

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

Incident Investigation Report

Report Date: 07/12/2021

Incident Number: G 20210422-3214

Utility: Southern California Gas SoCalGas

Date and Time of the Incident: 4/22/2021, 10:34:00 AM

Location of the Incident: ■■■ Stewart and Gray Rd Downey, Los Angeles
Downey ,CA
County: Los Angeles

Summary of Incident:

On April 22, 2021, at approximately 1034 hours, Select Electric Inc. (Select Electric), a third-party excavator was operating a Horizontal Directional Drilling (HDD) machine to install an electrical conduit for City of Downey when the drilling head damaged a SoCalGas' 6-inch Polyethylene (PE) gas main, resulting in an unintentional release of natural gas into the atmosphere. There were no fatalities or injuries reported as a result of this incident. However, this incident caused service interruption to 46 SoCalGas' residential customers. SED investigation found that SoCalGas Pipeline Locators failed to provide the temporary marking of its underground 6-inch PE gas main. Therefore, SED finds SoCalGas in violation of General Order (G.O.) 112-F, Reference Title 49 Code of Federal Regulations (CFR), Part 192, §192.614(c)(5).

Casualties: *Fatalities:* 0 *Injuries:* 0

Property Damage: \$60,052.00

Utility Facilities involved:

Pipe Material = Plastic, Pipe Size = 6 (inches), MAOP = 40 (psi), Operating Pressure = 36 (psi)

Witnesses:

	<i>Name</i>	<i>Title</i>	<i>Phone</i>
1	Sann Naing	CPUC Investigator	N/A
2	██████████	Emergency Management Sp	██████████
3	██████████	PS&C Advisor, SoCalGas	██████████
4	██████████	PS&C Advisor, SoCalGas	██████████
5	██████████████████	PS&C Advisor, SoCalGas	██████████
6	██████████████	Forman, Select Electric	██████████
7	██████████████████	Field Supervisor, Select Elec	██████████
8	██████████████	Crew Leader, SoCalGas	
9	██████████████	ETD, SoCalGas	
10	██████████████	Customer Service Team Lea	██████████

Evidence

	<i>Source</i>	<i>Description</i>
1	██████████ (SoCalGas)	Initial report on 4/22/2021
2	██████████ (SoCalGas)	CPUC 420 Intial Report on 4/23/2021
3	██████████ (SoCalGas)	PHMSA Form 7100.1 report on 5/21/2021
4	██████████ (SoCalGas)	Data responses to SED's requests
5	██████████ (SoCalGas)	Data responses to SED's requests
6	██████████████████ (Select Electric)	Interview , Photos, and USA ticket copy on 4/22/21
7	██████████████ Select Electric)	Interview on 4/22/21
8	██████████████ (SoCalGas)	Interview on 5/3/2021
9	██████████████ (SoCalGas)	Interview on 5/3/2021
10	██████████ ardo (SoCalGas)	Interview on 4/23/2021

Observations and Findings:

On April 22, 2021, at approximately 1034 hours, Select Electric, a contractor working for the City of Downey, damaged a SoCalGas' 6-inch PE gas main while utilizing a HDD machine to install an electrical conduit for a traffic signal upgrade project at the intersection of Stewart & Gray Road and Rives Avenue (near [REDACTED] Stewart & Gray Road) in the City of Downey, Los Angeles County. This incident resulted in an unintentional release of natural gas into the atmosphere. The City of Downey Fire Department (DFD) and Police Department responded to the scene, blocked off the area, rerouted the traffic, and shut off the gas service to 46 SoCalGas' customers as a precautionary measure while SoCalGas crews were working to control the gas release. The incident was reported to both CPUC and the Department of Transportation (DOT) due to media attention and gas release exceeding 3 million cubic feet (NRC#1303305).

On April 22, 2021, at approximately 1055 hours SoCalGas' crew arrived at the scene, excavated two remote control holes to control the gas by utilizing an existing pressure control fitting (PC) on 3-inch steel main (near intersection of Rives Avenue and Cole Street) and squeezing off the 6-inch PE main (at the intersection maintaining a safe distance from the gas release location) to control the release of gas. However, using the existing PC and squeezing off the 6-inch PE failed to control the flow of gas. SoCalGas' crew excavated a third hole (on Rives Avenue at approximately 150 feet south of incident), installed a new PC on a 6-inch steel main, and was able to control the flow of gas on April 23, 2021, at approximately 0305 hours.

On April 22, 2021, SED arrived on scene at approximately 1520 hours, met with SoCalGas' representative, [REDACTED], and took photos of the temporary marking near the accident site. In addition, SED surveyed the area where the 6-inch PE gas main got damaged and did not find any traces of temporary marking for the 6-inch PE gas main. Furthermore, SED observed temporary marking of the 6-inch steel gas main in the delineated area. SED also interviewed Select Electric's employee, [REDACTED], who stated that Select Electric had a USA ticket (Select Electric field supervisor, [REDACTED] provided SED a copy of USA ticket A202720873) and he potholed the area in conflict to locate the 6-inch steel gas main prior to using the HDD machine. [REDACTED] also stated that on the day of the incident, he started the HDD operation at 0800 hours and at approximately 1030 hours, the HDD's head damaged SoCalGas' 6-inch PE gas main.

On April 23, 2021, SED met with SoCalGas' representatives, [REDACTED] and the Field Supervision Team at the incident site, where SED took pictures of the damaged 6-inch PE gas main (hole with approximate 3-inch in diameter). In addition, SED measured the depth of cover of the damaged 6-inch PE gas main and found it to be 4 feet and 2 inches. According to [REDACTED] and Field Supervision Team, a section of the 6-inch steel main was altered and a new section of the 6-inch PE main was installed at some time in the past. In addition, the alteration was documented on SoCalGas' GIS map System.

