SoCalGas
A Sempra Energy utility

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Mr. Ken Bruno
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
320 W. Fourth Street, Suite 500
Los Angeles, CA 90013

Dear Mr. Bruno:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a G.O. 112, Operation and Maintenance Inspection of Southern California Gas Company's (SoCalGas) Northwest Central Coast Inspection Unit from August 21, 2017 to August 25, 2017. The inspection included a review of the Inspection Unit records of maintenance activities for the period of January 1, 2014 through December 31, 2016 and a representative sample of SCG facilities field inspections in the Simi Valley, Oxnard, and Santa Barbara districts. SED staff also reviewed the Inspection Unit's Operator Qualification records, which included field observation of randomly selected individuals performing covered tasks.

SED staff identified 4 probable violations and 4 areas of concern. Attached are Southern California Gas Company's (SoCalGas) written responses.

Please contact Troy A. Bauer at (909) 376-7208 if you have any questions or need additional information.

Sincerely,

Troy A. Bauer

CC:
Dennis Lee, SED/GSRB

SUMMARY OF INSPECTION FINDINGS

I. Probable Violations

1. Title 49 CFR §191.12 states in part:

"Each mechanical fitting failure, as required by §192.1009, must be submitted on a Mechanical Fitting Failure Report Form PHMSA F07100.1-2. An operator must submit a mechanical fitting failure report for each mechanical fitting failure that occurs within a calendar year not later than March 15 of the following year. Alternatively, an operator may elect to submit its report throughout the year."

SCG experienced a mechanical fitting failure (MF# 520001237508) on December 16, 2015 that they reported on February 21, 2017. SCG reported the failure past the required date (March 12, 2016).

Therefore, SCG is in violation of GO 112-F, Referenced Title 49 CFR §191.12, for its failure to report on or before the required date

RESPONSE:

SoCalGas employees are trained in accordance to policy 184.0231, *Mechanical Fitting Leak Reporting* to identify a mechanical fitting failure. The identification of this type of mechanical fitting failure is covered in the policy and the employee failed to follow the procedures as described in the policy. Ultimately, a subsequent process did discover the mechanical fitting failure and it was then reported in the subsequent reporting cycle, calendar year 2016.

CORRECTIVE ACTION:

SoCalGas will review existing process, policies and procedures and determine whether improvements can be made to improve stakeholders understanding of their importance in the identification, and ultimate reporting, of mechanical fitting failures. In addition, SoCalGas will establish a process to more frequently monitor mechanical fitting failures throughout the year. Upon discovery of any updates required to previously submitted reports, the PHMSA's supplemental reporting instructions will be followed.

2. Title 49 CFR §192.481(a) states in part:

"(a) Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

If the pipeline is located:	*Then the frequency of inspection is:*
Onshore	*At least once every 3 calendar years, but with intervals not exceeding 39 months*
Offshore	*At least once each calendar year, but with intervals not exceeding 15 months*

SCG reported 335 instances where the corrosion inspection of the meter set assemblies (MSA) were not in compliance with the frequencies stated in §192.481(a). After reviewing atmospheric corrosion records, SED found 26 more instances where the corrosion inspection of the meter set assemblies (MSA) were not in compliance. A table of those 361 instances is attached to this report.

Therefore, SCG is in violation of GO 112-F, Referenced Title 49 CFR §192.481(a), for its failure to inspect 361 meter sets for evidence of atmospheric corrosion once every 3 calendar years, but with intervals not exceeding 39 months.

RESPONSE:

SoCalGas identified the issue of missed Atmospheric Corrosion (ACOR) Inspection in early 2017 in preparation for the audits. SED was notified and SoCalGas has met with SED in March and August to update them on the status of these inspections. Prior to the use of Advanced Meter (AM) technologies, meter readers were used to perform these inspections during monthly visits to read the meters. Follow-up work was managed through an exception reporting process. With AM, a new program called the MSA Inspection Program was developed and implemented to complete the required ACOR inspections at least once every 3 calendar years, with intervals not exceeding 39 months. The MSA Inspection Program creates inspection orders using a location code or "GNN" versus a meter number as used by meter reading. Inspection orders are generated for each location and follow-up orders are issued as necessary from these visits. With inspections now being generated for an ACOR visit, a new audit report had to be created that shows last visit date, subsequent inspection date, employee who visited location, etc. Upon generating this report, it was discovered that some locations did not have a recorded ACOR observations within the required 39 months. We have confirmed that these locations were visited within a maximum of 63 months by personnel that were required to observe for ACOR and report any issues for follow-up.

