



January 14, 2019

Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration

Re: CPF 1-2019-6002M Notice of Amendment

Dear Mr. Burrough:

EnLink Midstream received your letter dated January 8, 2019. The following describes the action(s) that have been taken.

Item 1:

§ 195.11 What is a regulated rural gathering line and what requirements apply?

(b) Safety requirements. Each operator must prepare, follow, and maintain written procedures to carry out the requirements of this section. Except for the requirements in paragraphs (b)(2), (b)(3), (b)(9) and (b)(10) of this section, the safety requirements apply to all materials of construction.

(9) For steel pipelines, comply with subpart H of this part, except corrosion control is not required for pipelines existing on July 3, 2008 before July 3, 2011.

EnLink's procedures for complying with Subpart H of Part 195 were inadequate. Specifically, EnLink's procedures failed to include directions to personnel for examination of the interior surface of pipe when the pipe is exposed and cut out, and for documentation of the results of the inspections.

During the inspection, EnLink's procedures and record form for internal pipe surface examinations were reviewed. The EnLink form for examination of exposed pipe reviewed during the inspection did not have any questions or checkboxes to document the presence or severity of internal corrosion. However, several instances of an examination of a pipe's internal surface were added as comments on the Examination of

Exposed Pipe Form, the form which was used to document the external examination of the pipe.

During the verbal exit interview on May 24, 2018, the PHMSA inspector and EnLink personnel discussed a form for comprehensively documenting bell hole inspections, which included internal pipe surface examinations.

EnLink subsequently provided a blank copy of this Excel form for review. Although current records do not reflect the use of this form, the form could be used prospectively to document bell hole inspections. However, the *Hazardous Liquid Pipeline O&M Manual* does not direct personnel to specifically use this form.

Therefore, EnLink's procedures for complying with Subpart H of Part 195 were inadequate.

EnLink Response:

As submitted in the previous EnLink response letter, the current EnLink Liquid Pipeline O&M Manual addresses internal corrosion in Section 11.1 - CORROSION CONTROL. The section on Internal Corrosion says:

Internal Corrosion Control

Whenever any vessel, pipeline or pipeline component is used in the transportation of hazardous liquids or carbon dioxide is removed or opened, the internal surface shall be inspected for evidence of corrosion and the results of the inspection shall be documented.

If internal corrosion is found, qualified personnel shall be notified to specify action to minimize the internal corrosion and where appropriate, specify replacement material.

If tests or inspections confirm that corrosive conditions exist in the pipeline, monitoring and mitigation with suitable means will be used to mitigate internal corrosion. This could include chemical inhibitors, if necessary, in sufficient quantity to protect the entire pipeline.

Coupons, when necessary, shall be monitored at least twice each calendar year not exceeding seven and one-half (7 ½) months.

When a segment of pipe is removed from the pipeline, the internal surface of the segment will be examined circumferentially and longitudinally for signs of corrosion, as well as the pipe adjacent to the removed section.

If a tank bottom lining is installed in an above ground breakout tank, and the tank was built to API Specification 12F, API Standard 620, API Standard 650 or API Standard 12C, the lining will be installed in accordance with API RP 652, unless Engineering and the Pipeline Integrity Group determines and documents that API RP 652 is not necessary for the safety of the tank.

The O&M Manual also references the EnLink Corrosion Control Manual. Although, Section 6 - INTERNAL CORROSION CONTROL, in the Corrosion Manual, mainly addresses gas pipelines, the procedures are basically the same for liquid pipelines. The Corrosion Manual has been updated to specifically include liquid pipelines. We are in the process of reviewing the revisions to Section 6 and get Committee approval. As soon as the revised manual becomes official, we will provide a copy to PHMSA.

The Excel Bellhole Report provided is not currently a company-wide requirement to be used, therefore is not referenced in the O&M or Corrosion manuals. It is recommended to be used, and going forward, personnel will be reminded that this form is the preferred form to be used when a segment of pipeline is removed for documenting internal corrosion.

Item 2:

§ 195.11 What is a regulated rural gathering line and what requirements apply?

