

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



November 22, 2019

Jerry Schmitz
Vice President, Engineering
Southwest Gas Corporation
P.O. Box 98510, LVA-581
Las Vegas, NV 89193-8510

GI-2019-01-SWG-32

Subject: General Order (G.O.) 112-F Inspection of Southwest Gas Company's (SWG) Gas Facilities in Southern California Division (covering Barstow, Victorville and Big Bear areas)

Dear Mr. Schmitz:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a General Order 112-F inspection of Southwest Gas Company's (SWG) gas facilities in Southern California Division (covering Barstow, Victorville and Big Bear areas) between September 23-27 and September 30 – October 4, 2019. The inspection included a review of the records for the period of 2015 through 2018, as well as a representative field sample of the facilities. SED staff also observed personnel performing the covered tasks.

SED's findings are noted in the Summary of Inspection Findings (Summary) which is enclosed with this letter. The Summary reflects only those particular records and pipeline facilities that SED inspected during the inspection.

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

If you have any questions, please contact Sikandar Khatri at (415) 703-2565 or by email at Sikandar.Khatri@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Dennis Lee".

Dennis Lee, P.E.
Program and Project Supervisor
Gas Safety and Reliability Branch
Safety and Enforcement Division

CC: Laurie Brown, SWG
Claudia Almengor, SED

Summary of Inspection Findings

(Transmission)

Dates of Inspection: September 23-27 and September 30-October 4, 2019

Operator: SOUTHWEST GAS CORP

Operator ID: 18536 (primary)

Inspection Systems: Transmission (Southern California Division)

Assets (Unit IDs): SWG - Transmission Victorville (88674)

System Type: GT

Inspection Name: SWG - Transmission Victorville

Lead Inspector: Sikandar Khatri

Operator Representative: Laurie Brown

Unsatisfactory Results

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

Question Text Does the process include procedures for inspecting and testing each pressure limiting station, relief device, and pressure regulating station and their equipment?

References 192.605(b)(1) (192.739(a), 192.739(b))

Assets Covered SWG - Transmission Victorville (88674 (91))

Issue Summary SWG has a "Pressure Regulation Procedure", effective date of January 31, 2018, in their Operations Manual. During the field inspection on October 1, 2019, SED observed a Regulator Station located at the southerly intersection of Las Flores Street and Summit Valley Road, Hesperia, (Facility ID 12TS15007095) where the established Pressure Regulation Procedure was not being followed.

When questioned, the SWG supervisor/manager provided the following explanation: Following the established procedure may cause catastrophic results of natural gas flow being reversed due to a separate bypass for the working regulator and monitor. Therefore a non-established modified guideline is used for routine maintenance of this regulator station. SWG claims that this station is scheduled to be reconfigured into an above ground station with a filter in the near future.

Therefore, SED found SWG in violation of G.O. 112-F, Reference Title 49 CFR, Part 192, §192.605(b)(1) for failing to have a written procedure for operating, maintaining, and repairing, for this regulator station. Therefore, the written procedure must be established until the planned reconfiguration of this station is done, and thereafter appropriate procedure must also be available.

Concerns

No Concerns.

Summary of Inspection Findings (Distribution)

Dates of Inspection: September 23-27 and September 30-October 4, 2019

Operator: SOUTHWEST GAS CORP

Operator ID: 18536 (primary)

Inspection Systems: Distribution (Southern California Division)

Assets (Unit IDs): Dist (Barstow, Victorville, Big Bear) (89837)

System Type: GD

Inspection Name: SWG – Distribution Victorville

Lead Inspector: Sikandar Khatri

Operator Representative: Laurie Brown

Unsatisfactory Results

No Findings.

Concerns

A. Records : Operations And Maintenance (PRR.OM)

Question Text Do records indicate distribution patrolling was conducted as required?

