



Spire Inc.
700 Market
St. Louis, MO 63101

August 27, 2020

Mr. Allan C. Beshore
Director, Central
Pipeline and Hazardous Materials Safety Administration
901 Locust Street, Suite 480
Kansas City, Missouri 64106

Re: CPF-3-2020-5011M

Dear Mr. Beshore:

Spire has reviewed PHMSA's Notice of Amendment letter dated July 28, 2020, pertaining to the Highly Volatile Liquid (HVL) pipeline inspection completed in June 2019. Spire's response to the Notice of Amendment is enclosed.

Should you have any questions or need additional information regarding this matter, please contact me at (314) 349-2972, Mr. Bob Gardner at (205) 365-7846, Mr. Randy Wilson at (205) 326-2987 or Ms. Laura Kleckley at (205) 326-2680.

Sincerely,

Craig R. Hoferlin

Craig Hoferlin
Vice President, Operations Services

Enclosure

CC: George Godat
Dave Abernathy
Bob Gardner
Randy Wilson
Laura Kleckley

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.

Spire's O&M was inadequate because its procedures for operating and maintaining the pipeline system did not sufficiently address the requirements of subparts F and H. Specifically, Spire's O&M procedure, titled Pressure Testing of Highly Volatile Liquid (HVL) Mains NGL-14501M, dated December 31, 2018, was inadequate because it did not clearly identify what was applicable to an HVL pipeline versus a natural gas pipeline. Additionally, class locations were inappropriately referenced, maximum allowable operating pressure (MAOP) was used as opposed to maximum operating pressure (MOP), and there was an incorrect reference to low stress pressure testing that would not be allowed for an HVL pipeline. Furthermore, the procedure did not clearly identify what is required of a successful pressure test for an HVL pipeline under the Part 195 regulations. The procedure must be modified to delineate what is applicable in the O&M to HVLs; to remove reference to class locations; to appropriately reference MOP instead of MAOP; to remove the incorrect reference to a low stress pressure test on a HVL pipeline; and to identify what is required for a successful pressure test for a HVL pipeline.

Spire's O&M was also inadequate because Section 424 Pipeline Movement did not address how to prevent the movement of pipelines that carry HVLs where materials in the line section involved are joined by welding as required by § 195.424(c). Spire must amend its procedure to address how to prevent pipe movement in accordance with § 195.424(c).

Furthermore, Spire failed to have a procedure for inspection of pipelines when the pipeline could have been damaged by excavation activities. Spire's O&M Section 442 Damage Prevention refers to Appendix H to be used when pipe is damaged. However, the procedures in Appendix H are for mains, services, and appliances. Therefore, Spire must amend its procedure to include inspections when damage could have occurred due to excavation on HVL pipelines.

Finally, Spire's O&M procedure NGL-12000M Section 5.4.1 of the corrosion control standard is inadequate because it includes references to § 192.469 but does not include references to § 195.567. Spire must amend its procedure to reference § 195.567 for its HVL pipelines.

Company Response: Spire has corrected the inadequacies listed above in the Operation and Maintenance procedures. Spire will forward the applicable procedures by September 11, 2020 to PHMSA.

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

(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(2) Gathering of data needed for reporting accidents under Subpart B of this part in a timely and effective manner.

Spire's O&M manual is inadequate because it contained a previous version of the PHMSA accident report. An older version of the accident report had been embedded in the O&M Appendix C. This procedure has since been updated by the operator to link to the current PHMSA accident report information. The operator updated this during the inspection therefore no further action is needed.

Company Response: As stated above, Spire updated the Operation and Maintenance procedure during the inspection with the correct link to the current PHMSA accident report (DOT Form 7000-1).

3. §195.402 Procedural manual for operations, maintenance, and emergencies.

(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

Spire's Corrosion Control Standard in the O&M is inadequate because Sections 6.2, 6.3, 8.1 and Procedure NGL 2055 are inconsistent in regards inspection frequencies.

Spire's procedure NGL-12000M of the Corrosion Control Standard Section 5.3.3 of the O&M is inadequate because it does not provide clear steps when excess AC voltage is determined. It

states that readings in excess of 10 volts AC shall be referred to the Compliance Engineer for further review and remediation as appropriate. However, it is unclear from the procedures how the corrosion department and the compliance department will interface to remediate this condition should it be identified. During the field visit, a voltage reading was taken at Post 386 that was in excess of 10 volts AC. In discussion with the operator, it was unclear as to what steps that it would take pursuant to its O&M procedure. Therefore, Spire must amend its Corrosion

Control Standard procedure to adequately address how the corrosion department and compliance department will interact to ensure that any reading in excess of 10 volts will be remediated.

Company Response: Spire has updated its corrosion control standards in the Operation and Maintenance procedures to address the inspection frequencies and AC voltage procedures. Spire will forward the applicable sections to PHMSA by September 11, 2020.

