

## PUBLIC UTILITIES COMMISSION

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September 30, 2024

GI-2024-07-CVS-39-03-04-05-06

Mr. Darrell Hall ([dhall@calichestorage.com](mailto:dhall@calichestorage.com))  
Vice President of Operations  
Central Valley Gas Storage  
919 Milam St., Suite 2425  
Houston, TX 77002

**SUBJECT: General Order 112-F Inspection of Central Valley Gas Storage Operations, Maintenance, and Emergency Plans and Public Awareness and Anti-Drug and Alcohol Misuse Programs**

Dear Mr. Hall:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a General Order 112-F inspection of Central Valley Gas Storage's (CVGS) programs on July 8 – July 19, 2024. The inspection included a review of CVGS's Operations & Maintenance Plan, Emergency Plan, Public Awareness Plan, and Drug & Alcohol Misuse Program. The inspection included a review of CVGS's relevant records and procedures for the period of 2020 through 2023, inclusive.

SED's findings are noted in the Post-Inspection Written Preliminary Findings (Summary) which is enclosed with this letter. The Summary reflects only those particular records and pipeline facilities that SED inspected during the inspection. SED discovered four (4) violations and three (3) concerns during the inspection.

Within 30 days of your receipt of this letter, please provide a written response indicating the measures taken by CVGS to address the concerns noted in the Summary.

If you have any questions, please contact Mohammad Nouredine at (916) 208-2965 or by email at [Mohammad.nouredine@cpuc.ca.gov](mailto:Mohammad.nouredine@cpuc.ca.gov).

Sincerely,

Terence Eng, P.E.  
Program Manager  
Gas Safety and Reliability Branch  
Safety and Enforcement Division

Enclosure: Post-Inspection Written Preliminary Findings

cc: Chad Gavino, CVGS West Safety Manager ([cgavino@cvgs-storage.com](mailto:cgavino@cvgs-storage.com))  
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# Post-Inspection Written Preliminary Findings

**Dates of Inspection:** 07/08/2024 – 07/19/2024

**Operator:** CENTRAL VALLEY GAS STORAGE (CVGS), LLC

**Operator ID:** 32603

**Inspection Systems:** Operations & Maintenance Plan, Emergency Plan, Public Awareness Plan, and Drug & Alcohol Misuse Prevention Program

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

**System Type:** GT

**Inspection Name:** 2024 CVGS Program Audit and 2024 CVGS Drug and Alcohol Audit

**Lead Inspector:** Mohammad Nouredine

**Operator Representative:** Chad Gavino (CVGS West Safety Manager)

## Unsatisfactory Results

### Emergency Preparedness and Response : Emergency Response (EP.ERG)

Question Title, ID Notification of Potential Rupture, EP.ERG.NOTIFPOTRUPTURE.P

Question 22. Does the operator have procedures to identify and notify operator personnel of a potential rupture?

References 192.635

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

Issue Summary Title 49 CFR §192.635 states:

*(a) As used in this part, a "notification of potential rupture" refers to the notification of, or observation by, an operator (e.g., by or to its controller(s) in a control room, field personnel, nearby pipeline or utility personnel, the public, local responders, or public authorities) of one or more of the below indicia of a potential unintentional or uncontrolled release of a large volume of gas from a pipeline:*

*(1) An unanticipated or unexplained pressure loss outside of the pipeline's normal operating pressures, as defined in the operator's written procedures. The operator must establish in its written procedures that an unanticipated or unplanned pressure loss is outside of the pipeline's normal operating pressures when there is a pressure loss greater than 10 percent occurring within a time interval of 15 minutes or less, unless the operator has documented in its written procedures the operational need for a greater pressure-change threshold due to pipeline flow dynamics (including changes in operating pressure, flow rate, or volume), that are caused by fluctuations in gas demand, gas receipts, or gas deliveries; or*

(2) An unanticipated or unexplained flow rate change, pressure change, equipment function, or other pipeline instrumentation indication at the upstream or downstream station that may be representative of an event meeting paragraph (a)(1) of this section; or

(3) Any unanticipated or unexplained rapid release of a large volume of gas, a fire, or an explosion in the immediate vicinity of the pipeline.

(b) A notification of potential rupture occurs when an operator first receives notice of or observes an event specified in paragraph (a) of this section.

