PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



November 1, 2019

GI-2019-04-SCG-55

Mr. Rodger Schwecke, Senior Vice President Gas Operations and Construction Southern California Gas Company 555 West 5th Street, GT21C3 Los Angeles, CA 90013

SUBJECT: SED Closure letter for General Order 112-F Comprehensive Gas Inspection of Southern California Gas Company's Harbor Corridor Distribution Area

Dear Mr. Schwecke:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a G.O. 112-F Comprehensive Operation and Maintenance (O&M) Inspection of Southern California Gas Company's (SCG) Harbor Corridor Distribution Area (Inspection Unit) on April 29 – May 3 and May 6 – May 10, 2019. The inspection included a review of SCG's records for the period of 2015 through 2018, as well as a representative field sample of the Harbor Corridor Distribution Area's facilities. SED staff also reviewed the Harbor Corridor Distribution Area's operator qualification records, which included field observation of randomly selected individuals performing covered tasks.

A summary of the inspection findings documented by the SED, SCG's response to the findings, and SED's evaluation of SCG's response to all findings are outlined in the attached "Post-Inspection Written Findings".

This letter serves as the official closure of the 2019 Comprehensive O&M Inspection of SCG's Harbor Corridor Distribution Area and any matters that are being recommended for enforcement will be processed through the Commission's Citation Program or a formal proceeding.

Thank you for your cooperation in this inspection. If you have questions, please contact James Zhang, at (415) 603-1310 or by e-mail at <u>JZ3@cpuc.ca.gov</u>.

Sincerely,

Hannis Lel

Dennis Lee, P.E. Program and Project Supervisor Gas Safety and Reliability Branch Safety and Enforcement Division

cc: Troy Bauer, Sempra Energy Utilities Terence Eng, SED Kan-Wai Tong, SED (<u>Kwt@cpuc.ca.gov</u>) Claudia Almengor, SED (<u>Claudia.Almengor@cpuc.ca.gov</u>) 2019 SCG Harbor Corridor Distribution

Post-Inspection Written Findings

Dates of Inspection: 4/29/19 – 5/3/19 and 5/6/19 – 5/10/19

Operator: SOUTHERN CALIFORNIA GAS CO

Operator ID: 18484 (primary)

Inspection Systems: Compton, Huntington Park, 182nd (Redondo), and San Pedro

Assets (Unit IDs): Northwest - Harbor Corridor (87038)

System Type: GD

Inspection Name: SoCalGas Harbor Corridor Distribution

Lead Inspector: James Zhang

Operator Representative: Khoa Le

Unsatisfactory Results

Records : Corrosion Control (PRR.CORROSION)

- 1.Questio Do records adequately document actions taken to correct any identified n Text deficiencies in corrosion control?
- Reference 192.491(c) (192.465(d))

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Assets Northwest - Harbor Corridor (Harbor Corridor - 87038 (55)) Covered

Issue **Title 49 CFR §192.465(d) – External Corrosion Control: Monitoring** Summary

"Each operator shall take prompt remedial action to correct any deficiencies indicated by the [external corrosion control] monitoring."

The May 19, 1989, Federal Pipeline and Hazardous Materials Safety Administration's (PHMSA) Inspection Guideline and Interpretation #PI-89-006 for 192.465(d) states that, as a rule of thumb, PHMSA interprets "prompt" as having the "correction completed by the time of the next scheduled monitoring".

SED found numerous Cathodic Protection (CP) packages to be deficient for intervals exceeding SCG's routine monitoring frequency defined in Gas Standard 186.0135, and as required in 49 CFR §192.465(d). Since 2016,

SCG has been implementing changes to address the long-term CP Down Areas while developing a proactive approach to the CP areas. SCG provided "Cathodic Protection (CP) status update to SED" since 3rd Quarter of 2016 through 1st Quarter of 2019. It reported a total of 231 areas that were out of tolerance at system wide for various reasons for a period of longer than a year in September 2015, and then 78 areas in March 2019 (a 66% reduction). During this inspection, SCG provided additional information of 28 Cathodic Protection Areas in Harbor Corridor where CP were down greater than one year. SED recognizes that in some instances, factors outside of SCG's control may be the cause of delay for restoring deficient CP packages (i.e. environmental, permitting, moratoriums, etc.). However, SCG should continue to diligently follow up and monitor these areas and maintain documentation of actions taken.

