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Mr. Jeffrey D. Wiese, Associate Administrator for Pipeline Safety
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
1200 New Jersey Avenue, S.E
Washington, D.C. 20590

Re Interpretation of Instructions to Complete PHMSA Form F7100.1-1

Dear Mr. Wiese,

As you are aware, PG&E recently submitted Form F 7100.1.1 for calendar year 2009 in compliance with our annual reporting to the Pipeline and Hazardous Materials and Safety Administration (PHMSA). The purpose of the letter is to explain the increase in the number of leak repairs reported in 2009 and to initiate a discussion leading to consensus regarding gas leak reporting criteria, specifically the reporting of non-hazardous leaks.

Each year, PG&E submits its annual gas distribution system report – PHMSA Form F 7100.1-1. For calendar year 2007, PG&E reported 7,844 leak repairs (Attachment A). On March 15, 2010, PG&E submitted the gas leak repair statistics for 2009 (Attachment B) and reported 58,089 leaks – a seven-fold increase from 2007. (For reference, Table 1 is attached to provide a summary of PG&E data filed from 2006 thru 2009.)

As detailed below, this increase is attributable to two factors. First, PG&E initiated an Accelerated Leak Survey (ALS) Project which increased the number of gas mains and services surveyed. Second, we changed the way we account for non-hazardous, above ground riser and meter set leak repairs as a result of the January 13, 2009 verbal response received from Jamerson Pender of your staff to our December 18, 2008 request for interpretation.

PG&E's Accelerated Leak Survey (ALS) Project:

All of the increase in reported gas main leaks and a portion of the service leaks are due to PG&E's ALS Project. In 2008, PG&E determined that its leak detection process needed enhancement. As a result, PG&E modified work procedures, training and the qualification processes associated with the leak survey. Following these enhancements, in late 2008, PG&E initiated the ALS Project designed to complete the five-year gas leak surveys, otherwise scheduled for 2011 and 2012, by April 2010. This was in addition to the routine gas leak surveys normally scheduled in 2008 and 2009. With 3.3 million gas services, PG&E would normally survey 22.25% or about 750,000 gas services per year. In 2009, as a result of the ALS Project, we surveyed 57% of the entire gas system or almost 2 million services. (Note: Since the ALS Project was completed in April 2010, the impact of the additional surveys will affect next year's annual PHMSA report as well.)

With the addition of the ALS Project, the number of gas mains and services surveyed by PG&E in 2009 increased by about 165%. Therefore, using 2007 (the last full year of reporting before PG&E implemented ALS) as a base year, where we surveyed 22% of the gas mains and repaired 1,302 reportable leaks, in 2009, with the addition of 165% more leak surveys, it would be expected that the number of reportable gas main leak repairs would increase by the same percentage to approximately 3,500. In fact, 2009 gas main leak repairs were 3,101, only slightly less than predicted.

Similarly, for gas services, with additional leak surveys attributable to the ALS Project, the 6,542 service leak repairs in 2007 should have increased to approximately 17,000. However, as noted above, the actual increase of 54,988 was more than three times the projected amount. By far, the larger share of the gas service leak repair increase was attributable to changes in the PHMSA leak repair reporting interpretation as described more fully below.

Implementation of New PHMSA Reporting Interpretation:

PHMSA Form F7100.1-1 requires pipeline operators to report the repair of gas leaks due to corrosion, natural forces, excavation, other outside force damage, equipment failure, operations or other causes. The Instructions for Completing Form PHMSA F7100.1-1 ("Instructions") provides guidance (Attachment C.) Specifically, the Instructions provide that:

> A leak is defined as an unintentional escape of gas from a pipeline. A non-hazardous release that can be eliminated by lubrication, adjustment or tightening is not a leak. Include all leaks eliminated by repair, replacement or other reason during the reporting year.

PG&E has historically included all leak repairs on gas distribution mains and service lines and hazardous above-ground leaks repaired in Form F 7100.1.1. Until last year, PG&E defined the criteria for reporting hazardous leaks as any leak below the service (shut-off) valve. We have not historically reported above ground leaks at the service (shut-off) valve or on the meter set unless the leak was deemed hazardous or potentially hazardous and required replacement of damaged, corroded, or non-operational equipment.

In response to my December 2008 letter, your staff arranged a conference call with Jamerson Pender on January 13, 2009. During that call, Mr. Pender explained that, despite use of the word "non-hazardous" in the instructions, PHMSA intended utilities to report any release of gas, regardless of how insignificant, excluding those leaks which can be eliminated by lubrication, adjustment or tightening. Based on this verbal advice, PG&E has modified its reporting criteria for calendar year 2009.

The table below is included to provide a clear comparison of the impact on results for calendar year 2009 reporting compared to historical practices consistent with PG&E's reporting in 2007 and the current practices of most other AGA utilities consulted.