References 192.603(b) (192.721(a), 192.721(b))

Assets Covered Dist (Barstow, Victorville, Big Bear) (89837 (32))

Issue Summary The distributions patrolling records were reviewed and no issue was found, but during SED bridge and span patrolling field visit located on Bear Valley Road at Mojave River on September 30, 2019, it was observed that one of pads attached to the pipe while resting on roller type support was rotated from original location and the pad is not protecting the pipe and the coating against physical surface damage.

In a follow-up provided, SWG reported that it is scheduled for remediation by end of November 2019 and a photo will be provided once completed.

B. Pipeline Field Inspection : Pipeline Inspection (Field) (FR.FIELDPIPE)

Question Text Are meters and service regulators being located consistent with the requirements of 192.353?

References 192.351 (192.353(a), 192.353(b), 192.353(c), 192.353(d))

Assets Covered Dist (Barstow, Victorville, Big Bear) (89837 (32))

Issue Summary During the field inspection on September 25, 2019, SED observed a meter set assembly located at 152 Maple Lane, Big Bear, (Facility ID 13DOL0000003) in direct contact with natural earth/debris. SED recommended that SWG take corrective action to clear the debris. SWG took corrective action by removing rock and dirt revealing the meter set assembly is set on a cement block. SWG provided a photo on September 26, 2019, documenting this corrective action.

During the field inspection on September 30, 2019, SED observed a meter set assembly located at 13238 Sandia Circle, Victorville, (Leak Survey ID 12L3Y0001060) not protected from vehicular damage. SED recommended that SWG take corrective measures to protect the meter set assembly from vehicular damage. SWG provided a follow-up that it has been remediated.

During the field inspection on September 30, 2019, SED observed a meter set assembly located at 13228 Sandia Circle, Victorville, (Leak Survey ID 12L3Y0001060) not protected from vehicular damage. SED recommended that SWG take corrective measures to protect the meter set assembly from vehicular damage. SWG provided a follow-up that it has been remediated.

During the field inspection on September 30, 2019, SED observed a meter set assembly located at 13235 Eastview Lane, Victorville, (Leak Survey ID 12L3Y0001060) not protected from vehicular damage. SED recommended that SWG take corrective measures to protect the meter set assembly from vehicular damage. SWG provided a follow-up that it has been remediated.

During the field inspection on September 30, 2019, SED observed a meter set assembly located at 13225 Eastview Lane, Victorville, (Leak Survey ID 12L3Y0001060) not protected from vehicular damage. SED recommended that SWG take corrective measures to protect the meter set assembly from vehicular damage. SWG reassessed it and determined that a meter guard is not required due to inadequate space for a vehicle to attempt entry.

Question Text Are meters and service regulators being protected from damage consistent with the requirements of 192.355?

References 192.351 (192.355(a), 192.355(b), 192.355(c))

Assets Covered Dist (Barstow, Victorville, Big Bear) (89837 (32))

Issue Summary During the field inspection on September 30, 2019, SED observed a service regulator located at 13245 Eastview Lane, Victorville, (Leak Survey ID 12L3Y0001060) with a missing vent screen. SED recommended that SWG take corrective measures to address the issue. In a follow-up SWG confirmed that it has been remediated.

During the field inspection on September 30, 2019, SED observed a service regulator located at 13225 Eastview Lane, Victorville, (Leak Survey ID 12L3Y0001060) with a regulator vent very close to the building vent. SED recommended that SWG take corrective measures to ensure the regulator vent be located at a place where gas from the vent can escape freely into the atmosphere and away from any opening into the building. SWG took corrective action by directing the regulator vent away from the building vent. SWG provided a photo on October 4, 2019, documenting this corrective action.

Question Text Are meters and service regulators being installed consistent with the requirements of 192.357?

References 192.351 (192.357(a), 192.357(b), 192.357(c), 192.357(d))

Assets Covered Dist (Barstow, Victorville, Big Bear) (89837 (32))

Issue Summary During the field inspection on September 30, 2019, SED observed a meter set assembly located at 13238 Sandia Circle, Victorville, (Leak Survey ID 12L3Y0001060) with a bent riser increasing anticipated stresses on the connecting piping and meter. SED recommended that SWG take corrective measures to minimize the stresses on the connecting piping and meter. In a follow-up SWG reported that it was assessed and determined not to be bent, it was

concreted in a slightly leaning position. No further follow up action is required.