SCG's Response:

As SED noted, SoCalGas has been implementing changes to address longterm out of tolerance CP areas. One example is updating Gas Standard 186.0135 to define prompt remedial action and provide escalation and notifications for out-of-tolerance areas. SoCalGas recognizes that it still has CP areas that have been out-of-tolerance more than a year and is working diligently to bring down that number.

Corrective Action:

Since the audit, SoCalGas has brought 13 of the 28 areas into tolerance. The remediation for these areas and the dates they were brought into tolerance are shown in the table below.

Area	Date	Date	Remediation Work Completed
	Read Out	Brought	
	of	into	
	Tolerance	Tolerance	
WAT026	08/17/17	08/14/19	Installed Rectifier & Deep Well
-1			
WAT044			Replaced Service, Cleared
-5	09/01/17	04/19/19	Electrical Shorts
C0592W			
-4	10/30/17	07/30/19	Installed Anodes
C0582W			
-5	11/17/17	05/24/19	Installed Anodes
C0581W			
-2	11/20/17	07/24/19	Installed Anodes
WAT006			
-3	11/22/17	05/07/19	Installed Anodes
WAT022			
-5	11/27/17	06/19/19	Installed Anodes, Replaced Service
C0536W			
-1	01/16/18	05/14/19	Installed Anodes
WAT106			
-1	01/25/18	06/28/19	Installed Anodes

C0545W -1	01/31/18	06/05/19	Replaced Service
WAT077			
-4	03/06/18	05/20/19	Installed Anodes
C0174E-			
1	03/13/18	06/29/19	Installed Anodes
COM018			
-6	03/22/18	07/09/19	Installed Anodes

For the remaining areas, SoCalGas is actively working on remediation efforts, and has summarized the status of those efforts below. SoCalGas will continue to work diligently to address all required remediation.

Area	Date Read Out of Tolerance	Remediation Work Completed and In Progress	Status of Remediation Work in Progress
C0184E-1	04/06/17	Install Rectifier & Deep Well	This is a large area with about 38,000 feet of pipe. As a result, extensive troubleshooting was needed to verify area was short-free and identify remediation.
ELS02-3	05/01/17	Clear Electrical Shorts (Completed), Install Rectifier & Deep Well	The new rectifier installation will need electrical service. The location for electrical service was rejected by Southern California Edison in early August due to the distance from the nearest power source with a transformer. Accordingly, SoCalGas is working expeditiously to identify a new location for the job.
WAT083-6	06/01/17	Install Rectifier & Deep Well	The new rectifier installation will need electrical service, which was initially requested from Los Angeles Department of Water & Power in June 2018. After experiencing delays in getting the electrical service, SoCalGas reached out to the California Public Utility Commission to request assistance on 6/21/19. The electrical service approval is still pending.
Area	Date Read	Remediation	Status of Remediation
	Out of Tolerance	WORK	work in Progress
		In Progress	

C0624E-1	06/20/17	Clear Electrical Shorts (Completed), Install Rectifier & Deep Well	This is a large area with about 37,000 feet of pipe. Consequently, extensive troubleshooting was needed to find and clear shorts and identify additional remediation.
SL 43-34	10/09/17	Clear Electrical Shorts (Completed), Install Rectifier & Deep Well	The rectifier material was ordered in July. This is a large area with about 36,000 feet of pipe. Consequently, extensive troubleshooting was needed to find and clear shorts and identify additional remediation.
C1066W-6	10/17/17	Install Anodes	Waiting for permits from the City of Palos Verdes for the anode order, and as soon as those are approved, the anode installations will be expedited. In the meantime, SoCalGas is installing a second anode order in private property, which is scheduled to be completed 8/16/19.
C1066W-7	10/17/17	Install Anodes	Waiting for permits from the City of Palos Verdes Estates for the anode order, and as soon as those are approved, the anode installations will be expedited. In the meantime, SoCalGas is looking for a possible location in private property to install anodes sooner.
C1084W-1	10/26/17	Install Anodes, Clear Underground Short	Two sets of anodes were installed in 2018; however, the area remained out of tolerance. An additional anode order is in progress. Furthermore, a new underground electrical short has been identified, and an order to expose and clear the short is in progress.