SED reviewed the Operator's Emergency Response Plan and found that it does not contain a procedure to notify operator personnel of a potential rupture, therefore CVGS is in violation of CFR §192.635.

After the July 2024 Audit, CVGS carefully reviewed documents and CVGS does have a procedure to notify personnel of a potential rupture within the Control Room Management Plan.

Appendix D, Midstream Storage Rupture Detection Plan contains information to notify personal of a potential rupture. Please see **Attachment I** of this document which contains Appendix D - pages 52-56 of the Control Room Management Plan.

The Appendix D procedure describes the Controller Actions in Section 1.2.1.1., for example it discusses Controller may collaborate with Local Supervisor, Interconnecting meter Controller, and call SCADA and Transmission field techs to verify maintenance or construction activities. Section 1.2.1.3 discusses notification and verification of location with field personnel. Also, 1.2.1.2 contains a procedure on Outside Notification.

As a note, because of the recent CVGS transfer of control<sup>1</sup>, CVGS will be developing new manuals that will include and elaborate on the rupture mitigation procedure per rule requirements, including defining a potential rupture per 192.635 and providing the operator information on when it occurs.

Question Title, ID Rupture Identification, EP.ERG.RUPTUREIDENTIF.P

Question 26. Does the operator have procedures to evaluate and identify if a potential rupture is an actual rupture event?

References 192.615(a)(12)

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

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<sup>1</sup>In the Fall of 2023, the CPUC issued a decision to approve the transfer for CVGS from Southern Company to Caliche Development Partners II. Please see CPUC Decision D. 23-08-033, issued on 9/7/2023.

Issue Summary Title 49 CFR §192.615(a)(12) states:

*(12) Each operator must develop written rupture identification procedures to evaluate and identify whether a notification of potential rupture, as defined in § 192.3, is an actual rupture event or a non-rupture event. These procedures must, at a minimum, specify the sources of information, operational factors, and other criteria that operator personnel use to evaluate a notification of potential rupture and identify an actual rupture. For operators installing valves in accordance with § 192.179(e), § 192.179(f), or that are subject to the requirements in § 192.634, those procedures must provide for rupture identification as soon as practicable.*

SED reviewed the Operator's Emergency Response Plan and found that it does not contain a procedure to identify potential rupture as defined by CFR 192.3, therefore CVGS is in violation CFR §192.615(a)(12).

Yes, Appendix D, Midstream Storage Rupture Detection Plan is a procedure to evaluate and identify if a potential rupture is an actual rupture event. Please see **Attachment I** to this document for the procedure in Appendix D, Midstream Storage Rupture Detection Plan. (Appendix D is on pages 52-56 of the Control Room Management Plan.) This procedure provides,

1.2.1.1 Supervisory Control and Data Acquisition (SCADA) – Controller Actions and procedures to corroborate data by performing diagnostics.

1.2.1.3 Location Determination

1.2.2 SCADA Only Verification – includes a procedure to not only review SCADA readings but also to contact field personnel for “eyes on” verification, etc.

More information on Appendix D is included in Attachment I.

## Public Awareness and Damage Prevention: Public Awareness (PD.PA)

Question Title, ID Evaluate Program Implementation, PD.PA.EVALIMPL.R

Question 15. Has an audit or review of the operator's program implementation been performed annually since the program was developed?

References 192.616(c) (192.616(i), API RP 1162 Section 8.3)

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

Issue Summary Title 49 CFR §192.605(a)states, in part:

*Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response...*

According to the CVGS O&M plan, the Public Awareness Program (PAP) review should be conducted annually, in intervals not to exceed 18 months. CVGS failed to perform the 2023 PAP annual evaluation within the time interval specified in their O&M plan, therefore CVGS is in violation of 192.605(a).

In the Fall of 2023, the CPUC authorized a transfer of control of CVGS from the Southern Company to Caliche Development Partners II (D.23-08-003, issued September 2023.)

The 2023 PAP program was implemented by Southern in their companywide program. CVGS has requested information to complete the annual evaluation of the program; however, this has not been received from Southern. CVGS has exhausted all efforts to obtain information. Starting in 2024, CVGS will implement a Public Education Program individually for this asset and annual reviews will be completed within the first quarter of the following year.

Title 49 CFR §192.616(c) states:

*The operator must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.*

Furthermore, CVGS is also in violation of 192.616(c) for not following the recommendations of API 1162, section 8.3 MEASURING PROGRAM IMPLEMENTATION," which states operators should complete an annual review of its PAP.

