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August 7, 2016

Mr. Kenneth Bruno
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
320 W. Fourth Street, Suite 500
Los Angeles, CA 90013

Dear Mr. Bruno:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a G.O. 112-F Operation and Maintenance Inspection of Southern California Gas Company's (SCG) Cathodic Protection (CP) Facilities in the Southeast Region Inland East Inspection Unit (Chino, Corona, and Fontana) on October 26-30, 2015. The inspection included a review of the Inspection Unit's cathodic protection and bridge/span inspection records for calendar years 2013 and 2014 and random field inspections of pipeline facilities in the Chino, Corona, and Fontana districts. SED staff also reviewed the Inspection Unit's Operator Qualification records, which included field observation of randomly selected individuals performing covered tasks.

SED staff noted 11 probable violations and made two recommendations. It is described in the "Summary of Inspection Findings", which is enclosed with this letter. Please see attached SCG's response to those findings.

Please feel free to contact me at (213) 305-8660 if you have any questions or need additional information.

Sincerely,

W. Jeff Koskie

Cc: Intably, Mahmoud (Steve), SED/GSRB
Epuna, Matthewson, SED/GSRB
Kan Wai Tong, SED/GSRB

Attachments

Summary of Inspection Findings
2015 SCG Southeast Region East Inland Inspection Unit (Chino, Corona, and Fontana)
October 26-30, 2015

I. SED Identified Probable Violations

1. Title 49 CFR, Part 192 §192.13(c) What general requirements apply to pipelines regulated under this part?

"Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part."

A. SCG Gas Standard 223.0100 Pipeline Integrity, Section 7 Abnormal Operating Conditions requires corrective action when a gas meter buried in earth or paving.

During the field inspection of SCG's Cathodic Protection (CP) facilities, SED staff observed that SCG's customer gas meter was partially buried in dirt and in contact with the ground. The gas meters at the following locations exhibited atmospheric corrosion (heavy rust):

1) COLTON REC1, test station R at 965 East E Street (gas curb Meter Set Assembly (MSA) - multiple meters set)
2) COLTON REC1, Gas curb MSA, multiple meter sets, next to subway restaurant at 955 East E Street
3) 3612 Philadelphia Street, Chino
4) Meter number 448291

SCG did not follow its Gas Standard 223.0100 Pipeline Integrity, Section 7 Abnormal Operating Conditions and did not take corrective actions to mitigate the partially buried gas meters at the aforementioned locations. . Therefore, SCG is in violation of G.O. 112-F, Reference Title 49 CFR, Part 192 §192.13(c).

Response to 1A
SCG would like to recognize that the above referenced Gas Standard 223.0100 is Leakage Surveys and not Pipeline Integrity as referenced. SCG also notes that the meter number listed for item 4 above is 4482914 located at 12174 East End Ave. Chino.

The MSAs observed at the aforementioned locations were cast iron curb meters. SCG Engineering has determined that a meter made of cast iron or aluminum with a specialized (rubber) coating can be in direct contact with dirt, including up to or just below bottom of

the index (to the point that the index is not affected by the dirt) or just below the connection components, whichever is lower, in the most extreme case. Use of these meters in curb meter boxes also allows for the meter to sit directly on the soil, thus eliminating the potential for stress to be applied to the service and customer houseline piping.

The following is an excerpt from SCG Material Specification 76-01 / Meter Diaphragm;

- Curb meters shall be cast iron or aluminum per section 3.1. Aluminum meters shall be completely covered / sealed with a rubberized or equivalent protective coating. The coating must of sufficient thickness when dry to maintain corrosion protection throughout the life of the meter. The coating shall not be subject to failure (cracking/disbondment) when exposed to hot/cold temperatures or coming in contact with wet/damp soil.

3.1 Applicable ASTM, ANSI and MIL STD specifications.

ANSI/ASME	1983 - B1.20.1 Pipe Threads
ASTM B-85	2009 - Standard Specification for Aluminum-Alloy Die Castings
ASTM B-117	2003 – Standard Practice for Operating Salt Spray (Fog) Testing Apparatus
ASTM A-126, Class A	2009 – Standard Specification for Grey Iron Casting for Valves, Flanges and Pipe Fittings (Reference Meter Body)

Corrective Action

In order to satisfy SED's concerns, SCG proceeded to have these curb meter box locations cleaned of "excess" dirt and leak tested. No leaks were identified and all corrective actions have been complete. SCG will also conduct a review of Gas Standard 223.0100, section 7 – Abnormal Operating Conditions with all leak survey trained personnel at the following operating districts (Fontana, Chino, Corona and San Bernardino in which these locations were observed.

