

PUBLIC UTILITIES COMMISSION

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September 1, 2020

Stephen Wassell
VP, Storage Peaking & Ops
Central Valley Gas Storage
10 Peachtree Place NE, Suite 1000
Atlanta, GA 20209

GI-2020-07-CVS-39

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. Wassell:

On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC), Victor Muller, Alan Wehrman, Angel Garcia, and Chirag Patel conducted a remote General Order 112-F inspection of Central Valley Gas Storage's (CVGS) operations, maintenance, and emergency plans and public awareness and anti-drug and alcohol misuse programs from July 27 to July 31, 2020. The inspection included a review of CVGS's relevant records and procedures for the period of 2016 through 2019.

SED's findings are noted in the Post-Inspection Written Preliminary Findings (Summary) which is enclosed with this letter. SED found seven (7) probable violations and eight (8) concerns during the inspection. The Summary reflects only those particular records and procedures that SED inspected.

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

If you have any questions, please contact Victor Muller at (916) 327-6780 or by email at victor.muller@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Terence Eng", is written over a horizontal line.

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

Enclosure: Post-Inspection Written Preliminary Findings

cc: Jason McMillan, SED
Claudia Almengor, SED

Post-Inspection Written Preliminary Findings

Dates of Inspection: 7/27/20-7/31/20

Operator: CENTRAL VALLEY GAS STORAGE, LLC

Operator ID: 32603 (primary)

Assets (Unit IDs): Central Valley Gas Storage (86918)

System Type: DA

Inspection Name: CVGS 2020 Operations, Maintenance, and Emergency Plans, Public Awareness Program, and Anti-Drug and Alcohol Misuse Programs

Lead Inspector: Victor Muller

Operator Representative: Dennis Chappell, Robert Cornell, Kathleen Clausen, James Hotinger

Unsatisfactory Results

Drug and Alcohol: Anti-Drug Program (DA.DRUG)

Question Text Is a written Anti-Drug Plan in-place and maintained that conforms to the requirements of Part 199 and Part 40?

References 199.101(a) (199.101(a)(1), 199.101(a)(2), 199.101(a)(3), 199.101(a)(4))

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

Issue Summary Title 49 CFR subpart 199.101(a)(1) states:

(a) Each operator shall maintain and follow a written anti-drug plan that conforms to the requirements of this part and the DOT Procedures. The plan must contain—

(1) Methods and procedures for compliance with all the requirements of this part, including the employee assistance program;

Title 49 CFR subpart 199.202 states:

Each operator must maintain and follow a written alcohol misuse plan that conforms to the requirements of this part and DOT Procedures concerning alcohol testing programs. The plan shall contain methods and procedures for compliance with all the requirements of this subpart, including required testing, recordkeeping, reporting, education and training elements.

SED found the following deficiencies with CVGS's anti-drug program:

CVGS Plan Section	Relevant Code Section	Deficiency
3.6	199.241	Missing methods for providing supervisor training.
4.3	199.105(c)	Missing methods for the random selection process used and the method for informing an employee that they have been selected.
23.7	40.333	Missing methods for how records are stored, accessed, and transferred.
2.2	40.11(b)	Missing methods for ensuring that service agents are complying with the requirements of part 40.

SED finds CVGS in violation of Title 49 CFR §199.101(a)(1) and §199.202 for failure to maintain written anti-drug and alcohol misuse plans that contain methods and procedures for compliance with the above requirements of parts 199 and 40.

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

Question Text Does the emergency plan include procedures for receiving, identifying, and classifying notices of events which need immediate response?

References 192.615(a)(1)

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

Issue Summary 192.615(a)(1) states:

(a) Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following: (1) Receiving, identifying, and classifying notices of events which require immediate response by the operator.

In the ER Procedures, Agency Notifications and Reporting, there is a requirement to review the reporting criteria listed on Form #EM-3 "Agency Notification and Reporting".

Within Form #EM-3, the Reporting Criteria lists "death, hospitalization, \$50,000 in damage, [and] significant event." There are two criteria from the definition of an incident in 191.3 not included in Form #EM-3: "Unintentional estimated gas loss of three million cubic feet or more", "An event that results in an emergency shutdown of an LNG facility or a UNGSF (underground natural gas storage facility)."

