



U.S. Department
of Transportation

Pipeline and
Hazardous Materials
Safety Administration

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

NOTICE OF AMENDMENT

OVERNIGHT EXPRESS DELIVERY

March 19, 2024

Mr. Dan Krueger
President and Chief Executive Officer
Bluewater Gas Storage, LLC
231 W. Michigan Street, P468
Milwaukee, Wisconsin 53203

CPF 1-2024-017-NOA

Dear Mr. Krueger:

From July 11, 2023 through July 13, 2023 of the on-site inspection, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code (U.S.C.) inspected Bluewater Gas Storage, LLC's (Bluewater Gas Storage) procedures for the Columbus 3 and Kimball 27 Underground Natural Gas Storage (UNGS) facilities in St. Clair County, Michigan.

As a result of the inspection, PHMSA has identified the apparent inadequacies found within Bluewater Gas Storage's plans or procedures. The items inspected and the inadequacies are described below:

1. 49 CFR § 192.12 Underground natural gas storage facilities.

(a)

(c) *Procedural manuals.* Each operator of a UNGSF must prepare and follow for each facility one or more manuals of written procedures for conducting operations, maintenance, and emergency preparedness and response activities under paragraphs (a) and (b) of this section. Each operator must keep records necessary to administer such procedures and review and update these manuals at intervals not exceeding 15 months, but at least once each calendar year. Each operator must keep the appropriate parts of these manuals accessible at locations where UNGSF work is being performed. Each operator

must have written procedures in place before commencing operations or beginning an activity not yet implemented.

Bluewater Gas Storage's written procedures for conducting operations and maintenance activities were inadequate to ensure safe operation of a pipeline facility. Specifically, Bluewater Gas Storage's OM608 Valves Manual did not include procedures outlining the replacement process for valves pursuant to API 1171, Section 9.3.2.

API 1171, Section 9.3.2 requires that "[t]he valves shall be maintained, repaired, or replaced in accordance with the operator's valve maintenance program for isolation valves."

During the inspection, Bluewater Gas Storage's OM608 Valves Manual was reviewed and determined to not address the method in which valves shall be replaced within their valve maintenance program, such as a procedure specifying how valve replacements, or incidental repairs to valves, are to be performed and recorded.

Therefore, Bluewater Gas Storage's OM608 Valves Manual was inadequate. Bluewater Gas Storage must revise its written procedures to address valve replacement within its valve maintenance program.

2. 49 CFR § 192.12 Underground natural gas storage facilities.

(a)

(c) *Procedural manuals.* Each operator of a UNGSF must prepare and follow for each facility one or more manuals of written procedures for conducting operations, maintenance, and emergency preparedness and response activities under paragraphs (a) and (b) of this section. Each operator must keep records necessary to administer such procedures and review and update these manuals at intervals not exceeding 15 months, but at least once each calendar year. Each operator must keep the appropriate parts of these manuals accessible at locations where UNGSF work is being performed. Each operator must have written procedures in place before commencing operations or beginning an activity not yet implemented.

Bluewater Gas Storage's written procedures for conducting operations and maintenance activities were inadequate to ensure safe operation of a pipeline facility. Specifically, Bluewater Gas Storage's procedure, Standard 222 - Well Integrity Inspection, failed to include sufficient detail on the options for type and timing of the next mechanical integrity tests based on the results of initial and prior mechanical integrity testing.

API 1171, Section 9.3.1 requires that "[a]ctive well mechanical integrity evaluations shall include initial and subsequent evaluations as determined using the risk assessment and the information derived from the initial evaluation."

During the inspection, Bluewater Gas Storage's Standard 222 - Well Integrity Inspection was reviewed and found to lack adequate specificity and established criteria addressing the process for

determining the frequency and the methods of subsequent mechanical integrity tests, which are to be determined after review of initial and prior mechanical integrity testing.

Therefore, Bluewater Gas Storage's Standard 222 - Well Integrity Inspection was inadequate. Bluewater Gas Storage must revise its Well Integrity Inspection to specify process for the next mechanical integrity test.

3. 49 CFR § 192.12 Underground natural gas storage facilities.

(a) ...

(d) *Integrity management program--*

(1) ...

(4) *Integrity management procedures and recordkeeping.* Each UNGSF operator must establish and follow written procedures to carry out its integrity management program under API RP 1171 (incorporated by reference, see § 192.7), section 8 ("Risk Management for Gas Storage Operations"), and this paragraph (d). The operator must also maintain, for the useful life of the UNGSF, records that demonstrate compliance with the requirements of this paragraph (d). This includes records developed and used in support of any identification, calculation, amendment, modification, justification, deviation, and determination made, and any action taken to implement and evaluate any integrity management program element.