Furthermore, in January of this year, SCG implemented a new MSA inspection organization. This organization's primary purpose is to conduct the mandated atmospheric corrosion inspections on all SCG MSAs as meters are advanced and meter readers are no longer performing this function in conjunction with obtaining meter reads. The new MSA inspection organization inspects and reports the conditions of SCG MSA facilities, including but not limited to all curb meters and associated piping.

B. SCG Gas Standard 184.12 Inspection of Pipeline on Bridges and Spans, Section 6 Records requires marking "Y*es*" on the "*Bridge and Span Inspection Checklis*t" when special access instructions and/or tools needed.

During the field inspection and record review of SCG's Span number S1006, SED staff observed that the span number S1006 requires special access and the

"*Bridge and Span Inspection Checklist*" for special access criteria the "Box" was not checked.

SCG did not to follow its Gas Standard 184.12 Inspection of Pipeline on Bridges and Spans, Section 6 Records and mark the "Yes Box" for special access. Therefore, SCG is in violation of G.O. 112-F, Reference Title 49 CFR Part 192 §192.13(c).

Response to 1B

SCG contends there was no violation due to the special access instructions to access the span was included on the SAP maintenance inspection order. The intent of Gas Standard 184.12 – Inspection of Pipelines on Bridge and Spans, Section 6 Records, is for the field technician to mark "yes" when providing information for any previously unidentified/documented special instructions.

Corrective Action

SCG will review Gas Standard 184.12 – Inspection of Pipelines on Bridge and Spans, Section 6 Records, as well as the "Bridge and Span Inspection Checklist" to consider an edit to change; "Are there any special access instructions and/or tools needed" to "Are there any special access instructions and/or tools needed not already documented" The potential edit will clarify that a "yes" is only required when additional information needs to be added to the asset.

2. Title 49 CFR, Part 192 §192.353 Customer meters and regulators: Location.

(a) Each meter and service regulator, whether inside or outside a building, must be installed in a readily accessible location and be protected from corrosion and other damage, including, if installed outside a building, vehicular damage that may be anticipated. However, the upstream regulator in a series may be buried.
(b) Each service regulator installed within a building must be located as near as practical to the point of service line entrance.
(c) Each meter installed within a building must be located in a ventilated place and not less than 3 feet (914 millimeters) from any source of ignition or any source of heat which might damage the meter.
(d) Where feasible, the upstream regulator in a series must be located outside the building, unless it is located in a separate metering or regulating building.

SCG Standard 185.0008 Meter Guard - Installation, Section 2, Procedure, 2.1, General, 2.1.1 states

"Meter guards are required where aboveground MSAs are within 3 feet of driveways, roadways, alleys, parking stalls, wheel bumpers, trash collection areas and areas where industrial equipment (forklifts, loaders, etc.) may operate."

During the field inspection, SED staff observed that SCG's customer meters, regulators, and aboveground facilities were exposed to vehicular traffic at the following locations:

1. CP package ID COLTON REC1, test station F (439 Stoddard Ave., San Bernardino)
2. CP package ID CLTN008, test station A, B, and 940 Cypress
3. 12115 Humboldt Place, Chino 91710

SCG did not identify and install appropriate barriers to protect the customer meters, regulators, and aboveground facilities from vehicular traffic at the aforementioned locations. Therefore, SCG is in violation of G.O. 112-F, Reference Title 49 CFR Part 192, Section 192.353(a).

SCG ResponseSCG initiated work orders for the installation of meter guards at the aforementioned locations.

Corrective Action
SCG executed work orders and installed meter guards at;

- 439 Stoddard Ave. San Bernardino (52-62487)
- 950 Cypress, Colton. (54-65084)
- 940 Cypress, Colton. (54-65080)
- 770 Cypress, Colton. (54-67012)

The Abnormal Operating Condition policy regarding the guard rail requirements for the MSA will be reviewed with the SE Region Cathodic Protection employees. In addition, GS 185.0008 Meter Guard Installation Requirements will be reviewed with the SE Region CP employees to reinforce with employees how to identify and report AOCs found at the MSA.

