KINDER MORGAN
Tejas Pipeline LLC

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January 24, 2020

Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration
Office of Pipeline Safety
840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628

Re: Response to CPF 1-2019-0015M – Notice of Amendment (NOA) to Kinder Morgan Tejas Pipeline LLC and Closure Request

Dear Mr. Burrough:

Kinder Morgan Tejas Pipeline LLC submits this timely[1] Response to the NOA referenced above, including the submission of a copy of the amended Kinder Morgan O&M Procedure, and requests that upon completion of your review that the final order reflects the closure of this NOA based on the following response.

From February 19 – 22, 2019, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) inspected Kinder Morgan's (KM) Underground Gas Storage Facility (UNGS) Program in Houston, TX for the Kinder Morgan Tejas Pipeline. On the basis of the inspection, PHMSA alleged an inadequacy found within KM plans or procedures, as described below.

KM has revised its O&M Procedure 2631 – Risk Analysis to address PHMSA's concern. This revision was previously shared with PHMSA's Eastern Region staff for their review. The amended O&M Procedure 2631 is the final version, has been approved by the Company stakeholders, and will formally go through the Company's implementation process for procedural changes and will be effective on March 1, 2020.

For the purposes of clarity, KM is repeating the apparent inadequacies noted by your office with the KM response immediately following:

Item Number 1:

§ 192.12 Underground natural gas storage facilities.

(a) ....

(c) Operators of underground gas storage facilities must establish and following written procedures for operations, maintenance, and emergencies implementing the requirements of API RP 1170 and API RP 1171, as required under this section, including the effective dates as applicable, and incorporate such procedures into their written procedures for operations, maintenance, and emergencies established pursuant to § 192.605.

[1] KM requested an extension of time within which to respond to this NOA. An extension to January 27, 2020, was granted by letter dated December 19, 2019.

KM's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, KM's procedures did not address how it would assess threat and hazard interaction in their Risk Model, as required by API RP 1171, Section 8.3.2.

Section 8.3.2 states in part:

The operator shall use available information such as performance data collected through the field history, operations and maintenance (O&M) activities, geotechnical data such as well logs, engineering data, and completion reports to determine susceptibility to threat and hazard-related events and to assess threat and hazard interaction.

At the time of the inspection, KM's procedures failed to address the threat and hazard interaction requirement of Section 8.3.2.

KM Response to Item Number 1:

The O&M procedure amendment responsive to Item Number 1 can be found in four places, the yellow highlighted sections of Attachment A - Potential Threats and Consequences for Reservoir Storage (Porosity Storage):

1) Page 7: External Corrosion, Cathodic Protection
2) Page 7: External Corrosion, External (Behind Pipe) Corrosive Fluids Cause Concern
3) Page 8: Internal Corrosion & Erosion, Water Production Causes Concern
4) Page 11: Environmental, Hazardous Release (H2S or Other Hazardous Gasses)

which were revised to reference new Attachment D – Threat and Hazard Interactions found on pages 18 through 20.

Item Number 2:

§ 192.12 Underground natural gas storage facilities.

(a) ....

(e) Operators of underground gas storage facilities must establish and follow written procedures for operations, maintenance, and emergencies implementing the requirements of API RP 1170 and API RP 1171, as required under this section, including the effective dates as applicable, and incorporate such procedures into their written procedures for operations, maintenance, and emergencies established pursuant to § 192.605.

KM's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, KM's O&M Procedures did not address a process for the identification, selection, and implementation of P&M Measures in accordance with API RP 1171, Section 8.6 Preventive and Mitigative Measures (Section 8.6).

Section 8.6.1, General, states in part:

P&M measures are actions conducted by the operator to reduce the risks to the storage facilities by reducing the likelihood (preventive) or reducing the consequence

(mitigative) of events related to the threats identified in 8.4. The P&M measures include routine condition monitoring activities since the acquisition and analysis of data provides information upon which additional measures can he implemented.

Section 8.6.2, Methodology, states in part:

The operator shall develop P&M measures to manage risks.

At the time of the inspection, KM's procedures failed to address the requirements of Section 8.6 regarding the development of P&M measures within their program.

KM Response to Item Number 2:

The O&M procedure amendment responsive to Item Number 2 is highlighted green on page 5 of the attached amended O&M Procedure 2631. The three paragraphs were added to the O&M Procedure 2631 on October I, 2019 post-PHMSA inspection and prior to the issuance of CPF 1-2019-0015M

Item Number 3:

§ Underground natural gas storage facilities.

(a) . . .

(e) Operators of underground gas storage facilities must establish and follow written procedures for operations, maintenance, and emergencies implementing the requirements of API RP 1170 and API RP 1171, as required under this section, including the effective dates as applicable, and incorporate such procedures into their written procedures for operations, maintenance, and emergencies established pursuant to § 192.605.

KM's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, KM did not address how the effectiveness of their Risk Management plan would be determined, as required by API RP 1171, Section 8.7.1 Periodic Assessment and Review (Section 8.7.1)

Section 8.7.1 states, in part:

The operator shall assess the effectiveness of risk monitoring and risk management programs and maintain a continual review and improvement cycle in risk management activities to provide functional integrity of the storage operation. The interval of review and reassessment should be short enough to identify operational and monitoring trends and measure the effectiveness of P&M measures, but long enough that the data and information that can be brought into the analysis are meaningful.

At the time of the inspection, KM's procedures failed to address how the effectiveness of their Risk Management plan would be determined in accordance with Section 8.7.1.

KM Response to Item Number 3:

The O&M procedure amendment responsive to Item Number 3 is a new Subsection 3.5 – Risk Management and Effectiveness Review and is highlighted yellow on pages 5 and 6 of the attached amended O&M Procedure 2631.

With the procedure revisions noted, KM believes that the alleged inadequacy referenced in the NOA has been satisfactorily addressed. Upon completion of your review of this document, KM requests notification of closure of this NOA.

Please contact Jaime Hernandez at 713-369-9443 or jaime_hernandez@kindermorgan.com or me at 713-369-8763 or kenneth_grubb@kindermorgan.com should you wish to discuss the information provided above.

Sincerely,

Kenneth W. Grubb
Chief Operating Officer, Gas Pipelines

cc: Jorge Torres, Vice President, Engineering
Anders Johnson, Vice President of Storage
Jaime Hernandez, Director of Engineering
Eric Gentles, Manager Engineering

Attachment: KM O&M Procedure 2631 – Risk Analysis, Effective March 1, 2020