Form #EM-3 is not in compliance with 192.615(a)(1) since it does not provide for the proper classification of all incidents defined within the Code of Federal Regulations.

Procedure 1.01 "Reporting and Control of Incidents" section 4 "Incident Criteria" is also missing the aforementioned incident criteria from 191.3 and is therefore not in compliance with 192.615(a)(1).

Question Text Does the emergency plan include procedures for the emergency shutdown or pressure reduction in any section of pipeline system necessary to minimize hazards to life or property?

References 192.615(a) (192.615(a)(6))

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

Issue Summary Title 49 CFR §192.615(a)(6) states:

(a) Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:

(6) Emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life or property.

Title 49 CFR §192.605(a) states:

(a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

CVGS' O&M, Procedure 3.04 Preparation of Emergency Plan, 5.1.6.3 requires the Emergency Response Plan (ERP) have maps and drawings showing the location of the emergency valves in order to perform emergency shutdown and pressure reduction. CVGS does not maintain a map of their emergency valves. SED finds CVGS in violation of 192.605(a) for failure to maintain maps and drawings showing the location of the emergency valves according to their O&M procedure 3.04 section 5.1.6.3.

CVGS does not maintain a procedure to execute emergency shutdown and pressure reduction. Additionally, without a map showing the locations of the emergency valves, CVGS cannot have a complete emergency shutdown and pressure reduction procedure. SED finds CVGS in violation of 192.615(a)(6) for failure to maintain procedures to execute emergency shutdown and pressure reduction.

Maintenance and Operations: Gas Pipeline Operations (MO.GO)

Question Text Does the process include instructions enabling personnel who perform operation and maintenance activities to recognize conditions that may potentially be safety-related conditions?

References 192.605(a) (192.605(d), 191.23(a))

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

Issue Summary 49 CFR Part §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

49 CFR Part §192.605(d) states, in part:

The manual required by paragraph (a) of this section must include instructions enabling personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requirements of 191.23 of this subchapter.

CVGS O&M procedure 1.02 "Reporting SRCs" section 5.1 defines safety-related conditions that must be reported. These definitions do not include all of the safety-related conditions listed in 191.23(a). Procedure 1.02 is partially or wholly missing the following safety-related conditions from 191.23(a):

- (2) In the case of a UNGSF, general corrosion that has reduced the wall thickness of any metal component to less than that required for the well's maximum operating pressure, or localized corrosion pitting to a degree where leakage might result.
- (3) Unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability of a pipeline or the structural integrity or reliability of a UNGSF or LNG facility that contains, controls, or processes gas or LNG.
- (4) Any crack or other material defect that impairs the structural integrity or reliability of a UNGSF or an LNG facility that contains, controls, or processes gas or LNG.
- (5) Any material defect or physical damage that impairs the serviceability of a pipeline that operates at a hoop stress of 20% or more of its specified minimum yield strength, or the serviceability or the structural integrity of a UNGSF.
- (6) Any malfunction or operating error that causes the pressure—plus the margin (build-up) allowed for operation of pressure limiting or control devices—to exceed either the maximum allowable

operating pressure of a distribution or gathering line, the maximum well allowable operating pressure of an underground natural gas storage facility,

(7) A leak in a pipeline, UNGSF, or LNG facility containing or processing gas or LNG that constitutes an emergency.

(9) Any safety-related condition that could lead to an imminent hazard and causes (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20% or more reduction in operating pressure or shutdown of operation of a pipeline, UNGSF, or an LNG facility that contains or processes gas or LNG.

CVGS O&M procedure 1.02 "Reporting SRCs" is missing sections 2, 4, 7, and 9 of 191.23(a) in their entirety and the requirements for Underground Natural Gas Storage Facilities (UNGSF) in sections 3, 5, and 6 of 191.23(a). SED finds CVGS in violation of 192.605(d) for failing to list all reportable safety-related conditions listed in 191.23 in CVGS O&M procedure 1.02 section 5.1.

Reporting: Regulatory Reporting (Traditional) (RPT.RR)

Question Text Is there a process to immediately report incidents to the National Response Center?

References 191.5(b) (191.7)

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

Issue Summary Title 49 CFR Part §191.5(a) states in part:

At the earliest practicable moment following discovery, but no later than one hour after confirmed discovery, each operator must give notice in accordance with paragraph (b) of this section of each incident as defined in §191.3.