C1051W-1	11/06/17	Install Anodes	One set of anodes was installed on 8/16/19, and the area is polarizing. Two additional anode orders have been generated. Traffic control plans were requested for the permits, and they are in development As soon as the plans are received, the permit requests will be re- submitted to Palos Verdes.
C0585W-1	11/15/17	Install Anodes	Permits have been requested from the City of Palos Verdes Estates for five anode orders. As soon as those are approved, the anode installations will be expedited. All five permits were initially requested in December 2018 or January 2019, and SoCalGas has responded to multiple requests from the city for more information, such as updated sketches and traffic control plans.

Area	Date Read Out of	Remediation Work	Status of Remediation Work in Progress
	Tolerance	Completed and In Progress	
C0587W-3	11/17/17	Install Anodes	A permit has been requested from the City of Rancho Palos Verdes for an anode order, and as soon as it is approved, the anode installation will be expedited. The permit was initially requested on 9/21/18. SoCalGas provided a revised traffic control plan to the city on 8/9/19.
C0593W-8	01/10/18	Replace Main	Due to electrical interference of a nearby third-party CP system, this CP area is scheduled to be replaced with plastic pipe. The replacement planning has been completed and the replacement is projected to start in late September.

C0501W-2	01/12/18	Install Anodes	One set of anodes was installed on 7/22/19; however, the area remained out of tolerance. An additional anode order has since been created and permits have been requested from the City of Torrance.
C0424W-1	03/02/18	Install Rectifier & Deep Well	Currently planning this rectifier and deep well. In addition, a temporary rectifier was installed at the existing location on 8/12/19, and the area is polarizing. This is a large area with about 37,000 feet of pipe. Consequently, extensive troubleshooting was needed to verify area was short-free and identify remediation.
WAT068-5	03/29/18	Install Anodes	Permits have been requested from the City of South Gate for two anode orders. As soon as those are approved, the anode installations will be expedited. Both permits have been in progress since mid- 2018, and SoCalGas has responded to multiple requests from the city for more information, such as updated sketches and traffic control plan revisions.

SED's Conclusion:

SED has reviewed SCG's response and has opted not to impose a fine or penalty at this time. However, SED will continue to monitor SCG's progress and diligence in bringing its CP areas to compliance during future inspections.

2.Question Text Do records adequately document that exposed buried piping was examined for corrosion and deteriorated coating?

References 192.491(c) (192.465(e)) Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary Title 49 CFR part 192.455(a) (2) states:

(a) (2) Except as provided in paragraphs (b), (c), and (f) of this section, each buried or submerged pipeline installed after July 31, 1971, must be protected against external corrosion, including the following: it must have a cathodic protection system designed to

protect the pipeline in accordance with this subpart, installed and placed in operation within 1 year after completion of construction...

(f) This section does not apply to electrically isolated, metal alloy fittings in plastic pipelines, if:

(1) For the size of the fitting to be used, an operator can show by test, investigation, or experience in the area of application that adequate corrosion control is provided by the alloy composition; and

(2) The fitting is designed to prevent leakage caused by localized corrosion pitting.

SED reviewed records of unprotected steel pipe systems and found the following post-1971 pipeline repairs and/or replacements without cathodic protection installed:

The table below lists work orders that included portions of steel systems which were replaced with plastic pipe. However, anodes were not installed on the steel fittings:

W0#	WORK	WORK ASSETREGISTRYID DATE OF		MATEDIAL	NOMINAL
VV O#	ΤΥΡΕ	ASSEIREGISTRIID	OPERATION	MATERIAL	SIZE
2000140217	REPL	GD.PAC.HTP.MP.DOW0031	8/22/2017	Steel	2
2000140217	REPL	GD.PAC.HTP.MP.DOW0031	8/22/2017	Steel	2
2040788862	REPL	GD.PAC.HTP.MP.WAT0034	10/2/2017	Steel	6

SCG's Response:

After reviewing the two referenced jobs, SoCalGas agrees that anodes should have been installed at these new steel fittings.

