FOR IMMEDIATE RELEASE	Bulletin Number: 252 Date: 01/30/08

Pacific Gas and Electric Company

Gas Distribution Information Bulletin

Title: Leak Survey During and After Rain and Excessive Wind

Check all appropriate boxes

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The purpose of this bulletin is to provide guidance regarding environmental considerations when performing gas leak surveys. M&C Supervisors are responsible for communicating the contents of this bulletin to affected employees.

This document amends Attachment 1 of UO Standard S4110, *Leak Survey and Repair of Gas Transmission and Distribution Facilities*.

This document will be incorporated into the initial release of Work Procedure (WP) 4110-1.

Background

PG&E performs a surface leak survey using a variety of instruments to detect the presence of gas. The use of this survey method is limited by adverse conditions (such as excessive wind, excessive soil moisture or frost or surface sealing by ice or water). The current practice when using an HFI instrument is to survey at speeds slow enough to allow for an accurate sample to be drawn into the instrument. This is achieved by placing a probe over the most logical venting locations. When using an OMD, the survey speeds are also reduced to allow for better detection by the optical receiver. The OMD was tested by the manufacturer at wind speeds up to 25 MPH. (miles per hour). However, the manufacturer recommend limiting speeds to 10 - 15 mph to detect lower concentration leaks and allow the surveyor greater accuracy to locate leaks. When using an RMLD, similar considerations exist. The gas plume detected by the instrument is variable and dependent on the soil conditions, temperature, wind, and leak rate. The manufacturer recommends surveying with the wind to the operator's back.

The problem is that "Excessive Wind" and Excessive Soil Moisture" are not well defined. The equipment manufacturer has indicated that wind velocity has, generally, more influence on the ability to perform a successful survey than any other environmental factor. The ideal condition is, of course, when the wind velocity is zero MPH. Very heavy winds, on the other hand, dilute the sample and disperse the sample in the air. In the PG&E service territory, the problem of prevailing winds is usually mitigated by starting the survey earlier in the morning and ending earlier in the afternoon. Performing leak surveys during periods of rain or over standing water after rain have the potential to damage HFI units. The RMLD will alarm when detecting water in the background and

may not properly detect the presence of leaks. Additionally, venting conditions may have changed as a result of ground saturation.

Recommendations

Given the uncertainties involved, the following is recommended:

1. Do not leak survey during periods of rain, snow or when visible moisture (fog or mist are present).

2. For the OMD, do not survey when the steady state wind speed exceeds 15 MPH.

3. When using the RMLD, make every effort to keep the wind to your back during survey. Do not survey when steady state wind speeds are in excess of 15 MPH.

4. When using an HFI, HFI mobile or CGI unit, do not survey when steady state wind speeds are in excess of 15 MPH.

5. To determine if conditions are appropriate for the leak survey to resume after periods or heavy rain or during windy conditions, re-survey a minimum of 5 known recently-recorded (within the last year) leaks on the system where the reading range from 500 ppm to 2% gas in air. The leaks should be located in similar soil and paving conditions as the survey area. If 100% of the known leaks can be detected at their recorded concentration levels, plus or minus 25% using normal walking or driving speeds, the survey can continue.

Approved by:

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Date: (01/30/08)

Author: [redacted]

If you have any questions about this bulletin, please call the employee(s) listed below:

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