Procedure 1.01 "Reporting and Control of Incidents," Section 5 "Immediate Notice of Certain Incidents" states, in part, "At the earliest practicable moment following discovery, the company shall give notice to the NRC as shown below," but does not include the specific time limit stated in the regulation.

SED finds CVGS in violation of 191.5(a) for not requiring incidents to be reported no later than one hour after confirmed discovery in procedure 1.01.

Question Text Does the process require the obtaining, and appropriate control, of Operator Identification Numbers (OPIDs), including changes in entity, acquisition/divestiture, and construction/update/uprate?

References 191.22(a) (191.22(c), 191.22(d))

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

Issue Summary Title 49 CFR Part §191.22(a) states, in part:

Effective January 1, 2012, each operator of a gas pipeline, gas pipeline facility, UNGSF, LNG plant, or LNG facility must obtain from PHMSA an Operator Identification Number (OPID).

CVGS Procedure 1.07 "PHMSA Registration and Operator ID," section 4 "Lines Requiring PHMSA OPID" states, in part: "Effective January 1, 2012 all PHMSA jurisdictional gas transmission and gathering pipelines are required to obtain PHMSA operator identification number (OPID)."

SED finds CVGS in violation of 191.22(a) since procedure 1.07 does not require operators of an underground natural gas storage facility to obtain an OPID.

Furthermore, Procedure 1.07 section 6.3 lists events that must be reported to PHMSA. This section is wholly or partially missing the following events listed in 49 CFR Part 191.22(c):

(1)(iii) Construction of a new LNG plant, LNG facility, or UNGSF;

(1)(iv) Maintenance of a UNGSF that involves the plugging or abandonment of a well, or that requires a workover rig and costs \$200,000 or more for an individual well, including its wellhead. If 60-days' notice is not feasible due to an emergency, an operator must promptly respond to the emergency and notify PHMSA as soon as practicable;

(1)(v) Reversal of product flow direction when the reversal is expected to last more than 30 days. This notification is not required for pipeline systems already designed for bi-directional flow; or

(1)(vi) A pipeline converted for service under §192.14 of this chapter, or a change in commodity as reported on the annual report as required by §191.17.

(2)(iii) A change in the entity (e.g., company, municipality) responsible for an existing pipeline, pipeline segment, pipeline facility, UNGSF, or LNG facility;

(2)(v) The acquisition or divestiture of an existing UNGSF, or an LNG plant or LNG facility subject to part 193 of this subchapter.

SED finds CVGS in violation of 191.22(c) because procedure 1.07 does not require reporting of all events listed under 191.22(c).

Time-Dependent Threats: Internal Corrosion - Corrosive Gas (TD.ICCG)

Question Text Does the process give adequate direction for actions to be taken if corrosive gas is being transported by pipeline?

References 192.605(b)(2) (192.477)

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

Issue Summary Title 49 CFR Part §192.605(a) states:

(a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

Title 49 CFR Part §192.477 states, in part:

Each coupon or other means of monitoring internal corrosion must be checked two times each calendar year, but with intervals not exceeding 7 1/2 months.

CVGS Procedure 6.02 "Internal Corrosion," section 6.2.5 "Monitoring and Detection" states, in part: "Monitor checkpoints and record the results at least once per calendar year".

During the inspection, SED determined that this CVGS procedure was not reflective of their practices, and CVGS performs the checkpoint monitoring twice each year as required by 192.477. SED finds CVGS in violation of 192.605(a) since procedure 6.02 does not require coupons or other means of monitoring internal corrosion to be checked two times per year as required by 192.477.

Concerns

Design and Construction: Pipeline Commissioning (DC.COMM)

Question Text Does the emergency plan include procedures for receiving, identifying, and classifying notices of events which need immediate response?

References GO 112-F 122.2(b)

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

Issue Summary California General Order 112-F sections 122.2(a)(3) and 122.2(a)(4) state:

(a) Each Operator shall report incidents to the CPUC that meet the following criteria:

3. Incidents where the failure of a pressure relieving and limiting stations, or any other unplanned event, results in pipeline system pressure exceeding its established Maximum Allowable Operating Pressure (MAOP) plus the allowable build up set forth in 49 CFR § 192.201.