Corrective Action:

Anodes are currently being planned and will be installed for the referenced locations.

Gas Standard 186.0005 Cathodic Protection – Mixed Piping System outlines the configuration for installation of plastic within a steel system. The standard does not currently differentiate design specifications between non-cathodically protected steel and cathodically protected steel. It will be revised, and schematics will be included to add clarity on proper installation techniques of new steel in non-cathodically protected steel systems.

The Lead System Protection Specialist who reviewed these jobs has been counseled on the requirements for installing new steel fittings in existing non-cathodically protected steel systems.

In pursuit of continuous improvement, SoCalGas has been developing material and creating an enhanced training for their Lead System

Protection Specialists. The Lead System Protection Specialists are the designated employees for reviewing planned sketches for cathodic protection requirements. The pilot class took place earlier this year and was given to a select group of existing Lead System Protection Specialists.

SED's Conclusion:

SED has reviewed SCG's response and has opted not to impose a fine or penalty at this time but will continue monitoring SCG's progress. Also, SED may review the corrective actions during future inspections.

Concerns

Records: Operations And Maintenance (PRR.OM)

1.Question Text Do records indicate distribution leakage surveys were conducted as required?

References 192.603(b) (192.723(a), 192.723(b))

Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary SED reviewed Work Order # 520001602784 (Leak ID 1704382) Code 3 leak repair at 1104 Eubank Ave. Wilmington. Records show that the leak was detected on 2/28/17, and repaired using "clamp" on 1/12/18. Leak repair record indicates that the Code 3 leak was on the service, but repair comments notes that leak was at the bottom of steel main. The record also identified the material as "Steel-Coated w/CP". Review of SCG GIS showed that the 3-inch steel main was unprotected, contrary to the information provided in the leak repair record. During the audit, SCG personnel stated that leak repair personnel are not qualified to take P/S reads, which could have caused the personnel to assume that the main was protected. Leak repair records are essential data source used to identify threats as part of the distribution integrity management program. As such, SCG should ensure that information gathered in the field are accurate and complete.

SCG's Response:

SoCalGas has revised the leak order SAP# 52-1602784. It now states, "Steel-bare w/o CP."

SED's Conclusion:

SED has reviewed SCG's response and determined that the correction made to the leak order only addressed the single instance found by SED during the inspection. SED re-emphasizes the importance of maintaining accurate records. As such, SCG should remind its employees of the importance of gathering accurate information in the field. SED will continue to review accuracy of records during future inspections.

Pipeline Field Inspection: Pipeline Inspection (Field) (FR.FIELDPIPE)

2.Question Text Are meters and service regulators being installed consistent with the requirements of 192.357?

References 192.351 (192.357(a), 192.357(b), 192.357(c), 192.357(d)) Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary On 5/9/2019, during a leak survey on Pope Ave in Lynwood, SCG and SED observed many meters which were found to be slanted, along with many manifolds found to be not attached to the wall of the houses. According to §192.357, meters should be installed to minimize anticipated stresses upon the connecting piping and the meter. Please provide a status update on the corrective action and completion of work order.

SCG's Response:

SoCalGas has completed the repairs. Attached are before and after pictures for the three identified installations below.

SED's Conclusion:

SED has reviewed SCG's response and determined that the remedial actions implemented by SCG address SED's concern.

3.Questio Are methods used for taking CP monitoring readings that allow for the n Text application of appropriate CP monitoring criteria?

