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September 08, 2015

Mr. Ken Bruno  
Gas Safety and Reliability Branch  
Safety and Enforcement Division  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102

Re: State of California – Public Utilities Commission  
General Order 112-E Audit – PG&E’s De Anza Division

Dear Mr. Bruno:

The Safety and Enforcement Division (SED) of the CPUC conducted a General Order 112-E audit of PG&E’s De Anza Division from June 8 through June 12, 2015. On August 13, 2015, the SED submitted their audit report, identifying violations and findings. Attached is PG&E’s response to the CPUC audit report.

Please contact Glen Allen at (925) 244-3388 or gmad@pge.com for any questions you may have regarding this response.

Sincerely,

/S/  
Larry Deniston

Attachments

cc: Aimee Caguiran, CPUC  
Dennis Lee, CPUC

Mike Falk, PG&E  
Sumeet Singh, PG&E

2015 De Anza Division Audit Findings and Responses

Finding Type [Internal, NOV, AOC]	Finding #	Finding	Response	Associated Attachment (File Name)
PG&E Internal Review Findings		PG&E's Internal Review Findings	<p>At the start of the inspection, PG&amp;E provided SED its findings from the internal review it conducted of the De Anza Division. PG&amp;E addressed all of its findings prior to SED's inspection.</p> <p>Attached, please find Attachment 1 - Internal Inspection Findings and Attachment 2 - De Anza 2015 Internal Review, indicating the findings, corrective actions taken and the closure date.</p>	<p>Att 1_Internal Inspection Findings.pdf Att 2_De Anza Division 2015 Internal Review_CONF.xlsx</p>
SED NOV	1	<p>Title 49 CFR §192.465(d) states: "Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring."</p> <p>SED found that an Annual CP Area in Cupertino, CPA 3410-21, was identified as down during the annual reading on March 8, 2012, and was not restored until August 23, 2013.</p> <p>SED examined the Corrective Action Plan and saw that restoration was delayed for nine months while waiting for Engineering to secure a construction permit to install new anodes. After nine months without progress, a corrosion tech chose to perform intensive trouble shooting and discovered (from review of an old as-built drawing) that this portion of the pipeline had been electrically isolated in 1972 with a Kerotest insulator; thus the area should have been identified as a "10%-er" that could be cathodically protected by simple hand installation of drivable anodes (not requiring a permit for a deep well).</p> <p>Protection of the isolated area was restored by driving in new anodes by hand. If the decision to troubleshoot or a review of the as-built drawings had been performed earlier, the CP area could have been brought up promptly. PG&amp;E is in violation of 49 CFR §192.465(d).</p>	<p>Based on the best information available, it was not initially apparent that this portion of the pipeline had been electrically isolated in 1972 with a Kerotest insulator. Consequently, the job to install the anode required 9 months in engineering awaiting a permit from the City of Cupertino. Attached, please find Attachment 3 - "Action Plan", verifying the progression of the troubleshooting and work performed at 21255 Stevens Creek Blvd. in Cupertino.</p> <p>To prevent reoccurrence, the corrosion department, since March of 2014, has a dedicated corrosion services group consisting of experienced corrosion specialists with extensive knowledge of difficult troubleshooting procedures. Additionally, PG&amp;E is in the process of implementing a compliance management process, Super Gas Operations (SGO), which will provide compliance dates to all preventative and corrective work and will also manage the schedule for all of these jobs. Full implementation is currently scheduled for late 2016.</p>	Att 3_Action Plan_CONF.pdf
SED NOV	2	<p>Title 49 CFR §192.475(b) states in part: "Whenever any pipe is removed from a pipeline for any reason, the internal surface must be inspected for evidence of corrosion."</p> <p>During the records review, SED found that during repair of leak #12305841 at 1039 Sladky Avenue in Mountain View on 9/18/2012, the technician did not check the box on the A-Form or enter a comment to indicate that the internal pipe condition had been examined. PG&amp;E is in violation of 49 CFR §192.475(b).</p>	<p>Whenever any pipe is removed from a pipeline for any reason, or whenever the interior surface of the pipeline is exposed, the internal surface must be inspected for evidence of corrosion. This inspection was not documented on the A-Form for the referenced leak repair in which the existing 3/4" steel service line was inserted with 1/2" plastic pipe. See attachment 4 - "A-Form Leak 12305841".</p> <p>To prevent reoccurrence, PG&amp;E published a new internal corrosion control standard and five new internal corrosion control procedures in July 2014, with an effective date of January 1, 2016. Please see attachment 5 - "TD-4186S_CONF.zip" for a copy of PG&amp;E's internal corrosion standard ("TD-4186S_CONF.pdf") and the five associated procedures ("TD-4186P-100_CONF.pdf" through "TD-4186P-500_CONF.pdf").</p> <p>In addition, PG&amp;E revised the existing internal corrosion inspection instructions (Job Aids) on 7/16/2015. The new revision will enhance the internal processes used to review internal corrosion inspection data. See attachment 6 - "A-Form Job Aid". PG&amp;E is also currently evaluating potential changes to the A-Form to improve work processes.</p> <p>A Corrective Action Program (CAP) Notification (7012817) was also generated to develop a 5 Minute Meeting to reinforce to personnel in all Divisions of the requirement to fill out the Internal Inspection portion of the A-form whenever the inside surface of the steel pipe is visible, and also to reinforce that all employees qualified for 03-05, ("Pipe Inspection"), are qualified to perform this inspection. This 5 Minute Meeting has been completed and was issued on 8/10/2015. See attachment 7 - "5MM A Form Internal Inspection".</p> <p>Two tailboards were held in the De Anza Division to reinforce the requirement to perform the internal corrosion inspections. The first was held on 6/18/2015 following the audit. The second was held on 8/26/2015 following the distribution of the 5 Minute Meeting. See attachment 8 - "IC Inspection Tailboards".</p>	<p>Att 4_A-Form Leak 12305841_CONF.pdf Att 5_TD-4186S_CONF.zip Att 6_A-Form Job Aid - Final_rev2 date 7_6_15.pdf Att 7_5MM A Form Internal Inspection.pdf Att 8_IC Inspection Tailboards_CONF.pdf</p>