Question Text Is sampling of combustible gases adequate using an instrument capable of determining the percentage of gas in air at which it becomes readily detectable?

References 192.625(a) (192.625(c), 192.625(d), 192.625(e), 192.625(f))

Assets Covered Dist (Barstow, Victorville, Big Bear) (89837 (32))

Issue Summary SWG has an "Odorization Tools and Equipment" Procedure, effective date of July 31, 2018, in their Operations Manual. During the field inspection on September 25, 2019, SED observed an odorant test conducted at 152 Maple Lane, Victorville, (Facility ID 13DOL0000003) and a second test on October 3, 2019, conducted at 2700 Barstow Road, Barstow, (Facility ID 11DOL0000001).

"Odorization Tools and Equipment" Procedure, Section 3.3 is for the Heath Odorator Odorometer purchased after 2004 (used in these odorant tests). Section 3.3.2 requires the modification of values to reflect the change in air density due to increased elevation. Step 6 of Section 3.3.2 provides a table entitled, "Actual % Natural Gas (Methane) Correction Chart for Increased Elevation". Actual % gas values must be interpolated from the table. There is an example of interpolation following the table. In both cases, the technician did not interpolate actual % gas values correctly. It should be noted that the other steps (Step 1, 2, 3, 4, and 5) were performed correctly.

SED recommends that SWG take corrective measures to retrain employees in the use of "Odorization Tools and Equipment" Procedure, with specific attention to interpolating values in Section 3.3.2, Step 6.

Question Text Are line markers placed and maintained as required?

References 192.707(a) (192.707(b), 192.707(d), CGA Best Practices, v4.0, Practice 2-5, CGA Best Practices, v4.0, Practice 4-20)

Assets Covered Dist (Barstow, Victorville, Big Bear) (89837 (32))

Issue Summary During the field inspection on September 24, 2019, SED observed a line marker located at the east intersection of First Street and Holcomb Valley Road, north of California Highway 18, North Shore Drive, San Bernardino County, (Facility ID 13DCP0000073) with wording which was not legible. SED recommended that SWG take corrective action to replace the marker. SWG took corrective action by creating Maintenance Work Order WR#3923141, to replace the line marker. SWG provided a photo on September 26, 2019, documenting the replaced line marker.

During the field inspection on September 30, 2019, SED observed a line marker located on the northwesterly side of Sixth Street between D Street and E Street, behind the building at 16838 D Street, Victorville, (Facility ID 12DCP0000086) with wording which was not legible. SED recommends that SWG take corrective action to replace the marker. SWG took corrective action by replacing the line marker. SWG provided a photo on October 4, 2019, documenting the replaced line marker.

Question Text Are field or bench tests or inspections of regulating stations, pressure limiting stations or relief devices adequate?

References 192.739(a) (192.739(b))

Assets Covered Dist (Barstow, Victorville, Big Bear) (89837 (32))

Issue Summary The field tests of regulating stations and pressure limiting stations are done according to Southwest Gas (SWG) procedures. However, it was observed that the inlet and outlet fire valves are not exercised before doing the regulator maintenance. This applies to both Transmission and Distribution regulator stations. It is a safety concern since if some Abnormal Operating Conditions (AOCs) occur during the regulator maintenance and the need

arises to turn off gas at the inlet/outlet valves, there is possibility that these may not be operable. SED understands that these valves are maintained by different crew, however, the schedule of exercising the valves may be different from that for the regulating stations. This will create a safety hazard for the SWG employees and public. SWG should take appropriate action to address this.

Two possible solutions are either allowing crew who does regulator station maintenance to exercise fire valves also at the same station (SED understands that they hold OQs for emergency maintenance of the fire valves), and another option is that if two different crews are used, the schedule of maintenance of fire valves and regulator stations be aligned so that these are done at the same time.