Reference 192.465(a) (192.463(b), 192.463(c))

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Assets Northwest - Harbor Corridor (Harbor Corridor - 87038 (55)) Covered

Issue SCG and SED observed the following cathodic potential readings during its Summary field inspection:

- a. LA1515-1-1: mag anode area (-850mv criteria)
 - i. 131 N Harbor Ave (Point C), -800 mV
 - ii. ETS, Harbor View & Santa Cruz St (Point E), -816 mV
 - iii. 1459 Summerland Avenue, meter (Point D), -810 mV
- b. 10%er TLA1359-1-1 (-850mV criteria)
 - i. Eubank Ave & Denni St, casing cover paved over, -626mV ii. 575 Hamilton, -444mV
- c. SL 37-21B mag anode area (-850mV criteria), interference bond along Pacific Coast Hwy,
 - i. Bimonthly read location (Point F), -426mV

- ii. Diode location (randomly selected), -449mV
- d. TTOR17-15 (10%er, -850mV criteria)
 - i. 1907 Plaza Del Amo, -774mV
- e. TOR 11-4 (-850mV criteria)
 - i. 2941 El Dorado (Point A), -791mV
 - ii. 2934 Opal St (Point F), -813mV
- f. C0593W-8 (Point G) bonded together with Chevron, 0.67 mV -> 0.67 mA, 0.9 mA was initial, (-850mv criteria)
 - i. Point F, -534mV
- g. C0593W-6 interference bond (Point H), (-850mV criteria)
 - i. South wire, -677mV
 - ii. North wire, -478mV
 - iii. Point D, -682mV
- h. MB05-11 (-850mV criteria)
 - i. 1506 21St (Point A), -470 mV

Please provide SED an update on any corrective action(s) taken by SCG and include documentation of the corrective action(s).

SCG's Response:

The table below has the current status and actions taken to address the above readings.

Area	Read Point	Read During Audit (mV)	Date Point Read Up	N R((r	ead nV)		Remediation
	131 N Harbor Ave (Point C)	-800	5/14/19)	_ 1,029	9	Area was found in tolerance when employee initiated
LA1515 -1-1	ETS, Harbor View & Santa Cruz St (Point E)	-816	5/14/19)	- 1,424	4	troubleshooting. All read points and a random read point were in

	1459 Summerlan d Avenue, meter (Point D)	-810	5/13/19	- 1,025	tolerance. We suspect that there was a temporary short, such as something leaning against a meter during the audit reads.
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Area	Read Point	Read During Audit	Date Point Read	New Read (mV)	Remediation
		(mV)	Up		
	Eubank Ave & Denni St, casing cover paved over	-626	6/26/1 9	- 1,672	Repaired anode connection wires, and area is now in tolerance.
TLA1359- 1-1	575 Hamilton	-444	N/A	N/A	Note: The service at 575 Hamilton is not part of this CP area and is not under CP.
SL 37-	Bimonthly read location (Point F)	-426	N/A	N/A	Area remains out of tolerance. Area is being
218	Diode location (randomly selected)	-449	N/A	N/A	troubleshot to identify a remediation.
TTOR17- 15	1907 Plaza Del Amo	-774	N/A	N/A	Area remains out of tolerance. Anodes orders have been generated. The City of Torrance requires traffic control plans for a permit, which are in development.
TOR 11-4	2941 El Dorado (Point A)	-791	N/A	N/A	Area remains out of tolerance. Two anode orders have
	2934 Opal St (Point F)	-813	N/A	N/A	been planned.

C0593W- 8	Point F	-534	N/A	N/A	Area remains out of tolerance. Due to electrical interference of a nearby third-party CP system, this CP area is scheduled to be replaced with plastic pipe. The replacement is estimated to start in late September.
	South wire	-677	N/A	N/A	Area remains out
0050014	North wire	-478	N/A	N/A	of tolerance. Area
C0593W- 6	Point D	-682	N/A	N/A	is being troubleshot to identify a remediation.
MB05-11	1506 21St (Point A)	-470	7/16/1 9	-971	Installed insulated union to address an above ground short, and area is now in tolerance.

SED's Conclusion:

SED has reviewed SCG's response and determined that remedial actions articulated by SCG address SED's concern. SED may inspect the cathodic protection on the areas pending remediation at a future date to confirm completion of work.

4.Question Text Are measures performed to ensure electrical isolation of each buried or submerged pipeline from other metallic structures unless they electrically interconnect and cathodically protect the pipeline and the other structures as a single unit?