CORRECTIVE ACTION:

The MSA Inspection Program has completed a comprehensive review to verify all locations are captured in the program and inspected within the required time frame. We have prioritized locations based on last visit dates and are on track to complete all required inspections by the end of 2017. Additionally, the program has implemented an inspection schedule for all facilities moving forward and the associated workforce to meet the inspection deadlines. SED will continue to be updated on the status.

3. Title 49 CFR §192.605(a) states:

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

SCG's Gas Standard 223.0125 Leakage Classification and Mitigation Schedules, Section 3 states in part:

*3.11.2. "**CODE 2 LEAK INDICATION** - a leak that is recognized as being not-hazardous at the time of detection, but justifies scheduled repair based on the potential for creating a future hazard."*

3.11.2.1. "Examples of Code 2 leak indications include, but are not limited to:

*3.11.2.1.8. **Any reading on a pipeline operating at greater than 60 PSIG that is not a Code 1 leak"***

After reviewing SCG's leak survey records and maps, SED noted that the SCG failed to follow its own procedure. On May 21, 2015, a code 3 leak was discovered during an annual leak survey as can be seen on leak survey map VCO 4859-4 which was generated by order # 520000958432. This code 3 leak ID number is 1512936. Leak repair order # 520001097440 indicated that this leak was on a "high pressure" pipe. SCG defines "high pressure pipeline" as a pipeline operated greater than 60 psig (SCG Standard 182.0040 Section 3.4 High Pressure).

As a result, the operator did not follow SCG Standard 223.0125 Section 3.11.2.1.8 when they incorrectly classified this leak as a Code 3 leak. On July 23, 2015, during a re-evaluation inspection, this code 3 leak was re-coded as a code 2 leak since the leak is on a high-pressure pipe (above 60 psig).

Therefore, SCG is in violation of GO 112-F, Referenced Title 49 CFR §192.605(a), for its failure to follow its own procedure by incorrectly grading the leak.

RESPONSE:

SoCalGas disagrees with SED's determination of noncompliance as the leak was repaired within the required timeframe of a Code 2 leak. In October 2013, the noted section of the gas standard read, "Any reading on a pipeline operating at 30% SMYS or greater that is **not** a Code 1 leak." Code 3 leaks on high pressure were previously an acceptable practice. Although the Gas Standard language was revised, the change was a phased in over time in conjunction with an upgrade to the CLICK program. To address the leaks identified during this transition period, a QA/QC process was established to continually run reports of code 3 steel leaks and then determine if they were near high pressure (HP) pipelines (i.e., greater than 60 psig). Those identified were sent to operations on a re-evaluation order to determine if the leak could be associated with HP. The leak in question was one that the Compliance Assurance (CA) group identified as potentially involving HP facilities. The Re-evaluation Order 520001130443 was issued and completed on 7/21/2015 to confirm the leaking facility was HP, which resulted in CA upgrading the leak code from Code 3 – Steel to Code 2. The leak was

ultimately repaired on 9/8/15, less than 4 months after discovery, well within the required time frame for a Code 2 leak.

CORRECTIVE ACTION:

Leak number 1512936 was repaired with the required time frame and was appropriately coded through the established QA/QC process designed to identify these specific scenarios. SoCalGas took proactive measures to ensure, during the change in procedure and technology that a system was in place to stay in compliance with our procedures. On the current version of CLICK mobile, if HP is selected, the Code 3 option is grayed out and cannot be selected.

4. Title 49 CFR §192.603(c) states:

"The Administrator or the State Agency that has submitted a current certification under the pipeline safety laws (49 U.S.C. 60101 et seq.) with respect to the pipeline facility governed by an operator's plans and procedures may, after notice and opportunity for hearing as provided in 49 CFR 190.206 or the relevant State procedures, require the operator to amend its plans and procedures as necessary to provide a reasonable level of safety."