Bluewater Gas Storage's written procedures for carrying out its integrity management program were inadequate to ensure safe operation of a pipeline facility. Specifically, Bluewater Gas Storage's written integrity management procedures failed to include a requirement or process for the baseline risk assessments for all reservoirs and wells for each UNGSF to be completed in accordance with the timeframes and prioritization required by § 192.12(d)(2).

Section 192.12(d)(2) requires that "[n]o later than March 13, 2024, each UNGSF operator must complete the baseline risk assessments of all reservoirs and caverns, and at least 40% of the baseline risk assessments for each of its UNGSF wells (including wellhead assemblies), beginning with the highest-risk wells, as identified by the risk analysis process. No later than March 13, 2027, an operator must complete baseline risk assessments on all its wells (including wellhead assemblies)." Section 192.12(d)(4) specifies, in part, that each UNGSF operator must establish and follow written procedures to carry out its integrity management program under this paragraph (d), to include the requirements addressing the relevant risk assessment deadlines and thresholds cited above.

During the inspection, Bluewater Gas Storage's Standard 222 - Well Integrity Inspection Standard was reviewed and determined to not address the requirement that the baseline assessment for all reservoirs and 40% of the wells shall be completed by March 13, 2024 and 100% of the wells by March 13, 2027.

Therefore, Bluewater Gas Storage's Standard 222 - Well Integrity Inspection Standard was inadequate. Bluewater Gas Storage must revise its Well Integrity Inspection Standard to address

requiring baseline risk assessments for all reservoirs and wells by the dates specified above.

4. 49 CFR § 192.12 Underground natural gas storage facilities.

(a) ...

(d) *Integrity management program--*

(1) ...

(4) *Integrity management procedures and recordkeeping.* Each UNGSF operator must establish and follow written procedures to carry out its integrity management program under API RP 1171 (incorporated by reference, see § 192.7), section 8 ("Risk Management for Gas Storage Operations"), and this paragraph (d). The operator must also maintain, for the useful life of the UNGSF, records that demonstrate compliance with the requirements of this paragraph (d). This includes records developed and used in support of any identification, calculation, amendment, modification, justification, deviation, and determination made, and any action taken to implement and evaluate any integrity management program element.

Bluewater Gas Storage's written procedures for carrying out its integrity management program were inadequate to ensure safe operation of a pipeline facility. Specifically, Bluewater Gas Storage's procedure Standard 217 - Storage Risk Management Plan failed to require that the interval for risk assessments for each reservoir, cavern, and well be determined using the results from earlier assessments and updated risk analyses pursuant to § 192.12(d)(3).

Section 192.12(d)(3) requires that "[t]he operator must determine the appropriate interval for risk assessments under API RP 1171 (incorporated by reference, see § 192.7), subsection 8.7.1, and this paragraph (d) for each reservoir, cavern, and well, using the results from earlier assessments and updated risk analyses. The re-assessment interval for each reservoir, cavern, and well must not exceed seven years from the date of the baseline assessment for each reservoir, cavern, and well."

During the inspection, Bluewater Gas Storage's Standard 217 - Storage Risk Management Plan was reviewed and found to require in Section 217.7.2 that a review and update to the risk assessment will take place at least every three years. Bluewater Gas Storage's Standard 217 - Storage Risk Management Plan did not require that the appropriate interval for risk assessments be defined using the results from earlier assessments and updated risk analyses, as is specified in § 192.12(d)(3).

Therefore, Bluewater Gas Storage's Standard 217 - Storage Risk Management Plan was inadequate. Bluewater Gas Storage must revise its Storage Risk Management Plan to address the inadequacy outlined above.

Response to this Notice

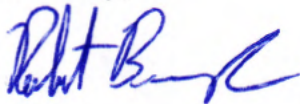
This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.206. Enclosed as part of this Notice is a document entitled Response Options for Pipeline Operators in Enforcement Proceedings.

Please refer to this document and note the response options. 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).

Following the receipt of this Notice, you have 30 days to submit written comments, revised procedures, or a request for a hearing under § 190.211. 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 an Order Directing Amendment. If your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.206). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 30 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that Bluewater Gas Storage maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Robert Burrough, Director, Eastern Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 1-2024-017-NOA** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

A handwritten signature in blue ink, appearing to read "Robert Burrough", is positioned above the printed name.

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

Enclosure: Response Options for Pipeline Operators in Enforcement Proceedings