References 192.467(a) (192.467(b), 192.467(c), 192.467(d), 192.467(e))

Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary During field inspection on 5/09/2019, SCG and SED discovered a disconnection of the interference bond at Point C of the Cathodic Protection Area C0658E-1 in Compton district. SCG representatives stated that it will come back to fix it with the correct tools. Please provide SED a status update on the corrective action(s) taken by SCG and completion of work order.

SCG's Response:

A Lead System Protection Specialist replaced the broken shunt at the interference bond on 6/7/19 and read it within tolerance.

SED's Conclusion:

SED has reviewed SCG's response and determined that remedial action implemented by SCG address SED's concern. SED may review the records of the remedial action during future inspections.

5.Question Text Is pipe that is exposed to atmospheric corrosion protected? References 192.481(b) (192.481(c), 192.479(a), 192.479(b), 192.479(c))
Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))
Issue Summary a. On May 2, 2019, SED inspected the pipe under one end of Redondo Beach Pier and found the pipe to be held with metal straps. However, these straps were observed to not have insulation separating it from touching the pipe compared to the other end of the pier where the pipe was painted green, indicating epoxy coating, and had insulation between the pipe and its metal supports. This span was also under the pier, over a body of water.

> b. On May 9, 2019, SED inspected the bridge and span at Slauson Ave Bridge in Maywood. SED noticed missing insulation at one of the supports, and missing pipe wrap where the pipe touched the concrete.

> SED believes that both situations can lead to atmospheric corrosion if not remediated. Please provide SED a status update on the corrective action(s) taken by SCG and completion of work order.

SCG's Response:

5a: Redondo Beach Pier- SAP# 520001991002 was created to address the issues at the Pier. This is a hazardous work environment. All work is below the pier, and above surging tides. Currently there is not a safe catwalk to access our facilities. SoCalGas is currently in discussions with the City of Redondo Beach and its specialized pier contractor to build a temporary scaffolding structure for SoCalGas to access its facilities. We can then address the missing insulation on the straps supporting our gas main. SoCalGas has proposed an August or September time frame for making the repairs because the tides will be at their lowest levels in those months. This issue was addressed at a meeting with the City of Redondo Beach Pier Management and SoCalGas on 7/30/19. The City of Redondo Beach is expected to respond to SoCalGas' proposal by 8/23/19.

5b: Slauson bridge- An Abnormal Operating Condition (AOC) was found in 2018 on a Bridge and Span inspection at this location. Order 520001935186 was created. The span is inspected every month and we are currently waiting on permits from the Army Corp of Engineers to perform the work. We anticipate having the permits by November 1, 2019. We will then be able to address within 2 weeks the missing insulation on the support and the missing pipe wrap.

SED's Conclusion:

SED has reviewed SCG's response and determined that remedial actions articulated by SCG address SED's concern. SED may review the records of the corrective action or conduct a field visit to verify condition of pipeline during future inspections.

Generic Questions: Generic Questions (GENERIC.GENERIC)

6.Question Text Generic question – Field Observations

References N/A

Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary a. On 5/8/2019, SED observed SCG field crew conducting maintenance of Regulator Station 2042 in Compton district. During the maintenance, regulator 0100 did not lock up. SCG crew repaired and replaced parts to reach lock up. SED reviewed the record of this maintenance work order after its field inspection and noticed that the record did not reflect the "as-found" condition of the 0100 regulator to state "51 – NO LOCK UP". SED believes that maintenance records are essential data sources for the distribution integrity management program. Thus, SCG should accurately record the "as found" conditions to reflect actual field conditions observed.

> b. On 5/9/2019, SED was observing SCG perform a leak survey along Pope Ave starting from Martin Luther King Jr. Blvd and came across an address where a code 3 leak was previously identified. During the leak survey, the leak was found to have migrated into the residence and was categorized as a code 1 leak. Please provide SED with records of prior odor calls/complaint (if any), and leak repair records associated with the leak.

SCG's Response:

a. SoCalGas requires that employees capture "As-Found" conditions with specific codes to indicate the conditions found. In the Company Form Instructions for District Regulator Station – Inspection, CM-5110, employees are instructed to "check any as found applicable condition codes associated to the District Regulator Station."

