

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



June 19, 2024

Mr. Darrell Hall
Vice President of Operations
Caliche Development Partners II, LLC
919 Milam St. Suite 2425
Houston, TX 77002

GI-2023-12-CVS-39-01ABC

SUBJECT: SED's Closure Letter for General Order (GO) 112-F Gas Inspection of Central Valley Gas Storage

Dear Mr. Hall,

The Safety and Enforcement Division (SED) of the California Public Utilities Commission reviewed Central Valley Gas Storage's (CVGS) response letter dated May 28, 2024, for the findings identified during the 2023 General Order 112-F inspection of CVGS's facilities. The inspection included a review of CVGS's records for the period of 2018 through 2022, as well as a representative field sample of the CVGS's facilities from Dec 18 to Dec 21, 2023.

Enclosed is a summary of SED's inspection findings, CVGS's response to SED's findings, and SED's evaluation of CVGS's response to the findings.

This letter serves as the official closure for the 2023 GO 112-F Inspection of CVGS's facilities.

If you have any questions, please contact Yi (Rocky) Yang at (415) 940-8639 or by email at yi.yang@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Matthewson Epuna".

Matthewson Epuna
Program & Project Supervisor
Gas Safety & Reliability Branch
Safety and Enforcement Division

cc:

Dennis Chappell, CVGS Plant Manager
Terence Eng, SED/GSRB
Claudia Almengor, SED/GSRB
Yi Yang, SED/ESRB

Enclosure: Post-Inspection Written Preliminary Findings

Post-Inspection Written Preliminary Findings

Dates of Inspection: 12/18/2023 – 12/21/2023

Operator: CENTRAL VALLEY GAS STORAGE, LLC

Operator ID: 32603 (primary)

Inspection Systems: Central Valley Gas Storage Transmission

Assets (Unit IDs) with results in this report: Central Valley Gas Storage (86918)

System Type: GT

Inspection Name: 2023 Central Valley Gas Storage Standard Transmission

Lead Inspector: Yi Yang

Operator Representative: Dennis Chappell

Unsatisfactory Results

1. Facilities and Storage : Compressor Station System Protection (FS.CSSYSPROT)

Maintenance and Operations : Gas Pipeline Overpressure Protection (MO.GMOPP)

Question Title, ID Compressor Station Design/Construction - Pressure Relief, FS.CSSYSPROT.CMPRELIEF.R

Question 19. Do records document with adequate detail that all inspection and testing of compressor station pressure relief devices with the exception of rupture disks have occurred at the required interval?

References 192.709(b) (192.709(c), 192.731(a), 192.731(b), 192.731(c))

Assets Covered Central Valley Gas Storage (86918 (39))

Question Title, ID Pressure Limiting and Regulating Stations Capacity of Relief Devices, MO.GMOPP.PRESSREGCAP.R

Question 4. Do records indicate testing or review of the capacity of each pressure relief device at each pressure limiting station and pressure regulating station as required?

References 192.709(c) (192.743(a), 192.743(b), 192.743(c))

Assets Covered Central Valley Gas Storage (86918 (39))

Issue Summary SED reviewed the Pressure Safety Valve (PSV) relief valve inspection records for 2018-2022. The capacity review records for all relief valves in 2022 were missing.

49 CFR Part 192, Section 192.731(a) States:

"Except for rupture discs, each pressure relieving device in a compressor station must be inspected and tested in accordance with 192.739 and 192.743, must be operated periodically to determine that it opens at the correct set pressure".

Furthermore, Part 192 Section 192.743 states:

- (a) *Pressure relief devices at pressure limiting stations and pressure regulating stations must have sufficient capacity to protect the facilities to which they are connected. Except as provided in § 192.739(b), the capacity must be consistent with the pressure limits of § 192.201(a). This capacity must be determined at intervals not exceeding 15 months, but at least once each calendar year, by testing the devices in place or by review and calculations.*

CVGS failed to provide 2022 capacity review records for all relief valves. Therefore, CVGS committed probable violations of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192. 731(a) and 192.743(a).

CVGS's response:

Relief valve testing was completed in July 2022. Capacity review form 7.02C was completed on 12/27/2023. CVGS completed Relief valve testing in July 2023 and completed Form 7.02C in August 2023. CVGS will continue to comply with the O&M manual.

SED's Conclusion:

SED reviewed CVGS's response regarding its Relief Valve Capacity review records and its confirmation that the relief valve has sufficient capacity. The Relief Valve Capacity review is required to be performed within the compliance window. SED accepts CVGS's remedial actions and may review these records during future inspections.

Concerns

1. Facilities and Storage: Compressor Station System Protection (FS.CSSYSROT)

Question Title, ID Compressor Station - Gas Detection and Alarm System, FS.CSSYSROT.CMPGASDETOM.R

Question 25. Do records document that all compressor station gas detection and alarm systems are being maintained and tested as required?

References 192.709(c) (192.736(c), 192.736(b))

Assets Covered Central Valley Gas Storage (86918 (39))

Issue Summary CVGS's gas detection device inspection record's cover page states "Gas detection inspection interval: At least 4 times each calendar year, not to exceed 4.5 months".

However, CVGS's O&M Procedure 10.03 Section 5.2 states "Maintain each gas detection and alarm system as recommended by manufacture(s) of the equipment, at intervals not to exceed one year".

The gas detection device IR4000S and IR400 made by General Monitors does not have manufacturer recommended maintenance frequency.