The 2023 PAP program was implemented by Southern in their companywide program. CVGS has requested information to complete the annual evaluation of the program; however, this has not been received from Southern. CVGS has exhausted all efforts to obtain information. Starting in 2024, CVGS will implement a Public Education Program individually for this asset and annual reviews will be completed within the first quarter of the following year.

## **Drug and Alcohol: Drug and Alcohol Program Records (DA.PROGRAMRECORDS)**

Question Title, ID Required Alcohol Test Records, DA. PROGRAMRECORDS.ALCOHOL.R

Question 3. Are alcohol test records retained for five years, three years, two years, and one year as required and readily available?

References 199.227(b) (199.227(b)(1), 199.227(b)(2), 199.227(b)(3), 199.227(b)(4), 40.333(a)(1), 40.333(a)(2), 40.333(a)(3), 40.333(a)(4))

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

Issue Summary Title 49 CFR §199.227(b)(1) states:

*(b) Period of retention. Each operator shall maintain the records in accordance with the following schedule:*

*(1) Five years. Records of employee alcohol test results with results indicating an alcohol concentration of 0.02 or greater, documentation of refusals to take required alcohol tests, calibration documentation, employee evaluation and referrals, and MIS annual report data shall be maintained for a minimum of 5 years.*

According to the Management Information System (MIS) report for the calendar year 2023, there was one incident where an employee tested above 0.02 BAC. When SED requested the test records, CVGS could not produce the alcohol test records for the employee who tested above 0.02 BAC in calendar year 2023.

According to 199.227(b)(1) test records which show a result of more than 0.02 BAC must be kept for 5 years. Therefore, CVGS is in violation of 199.227(b)(1).

Southern Company operated CVGS until late September of 2023. Southern's operations are in Illinois, Georgia and other places in the Southwest. Please note, the MIS report being referenced is for natural gas distribution, CVGS is not a natural gas distribution facility—this result appears to be related to another Southern facility, **not CVGS**. Please see **Attachment II** which is Southern Company's 2023 MIS.

There is no internal record at CVGS of an employee being tested for reasonable cause alcohol nor of an individual testing 0.02 or greater. The referenced report is provided companywide for Southern, and this test was completed at another facility. In the future, CVGS will operate as a separate entity under Caliche, with its own OPID number, and will be reported separately. This will avoid any confusion regarding which facility the MIS is reporting on.

(Please see **Attachment II**, titled, "U.S. Department of Transportation Drug and Alcohol Testing MIS Data Collection Form, 2023" which is Southern Company's for Gas Distribution)

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

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

Question 3. Does the process include procedures for ensuring that the capacity of each pressure relief device at pressure limiting stations and pressure regulating stations is sufficient?

References 192.605(b)(1) (192.743(a), 192.743(b), 192.743(c))

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

Issue Summary SED reviewed CVGS's O&M plan version 2023. CVGS' O&M manual references a section that does not exist in procedure 7.02, section 5.1.5 of the O&M manual.

Procedure 7.02, section 5.1.5 states: "If a relief device is of insufficient capacity, a new or additional device must be installed to provide the capacity required by paragraph (a) of this section." However, the pertinent information is contained within Section 5.1.3.

SED requests that CVGS change their manual so that Section 5.1.5 refers to section 5.1.3 instead of "paragraph (a)".

This was a clerical error in editing a previous version of the manual completed by Southern for what is known now. CVGS is currently developing a new O&M manual that will not be formatted the same way as the previous version.

## Public Awareness and Damage Prevention: Public Awareness (PD.PA)

Question Title, ID Measure Bottom-Line Results, PD.PA.MEASUREBOTTOM.R

Question 22. Were bottom-line results of the program measured by tracking third-party incidents and consequences including: (1) near misses, (2) excavation damages resulting in pipeline failures, (3) excavation damages that do not result in pipeline failures?

References 192.616(c) (API RP 1162 Section 8.4.4)

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

Issue Summary CVGS does not measure effectiveness by tracking third-party incidents and consequences because they have not experienced excavation damage on their line. SED recommends including the data in their plan, even if the number is zero.

CVGS had zero incidents. In CVGS's plan in the future, third-party incidents and consequences will be tracked in the annual self-assessment each year, including even if the number is zero.