SCG made contact with the homeowner at 12115 Humboldt, Chino. The homeowner has declined to have the meter guard installed as it will impact their usable space. SCG will continue to work with the homeowner and legal to resolve.

4. Title 49 CFR, Part 192 §192.357(a) Customer meters and regulators: Installation.

"Each meter and each regulator must be installed so as to minimize anticipated stresses upon the connecting piping and the meter."

During the field inspection, SED staff observed that SCG facilities at 439 Stoddard Ave., San Bernardino and 3625 Philadelphia Street, Chino did not have proper support to prevent stress/strain on the service riser.

SCG did not identify and provide proper support to the above ground pipe at the aforementioned location to prevent stress/strain on the service riser. Therefore, SCG is in violation of G.O. 112-F, Reference Title 49 CFR Part 192, Section 192.357(a).

SCG Response
SCG created follow-on work orders at the aforementioned addresses.

Corrective Actions
The piping identified as having stress/strain at the address of 3625 Philadelphia St. was houseline piping. Although SCG contends that the houseline piping was the responsibility of the homeowner, SCG completed work orders at the following locations;

- 439 Stoddard Ave. San Bernardino (520001199765)
- 3625 Philadelphia St, Chino (houseline). Bracket installed by customer service.

SCG has also identified the last employee to perform leak survey at 439 Stoddard Ave. A request has been made for a counseling session to be held with the employee as well as a review of Gas Standard 223.0100.

5. Title 49 CFR, Part 192 §192.465(d) External Corrosion Control: Monitoring.

"Each operator shall take prompt remedial action to correct any deficiencies indicated by monitoring."

During the records review of SCG's CP packages, SED staff found that the following CP packages were out of tolerance:

1) SB-0249-1-A found out of tolerance on 5/11/2015 (anode bed depleted) and SCG failed to take action in a timely manner to submit the necessary document to obtain a permit to install a new anode bed.
2) SB0914-A found out of tolerance on 6/2/2015 (anode bed depleted) and SCG failed to take action in a timely manner to submit the necessary document to obtain a permit to install a new anode bed.

SCG did not to take prompt remedial action to correct the deficiencies at the aforementioned locations. Therefore, SCG is in violation of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.465(d).

SCG Response
SCG contends no violation occurred. SCG did take prompt remedial action per Gas Standard 186.0135 / Operation and Maintenance of Cathodic Protection Facilities, Section 2 / Policy and Scope (2.4, 2.41 and 2.4.2)

2.4 Prompt remedial action shall be taken to correct any variations from Company standards that are discovered during monitoring. See also GS **186.02**, *Cathodic Protection – Inspection of Exposed Pipe,* for additional remediation action to be taken beyond that described in this standard.

2.4.1 In order to achieve prompt remedial action, the Company shall make efforts to commence the troubleshooting process within 30 days, but no longer than 60 days, of the date the area was determined to be out of tolerance.

2.4.2 The subsequent identification of the problem(s) after troubleshooting shall be used to determine a remediation plan as soon as practicable, and, preferably, correction

of deficiencies will occur by the time of the next scheduled annual monitoring. Any remediation plan that includes corrective actions outside of the next scheduled annual monitoring (see MONITORING FREQUENCY section below) requires manager approval.

Troubleshooting for CP area SB0249-1-A commenced on May 28, 2015, 17 days from date the area was determined to be out-of-tolerance.

Troubleshooting for CP area SB0914-A commenced on June 16, 2015, 14 days from the date area was determined to be out-of-tolerance.

Both CP areas have subsequently been brought back within tolerance prior to the next scheduled annual monitoring.

6. Title 49 CFR, Part 192 §192.479(a) Atmospheric Corrosion Control – General

"Each operator must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section"

During the field inspection of SCG's CP facilities, SED staff observed that SCG's above ground piping at the following locations had severe atmospheric corrosion damage (pitting):

1) CP package COLTON REC1, test station R at 965 East E Street
2) Curb MSA in CP package COLTON REC1 next to Subway restaurant
3) 3612 Philadelphia Street, Chino
4) Piping for meter number 448291

SCG did not clean and coat the aboveground pipelines that had atmospheric corrosion at the aforementioned locations. Therefore, SCG is in violation of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.479(a).