2015 De Anza Division Audit Findings and Responses

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AOC	1(a)	<p>ATMOSPHERIC CORROSION: During the field visit, SED observed scaling at the following meter locations:</p> <ul style="list-style-type: none"> <li>o 4955 Bel Escou Dr. San Jose - Riser</li> <li>o 4965 Bel Escou Dr – Bottom part of riser (soil-to-air transition)</li> </ul> <p>SED recommends that PG&amp;E examine the risers at the above locations and take corrective actions, as needed, to prevent further atmospheric corrosion.</p>	<p>The riser located at 4955 Bel Escou Drive was remediated on 8/17/15 per PM 42454635. See attachments 9 - "PM 42454635" and attachment 10 - "Photo 4955 Bel Escou" for confirmation.</p> <p>The riser located at 4965 Bel Escou was remediated under PM 42454637. See attachments 11 - "PM 42454637" and attachment 12 - "Photo 4965 Bel Escou" for confirmation.</p>	<p>Att 9_PM 42454635_CONF.pdf Att 10_Photo 4955 Bel Escou.jpg Att 11_PM 42454637_CONF.pdf Att 12_Photo 4965 Bel Escou.jpg</p>
AOC	1(b)	<p>During the inspection, SED requested a copy of the Division’s Atmospheric Corrosion Records. A binder was provided which appear to contain the 2012 Quality Control report of the Atmospheric Corrosion work performed by PG&amp;E’s contractors. The binder contained some plats covering some portions of the Divisions in which quality check of the PG&amp;E’s contractors was conducted. According to Division representative, the complete 2012 Atmospheric Corrosion binder cannot be located and may have been retained at another location. Thus, SED was able to review only those plats that were in the QC binder for compliance with 49 CFR §192.481(a).</p> <p>- PG&amp;E should ensure that complete records of Atmospheric Corrosion monitoring are made available during future SED inspections.</p>	<p>The 2011 and 2012 AC inspection binders, comprised of reduced plat maps, were located on 6/12/15 and are now being stored in the Edenvale mapping office. All 2014 and 2015 AC inspections are now in an electronic format and stored on an accessible share point site.</p>	
AOC	2	<p>PIPE-TO-SOIL READS:</p> <p>During the field visit, SED observed readings that did not meet the -850 millivolt criterion at:</p> <ul style="list-style-type: none"> <li>o 265 Santa Rosa Ave. (-0.730),</li> <li>o 495 Margo Dr (-0.801),</li> <li>o 1175 Altamead (-0.797).</li> </ul> <p>Please describe corrective action(s) taken to restore cathodic protection at these locations.</p>	<p>265 Santa Rosa Ave: Notification 110553759 and PM 42443086 have been generated to install a deep well anode along with frame and cover and install 2 #10 wires to connect it to the cathodic protection system. This project is currently in the permitting phase. Attached, please find Attachment 13 - "PM 42443086".</p> <p>495 Margo Dr: This Corrosion Protection Area (CPA) is currently down. Notification 110052184 and Order 31136282 were previously generated to install a deep well anode in this CPA. Attached, please find Attachment 14 - "Order 31136282".</p> <p>1175 Altamead: This location was deleted as a 10%er per RW 110450960 because it is tied into the rectified system and does not need to be a separate read point. Attached, please find Attachment 15 - "RW 110450960". 1175 Altamead is now a part of the yearly read within CPA 3410-19. Within this yearly, the read point is taken at 1230 Altamead. On 8/10/2015, this CPA was troubleshot and restored with an up read of -905 mv at 1230 Altamead. Attached, please find Attachment 16 - "CPA 3410-19 Read Sheet".</p>	<p>Att 13_PM 42443086_CONF.pdf Att 14_Order 31136282_CONF.pdf Att 15_RW 110450960_CONF.pdf Att 16_CPA 3410-19 Read Sheet_CONF.pdf</p>
AOC	3	<p>ISOLATED STEEL SECTIONS:</p> <p>SED’s review of 2012 CPA Action Plan for CPA 3349-10 found an identified isolated steel section of pipe (10%er) at 1631 Ernestine Ln in Mountain View. This location was identified in September 2012 during a PG&amp;E’s contractor’s survey of isolated steel services. However, this location was not entered into SAP until it was brought up by SED on 6/11/2015. SED is concerned that PG&amp;E’s review of the CPA Action Plan failed to capture the field personnel’s discovery of the condition, which should have prompted the addition of this location to PG&amp;E’s 10%er’s list.</p> <p>Please describe action(s) planned or taken by PG&amp;E to ensure that all known isolated steel sections of pipe (10%ers) are accounted for and entered into PG&amp;E’s database for scheduling and maintenance.</p>	<p>After further review of the service located at 1631 Ernestine Ln in Mountain View, it was determined that this location is not a 10%er and that it is tied into the rectified system. Attached, please find Attachment 17 - "RW 110447432" and Attachment 18 - "AOC 3" for verification.</p> <p>The actions taken by PG&amp;E to ensure that all known isolated steel sections of pipe (10%ers) are accounted for and entered into PG&amp;E’s database for scheduling and maintenance include the following:</p> <ul style="list-style-type: none"> <li>• Isolated Steel Services were created and stabilized in SAP for De Anza by 4/25/13</li> <li>• Asset Strategist stabilized using the maintenance forms provided by the division, followed by the Specialists QC and sign off</li> <li>• A third party contractor was hired by PG&amp;E to perform a multi-year project to identify all 10%ers in the system which started in 2011 and was completed in 2012.</li> <li>• The SAP Asset Registry was updated with the newly identified locations after the final SAP upload</li> </ul>	<p>Att 17_RW 110447432_CONF.pdf Att 18_AOC 3_CONF.pdf</p>

