

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



May 5, 2014

Redacted

Dear Redacted,

On May 13, 2013, the Gas Safety and Reliability Branch (GSRB), Safety and Enforcement Division of the California Public Utilities Commission (CPUC), received your telephonic complaint concerning natural gas leak issues at or near your residence located at Redacted Redacted. In your communication, you expressed concerns about safety hazards associated with natural gas and gas company activities in your neighborhood.

More recently, on March 10, 2014 in a follow-up phone call you expressed some additional general concerns related to PG&E's safety assurance activities and responsiveness to your complaints. GSRB followed up with PG&E on these general concerns and reviewed their documentation of interaction between yourself and PG&E between the time period February 2009 and March 2014. GSRB did not observe any unsafe conditions in our review; nor were any instances of non-responsiveness or concerns with PG&E's safety assurance activities detected.

Following receipt of your May 13, 2013 complaints, a staff engineer from GSRB contacted you to become further informed of your concerns and to conduct an investigation of these matters. You expressed that you felt unsafe due to the following conditions:

1. A possible underground gas leak near the sidewalk.
2. A possible gas leak near the gas meter.
3. The excavation of gas transmission pipelines near your home due to BART construction.
4. The implications of hydro testing on transmission pipelines near your home.
5. The implications of transmission pipeline excavations near your home.
6. The presence of SCADA equipment near your home.
7. The use of soil sampling to determine sources of methane.
8. Low temperatures increase the threat of gas leaks.
9. PG&E has been driving around your neighborhood with a leak detection vehicle.
10. Gas leaking through a fire hydrant near the BART construction.
11. You feel PG&E is ignoring your concerns.

GSRB staff conducted an investigation by obtaining and reviewing various PG&E records for your residence and the area in close proximity to it to determine if there are violations of Commission General Order 112-E, which references and adopts Title 49 of the Code of Federal Regulations (CFR), Part 192. The following are GSRB's findings related to the investigation of your concerns.

**Concern 1:** A possible underground gas leak near the sidewalk

Our investigation found that a 50 parts-per-million methane concentration by the sidewalk was confirmed by PG&E's survey conducted at your residence on May 24, 2012. A reading of 50 ppm represents a gas-in-air level that is well below the lowest flammability level for natural gas of 40,000 ppm, or 4% gas in air. Methane is the primary component in utility natural gas. The PG&E surveyors used a leak survey device, the Detecto Pak -Infrared (DP -IR), which can measure levels of methane that are well below any hazardous amount. In any event PG&E is responsible for the safe operation of all of its facilities including distribution and service lines in residential neighborhoods. Title 49 CFR 192.703(c) states: "*Hazardous leaks must be repaired promptly.*" Due to the low methane concentration found, PG&E has not violated 192.703(c) in this case.

**Concern 2:** A possible gas leak near the meter

GSRB's investigation found that a 15 ppm methane concentration near your gas meter was confirmed by the leak survey conducted at your residence by PG&E on May 24, 2012. The gas meter in question was then soap-bubble tested to check for any leaking gas; no gas leaks were found in the meter fittings. The 15 ppm reading may have been caused by gas passing through the regulator's vent, which constitutes normal operation of the meter set. Regulators are installed on residential meter sets to protect appliances from overpressure. A level of 15 ppm is much lower than the lowest hazardous concentration of natural gas. PG&E has not violated 192.703(c) in this case.

Review of PG&E records show that subsequent leak surveys were conducted at your home on May 25<sup>th</sup>, September 1<sup>st</sup>, October 26<sup>th</sup>, 29<sup>th</sup>, and 30<sup>th</sup>, 2012. No hazardous leaks were found at those times. PG&E is required by regulation to perform leak surveys at least every 5 years. The most recent 5-year survey at your home was in 2010 and no leaks were found at that time.

**Concern 3:** The excavation of gas transmission pipelines near your home due to BART construction

Excavations near buried utility lines are coordinated by the Northern California One-Call service. Builders who are planning to dig as part of a construction project are required to use the "Call - Before-You-Dig" toll-free 811 One-Call hotline. The One-Call service then sends out notices to all utilities that have pipelines or conduits in the project area. Operators such as PG&E are required to mark the locations of buried pipelines within the construction zone so that the construction team will know where to dig to avoid damage to the buried utilities. In addition, excavation of high pressure gas transmission lines requires the presence of a gas company representative on site to ensure a safe dig.