There is a conflict between CVGS's O&M procedure and the gas detection device inspection record's cover page regarding the inspection frequency of gas detection devices. CVGS should establish a consistent inspection frequency for its gas detection device and maintain the required documentation.

CVGS's Response:

CVGS updated its Enterprise Asset Management (EAM) database to an annual inspection requirement to match and be consistent with CVGS's O&M procedure.

SED's Conclusion:

SED accepts CVGS's response.

2. Maintenance and Operations: Gas Pipeline Abnormal Operations (MO.GOABNORMAL)

Question Title, ID Abnormal Operations, MO.GOABNORMAL.ABNORMAL.R

Question 2. Did personnel respond to indications of abnormal operations as required by the process?

References 192.605(a) (192.605(c)(1))

Assets Covered Central Valley Gas Storage (86918 (39))

Issue Summary One of CVGS's Gas detector devices malfunctioned on 6/27/2020. The CVGS's Abnormal Operation Report stated the preventive actions planned/taken: "Need to research for more information". CVGS did not provide information on specific actions it took to address the issue. SED is concerned that the malfunctioning devices may not be repaired timely.

CVGS's Response:

The attached time stamp for the instrument shows the repair for the Gas Detector was completed in less than 5 hours on 6/27/2020, a Saturday. Please see the attached showing the alarm came in at approximately 9 am and it was repaired at 2:25pm. The check box indicating timely repair on AOC form was checked after the audit.

Please see the attached file titled, "Check Box completed 5 hours to repair"

SED's Conclusion:

SED has reviewed the document provided and accepts CVGS's response.

3. Maintenance and Operations : Gas Pipeline Abnormal Operations (MO.GOABNORMAL)

Question Title, ID Abnormal Operations Review, MO.GOABNORMAL.ABNORMALREVIEW.R

Question 6. Do records indicate periodic review of work done by operator personnel to determine the effectiveness of the abnormal operation processes and corrective action taken where deficiencies are found?

References 192.605(a) (192.605(c)(4))

Assets Covered Central Valley Gas Storage (86918 (39))

Issue Summary One of CVGS's Gas detector devices malfunctioned on 6/27/2020. The Review of Personnel Response and Determination of Effectiveness of the Procedure box was not checked for the AOC event.

CVGS should complete the Abnormal Operations Report properly to determine the effectiveness of the abnormal operation processes and corrective action taken.

CVGS's Response:

The form was revised after the audit; please see excerpt below. Training was held with Operations staff on completing the form properly; please see attached training sign-in sheet in Attachment 3.

SED's Conclusion:

SED accepts CVGS's response.

4. Time-Dependent Threats: External Corrosion - CP Monitoring (TD.CPMONITOR)

Question Title, ID Rectifiers or other Impressed Current Sources, TD.CPMONITOR.CURRENTTEST.O

Question 8. Are impressed current sources properly maintained and are they functioning properly?

References 192.465(b)

Assets Covered Central Valley Gas Storage (86918 (39))

Issue Summary The rectifier at the compressor station was rated 40V/20A. SED field inspection observed that CVGS had it running at 41V, 9A.

CVGS should operate the rectifier within the manufacturer's ratings to prevent an abnormal operating condition.

CVGS's Response:

CVGS is monitoring Rectifier output per Corrosion Compliance Manager. The higher voltage is not a concern and an Anode bed will be replaced based on Corrosion Technicians recommendations at a later date.

SED's Conclusion:

SED accepts CVGS's response.

5. Time-Dependent Threats: External Corrosion - CP Monitoring (TD.CPMONITOR)

Question Title, ID Interference Currents, TD.CPMONITOR.INTFRCURRENT.O

Question 22. Are areas of potential stray current identified, and if found, the detrimental effects of stray currents minimized?

References 192.473(a)

Assets Covered Central Valley Gas Storage (86918 (39))

Issue Summary SED requested CVGS's staff to perform a rectifier "instant on and off" read on one of its pipelines at the 401 Metering station. SED noted that the CVGS's pipeline was electrically connected to PG&E's pipeline. CVGS should continue to monitor for current interference on its pipeline.

CVGS's Response:

Isolation Kit being investigated for future repairs. CP expert confirmed protection is adequate at this time.

SED's Conclusion:

SED accepts CVGS's response.

6. Time-Dependent Threats : External Corrosion - Coatings (TD.COAT)

Question Title, ID New Buried Pipe Coating Application, TD.COAT.NEWPIPEINSTALL.R

Question 5. Do records document that acceptable external protective coating materials have been used and the application and inspection was done in accordance with the written procedures?

References 192.491(c) (192.461(c), 192.461(d), 192.461(e), 192.483(a), 192.9(f)(1), 192.452, 192.453, 192.491)

Assets Covered Central Valley Gas Storage (86918 (39))

Issue Summary SED reviewed pipeline installation records for a Tee at the storage well pad's header that was installed in August 2021. CVGS' coating procedure for the installed pipe required 14-16 mil of standard coating material.

However, CVGS's Pipeline Inspection and Repair Report of Partially Exposed Pipe record was not filled out completely. CVGS did not document the coating used for the project matched the CVGS's coating standards requirement. CVGS should fill out its inspection reports completely and document all required parameters.

CVGS's Response:

Photos of the work attached appear to show proper coating. Also reaching out to installer to verify installation. Please see Pipeline Inspection and Repair Report and before and after photos attached.

SED's Conclusion:

SED accepts CVGS's response.