



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

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

**NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER**

**VIA ELECTRONIC MAIL TO : scott.smith@spireenergy.com;
randy.wilson@spireenergy.com**

August 23, 2024

Mr. Scott Smith
President
Spire Storage West LLC
3773 Richmond Avenue, Suite 300
Houston, Texas 77046

CPF 5-2024-023-NOPV

Dear Mr. Smith:

From August 15 through 16, 2023, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected Spire Storage West LLC's (Spire), Ryckman Gas System WY near Evanston, Wyoming.

As a result of the inspection, it is alleged that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items inspected and the probable violations are:

1. §192.465 External corrosion control: Monitoring and remediation.

(a) Each pipeline that is under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of § 192.463. However, if tests at those

intervals are impractical for separately protected short sections of mains or transmission lines, not in excess of 100 feet (30 meters), or separately protected service lines, these pipelines may be surveyed on a sampling basis. At least 10 percent of these protected structures, distributed over the entire system must be surveyed each calendar year, with a different 10 percent checked each subsequent year, so that the entire system is tested in each 10-year period.

Spire failed to properly test its cathodic protection at least once per calendar year, but with intervals not to exceed 15 months, as required. During the inspection, Spire provided several records to demonstrate its compliance with the cathodic protection (CP) requirements outlined in 192 Appendix D. However, the documents furnished did denote that adequate testing of the CP on the pipeline was conducted as required by §192.465(a) for the calendar years of 2021 and 2022.

Specifically, of the documents reviewed by PHMSA for the calendar years of 2021, 2022 and 2023, only the 2023 annual CP survey included the current applied and voltage drop considered readings. The provided 2021 and 2022 annual CP surveys did not include applied current readings or readings with a voltage drop considered. Without considering voltage drop, it is not possible to determine the effective pipeline protective voltage.

Therefore, Spire failed to demonstrate adequate corrosion control monitoring as prescribed in §192.465(a) for the calendar years of 2021 and 2022.

2. §192.465 External corrosion control: Monitoring and remediation.

(a) ...

(b) Cathodic protection rectifiers and impressed current power sources must be periodically inspected as follows:

(1) Each cathodic protection rectifier or impressed current power source must be inspected six times each calendar year, but with intervals not exceeding 2 ½ months between inspections, to ensure adequate amperage and voltage levels needed to provide cathodic protection are maintained. This may be done either through remote measurement or through an onsite inspection of the rectifier.

Spire failed to inspect its cathodic protection rectifiers at the required interval of six times each calendar year, but with intervals not to exceed 2 ½ months, as required. A review of Spire's cathodic protection rectifier inspection records found a monitoring interval that exceeded the 2 ½ month limit on at least eight occasions: two times within 2021, three times in 2022, and three times in 2023.

Therefore, Spire failed to demonstrate adequate corrosion control monitoring as prescribed in §192.465(b)(1).

3. §192.475 Internal corrosion control: General.

(a) Corrosive gas may not be transported by pipeline, unless the corrosive effect of the gas on the pipeline has been investigated and steps have been taken to minimize internal corrosion.

Spire failed to neutralize the corrosive effect of the gas transported through the pipeline to minimize the effect on internal corrosion. During the inspection, Spire personnel verbally affirmed that a third-party contractor had implemented a sampling and neutralization program to mitigate the internal corrosion effects of the corrosive gas Spire transports through its pipelines, and provided its H₂S Removal Process. However, Spire could not provide any records verifying this procedure had been implemented.

Therefore, Spire failed to demonstrate adequate internal corrosion pipeline protection from corrosive gas as required in §192.475(a).

4. §192.477 Internal corrosion control: Monitoring.

If corrosive gas is being transported, coupons or other suitable means must be used to determine the effectiveness of the steps taken to minimize internal corrosion. Each coupon or other means of monitoring internal corrosion must be checked two times each calendar year, but with intervals not exceeding 7 ½ months.

Spire failed to monitor its internal corrosion coupons at least two times a year, at intervals not to exceed 7 ½ months, to measure the effect of corrosive gas. Spire presented testing records during the inspection for its internal corrosion coupons for the calendar years of 2019, 2020, and 2021. However, the records provided showed that coupon testing intervals exceeded the requirements of the pipeline safety regulations, with an average in-place coupon duration of 482 days.

Therefore, Spire failed to demonstrate adequate coupon testing as required in §192.477.

5. §192.481 Atmospheric corrosion control: Monitoring.

(a) Each operator must inspect and evaluate each pipeline or portion of the pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

Pipeline type:	Then the frequency of inspection is:
(1) Onshore other than a Service Line	At least once every 3 calendar years, but with intervals not exceeding 39 months.
(2) Onshore Service Line	At least once every 5 calendar years, but with intervals not exceeding 63 months, except as provided in paragraph (d) of this section.
(3) Offshore	At least once each calendar year, but with intervals not exceeding 15 months

Spire failed to conduct atmospheric corrosion inspections at least once every 3 calendar years, but with intervals not exceeding 39 months, as required. Specifically, during the PHMSA inspection, Spire provided the atmospheric corrosion records for the calendar year of 2022 but not for the calendar year of 2019 or any other years prior. Additionally, while Spire provided records of a 2022 atmospheric corrosion inspection at the Belle Butte, Canyon Creek, and Gem Stone facilities, and Wells 1A, 1B, 9A, 9B, 9C, 15, 34, 35, none of the documents provided by Spire included inspections of the aboveground pipes that connect the Belle Butte facility to the regulated injection/withdraw well flanges.

