consequence area in the event of a hazardous liquid pipeline release, an operator must install the EFRD. In making this determination, an operator must, at least, consider the following factors—the swiftness of leak detection and pipeline shutdown capabilities, the type of commodity carried, the rate of potential leakage, the volume that can be released, topography or pipeline profile, the potential for ignition, proximity to power sources, location of nearest response personnel, specific terrain between the pipeline segment and the high consequence area, and benefits expected by reducing the spill size.

Kinder Morgan (KM) did not consider all of the minimum factors required by §195.452 (i)(4) when determining the need for Emergency Flow Restriction Devices to protect high consequence areas (HCAs). Line Section 14 (LS-14) which extends from Portland to Eugene crosses the Willamette River or its tributaries at multiple locations. At one (1) Willamette River crossing, pipeline Milepost (MP) 23.4, the waterway is greater than 100 feet wide which if LS-14 was constructed today would require valves on both sides of the water crossing per 195.260(e). Since LS-14 was constructed before the Federal pipeline safety regulations were issued, that code requirement is not retroactively applicable.

The need for additional Emergency Flow Restricting Devices (EFRD) are, however, required under the Integrity Management regulations and apply to all hazardous liquid pipelines that could affect High Consequence Areas (HCA) regardless of when the pipelines were constructed. In person discussions on June 30, 2016 and records provided on July 8, 2016 indicate that EFRD studies to determine the need for addition valves were conducted and concluded on June 5, 2009 and February 20, 2012. While two EFRD enhancements were considered at Stations 190,321 (MP 36) and 519,642 (MP 98.3), KM decided in their EFRD Project Closure Report, dated February 20, 2012, to not install either valve enhancement. Detailed rationale for dropping of the EFRD projects was not given other than quoting that the Business Unit Engineering and Operations teams considered the factors in the Federal regulations.

Furthermore, it does not appear that evaluation of all Willamette River crossings were formally evaluated in the EFRD studies conducted in 2009 and 2012. Our inspector noted that at the MP 23.4 river crossing, there are two (2) motor operated valves (MOVs) on either side of the river, but they are over 11 miles apart, one at MP 15.35 and one at MP 27.05. There is a nearer block valve north of the river at MP 22.94 but it is manually operated. There is no valve near the south side of the river. During our June 30th meeting, KM representatives stated the expected reduction of a guillotine spill event into the Willamette River at this location would be 673.07 barrels should they place valves adjacent to the river.

The Willamette River is one of 14 waterways in the American Heritage Rivers Protection Program. It contributes 12 to 15 percent of the total flow of the Columbia River and traverses many ecologically sensitive and populated areas. The Willamette's flow varies considerably season to season, averaging about 8,200 cubic feet per second in August to more than 79,000 cubic feet per second in December. Not to include a detailed EFRD evaluation at the Willamette crossings does not address all of the mandatory factors for evaluating EFRDs, especially considering that your current valve placement would not meet today's minimum standards. Specifically, past evaluations did not address the volume that can be released, the unique nature of the high consequence area, and benefits expected by reducing the spill size. KM must conduct and document detailed EFRD studies for the LS-14 crossings of the Willamette River in Oregon. KM must also specify why they did not pursue completion of the other EFRDs proposed in 2009 and 2012.

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed \$200,000 per violation per day the violation persists up to a maximum of \$2,000,000 for a related series of violations. For violations occurring prior to January 4, 2012, the maximum penalty may not exceed \$100,000 per violation per day, with a maximum penalty not to exceed \$1,000,000 for a related series of violations. 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 correct the item(s) identified in this letter.

No reply to this letter is required. If you choose to reply, in your correspondence please refer to **CPF 5-2016-6006W**. 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).

PHMSA does apologize for any inconvenience or confusion that this delayed enforcement letter might cause. If there are any questions concerning this letter, please do not hesitate to contact me at (720) 963-3160. Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Hoidal". The signature is fluid and cursive, with a large initial "C" and "H".

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

cc: PHP-60 Compliance Registry
PHP-500 H. Monfared (#145281)