- Historical Reporting Criteria: Reporting consistent with historic practices that included all leak repairs on mains and services plus hazardous or potentially hazardous, above ground leaks on risers and meter sets

- New PHMSA Reporting Criteria: Reporting consistent with the new PHMSA advice that includes all leak repairs on mains and services plus all leak repairs on risers and meter sets regardless of leak severity or potential risk

| PG&E Calendar Year 2009 Leak Repairs - Reporting Criteria Comparison | | | | |
|---|---|---|---|---|
| | Historical Reporting Criteria | | New PHMSA Reporting Criteria | |
| Category | Mains | Services | Mains | Services |
| Corrosion | 1062 | 2986 | 1062 | 5049 |
| Natural Forces | 26 | 45 | 26 | 47 |
| Excavation | 215 | 1507 | 215 | 1510 |
| Other outside force damage | 26 | 171 | 26 | 175 |
| Material or Welds | 1057 | 5889 | 1057 | 26896 |
| Equipment | 35 | 176 | 35 | 481 |
| Operations | 10 | 49 | 10 | 72 |
| Other | 670 | 2647 | 670 | 20758 |
| Subtotal: | 3101 | 13470 | 3101 | 54988 |
| Total: | 16,571 | | 58,089 | |
| Non-hazardous Leak Repairs | 1,981 (12%) | | 46,576 (80%) | |
| Leaks Scheduled for Repair | 5,600 | | 25,700 | |

Under the historical reporting criteria, PG&E would have reported a total of 16,571 leak repairs in 2009. While this represents a significant increase over the 7,844 leak repairs reported in 2007, the number is consistent with expectations given the 165% increase in 2009 leak surveys due to PG&E's ALS Project. However, the actual number of reportable leak repairs in 2009 was 58,089. This is an increase of 41,518 reported leak repairs and represents a 250% increase in total leak repairs based solely on the new PHMSA reporting interpretation.

Looking separately at the reportable leak repairs on mains and services, it should be noted that while the number of reportable leak repairs on gas mains is constant under the two reporting criteria (3,101), the inclusion of non-hazardous leak repairs on risers and meter sets increased more than 300%. The increase of 41,518 service leak repairs includes approximately 36,600 (88%) non-hazardous, "fuzz" leak repairs on service riser valves and threads and approximately 4,900 (12%) similar non-hazardous leak repairs on meter sets where the technician elects to replace a fitting or install a clamp rather than lubricating and tightening. (In many cases, these "fuzz" leaks or fugitive emissions would not be detected or repaired on below ground pipe.)

Also, under the two reporting criteria, there is a dramatic increase in non-hazardous leak repairs that would be reported. Historically, PG&E would have reported 16,571 total leak repairs which included 1,981 (12%) non-hazardous leak repairs. However, under the new reporting criteria, total leak repairs (58,089) have ballooned with the addition of 46,576 non-hazardous leaks, representing 80% of the total.

The potentially confusing impact of the new reporting criteria is further illustrated by the increase in the number leaks scheduled for repair under the two reporting criteria. Using the historic approach, PG&E would have reported about 5,600 scheduled leak repairs. However, the scheduled leaks actually reported in 2009 were 25,700 – an increase of more than 350%. This is particularly noteworthy when you consider that all of this increase was attributable to the change in the reporting criteria and that all of these scheduled leaks are non-hazardous.

Conclusion:

PG&E understands that PHMSA is a data-driven organization that uses Form F 7100.1.1 data to evaluate the trends and frequently proposes policy changes based on the statistics reported by pipeline operators. Our concern is that the inclusion of these previously unreported non-hazardous leaks without fully understanding the underlying data may mask the significance of leaks that are potential safety issues and may divert operator and industry attention on non-hazardous leaks.

For this reason, PG&E has attempted to illustrate the impact of the verbal interpretation that we received from PHMSA staff on the PHMSA leak repair reporting criteria. We believe such a change deserves careful consideration particularly given the potential that it may impair meaningful historical trending analysis until such time as a new body of statistics has been developed. Additionally, at this point, only PG&E has received new reporting criteria interpretation; unless all utilities are directed to adopt the same leak repair reporting criteria, PHMSA and others will be unable to make meaningful comparisons across utilities.

We have tried to explain the impact of PHMSA's advice on PG&E's 2009 leak repair statistics and to provide a comprehensive analysis of the impact of that advice to stimulate further discussion. PG&E looks forward to these discussions with a view to developing consensus on this matter. If you have any questions, do not hesitate to call me.

Sincerely,

Glen Garter

cc: John Gale, PHMSA
Roger Little, PHMSA
Raffy Stepanian, CPUC
Bob Howard, PG&E
Christina Sames, AGA

Attachments: A – PG&E's Calendar Year 2007 PHMSA Form F7100.1-1.
B – PG&E's Calendar Year 2009 PHMSA Form F7100.1-1.
C – Instructions for Completing Form PHMSA F7100.1-1
D – PG&E's December 18, 2008 Letter to John Gale

Table 1: PG&E's Annual PHMSA Form 7100.1-1 Data
(Years 2006 - 2009 for reference and comparison)

| | 2006 | | 2007 | | 2008 | | 2009 | |
|---|---|---|---|---|---|---|---|---|
| Category | Mains | Services | Mains | Services | Mains | Services | Mains | Services |
| Corrosion | 229 | 1208 | 240 | 1233 | 433 | 1971 | 1062 | 5049 |
| Natural Forces | 36 | 134 | 31 | 88 | 21 | 51 | 26 | 47 |
| Excavation | 594 | 2441 | 483 | 2791 | 319 | 1878 | 215 | 1510 |
| Other outside force damage | 73 | 113 | 13 | 104 | 28 | 157 | 26 | 175 |
| Material or Welds | 252 | 1471 | 368 | 1595 | 602 | 5417 | 1057 | 26896 |
| Equipment | 1 | 4 | 1 | 5 | 7 | 105 | 35 | 481 |
| Operations | 0 | 0 | 0 | 0 | 3 | 25 | 10 | 72 |
| Other | 221 | 752 | 166 | 726 | 378 | 5952 | 670 | 20758 |
| Subtotal: | 1406 | 6123 | 1302 | 6542 | 1791 | 15556 | 3101 | 54988 |
| Total: | 7,529 | | 7,844 | | 17,347 | | 58,089 | |