Unfortunately, the technician who performed the referenced inspection neglected to include the as-found condition on this occasion. A training session was conducted on 7/29/19 where the technicians were reminded to include the as-found condition as part of their inspection of equipment.

b. Leak Repair Order number was SAP# 52-1765886. The code 3 leak was the only leak at this location and there were no odor or customer complaints associated with this leak.

SED's Conclusion:

SED has reviewed SCG's response and determined that corrective actions implemented by SCG's address SED's concern. SED may review the records of the corrective action during future inspections.

7. Question Text Generic question – Leak survey, repair and recordkeeping

References N/A

Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary The current SCG's gas leak survey classification procedure, Gas Standard 223.0125, section 1.3, states "Although a repair of a classified leak may be expedited for a variety of reasons, the original classification of the leak shall not be changed." SED believes that this restriction does not reveal the actual condition of the gas leaks during the subsequent reevaluations, and none of the current SCG's work management system can track the escalated levels of the leak condition and corresponding repair activities. Even though the Gas Standard allows the crew to expedite the repairs, there is currently no auditable process to verify that the repairs were completed within the timeframes corresponding to the latest Code levels (i.e. Code 3 to Code 2). Therefore, SCG should revise its Gas Standard to require documenting field observations during subsequent reevaluations, including recording any changes (i.e. code levels) identified that may expedite the need for remedial actions.

SCG's Response:

SoCalGas currently codes leaks based on indications found upon discovery. Per Gas Standard 184.0245, Section 4.6.3.6, when performing leak investigation on underground leakage, the excavation is made at the "point of highest leak indication" and action is taken to properly code the leak. SoCalGas currently does not downgrade leaks in the interest of public safety and so that it continues to mitigate pending leaks. When a re-evaluate is performed, indications will more than likely be less if there has been venting or a temporary repair. If indications are higher when the reevaluation is performed, and the indications classify the leak as a code 1 or 2 leak, the repair will be expedited. Gas Standard 223.0125, Section 2.10 provides specific requirements for when gas indications change during re-evaluation to ensure consistency among the field employees and supervisors throughout the company. Enhancements are currently being developed to automatically escalate the mitigation schedule of re-evaluated when a change in conditions is documented in CLICK and SAP.

SED's Conclusion:

SED has reviewed SCG's response and acknowledges that the proposed corrective actions address the concern. However, SED will continue to monitor the development of the enhancements until the planned corrective actions are fully implemented by SCG. In addition, please provide a copy of the enhancements to SED as soon as it becomes available.

8. Question Text Generic question – Operator qualification

References N/A

Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary CPA C0597-W Z9 had been under a 100mV shift criterion set established in 2004 at the time remediation activities took place between 2015 and 2017. During this time, SCG personnel conducted CP monitoring and surveillance by taking monthly reads while attempting to restore the CP levels in the area. At some point in 2016, the reads began producing satisfactory values. However, the SCG personnel failed to recognize the area was no longer deficient under the 100-mV shift criterion. CP remediation log comments indicate the SCG personnel believed the area was under the -850mV shift and continued remediation activities. Eventually, this led to the establishment of another 100 mV shift criterion in 2017 and SCG reconsidering the area as within compliance under the 2017 criterion set.

> After relating this information to SCG, SCG representatives agreed with SED's assessment that the employee failed to recognize the criterion utilized in the CPA. SCG representatives stated they would address this issue with their CP staff to prevent a reoccurrence in the future. SCG representatives later provided SED with OQs for the SPS and LSPS personnel involved. Upon review, the Operator Qualifications were found to be active and valid between 2015 to 2017.

SCG's Response:

When this area was found out of tolerance, the employee performing troubleshooting initially looked into whether it could be qualified under 850mV criteria with the installation of new anodes. When the area did not meet the 850mV criteria, the employee then had to requalify the area under 100mV criteria since the new anodes increased the current output of the system by more than 20%. The 100mV re-qualification request was approved by the Pipeline Integrity department on 11/28/17. The 100mV re-qualification was then completed on 12/26/17 after new read point locations had been established with updated read tolerances.

SED's Conclusion:

SED has reviewed the clarification provided by SCG and has no further concerns at this time.