



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628
609.771.7800

WARNING LETTER

VIA ELECTRONIC MAIL TO: Scott.Hallam@bwpipelines.com

August 14, 2025

Mr. Scott Hallam
President, Chief Executive Officer
Texas Gas Transmission, LLC
9 Greenway Plaza, Suite 2800
Houston, Texas 77046

CPF 1-2025-016-WL

Dear Mr. Hallam:

From June 4 through June 6, 2024, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code (U.S.C.) inspected Boardwalk Pipeline's (Boardwalk)¹ records for its Leesville and Wilfred depleted aquifer underground natural gas storage facilities in Lawrence County and Sullivan County, Indiana.

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

1. **§ 192.12 Underground natural gas storage facilities.**
 - (a) . . .
 - (b) *Depleted hydrocarbon and aquifer reservoir UNGSFs.*
 - (1) **Each UNGSF that uses a depleted hydrocarbon reservoir or an aquifer reservoir for natural gas storage and was constructed after July 18, 2017, must meet all provisions of API RP 1171 (incorporated by reference, see § 192.7), and paragraphs (c) and (d) of this section, prior to commencing operations.**

Boardwalk failed to meet all provisions of American Petroleum Institute's Recommended Practice 1171 (API RP 1171) in accordance with section 192.12(b)(1). Specifically, Boardwalk failed to

¹ Boardwalk is a subsidiary of Texas Gas Transmission, LLC.

determine the location of groundwater and hydrocarbon bearing zones (in addition to the storage zone) penetrated by the wells to be abandoned and the condition of the well's casing and cement across those zones, and failed to use an adequate cement plug during the abandonment of two wells, Wilfred 2645 and Wilfred 5904, in accordance with section 6.7.2 of API RP 1171.

API RP 1171, in section 3.1.10, defines a "cement plug" as "[c]ement that is placed in the wellbore with a defined bottom and top to achieve zonal isolation within the wellbore and to prevent communication of fluids between zones by providing a mechanical seal." Section 6.7.2 in API RP 1171 states that "[t]he operator shall use cement plugs (see 6.4.3) and/or mechanical plugs to isolate the storage zone from fluid migration," and that "the operator shall determine the location of groundwater and hydrocarbon bearing zones (in addition to the storage zone) penetrated by the well to be abandoned, and the condition of the well's casing and cement across those zones, to prevent communication between any of those zones during and after plugging of the well." Section 6.7.2 also states that "[t]he operator shall verify the presence and location of a cement plug after the plug is set and has reached a sufficient compressive strength[.]"

Boardwalk's procedure *TL1529 Plugging and Abandoning a Well* required that Boardwalk "[r]un appropriately rated and sized cement pump string into the well close to bottom and tag plug to confirm depth."

Boardwalk abandoned wells Wilfred 2645 and Wilfred 5904 in 2021. For Wilfred 2645 and Wilfred 5904, the cement was pumped into each well in one process from storage sand to surface without allowing it to set across the storage formation. Thereby, Boardwalk failed to verify the presence and location of the cement plug across the storage formation to show it had isolated the storage zone from fluid migration. At Wilfred, since Boardwalk ran cement from the storage formation to surface in a single flow, Boardwalk failed to use cement plugs that verified the cement at the storage zone had achieved zonal isolation within the wellbore and was able to prevent communication of fluids between zones. As noted in API RP 1171, a cement plug must have a defined bottom and top to achieve zonal isolation and a mechanical seal. This requires separate concrete pours along with verifying the presence, location, and sufficient compressive strength of the cement plug that isolates the storage zone.

In addition, Boardwalk failed to determine the location of the groundwater and hydrocarbon bearing zones prior to the abandonment of four wells: Leesville 5710, Leesville 5884, Wilfred 2645, and Wilfred 5904. The well schematics did not explicitly show all groundwater and hydrocarbon bearing zones. Boardwalk stated that they did not determine the location of groundwater and hydrocarbon bearing zones and documents pertaining to this were not provided when requested. Boardwalk also failed to conduct the casing and cement evaluations through the groundwater, hydrocarbon, and storage zones prior to abandoning the four wells in the Leesville and Wilfred storage fields. These are tools to access and prevent communication between any of zones during and after plugging of the well. Boardwalk stated that the casing and cement evaluations were not completed and documents pertaining to this were not provided when requested.

Therefore, Boardwalk failed to meet all provisions of API RP 1171 in accordance with section 192.12(b)(1).

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$272,926 per violation per day the violation persists, up to a maximum of \$2,729,245 for a related series of violations. For violation occurring on or after December 28, 2023 and before December 30, 2024, the maximum penalty may not 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 \$2,391,142 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.

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 correct the item identified in this letter. Failure to do so may result in Texas Gas Transmission, LLC being subject to additional enforcement action.

No reply to this letter is required. If you choose to reply, in your correspondence please refer to **CPF 1-2025-016-WL**. Be advised that all material you submit in response to this enforcement action is subject to being 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).

Sincerely,

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