Therefore, Spire failed to demonstrate it performed atmospheric corrosion inspections at the required interval of every 3 calendar years, not to exceed 39 months.

6. §192.619 Maximum allowable operating pressure: Steel or plastic pipelines.

(a) No person may operate a segment of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure (MAOP) determined under paragraph (c), (d), or (e) of this section, or the lowest of the following...

Spire failed to operate its pipeline below MAOP as required by §192.619(a). During the inspection Spire provided pressure log data for seven pipeline monitoring points during the inspection period. However, the pressure records were missing 38 months between the calendar years of 2021 and 2023.

Therefore, Spire failed to operate their pipeline within MAOP limits as required by §192.619(a).

7. §192.739 Pressure limiting and regulation stations: Inspection and testing.

(a) Each pressure limiting station, relief device (except rupture discs), and pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months, but at least once each calendar year, to inspections and tests to determine that it is—

(1) In good mechanical condition;

(2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;

(3) Except as provided in paragraph (b) of this section, set to control or relieve at the correct pressure consistent with the pressure limits of § 192.201(a); and

(4) Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.

Spire failed to test its Pressure Safety Valves (PSVs) at an interval not to exceed 15 months but at least once per calendar year per §192.739. Spire presented PSV testing data during the inspection. However, a review of those records for the calendar years of 2020, 2021, and 2022 revealed that only one of the five PSVs located on Spire's pipeline met the testing interval described in 192.739. Without the test records for the other four PSVs, PHMSA cannot determine if Spire performed the required annual inspection on those PSVs as required.

Therefore, Spire failed to demonstrate it inspected its PSVs during the interval as required by §192.739(a).

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$266,015 per violation per day the violation persists, up to a maximum of \$2,660,135 for a related series of violations. For violation occurring on or after January 6, 2023 and before December 28, 2023, the maximum penalty may not exceed \$257,664 per violation per day the violation persists, up to a maximum of \$2,576,627 for a related series of violations. For violation occurring on or after March 21, 2022 and before January 6, 2023, the maximum penalty may not exceed \$239,142 per violation per day the violation persists, up to a maximum of \$2,391,412 for a related series of violations. For violation occurring on or after May 3, 2021 and before March 21, 2022, the maximum penalty may not exceed \$225,134 per violation per day the violation persists, up to a maximum of \$2,251,334 for a related series of violations. For violation occurring on or after January 11, 2021 and before May 3, 2021, the maximum penalty may not exceed \$222,504 per violation per day the violation persists, up to a maximum of \$2,225,034 for a related series of violations. For violation occurring on or after July 31, 2019 and before January 11, 2021, the maximum penalty may not exceed \$218,647 per violation per day the violation persists, up to a maximum of \$2,186,465 for a related series of violations. For violation occurring on or after November 27, 2018 and before July 31, 2019, the maximum penalty may not exceed \$213,268 per violation per day, with a maximum penalty not to exceed \$2,132,679.

We have reviewed the circumstances and supporting documentation involved for the above probable violations and recommend that you be preliminarily assessed a civil penalty of \$87,200 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$ 20,800
2	\$ 23,000
3	\$ 20,400
5	\$ 23,000

Proposed Compliance Order

With respect to Item 5, pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Spire Storage West LLC. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Warning Item

With respect to Item 4, 6, and 7, 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 promptly correct these items. Failure to do so may result in additional enforcement action.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement Proceedings*. Please refer to this document and note the response options. All material you submit in response to this enforcement action may be 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).

Following your receipt of this Notice, you have 30 days to respond as described in the enclosed *Response Options*. If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order. If you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from receipt of this Notice. The Region Director may extend the period for responding upon a written request timely submitted demonstrating good cause for an extension.

In your correspondence on this matter, please refer to **CPF 5-2024-023-NOPV**, and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Dustin Hubbard
Director, Western Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Enforcement Proceedings

cc: PHP-60 Compliance Registry
PHP-500 J. Long (#23-264166)

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Spire Storage West LLC a Compliance Order incorporating the following remedial requirements to ensure the compliance of Spire Storage West LLC with the pipeline safety regulations:

- A. In regard to Item 5 of the Notice pertaining to atmospheric corrosion inspection, Spire Storage West LLC must conduct an atmospheric corrosion inspection on the aboveground pipes that connect the Belle Butte facility to the regulated injection/withdraw well flanges within **60** days of receipt of the Final Order.
- B. It is requested (not mandated) that Spire Storage West LLC maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Dustin Hubbard, Director, Western Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.