# CALIFORNIA PUBLIC UTILITIES COMMISSION Safety and Enforcement Division Gas Safety and Reliability Branch Gas Engineering and Compliance Section

## **Incident Investigation Report**

**Report Date:** 08/25/2014

**Investigator:** Matthewson Epuna

Incident Number: G 20091214-01

**Utility:** Southern California Gas SoCalGas

Date and Time of the Incident: 12/12/2009, 5:13:00 PM

Location of the Incident:

Canoga Park ,CA County: Los Angeles

#### Summary of Incident:

On December 12, 2009, a natural gas explosion in an electric room ripped through a 2nd-Storey Apartment directly above the electric room in the city of Canoga Park, CA. There were no reported injuries or fatalities. The probable cause of this incident was a stress-cracked PE elbow as reported from SoCalGas Failure Investigation analysis.

On or about November 16, 2009, the Property Maintenance Supervisor, smelt gas odor and requested the Office Manager, to report it to SocalGas. reported two gas leak odor complaints to SoCalGas the same day. initial gas leak odor complaint was centered around the gas master meter location. subsequent leak odor complaint was regarding the 2nd -Two different SoCalGas' employees responded at diferent times Storev Apt. # to the leak odor complaints. The first responder conducted a gas leak investigation around the gas meter set assembly (MSA) and at the 2nd-Storey Apt # and reported no natural gas indications except a fizzer at the MSA master -meter connections. He was unable to perform the "Underground-Samples" but he issued a 3081 for Distribution leak surveyor to return, bar-hole and perform the "Underground" Samples". Unfortunately, this order was not performed. Hence I find SoCalGas in

violation of the General Order 112-E (G.O. 112-E), referrence 49 CFR Part 192 section 192.13(C). Failure to follow company written procedures.

Casualties: Fatalities: 0 Injuries: 0

Property Damage: \$200,000.00

#### **Utility Facilities involved:**

Pipe Material = Plastic, Pipe Size = 0.5 (inches), MAOP = 60 (psi), Operating Pressure = 40 (psi)

#### Witnesses:



Source	Description
1 SoCalgas employee	interviews of employee at Canoga Park office
2 SoCalgas	Call Center recordings
3 SoCalgas	Dispatch report
4 SoCalgas	Leak Investigation - Customer Premises Standard
5 SoCalGas	Leak Investigation -Underground samples Standard
6 SoCalGas	Previous leak survey reports
7 SoCalgas	Call Center procedures flow chart
8 Resident of Apt #	Telephonic Interview
9 Americana Mgnt Co Employees	In person and telephonic interviews

### **Observations and Findings:**

On December 12, 2009, a natural gas explosion in an electric room ripped through a 2nd-Storey Apartment directly above the electric room in the City of Canoga Park, CA. There were no reported injuries or fatalities. The probable cause of this incident was a leaking stress-cracked PE elbow. Final report from SoCalGas Failure Investigation analysis indicated the PE elbow crack was due to stress loading.

On or about November 16, 2009, the Property Maintenance Supervisor, smelt gas odor and requested the Office Manager, to report it to SocalGas. reported two gas leak odor complaints to SoCalGas the initial gas leak odor complaint was pertaining to the gas same day. master meter location. The subsequent leak odor complaint was regarding the Two different SoCalGas' employees responded at diferent 2nd -floor Apt. times to the leak odor complaints. The first responder conducted a gas leak investigation around the meter (MSA) and the 2nd-Storey floor Apt # and reported no natural gas indications except a fizzer at the MSA master -meter connections. He issued the Apertment manager a ticket to correct fizzer leak at the MSA and also issued an order for SoCalGas to repair/ replace a vibrating regulator at the MSA. SoCalgas repaired the vibrating regulator. The 1st responder was unable to perforrm the "Leak Investigation- Underground Samples" as prescribed in the company's Gas Standard 142.0120 section 3, 142.02.3.3.3 and 142.02.3.3.6. However, he completed an RFA or Form 3081 which creates a work order for a distribution leak surveyor to come back with all the proper equipment and barhole

and conduct the underground gas samples. This order was never worked, meaning no employee ever went out to the site to conduct this underground gas leak samples.

On December 12, 2009, SoCalGas' dispatcher received a telephone call from City of Los Angeles Fire Department about an explosion and SoCalGas dispatched a Customer Technician to the incident site. SoCalGas employees arrived with leak survey instruments (DPIR) and surveyed the area on December 12 and 13, 2009, and reported no natural gas indications. SoCalGas employees returned on December 14, 2009 and clock-tested the service line. The clock test revealed a 0.75 cubic feet per hour pressure drop (38 lbs/sq in to 0 lb/sq-in drop in 4 minutes). SoCalgas exposed the gas line and discovered a cracked PE elbow. SoCalgas replaced the the entire service line with a new PE pipe.

SoCalGas employee's failure to barhole and perform the "Underground Samples" may have contributed to the inability to discover this cracked PE elbow leak. SoCalGas has a very robust written gas standard and procedures on this covered task that may have detected the leaking cracked elbow, however, that procedure was not followed. SoCalGas is in violation of General Order 112-E, referrence 49 CFR Part 192 section 192.13(C).

# Preliminary Statement of Pertinent General Order, Public Utilities Code Requirements, and/or Federal Requirements:

<b>General Order</b>	GO Rule
1 GO112E	GO.112-E,Part 192 section 192.13©

#### Conclusion:

SoCalGas company's "Gas Standard 142.0120 section 3, 142.02.3.3.3 and 142.02.3.3.6" mandates that an "Underground Samples" be performed in cases identical this odor complaint. SoCalGas has a very robust written gas standard and procedures on this covered task that may have detected the leaking cracked elbow, however, that procedure was not followed. SoCalGas employee's failure to follow-up on the RFA to barhole and perform the "Underground Samples" may have contributed to the inability to discover this cracked PE elbow leak. SoCalGas is in violation of General Order 112-E, referrence 49 CFR Part 192 section 192.13(C).