4. §195.402 Procedural manual for operations, maintenance, and emergencies.

(f) Safety-related condition reports. The manual required by paragraph (a) of this section must include instructions enabling personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requirements of §195.55.

§195.55 Reporting safety-related conditions.

(a) Except as provided in paragraph (b) of this section, each operator shall report in accordance with § 195.56 the existence of any of the following safety-related conditions involving pipelines in service: . . .

(b) A report is not required for any safety-related condition that -

- (1) Exists on a pipeline that is more than 220 yards (200 meters) from any building intended for human occupancy or outdoor place of assembly, except that reports are required for conditions within the right-of-way of an active railroad, paved road, street, or highway, or that occur offshore or at onshore locations where a loss of hazardous liquid could reasonably be expected to pollute any stream, river, lake, reservoir, or other body of water;**
- (2) Is an accident that is required to be reported under § 195.50 or results in such an accident before the deadline for filing the safety-related condition report; or**
- (3) Is corrected by repair or replacement in accordance with applicable safety standards before the deadline for filing the safety-related condition report, except that reports are required for all conditions under paragraph (a)(1) of this section other than localized corrosion pitting on an effectively coated and cathodically protected pipeline.**

Spire's O&M Manual, Section 55 Reporting Safety-Related Conditions, is inadequate because it does not appropriately address the requirements of §195.55(b)(3). Spire's procedure does not adequately include the following exception of §195.55(b)(3), which is that a safety related condition report is not required when the condition "is corrected by repair or replacement in

accordance with the applicable safety standards before the deadline for filing the safety-related condition report". Additionally, §§ 195.55(b)(2) and (b)(3) were combined incorrectly in the procedure. Therefore, Spire must amend its O&M procedure to adequately address all requirements under 195.55 and separately reference the exceptions of §§ 195.55(b)(2) and (b)(3).

Company Response: Spire has updated the Operation and Maintenance procedure to adequately address the requirements in §195.55. Spire will forward the applicable procedure to PHMSA by September 11, 2020.

5. §195.452 Pipeline integrity management in high consequence areas.

**(b) What program and practices must operators use to manage pipeline integrity?
Each operator of a pipeline covered by this section must:**

(2) Include in the program an identification of each pipeline or pipeline segment in the first column of the following table not later than the date in the second column:

Pipeline Date

Category 1 December 31, 2001.

Category 2 November 18, 2002.

Category 3 Date the pipeline begins operation.

Spire's IMP did not include a process for the identification of Category 3 pipelines per §195.452(b)(2). While this HVL pipeline is not a Category 3 pipeline, Spire must amend its IMP to include the requirement for Category 3 pipeline segment identification.

Company Response: Spire has updated its HVL Integrity Management Plan to address the identification of Category 3 pipelines required in §195.452(b)(2). Spire will forward the applicable section of the Integrity Management Plan to PHMSA by September 11, 2020.

6. §195.505 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(a) Identify covered tasks;

Spire's written OQ program did not adequately identify covered tasks for the HVL pipeline system. While OQ task numbers and descriptions of tasks do exist, the program is written explicitly for natural gas pipeline qualifications. The OQ plan and the covered tasks associated have not been sufficiently developed for the HVL pipeline. Therefore, Spire must amend its written OQ program to adequately identify covered tasks for its HVL pipeline.

Company Response: Spire has developed an OQ program specific to the HVL pipeline. This program identifies covered tasks that are specific to the operation and maintenance of the HVL pipeline. Spire will forward the OQ plan and covered tasks list to PHMSA by September 11, 2020.

7. §195.591 In-Line inspection of pipelines.

When conducting in-line inspection of pipelines required by this part, each operator must comply with the requirements and recommendations of API Std 1163, Inline Inspection Systems Qualification Standard; ANSI/ASNT ILI-PQ, Inline Inspection Personnel Qualification and Certification; and NACE SP0102-2010, Inline Inspection of Pipelines (incorporated by reference, see §195.3). An in-line inspection may also be conducted using tethered or remote control tools provided they generally comply with those sections of NACE SP0102-2010 that are applicable.

Spire's IMP did not reference nor incorporated API Std 1163 as required by §195.591. During the inspection, PHMSA discussed ILI vendor contract requirements with the operator and the operator confirmed that API 1163 is not currently listed as a vendor contract requirement. Therefore, Spire must amend its IMP to reference the edition of API Std 1163 that is incorporated by reference in §195.591 regarding ILI inspection of pipelines.

Company Response: Spire has updated its HVL Integrity Management Plan to reference the current edition of API Std 1163 that is incorporated by reference in §195.591. Spire will forward the applicable Integrity Management plan sections to PHMSA by September 11, 2020.