SCG Response
SCG created follow-on work orders at the aforementioned addresses.

Corrective Actions
SCG created work orders and Customer Service Field personnel completed the associated work at the following locations;

1) 965 S. E Street, San Bernardino
2) 955 S. E Street, San Bernardino
3) 3612 Philadelphia Street, Chino
4) 12174 East End Ave. Chino / Meter #4482914

In addition, SCG will review Gas Standard 167.0100 (Appendix B) – Abnormal Operating Conditions with the SE Region Cathodic protection workforce.

7. Title 49 CFR, Part 192 §192.481 Atmospheric Corrosion Control – Monitoring.

"(a) Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

If the pipeline is located:	*Then the frequency of inspection is:*
Onshore	*At least once every 3 calendar years, but with intervals not exceeding 39 months*
Offshore	*At least once each calendar year, but with intervals not exceeding 15 months*

(b) During inspections the operator must give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.

(c) If atmospheric corrosion is found during an inspection, the operator must provide protection against the corrosion as required by Sec. 192.479."

SCG did not provide atmospheric corrosion records of its curbside meter set assemblies (MSAs). SED also sampled MSAs within the districts and observed evidence that inspection for atmospheric corrosion was performed based on the observed MSAs that were partially buried in the ground and aboveground pipeline with rusts. Therefore, SCG is in violation of Title 49 CFR, Part 192 §192.481 for failing to inspect its above ground piping for evidence of atmospheric corrosion.

SCG Response

SCG currently requires employees who visit the MSA to be trained and qualified to identify and report abnormal operating conditions; including but not limited to atmospheric corrosion. SCG does not currently have reports that document that an MSA was specifically inspected for atmospheric corrosion. However, SCG does have exception reporting which can identify those locations where abnormal operating conditions were reported.

Corrective Action

In January of this year, SCG implemented a new MSA inspection organization. This organization's primary purpose is to conduct the mandated atmospheric corrosion inspections for all SCG MSAs, as meters are advanced and meter readers are no longer performing this function in conjunction with obtaining meter reads. The new MSA inspection organization inspects and reports the conditions of SCG MSA facilities, including but not limited to all curb meters and associated piping. Observed abnormal conditions, including atmospheric corrosion, are documented for each MSA inspection and will no longer be accounted for via exception reporting as meter reading inspections are replaced with inspections performed by the new MSA inspection organization.

8. Title 49 CFR, Part 192 §192.491(a) Corrosion Control Records

"Each operator shall maintain records or maps to show the location of cathodically protected piping, cathodic protection facilities, galvanic anodes, and neighboring structures bonded to the cathodic protection system. Records or maps showing a stated number of anodes, installed in a stated manner or spacing, need not show specific distances to each buried anode."

During the field inspection of SCG's CP facilities, SED staff observed that SCG's CP package ID SB0248-A did not have records or maps showing the location of the galvanic anode bed.

SCG did not maintain records or maps of the galvanic anode bed location for the CP package ID SB0248-A. Therefore, SCG is in violation of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.491(a).

SCG Response

SCG agrees that the aforementioned CP package did not show the anode locations on the CP map nor on the CP area Basic Information Record (BIR) and will correct it as set forth below.

Corrective Action

SCG conducted a records review in archives and identified construction records which identified where anodes had been installed. Those locations were field verified and the CP area map and BIR have been updated accordingly. The SCG CP employee who last worked the CP area was counseled on proper record documentation. In addition, SCG Distribution CP personnel have been reminded that when working CP areas/packages they are to verify proper records and information is contained within the maps and BIR.

9. Title 49 CFR, Part §192.365(b) Service Lines: Location of valves

"Outside valves. Each service line must have a shutoff valve in a readily accessible location that, if feasible, is outside of the building."

