



FEDEX TRACKING NUMBER: 7839 8118 5245

September 1, 2016

R.M. Seeley  
Director, SW Region  
Pipeline and Hazardous Materials Safety Administration  
8701 S. Gessner, Suite 630  
Houston, TX 77074



**Re: CPF 4-2016-5027M**

Dear Mr. Seeley:

On August 15, 2016, Kinder Morgan Wink Pipeline, LLC (KM Wink) received your Notice of Amendment, CPF 4-2016-5027M, dated August 3, 2016. KM Wink requests a 35-day extension from receipt of the Notice of Amendment, so that we may have adequate time to carry out Kinder Morgan's internal process for revising procedures and submitting the proposed changes for review and approval to appropriate Kinder Morgan Stakeholders and Subject Matter Experts, before submitting the revised procedures to your office.

If the time extension is granted, the timetable for "Items" 1 and 2 of the Notice of Amendment would start on September 19, 2016. The 30-day deliverables for "Items" 1 and 2 will be due on October 19, 2016.

The Notice of Amendment contains alleged procedural inadequacies based on inspections conducted between October 6, 2014 and February 18, 2015 by representatives of your office. In accordance with Item II.a., of the "Response Options for Pipeline Operators in Enforcement Proceedings," KM Wink does not contest the Notice of Amendment, and provides the following responses (following the original citation and PHMSA comments):

1. **§ 195.402 Procedural manual for operations, maintenance, and emergencies.**
  - (a) **General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.**

KM Wink procedures regarding repairs for internal metal loss/internal corrosion lack guidance or limitation on the term 'temporary' with regard to the use of Type B sleeve repairs. KM Wink installs Type B sleeves on internal metal loss anomalies as permanent repairs knowing that their pipeline has a high internal corrosion threat.

As required by §195.402(c)(3), the procedures must be in accordance with subpart F and subpart H of this part. The KM Liquid O&M Manual Procedure L-O&M 213 *Leaks, Pipe and Weld Defects (Evaluation and Repair)* section 3.7.5 *Internal Metal Loss* states,

*"The limitations for areas with internal metal loss and areas with a combination of internal metal loss and external corrosion are the same as for external corrosion (RSTRENG). When dealing with internal metal loss, treat it as a manufacturing anomaly and not considered a defect unless an internal corrosion threat has been identified thru product conditions, unique NDE evaluations, ILI pattern recognition or prior history. If internal corrosion is identified, then repairs consistent with Table 1 are considered temporary unless the internal corrosion has been successfully mitigated, the pressure reduction as noted in Section 3.4 and Section 3.7.2 apply." (underlined for emphasis)*

Table 1 in the procedure does not note the Type B sleeve repair as a temporary repair for internal corrosion. The Type B sleeve is a permanent repair only if it can be proven the internal corrosion has been mitigated. Internal corrosion is repaired using Type B sleeves, which are a temporary repair technique. There is no guidance or limitation on the term "temporary" in the process. KM installs Type B sleeves for all corrosion repairs, internal or external.

**KM Wink's Response:** KM Wink is aware that a potential internal corrosion threat exists on our pipeline. We mitigate the threat with periodic cleaning pigs, corrosion inhibitor (including monitoring inhibitor residuals), internal corrosion coupon monitoring, and product analysis. Coupon readings have not indicated an internal corrosion issue on our pipeline, and we continue to find inhibitor residuals downstream of the inhibitor injection points. KM Wink has not experienced an internal corrosion leak on any mainline pipe, since acquiring the system and initiating the corrosion inhibitor injection program in 2004. Our success in mitigating internal corrosion supports the use of full encirclement sleeves as permanent repairs.

**2. § 195.402 Procedural manual for operations, maintenance, and emergencies.**

**(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.**

KM Wink does not have procedures that provide the basis for quantifying and adjusting the corrosion inhibitor injection rates within their pipeline systems. KM does not have a process or procedure to give adequate direction for the monitoring of corrosion inhibitors.

Paragraph §195.579 directs an operator to things that must be done to mitigate internal corrosion. KM Wink uses both corrosion inhibitor and corrosion coupons/probes in an attempt to monitor and control internal corrosion in their pipeline system. KM Liquid O&M Manual Procedure L-O&M 906 *Internal Corrosion Control*, section 3.3.2 *Coupon/Probe Monitoring* states,

*"If corrosion inhibitors are added in the product service to mitigate internal corrosion, it must be used in a sufficient quantity to protect the pipeline and corrosion probes and/or coupons shall be used to determine its effectiveness in mitigating internal corrosion."*

In section 3.4 *Remedial Action*, it further states,

*"Pitting of the coupon/probe is an indication of insufficient inhibitor to protect the internal surface of the pipe. Indications of insufficient inhibitor to protect the internal surface of the pipe may be if inspections reveal internal corrosion in excess of 1 mpy, or if the coupon/probe surface rust is greater than 50% of the surface area for consecutive inspection periods. Corrective actions to mitigate insufficient inhibitor protection include:*

- *Increasing dosage rate of inhibitor at injection points*
- *Increasing coupon inspection interval*

- Investigating source point (refinery) product received into the pipeline system
- Increase frequency of cleaning scrapers/pigs

*The KM representative(s) responsible for internal corrosion ensures that sufficient inhibitors are used to protect the assigned segment of pipeline."*

The process that KM Wink uses for internal corrosion control makes no reference to using/applying manufacturer's suggested corrosion inhibitor injection rates. The KM process shows no correlation between the coupon/probe corrosion rating and adjustment of the corrosion inhibitor injection rate.

**KM Wink Response:** KM Wink believes that our process does effectively support the basis for our inhibitor injection program. Our chemical provider has a testing process that effectively monitors corrosion inhibitor residuals, which help determine inhibitor injection rates. KM Wink analyzes product, water, and solids to identify factors for internal corrosion. We also check dissolved gases including CO<sub>2</sub>, H<sub>2</sub>S, and O<sub>2</sub>, and inoculate bacteria cultures from water and solids. In addition, KM Wink performs in-line inspections, internal corrosion coupon inspections every 6 months, and has in place a cleaning pig program that round out an effective internal corrosion mitigation program. All of these methods are overseen by KM Wink's Corrosion Control Department. KM Wink has not experienced an internal corrosion leak on any mainline pipe, since acquiring the system and initiating the corrosion inhibitor injection program in 2004.

As requested by PHMSA, KM Wink will revise L-O&M procedures 213 and 906. As noted at the beginning of this letter, KM Wink requests an extension until September 19, 2016 to provide the revised procedures to allow sufficient time to follow our process for amendment of these procedures.

We are committed to operating our pipelines safely and in compliance with applicable regulations. We appreciate the Pipeline and Hazardous Materials Safety Administration's efforts in helping us to achieve this goal.

If you have any questions or require additional information, I could be reached at (713) 369-9113. Also, you may contact Scott Muston at (713) 369-8065 or April Zapien at (713) 369-9512 or [april\\_zapien@kindermorgan.com](mailto:april_zapien@kindermorgan.com).

Sincerely,



Kenneth H. Havens, Jr.  
Vice President, Source and Transportation  
Kinder Morgan CO<sub>2</sub> Company, L.P.