SCG Standard 223.0125 Leakage Classification and Mitigation Schedules, Section 1.3 has a Note which states,

"Although a repair of a classified leak may be expedited for a variety of reasons, ***the original classification of the leak shall not be changed."***

CPUC General Order No. 112-F Section 143.2(d) states,

"Any grade of leaks above Grade 3 can only be downgraded once to a Grade 3 leak without a physical repair. After a leak has been downgraded to Grade 3, the leak must be reevaluated every calendar year not to exceed 15 months. ***If the Grade 3 leak is upgraded at any time to a higher grade, the leak must be reevaluated and repaired per the Operator's procedures for the higher grade to which the leak is upgraded and may not be downgraded again to Grade 3."***

SCG Standard 223.0125 Section 1.3 does not allow reclassification of a leak. As a result, during re-evaluation of a leak, the operator cannot upgrade nor downgrade a leak if condition changes. For example, if gas indications are higher during a re-evaluation (compared to the original gas indication during the discovery of the leak) in which the leak may now be considered hazardous, it may be necessary to upgrade a leak to a higher grade. Currently, after a re-evaluation of a code 3 leak is performed, SCG is relying on the supervisor's judgment to make a decision on whether a code 3 leak must be mitigated or back on the re-evaluation schedule.

This may be inadequate since the supervisor's judgment is subjective and may not be consistent. Therefore, the flexibility to change the classification of a leak, especially during re-evaluation of a leak, may be needed to expedite the leak mitigation schedule. CPUC General Order No. 112-F Section 143.2(d) also allows reclassification of leaks. Therefore, SCG is in violation of GO 112-F, Referenced Title 49 CFR §192.603(c), for its failure to have adequate procedure pertaining to leak classification and re-evaluation to provide a reasonable level of safety.

RESPONSE:

SoCalGas currently codes leaks based on indications found upon discovery. Per Gas Standard 184.0245, section 4.6.3.6, when performing leak investigation on underground leakage, the excavation is made at the "Point of highest leak indication" and action is taken to properly code the leak.

SoCalGas currently does not downgrade leaks in the interest of public safety and to continue mitigating pending leaks. When a re-evaluation is performed, indications will more than likely be less if there has been venting or a temporary repair.

If indications are higher when the re-evaluation is performed, and the indications classify the leak as a code 1 or 2 leak, the repair will be expedited. Gas Standard 223.0125 will be revised to include specific requirements for when gas indications change during re-evaluation to ensure consistency among the field employees and supervisors throughout the company.

CORRECTIVE ACTION:
An information bulletin will also be sent out notifying the field and management about the changes.

II. Areas of Concern / Recommendations/ Observations

1. During SED's field visit, the inspection unit recorded the following eleven low pipe-to-soil readings, in six different cathodic protection areas.

   SL8-11, S0000: -450 mV
   SL8-11, Q0000: -838 mV
   VCO1624-2-A, D0000: -452 mV
   VCO1624-2-A, A0000: -438 mV
   TVCO1376-1, isolated steel section: -526 mV
   HM195, F0000: -623 mV
   HM195, C0000: -626 mV
   HM372, A0000: -680 mV
   HM372, B0000: -703 mV
   HM001, B0000: -494 mV
   HM001, F0000: -500 mV

Please provide an update on corrective measure to address the out of compliance pipe-to-soil reads.

RESPONSE:

SoCalGas has provided an update to the above referenced locations in the following table, and is continuing to move forward with remediation for those areas remaining out-of-tolerance.

Area	Location	District	Audit Read (V)	Lower Limit (V)	Up Read (V)	Date Read Up	Remediation
SL8-11	Read Point S	Ventura	-0.450	-0.850	-0.915	10/04/17	Anodes installed 10/02/17.
SL8-11	Read Point Q	Ventura	-0.838	-0.850	-0.979	10/04/17	Anodes installed 10/02/17.
VCO1 624-2-A	Read Point D	Ventura	-0.452	-0.850			Anode Installation Pending. Waiting on Permits.
VCO1 624-2-A	Read Point A	Ventura	-0.438	-0.850			Anode Installation Pending. Waiting on Permits.
TVCO 1376-1	Isolated Steel Section	Ventura	-0.526	N/A	N/A	N/A	Verified plastic and removed from CP inspection system 08/29/17.
HM19 5	Read Point F	Santa Barbara	-0.623	-0.850	-1.046	11/01/17	Anode Installed 10/26/17.
HM19 5	Read Point C	Santa Barbara	-0.626	-0.850	-1.048	11/01/17	Anode Installed 10/26/17.
HM37 2	Read Point A	Santa Barbara	-0.680	-0.850	-1.053	10/23/17	Anodes installed.
HM37 2	Read Point B	Santa Barbara	-0.703	-0.850	-1.077	10/23/17	Anodes installed.
HM00 1	Read Point B	Santa Barbara	-0.494	-0.850	-1.161	11/10/17	Anode installed.
HM00 1	Read Point F	Santa Barbara	-0.500	-0.850	-1.189	11/10/17	Anode Installed.