4. Incidents in which an under-pressure condition, caused by the failure of any pressure controlling device, or any other unplanned event other than excavation related damage, results in any part of the gas pipeline system losing service or being shut-down.

These reporting requirements are absent from CVGS procedures and SED recommends adding them to Table 17.10-1.

General Order 112-F subpart 122.2(b) states:

(b) In the event of an incident listed in 122.2(a) above, an Operator shall go to the Commission's website, select the link to the page for reporting emergencies and follow the instructions thereon.

Table 17.10-1 in Procedure 17 links to an outdated website for reporting incidents to the CPUC, <http://www.cpuc.ca.gov/emergency>.

SED recommends this website be corrected to <https://www.cpuc.ca.gov/emrep/> or <https://ia.cpuc.ca.gov/safetyevents/> or to include the requirements of 122.2(b) as written.

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

Question Text Does the process include detailed steps for reviewing employee activities to determine whether the procedures were effectively followed in each emergency?

References 192.615(b)(3)

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

Issue Summary CVGS does not require a review of employee activities in their ERP, DOT General Emergency Response Procedures, "Escaping Gas and/or Gas Detected Inside A Building". This requirement is present in section 3.04, 6.1 of CVGS' O&M procedures. However, SED recommends the addition of this requirement to the ERP.

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

Question Text 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 CVGS' O&M manual references a section that does not exist in procedure 7.02, section 5.1.5. 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." Section 5.1.5 should refer to section 5.1.3 instead of paragraph (a).

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

Question Text Were relevant factors considered to determine the need for supplemental public awareness program enhancements for each stakeholder audience, as described in API RP 1162?

References 192.616(c) (API RP 1162 Section 6.2)

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

Issue Summary The majority of the properties adjoining CVGS's pipeline right-of-way (ROW) are farms. Per conversation with CVGS, the farming activity around the ROW consists entirely of rice production and fruit orchards, and no deep ripping or excavation damage has occurred.

SED recommends CVGS review the specific farming activities that take place in adjoining properties, and consider supplemental messaging to farms discussing the specific risks farming activities may pose to the pipeline, as recommended by API RP 1162 section 6.3.1.

Question Text 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's four-year effectiveness evaluation report "Four Year Review of the Southern Company Gas RP 1162 Public Awareness Program" states that "pipeline damages and damages per 1000 locate requests are trending downward." In conversation with CVGS, SED was informed that no damages or near misses have occurred. For clarity, SED recommends including precise data on damages and near-misses in the evaluation report, even if that number is zero.

Question Text 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's four-year effectiveness evaluation report "Four Year Review of the Southern Company Gas RP 1162 Public Awareness Program" lists a number of recommended program enhancements, but does not state how or if these enhancements were implemented. SED recommends CVGS keep detailed records demonstrating consideration of recommended enhancements, implementation, or justification for why enhancements were not implemented.

SED has requested records to demonstrate what action was taken in response to the 2019 evaluation. To-date, CVGS has not provided the records to SED.

Reporting: Regulatory Reporting (Traditional) (RPT.RR)

Question Text Do processes require reporting of safety-related conditions?

References 192.605(a) (191.23(a), 191.23(b), 191.25(a), 191.25(b))

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

Issue Summary Procedure 1.02 "Reporting SRCs" section 5.2.6 states, in part:

"The Facility Manager must submit a final report to the DOT...at the following address:

Information Resources Manager
Office of Pipeline Safety
Pipeline and Hazardous Material Safety Administration (PHMSA)
PHP-20
1200 New Jersey Ave, SE
Washington, DC 20590"

Title 49 CFR Part §191.25(c) states in part:

"Reports must be filed by email to InformationResourcesManager@dot.gov"

CVGS should include this email address as a required method of reporting SRCs in Procedure 1.02.

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

Question Text Does the process give adequate guidance for the application and inspection of protective coatings on pipe?

References 192.605(b)(2) (192.461(c), 192.461(d), 192.461(e), 192.483(a))

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

Issue Summary CVGS Procedure 6.03 "External Protective Coating" includes general requirements for applying and inspecting coating, and states that coating system manufacturer recommendations should be followed. SED recommends CVGS include a list of approved coatings in the O&M. Any unique procedures that may apply to individual coating types should be included in the O&M or included in the O&M by reference.