Question Title, ID Program Changes, PD.PA.CHANGES.R

Question 23. Were needed changes and/or modifications to the program identified and documented based on the results and findings of the program effectiveness evaluations?

References 192.616(c) (API RP 1162 Section 2.7 (Step 12), API RP 1162 Section 8.5)

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

Issue Summary CVGS did not perform a PAP evaluation in 2023, and therefore did not identify if their PAP required changes. SED recommends they perform a PAP evaluation as soon as possible so they can determine if their program needs changes or modifications.

As mentioned above, control of CVGS was transferred in 2023. CVGS is in the process of developing a new Public Awareness plan and is contracting with a new vendor. The new plan will be evaluated annually, and any determined improvements will be made.

Attachment I, "Appendix D, Midstream Storage Rupture Detection Plan"



Southern Company  
Gas

## APPENDIX D

# MIDSTREAM STORAGE RUPTURE DETECTION PLAN

## 1 INTRODUCTION

### 1.1 REGULATION DESCRIPTION

Southern Company Gas (GAS) developed and implemented this Rupture Detection Plan to address the documented Pipeline and Hazardous Materials Safety Administration (PHMSA) requirements as stated in the Pipeline Safety: Requirement of Valve Installation and Minimum Rupture Detection Standards, the stated purpose of this regulation is as follows:

PHMSA is revising the Federal Pipeline Safety Regulations applicable to most newly constructed and entirely replaced onshore gas transmission, Type A gas gathering, and hazardous liquid pipelines with diameters of 6 inches or greater. In the revised regulations, PHMSA requires operators of these lines to install rupture-mitigation valves (i.e., remote-control, or automatic shut-off valves) or alternative equivalent technologies and establishes minimum performance standards for those valves' operation to prevent or mitigate the public safety and environmental consequences of pipeline ruptures. This final rule establishes requirements for rupture-mitigation valve spacing, maintenance and inspection, and risk analysis. The final rule also requires operators of gas and hazardous liquid pipelines to contact 9-1-1 emergency call centers immediately upon notification of a potential rupture and conduct post-rupture investigations and reviews. Operators must also incorporate lessons learned from such investigations and reviews into operators' personnel training and qualifications programs, and in design, construction, testing, maintenance, operations, and emergency procedure manuals and specifications. PHMSA is promulgating these regulations in response to congressional directives following major pipeline incidents where there were significant environmental consequences or losses of human life. The revisions are intended to achieve better rupture identification, response, and mitigation of safety, greenhouse gas, and environmental justice impacts.

### 1.2 DETECTION Of Main Line Rupture

Main Line pressure drops below 10 percent in a 15-minute time span can happen due to operational consequences during each gas day.

- Compression, or underground storage facility is shut down either unintentionally or intentionally.
- Adjusting meter stations to direct gas to appropriate location due to demand or lack thereof.

If this event occurs, the controller will follow Gas Control's Rupture Detection Plan to confirm and document the event is not a main line rupture.

Gas Controllers (Controllers) have two main information sources available for detecting possible ruptures: SCADA (Supervisory Control and Data Acquisition) and trusted outside personnel (e.g., on or off-duty pipeline operator personnel, sheriff or police officers, fire department personnel, or other emergency response personnel)

### *1.2.1.1 SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)*

SCADA is the principal tool used by Controllers to diagnose possible safety events; controllers are trained to take specific actions in SCADA regarding possible ruptures. Note that SCADA readings ALONE are not considered verification of a rupture event. 100% verification of rupture events is left to “boots on the ground” company field personnel or emergency responders.

Controller Actions -

1. Verify the alarm and/or readings are not the result of a system communication failure or system glitch:
  - a. Review the communication status of points in the vicinity of the possible rupture looking for normal operating communication status.
  - b. Be knowledgeable of active Operator Log Entries of work being performed at or around this location.
  - c. If possible, call SCADA and Transmission field techs to verify any maintenance, upgrades, repairs, or other actions are being performed that could produce an abnormal SCADA result that has not been discussed through Gas Control protocols. I.e., MOC or Operator Logbook.
2. Find corroborating data for alarms by performing diagnostics:
  - a. Perform a quick trend or ad-hoc trend on pressures, flows, temperatures, etc. judged necessary by the Controller. Verify if the readings are consistent with a rupture.
  - b. Compare current readings to expected readings during safe, normal operations.
  - c. Observe and compare pressure and flow readings upstream and downstream to verify if they are consistent with a rupture. Compare current readings to expected readings during safe, normal operations.
  - d. Observe flow rates of meter stations in or around the area that may have increased due to pressure drop downstream.
3. In addition to these actions, a Controller may also collaborate with the Interconnecting meter Controller or Local Supervisor to review their data as a means of gathering additional information and interpretation.