During the field inspection of SCG CP facilities, SED staff observed that SCG service shutoff valve at the following locations were inaccessible (buried in dirt (sand)):

1) NORCO7, test station C, E, and F (1024 2nd St., 1178 2nd St., and 1639 Temescal Rd.)
2) Meter number 448291
3) GT019, test station C

SCG did not identify and ensure that the shutoff valves at the aforementioned locations were readily accessible. Therefore, SCG is in violation of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.365(b).

SCG Response

SCG contends that the aforementioned valves at the above locations were readily accessible. It was observed that with minimal effort the dirt and sand could be cleared away from the valves.

Corrective Actions

At the request of the SED work orders were created and completed to raise the service valves at the aforementioned locations.

10. Title 49 CFR, Part 192 §192.467 (a) & (d) External corrosion control: Electrical isolation.

(a) Each buried or submerged pipeline must be electrically isolated from other underground metallic structures, unless the pipeline and the other structures are electrically interconnected and cathodically protected as a single unit.

(d) Inspection and electrical tests must be made to assure that electrical isolation is adequate.

SCG did not provide inspection/test records to ensure that the electrical isolation of the casings from the gas carrier pipe in accordance with Part 192 section 192.467(d). SCG did not have test leads on each casing to perform monitoring tests and to document that the casing is electrically isolated and clear of all metallic shorts and electrolytic contacts.

SCG Response

SCG disagrees with SED and its position is that no violation has occurred. SCG has provided SED with PHMSA interpretation, PI8600 which PHMSA stated, "The tests under §192.465(a) must be sufficient to determine whether the cathodic protection meets the requirements of §192.463 for the entire pipeline, including any cathodically protected segments inside casings. If the tests under §192.465(a) show that the cathodic protection of a cased segment is adequate, then §192.467(d) has been satisfied because the electrical isolation must also be adequate, and compliance with §192.467(a) and (c) has been achieved. If §192.465(a) tests show inadequate protection of any cased segment, then additional inspection and tests would be needed under §192.467(d) to determine the adequacy of electrical isolation." This interpretation does not require routine testing of casing in order to prove isolation but rather states that adequate CP on the pipeline of a cased segment proves isolation has been achieved.

While there are no **DOT requirements** currently mandating the application of cathodic protection on casings, nor is there a requirement to monitor casings, as a prudent operator SCG has the following policy related to cathodic protection on casings;

- Gas Standard 186.09 / Cathodic Protection – Casings, requires that all coated steel casings installed after **12/01/2015** be placed on a required monitoring schedule.

11. Title 49 CFR, Part 192 §192.465(a) External corrosion control: Monitoring.

" Each pipeline that is under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of §192.463. However, if tests at those intervals are impractical for separately protected short sections of mains or transmission line, not in excess of 100 feet (30 meters), or separately protected service line, these pipelines may be surveyed on a sampling basis. At least 10 percent of these protected structures, distributed over the entire system must be surveyed each calendar year, with a different 10 percent checked each subsequent year, so that the entire system is tested in each 10-year period."

The regulation requires separately protected short sections of mains or transmission line, not in excess of 100 feet, or separately protected service line to be tested at least once each calendar year but with interval not to exceed 15 months. The regulation gives an exception for those sections that are impractical to survey on a sampling basis. SED observed during the field inspection that some of the CP packages that were separately protected service lines were classified as ten percenter (10% CP) and were surveyed on a 10 % sampling basis without justification to why the testing of those separately protected service lines were impractical to be monitored at least once each calendar year but with interval not to exceed 15 months.

SCG did not provide justification to why those separately protected short sections were impractical to be monitored at least once each calendar year but with interval not to exceed 15 months. SCG did not provide factors that made it impractical to monitor these CP points at least once each calendar year but with interval not to exceed 15 months. Therefore, SCG is in violation of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.465(a).

SCG Response:

SCG's interpretation is consistent with the plain language set forth in the above statute. For SCG, it would be impractical to test its short sections of cathodically protected mains (not in excess of 100 feet), and its separately protected service lines annually. SCG currently has more than 333,000 separately protected service lines and short sections of main that are surveyed on a sampling basis (at least 10% per year, with a different 10 percent checked each subsequent year). Creating individual CP packages for each CP10, even if adjacent, would be impractical.