**Concern 4:** The implications of hydro testing on transmission pipelines near your home

Hydrostatic testing of gas pipelines is one of the methods used by pipeline operators to comply with the Integrity Management assessment requirements in Title 49 CFR 192.901, and it is also a standard method to test the strength of a pipeline segment including the welds in that segment. It is also used to confirm that a new or replaced pipe installation is able to contain gas at the planned maximum operating pressure according to Title 49 CFR 192.501, Test Requirements.

Hydro-testing involves purging the test segment of gas, filling it with water, and then raising the water pressure to at least 125% of the intended maximum operating pressure and holding that pressure for a specified length of time. It is a safe way to demonstrate that the pipe will not leak or rupture when operating at pressures less than the tested pressure. After these tests, operators are required to dispose of the water in a safe manner.

PG&E conducted successful hydro-testing on two transmission line pipe segments located about 2/3 of a mile from your home in 2011. A portion of Line 191 was relocated to make room for Highway 4 construction and the new segment of pipe was tested before beginning operation to comply with Title 49 CFR 192.505. Line SP5 was tested as a part of PG&E's Pipeline Safety Enhancement Program under the CPUC order R.11-02-019, with no issues found.

**Concern 5:** The implications of transmission pipeline excavations near your home.

Pipeline operators are required by the Integrity Management portion of Title 49 CFR, Part 192 to perform periodic assessments of the pipe integrity to include direct inspection for potential external pipe corrosion, known as External Corrosion Direct Assessment (ECDA). PG&E performed ECDA testing on lines SP5 and 191 in 2010 and 2011. These tests require the excavation of pipeline segments so that the external condition can be evaluated for potential risks. PG&E did not find any issues requiring corrective action as a result of these ECDA tests.

**Concern 6:** The presence of SCADA equipment near your home

Supervisory Control and Data Acquisition (SCADA) technology is widely used in the pipeline industry to remotely measure and transmit important operating data, such as pipeline pressure and flow rate, to central control stations. PG&E uses SCADA transmitting equipment at many locations to monitor and control pipeline operations. Operators are required to follow Title 49 CFR 192.631 regulations in their use of SCADA for Control Room Management. GSRB conducted an audit of PG&E's Control Room Management in 2012.

**Concern 7:** The use of soil sampling to determine sources of methane

Soil sampling is sometimes used to determine the source of methane if there is a hazardous leak and it cannot be traced to a utility pipeline. As previously discussed, no hazardous leak has been found at your home.

**Concern 8:** Low temperatures increase the threat of gas leaks

The low, non-hazardous concentrations of gas measured during the PG&E surveys will not be significantly changed due to lower ambient temperatures.

**Concern 9:** PG&E has been driving around your neighborhood with a leak detection vehicle.

PG&E records show that the new Picarro Surveyor™ leak detection vehicle has been used in the city of Antioch to investigate your gas leak concerns. The Picarro Surveyor™ is more sensitive than traditional hand-held leak detection methods. PG&E is required by State and Federal law to conduct regular leak surveys of its distribution and transmission lines. If a leak is found PG&E must grade the leak according to a defined scale. Any hazardous leak must be repaired immediately. Non-hazardous leaks are monitored on a regular basis to ensure that they remain safe.

**Concern 10:** Gas leaking through a fire hydrant near the BART construction

Any gas leak should be reported to PG&E to be surveyed. If hazardous, PG&E will repair the leak.

**Concern 11:** You feel PG&E is ignoring your concerns

A review of PG&E records shows they have responded to your calls on a number of occasions during the last two years. Within the last few months, PG&E has conducted three gas leak surveys due to your calls of gas leak concerns. For two of the three surveys, the Picarro Surveyor™ was used and no gas leaks were found near your residence.

The Safety and Enforcement Division has devoted significant attention to these concerns and has inquired with PG&E on several of their recent activities regarding your residence. In short we feel the actions of PG&E have constituted a level of safety assurance above and beyond applicable pipeline codes and there are no outstanding safety issues. SED and GSRB management considers these complaints resolved and closed.

If you feel there are still unresolved issues related to your complaints please feel free to file a formal complaint with the CPUC. The instructions for filing a formal complaint can be found on the CPUC's website or [http://www.cpuc.ca.gov/PUC/CEC/e\\_complaint/b\\_safetycomplaint.htm](http://www.cpuc.ca.gov/PUC/CEC/e_complaint/b_safetycomplaint.htm)

Sincerely,

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