### *1.2.1.2 OUTSIDE NOTIFICATION*

If SCADA has not produced alarms related to a main line break this means the Controller was not alerted of the possible rupture by outside communication into Gas Control.

It is possible for a small enough rupture to take place that does not trigger an alarm or disrupt SCADA readings to an appreciable level that would arouse suspicion of a possible rupture. Under these circumstances, outside verification is the only diagnostic method available to alert the Controller of a rupture. In this case, the Controller asks the alerting personnel for an address or GPS coordinates of the rupture site to relay to Operations.

### 1.2.1.3 LOCATION DETERMINATION

At an appropriate moment, the Controller can use system knowledge, GIS, GPS coordinates, Google Maps, and any other data source necessary to find an approximate location of the possible rupture. This information can be relayed to the responding company field personnel who will verify the event.

### 1.2.2 SCADA ONLY VERIFICATION

SCADA readings alone are not verification of a rupture. A Controller's default action after completing the rupture detection procedure is to contact company field personnel for "eyes on" verification. If it is not possible<sup>1</sup> for company field personnel to arrive at the site in a timely manner, a Controller **may** take action without field verification.

### 1.2.3 FIELD VERIFICATION ONLY

Reports of a rupture from on-scene, credible sources will be sufficient in notifying (e.g., on or off-duty pipeline operator personnel, sheriff or police officers, fire department personnel, or other emergency response personnel).

Gas Control notification protocol will be to call the Operations Supervisor with information and location of main line rupture.

### 1.2.4 CONTACTING 911

The purpose of contacting the 911 Operators to give notification and location information to local emergency personnel and first responders. Controllers contact 911 after completing the rupture detection steps in Section 1.2.1.1 and receiving verification from the field or receiving direct notification from company field personnel. The following steps are used to guide the conversation with 911:

1. Identify themselves to the 911 Operator.
2. State they are calling regarding a confirmed line rupture event.
3. Provide the 911 Operator with the approximate location of the rupture site using knowledge of the system, GPS coordinates, addresses, intersections, landmarks, or any other means of localizing.
4. Stay in contact with 911 until emergency personnel arrive on site.

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<sup>1</sup> For example, what if the possible rupture is happening during a severe storm, it might not be possible for company personnel to make it safely and in a timely manner.

## 1.3 TRAINING

### 1.3.1 RUPTURE DETECTION

Gas Controllers are trained on the possible rupture detection steps in Section 1.2.1.1 through several methods outlined in the RCV Operations Protocol. Refer to “Training Program” section of the RCV Operations Protocol document for more information.

### 1.3.2 Operator Qualifications for Main Line Rupture Identification

Controllers are Operator Qualified for main line ruptures through Gas Control’s Abnormal Operations section of the Operator Qualification test once every three years.

### 1.3.3 OPERATIONS NOTIFICATION

Mock emergency calls are practiced to train Controllers to finding approximate leak locations and disseminating information to Operations in a calm, orderly manner.

### 1.3.4 LESSONS LEARNED

Current Lessons Learned practices already include reviewing rupture events. The current template for Lessons Learned now contains a special “rupture events” check box for added emphasis.

## 1.4 MAINTENANCE

Maintenance for all valves and pipelines is outside of the purview of Gas Control. Operations department notifies Gas Control of future maintenance, repairs, etc. through the work permit process. Once the repairs are complete a Point-to-Point (P2P) inspection will be necessary to bring equipment, valves, pipes, etc. back into service. Refer to the SCG Midstream Control Room Management Plan and the RCV Operations Protocol for the applicable P2P process.

## 1.5 REFERENCE

- SCG Midstream Control Room Management Plan
- SCG Midstream I&M Plan
- RCV Operations Protocol.

Attachment II, 2023 MIS Data Southern Company Gas Distribution



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Title 18, USC Section 1001, makes it a criminal offense subject to a maximum fine of \$10,000, or imprisonment for not more than 5 years, or both, to knowingly and willfully make or cause to be made any false or fraudulent statements or representations in any matter within the jurisdiction of any agency of the United States.