

NOTICE OF AMENDMENT

VIA ELECTRONIC MAIL TO: Mathieu.Fournier@rockpointgs.com

November 19, 2021

Mr. Mathieu Fournier
Manager, Reservoir Engineering
Engineering & Operations
Lodi Gas Storage, LLC
400 - 607 8th Ave SW
Calgary, AB T2P 0A7

CPF 1-2021-067-NOA

Dear Mr. Fournier:

From September 15, 2020 through September 18, 2020, California Geologic Energy Management Division (CalGEM), acting as an agent for the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected procedures for Lodi Gas Storage, LLC's (LGS) Lodi and Kirby Hill Underground Natural Gas Storage Facilities near Acampo, California and Birds Landing, California, respectively.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within LGS's procedures, as described below:

1. § 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.

LGS's written procedures for conducting operations, maintenance, and emergency preparedness and response activities were inadequate to ensure safe operation of a pipeline facility. Specifically, the procedures failed to address construction activities discussed in API RP 1171, Section 6 and incorporated by reference under § 192.12(b), as required by § 192.12(c).¹

During the inspection, LGS's procedures for conducting operations, maintenance, and emergency preparedness and response activities were reviewed. Based upon this review, it was determined that no procedures had been developed for well construction work. This was despite the fact that LGS had provided construction notifications for multiple wells that were planned to be plugged and abandoned, and for other well work done pursuant to API RP 1171, Sections 6.6 and 6.7.²

Therefore, LGS's written procedures, required by § 192.12(c), were inadequate. LGS must revise its procedures to address the well construction activities described in API RP 1171, Section 6.

2. § 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.

LGS's written procedures for carrying out its integrity management program were inadequate to ensure safe operation of a pipeline facility. Specifically, the procedures failed to address threat

¹ API RP 1171, Section 6 discusses construction activities such as construction of new wells, plugging and abandoning wells, recompletion of wells by plugback, kickoff and drilling of a new horizontal well, and workovers. *See, e.g.*, API RP 1171, Section 6.6 Well Remediation, 6.6.1 General (advising operators that, "[A] well identified as having compromised mechanical integrity shall be evaluated and responsive action implemented within a timeframe and by method(s) determined by the operator and corresponding to the severity of the integrity risk."); *Id.*, at Section 6.7 Well Closure (Plugging and Abandonment), 6.7.1 General (advising operators that they "shall design a well abandonment for long-term isolation of the storage zone in order to prevent fluid flow between the storage zone and any other penetrated zone and the surface.").

² Construction notifications on file with PHMSA.

and hazard interactions as required by API RP 1171, Section 8.3.2.³

During the inspection, LGS's *Risk Management Plan for the Wells and Reservoirs of the Lodi Underground Gas Storage Project, dated 3/31/2019* (RMP) procedure was reviewed. Section 5 of the RMP discussed threats and hazards. However, it did not include an assessment of threat and hazard interactions. LGS was unable to provide any procedures which addressed threat and hazard interactions.

Therefore, LGS's written integrity management procedures, required by § 192.12(d)(4), were inadequate. LGS must revise its procedures to address threat and hazard interactions.

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 Lodi Gas Storage, LLC 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, 840 Bear Tavern Road, Suite 300, West Trenton, NJ 08628. In correspondence concerning this matter, please refer to **CPF 1-2021-067-NOA** and, for each document you submit, please provide a copy in electronic format whenever possible. Smaller

³ API RP 1171, Section 8.3.2 Data Sources

The operator shall use available information such as performance data collected through the field history, operations and maintenance (O&M) activities, geotechnical data such as well logs, engineering data, and completion reports to determine susceptibility to threat and hazard-related events and to assess threat and hazard interaction.

files may be emailed to robert.burrough@dot.gov. Larger files should be sent on USB flash drive accompanied by the original paper copy to the Eastern Region Office.

Sincerely,

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

Enclosure: Response Options for Pipeline Operators in Enforcement Proceedings