2. During SED's field inspection of a Regulator Station maintenance of an above ground Station 0330B, SED observed condensation at the downstream pipe next to the service regulator; which we believe as a result of a big pressure cut at the 2nd stage cut (360 psig to 45 psig). However; SED found that the station has a working monitor at upstream which is designed to cut from 420 psig to 360 psig, and an adjustment on the 1st stage cut could reduce the condensation by lowering the big 2nd stage cut. Please provide SCG's plan to address the condensation of the downstream pipe, which could potentially create an atmospheric corrosion.

RESPONSE:

SoCalGas is comfortable with the operation and integrity of ID 330. We will, as discussed with SED at the job site, change the set point of the Working Monitor to 300 psig to ascertain what effect the lower setting will have on the external condensation of the outlet piping of ID 330.

3. Title 49 CFR §192.605(a) states

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

SCG Standard 223.0100 Leakage Survey, Section 11.2 states,

*"Records **covering leakage surveys**, leaks discovered, and repairs made are filed by the appropriate Gas Transmission District, Storage Field, or Distribution Region, and maintained for the life of the pipeline plus five years."*

SCG did not retain the leak survey map VCO 3551-2, order # 520001022011 as required by SCG Standard 223.0100 Section 11.2. The operator indicated the leak survey map was lost; however, the leak survey was performed. Information pertaining to this leak survey map includes 4 leaks that were recorded and that the leak survey performed by 42965 on August 3, 2015. Leak repairs orders for the 4 leaks were requested. Operator provided "Compliance Leak Survey" record for order # 520001022011 showing the leak survey was completed on August 3, 2015 which indicates that the leak survey was recorded in the SAP. In addition, operator provided leak records for the 4 leaks discovered on that leak survey which were all "Above-ground minor leaks". The 4 leak ID's are 1518791, 1518793, 1518797, and 1518795.

SED recommends SCG to keep all the necessary documentation of maintenance activity performed as the SCG Standard 223.0100 Section 11.2 requires keeping records of maps covering leakage survey.

RESPONSE:

SoCalGas documented that the leak survey map in question was sent in to the Leakage Department after the survey was completed; however, it was removed from the filing cabinet sometime after that, and could not be located. Moving forward, SoCalGas will start using out-of-file markers for the Distribution leak survey map filing cabinets. These markers will include the date and the name of the person removing the leak survey map so that maps temporarily removed from the filing cabinets can be located.

The four leaks identified on leak survey map VCO 3551-2, order # 520001022011 were all aboveground minor leaks, and all four leaks have all been repaired.

Leak Object # 1518791 – Repaired on 01/17/17
Leak Object # 1518793 – Repaired on 01/17/17
Leak Object # 1518795 – Repaired on 01/07/17
Leak Object # 1518797 – Repaired on 11/10/15

4. Title 49 CFR §192.605(a) states

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

SCG Standard 189.0005 Operation Odometer, Sections 3.2.6 and 3.3.2 states I part

"3.2.6 Connect the sample line to the Odorometer. Check for and fix any gas leaks to avoid odor interference with the test."…"

And

"3.3.2 Odor Intensity at 0.9% Gas in Air…."

During SED's field inspection, SED observed SCG Technician (ID number 65872) conducting periodic sampling of odorant per GAS STANDARD 189.005 at location 404 Westlake Village of SCG Simi Valley District.
But the technician missed to perform the following two critical activities:

A. Section 3.2.6 for checking and fix any gas leaks to avoid odor interference with the test (as stated in the GAS STANDARD 189.005).
B. Section 3.3.2 Odor Intensity at 0.9% Gas in Air (as stated in the GAS STANDARD 189.005).

SED recommends SCG to conduct periodic evaluation of employers performing covered task field activity.

RESPONSE:

SoCalGas acknowledges SED's recommendations. SoCalGas is making changes to various aspects of this inspection to ensure it is easy to understand and follow. One example is identifying the specific setting for the machine during the test required under 3.3.2. instead of the employee trace the calibration chart up and over to determine what the setting should be. SoCalGas is also looking into creating an instructional video to demonstrate the appropriate steps in the process. Finally, the operator requalification period is scheduled to redo the Difficulty, Importance and Frequency (DIF) analysis to determine the appropriate re-evaluation frequency which could result in a shorter time frame for re-evaluation.