(b) Safety requirements. Each operator must prepare, follow, and maintain written procedures to carry out the requirements of this section. Except for the requirements in paragraphs (b)(2), (b)(3), (b)(9) and (b)(10) of this section, the safety requirements apply to all materials of construction.

(9) For steel pipelines, comply with subpart H of this part, except corrosion control is not required for pipelines existing on July 3, 2008 before July 3, 2011.

EnLink's procedures for complying with Subpart H of Part 195 were inadequate. Specifically, EnLink's procedures failed to provide any reference or guidance to evaluate the remaining strength of an internally corroded pipe.

During the inspection, EnLink's *Hazardous Liquid Pipeline Operation and Maintenance Manual* and *Corrosion Manual* were reviewed. It was found that there were no general references to the commonly used or accepted methods noted in § 195.587 (B31G, R-STRENG), nor were there specific references to any method utilized by EnLink's engineering or integrity group.

Therefore, EnLink's procedures for complying with Subpart H of Part 195 were inadequate.

EnLink Response:

As submitted in the previous EnLink response letter, the current EnLink Liquid Pipeline O&M Manual addresses evaluating the remaining strength of corroded pipe on page 148 in Section 11.1 - CORROSION CONTROL:

To determine the remaining strength of any corroded pipe, based on actual remaining wall thickness, further evaluations shall be made using techniques in the latest version of the ANSI/ASME B31G Manual for Determining the Remaining Strength of Corroded Pipelines and/or AGA Pipeline Research Committee Project PR3-805 (RSTRENG) or an alternative equivalent method of remaining strength calculations. These procedures apply to corroded regions that do not penetrate the pipe wall, subject to the limitations set out in the respective procedures.

Also, the current EnLink Hazardous Liquid Integrity Management Plan (LIMP), references B31G (RSTRENG) in Section 4.10.1 and in Section 4.10.3 on Page 31.

Item 3:

§ 195.11 What is a regulated rural gathering line and what requirements apply?

(b) Safety requirements. Each operator must prepare, follow, and maintain written procedures to carry out the requirements of this section. Except for the requirements in paragraphs (b)(2), (b)(3), (b)(9) and (b)(10) of this section, the safety requirements apply to all materials of construction.

(10) For steel pipelines, establish and follow a comprehensive and effective program to continuously identify operating conditions that could contribute to internal corrosion. The program must include measures to prevent and mitigate internal corrosion, such as cleaning the pipeline and using inhibitors. This program must be established before transportation begins or if the pipeline exists on July 3, 2008, before July 3, 2009.

EnLink's procedures for its program for internal corrosion of its regulated rural gathering line system were inadequate. Specifically, EnLink's *Hazardous Liquid Pipeline O&M Manual* was inadequate in its description of a process to continuously identify operating conditions that would contribute to internal corrosion. Additionally, EnLink's *Corrosion Manual*, Section 6, Internal Corrosion Control did not address hazardous liquid pipeline internal corrosion in detail.

During the inspection, the PHMSA inspector discussed EnLink's operating practices to identify conditions which could contribute to internal corrosion. EnLink personnel described a practice of running cleaning pigs (in-line cleaning tools) through the pipeline, and the inspector requested and subsequently reviewed records that documented the pigging activities. However, the *Hazardous Liquid Pipeline O&M Manual* did not provide a written description of a comprehensive program for cleaning the pipeline or the use of corrosion inhibitors.

The detailed requirements of the *Corrosion Manual* addressing internal corrosion control appeared to be applicable to natural gas pipeline systems only.

Therefore, EnLink's written procedures fail to establish a comprehensive and effective program to continuously identify operating conditions that could contribute to internal corrosion.

EnLink Response:

As in the previous EnLink Response to Item 1 above, the EnLink Corrosion Manual is currently under Committee review and will be provided to PHMSA as soon as it become official.

EnLink will provide PHMSA the revised Corrosion Manual within the 60-day period requested by PHMSA.

Thank You,



Cordell Theriot
Sr. DOT Specialist

Cc: Mike LeBlanc, Edwin Cormier, Ashleigh Strahler, Derrick Lamp, Prasanna Swamy, JW Riley, Katie Henry and Hagen Henley.