On April 23, 2021, SoCalGas' crew cut out approximately (3) feet section of damaged 6-inch PE gas main and installed a new section of PE pipe (DR 13.5, PE 2406/2808, ASTM D2513) using electro fusion method. After the repair was completed, SoCalGas' Customer Service Crew was dispatched to restore gas service to the affected customers and all customers were back in service at approximately 1600 hours.

On April 30, 2021, SoCalGas' representative, [REDACTED] provided SED with a copy of GIS map showing both the 6-inch steel gas main and the altered 6-inch PE gas main at the intersection of Stewart & Gray Road and Rives Avenue.

On May 3, 2021, SED visited the site and interviewed SoCalGas' Pipeline Locator, [REDACTED], who stated that it was a long time ago and he does not remember what he did. SED also interviewed another Line Locator, [REDACTED], who stated that [REDACTED] provided temporary marking for company pipelines under the previous Underground Service Alert (USA) ticket # A202610686 and he observed the temporary markings of company pipelines at the intersection of Stewart & Gray Road and Rives Avenue. In addition, [REDACTED] stated that under the new USA ticket (#A202720873) he just provided the temporary marking for 6-inch and 3-inch steel gas mains on Rives Avenue and did not provide temporary marking at the intersection of Stewart & Gray Road and Rives Avenue because the temporary marking was visible and did not require refreshing of the marking. While at the accident site, SED checked the temporary marking in the delineated area where the incident occurred and observed temporary marking for the 6-inch steel gas main and no temporary marking for the altered 6-inch PE gas main (the PE gas main was offset by approximately (4) feet (4) inches of the 6-inch steel gas main). According to SoCalGas' Area Manager, [REDACTED], and Field Supervisor, [REDACTED], the 6-inch PE gas main was installed in January, 2002, and during the temporary marking, the Pipeline Locators provided temporary marking for the abandoned section of the 6-inch steel Gas main and did not provide temporary marking for the 6-inch PE gas main.

On June 11, 2021, SoCalGas provided additional records showing that on January 18, 2002, SoCalGas abandoned a 73 feet section of the 6-inch steel gas main and installed the 6-inch PE gas main as a part of its Distribution Integrity Management Program, System Integrity Plan project (DIMP SIP). In addition, SoCalGas GIS map records did reflect the 6-inch PE gas main, and the GIS map records were available for the Pipeline Locators to use for locating and field marking of SoCalGas' subsurface installations (6-inch PE gas main). However, Pipeline Locators failed to provide for temporary marking of the 6-inch PE gas main in the delineated area as described in a valid USA ticket requested by Select Electric.

SED reviewed Operator Qualification records of Pipeline Locators ([REDACTED] and [REDACTED]) who responded to the USA tickets (# A202610686 and # A202720873) and found both Pipeline Locators had valid qualifications at the time of the incident.

SED reviewed Select Electric records including USA tickets, photos of the delineated area where the incident occurred and found no sign/evidence of temporary marking for the 6-inch PE gas main.

According to SoCalGas, the estimated volume of gas released unintentionally was 5,825.380 mcf, amounting to an estimated cost of \$18,152. In addition, the estimated cost to repair the damaged gas main was in the amount of \$1,900 and emergency response was \$40,000.

General Order (GO) 112-F, Title 49 of Code of Federal Regulation (CFR), Part 192, §192.614 Damage Prevention Program, §192.614(c)(5) states:

“Provide for temporary marking of buried pipelines in the area of excavation activity before, as far as practical, the activity begins.”

SED investigation found that:

- Under USA ticket # A202610686, SoCalGas' Line Locator, [REDACTED] was required to locate and field mark all SoCalGas' underground subsurface structures at the intersection of Stewart & Gray Road and Rives Avenue using the GIS map that shows the 6-inch steel, 3-inch steel, 6-inch PE gas mains and gas service lines, but [REDACTED] provided the temporary marking for the 6-inch steel, 3-inch steel gas mains, and gas service lines but failed to locate and field mark the 6-inch PE gas main.

- Under USA tickets numbered A202720873 and A202610686, SoCalGas' Line Locator, [REDACTED] was required to locate and field mark all SoCalGas' underground subsurface structures at the intersection of Stewart & Gray Road and on Rives Avenue, but [REDACTED] only provided temporary marking of SoCalGas' underground subsurface structures on Rives Avenue because the temporary markings at the intersection of Stewart & Gray Road was visible and did not require refreshing of the marking. In addition, [REDACTED] failed to review the GIS map and verify that all SoCalGas' underground subsurface structures at the intersection of Stewart & Gray Road and Rives Avenue were located and field marked.

Therefore, SED finds SoCalGas in violation of G.O. 112-F, Reference Title 49 CFR, Part 192, §192.614(c)(5) for not locating and field marking the 6-inch PE gas main.

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

General Order

1 GO112F

GO Rule

Title 49, CFR, Part 192, §192.614(c)(5)

Conclusion:

SED investigation found that Select Electric, the third-party excavator had a valid USA ticket at the time of the incident and used hand tools to determine the exact location of the subsurface installations in conflict with excavation before using the HDD machine as required by California Government Code 4216.4. In addition, SoCalGas' Pipeline Locators failed to locate and field mark the 6-inch PE gas main as described in the valid USA tickets. Therefore, SED finds SoCalGas in violation of G.O. 112-F, Reference Title 49 CFR, Part 192, §192.614(c)(5) for not locating and field marking the 6-inch PE gas main.