Due to the large number of CP10s, shifting even a portion of these to annual monitoring would require a significant increase in workforce, making this

operationally impractical. In addition to the incremental field employees, incremental staff support would also be needed to continuously analyze the population of CP10s and their proximity to existing annual reads and other CP10 read locations.

SCG currently bundles its CP10s, based on geographic location. Each bundle is scheduled as one order, so that bundles of adjacent CP10s are tested together, avoiding unnecessary travel time between reads.

II Concerns and Recommendations

1. SCG Gas Standard 186.0135 operation and Maintenance of Cathodic Protection Facilities, Section 4.3 Monitoring Frequency, Sub-Section 4.3.2 states:

"Ten percent of cathodically protected isolated services and segments of main 100 feet or less in length shall be monitored each year and a different ten percent each subsequent year so that all facilities are monitored within a ten year period."

SCG Standard 186.0135 Operation and Maintenance of Cathodic Protection Facilities failed to address impractical to justify the survey on a sampling basis for the separately protected short sections. We recommend that SCG review/revise its Standard 186.0135 to address "impractical" and provide justification to why the testing once each calendar year is impractical for each separately protected short section.

SCG Response

SCG contends that Gas Standard 186.0135 / Operation and Maintenance of Cathodic Protection Facilities does not need to be revised to include the definition of "impractical" or to provide the justification which supports the current SCG CP10 policy. The current verbiage in the gas standard provides clear requirements for monitoring all cathodically protected isolated services and segments of main 100' or less in length.

Please see the response to Probable Violation Number 11 above for a discussion on why it would be impractical for SCG to monitor its cathodically protected isolated services and segments of main 100 feet or annually, and why SCG's interpretation is consistent with the statute.

2. SCG Gas 182.0095 Piping Spans-Unsupported, Section 1.3 States:

"Stresses and deflections can vary due to a number of conditions such as end restraints, pipe properties and operating conditions. If the span length exceeds the maximum allowable length shown in Table 1, ***Pipeline Design*** *shall be consulted to determine if actual conditions justify increasing the allowable length for the span being evaluated."*

During a field inspection SED staff observed that:

1) Span number S95 had deflection
2) Span number B1105 is an encased carrier pipe that was not properly supported

SED recommends that SCG consult with Pipeline Design Department to determine if additional support is needed.

SCG Response/Corrective Action

In reference to Span 95 with the deflection concern; a Request for Engineering Review (RER) was conducted to determine if the deflection has an impact on the integrity of the pipeline. Engineering determined that if this Span was altered it would need to be replaced to comply with current standards. Based on the unsupported distance of this 2" pipe, and the need to conduct a complete replacement, SCG conducted a system review and has determined that this Span will be abandoned.

Span B1105 was found to be missing insulation between the casing and the support stand during our field audit. This situation has been rectified by having micarta inserted between the casing and the support.

3. During field visit SED observed the following rectifiers with current output that exceeded its established upper limit, which is an indication of depleting anode bed.

Table-X: Rectifier DC Current Output

District	Rectifier	DC Current Output (amps)	DC Current Output Upper Limit (amps)
CORONA	NORCO-REC3	6.4	6
CORONA	NORCO REC4	2.94	2.9

SED recommends that SCG review/revise its procedure and be proactive in replacing the anode bed to ensure continuous cathodic protection on its facilities.

SCG Response

SCG disagrees with SED's assessment that its procedures require revision. The two examples cited by SED from the field visit do not warrant such a revision. SCG reviews rectifier configuration and output settings anytime an area is found to be reading out of tolerance within established limits. Troubleshooting and subsequent review of the CP Area determines if an anode bed is depleting and warrants replacement. In regards to CP area NORCO REC 3, the Upper Tolerance was adjusted in May 2014. The auditor was reviewing 2013 and 2014 records, and had a copy of the 2014 inspection tolerance levels prior to the adjustment. The readings obtained during the filed portion of our audit on October 29, 2015 were within the current established tolerances.

In regards to NORCO REC4, this area was found down during the field portion of our audit with pipe to soil readings out of tolerance, and slightly elevated Voltage and Amperage readings at the rectifier, indicative of a shorted CP area. Upon returning to the area after the audit to begin troubleshooting, amperage, voltage and pipe to soil readings had all returned back to normal and within tolerance, consistent of an area with a short that is no longer present. No further action is required at this time.