2015 De Anza Division Audit Findings and Responses

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AOC	4	<p>LEAK REPAIR:</p> <p>PG&amp;E identified and repaired an external corrosion leak (Leak# 8014300721) with a full circle clamp on 1/27/2014 at 135 Acalanes Drive in Sunnyvale. The repair record noted that a full service replacement form has been completed. SED reviewed the work order which shows that this location is scheduled for construction on 6/30/2015. Please provide a status update on the replacement work and if completed, provide record(s) to show completed work (i.e. Gas Service Record, A-form).</p>	<p>Replacement work was performed as scheduled on 6/30/15 per PM 31058602. Attached, please find Attachment 19 - "GSR 31058602" for verification of completed work.</p>	<p>Att 19_GSR 31058602_CONF.pdf</p>
AOC	5	<p>CASING POTENTIAL:</p> <p>During the field inspection, pipe-to-soil readings were taken at Casing #13 in CPA 3349-19, MP 1.22. The readings on the casing wire and vent pipe were -18 and -17 millivolts, respectively. Those readings were significantly more positive than typical native potentials, possibly indicating that the true casing voltage could not be measured accurately. Please investigate the casing potential and provide a status update to confirm there is adequate isolation between the pipe and casing at this location.</p>	<p>The local corrosion specialist has visited the site and verified that the reads are accurate. This low read, while not a normal read for a piece of unprotected steel, is still within the standard of having a -100 mv difference in potential between the host pipe and the casing. The corrosion mechanic went back out to this casing to verify the reads that were taken the day of the CPUC field visit. The pipe reads were -960 mv and the casing reads were -25 mv. The conclusion of the corrosion experts is that the casing is entirely wrapped and isolated from the soil. This provides an explanation for the low casing read. There is no contact between the casing and the pipe and a -100 mv difference in potential exists.</p>	