

PUBLIC UTILITIES COMMISSION

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September 20, 2019

Robert Russell, VP-Field Operations
Lodi Gas Storage
P.O. Box 230
Acampo, CA 95220

GI-2018-09-LGS-37-14

SUBJECT: LGS Damage Prevention Program Inspection

Dear Mr. Russell:

As you know, failure of excavators to notify one-call centers prior to starting, or not utilizing best practices when performing, excavations continues to be a leading cause of damages to subsurface facilities nationwide. California is no exception as lack of enforcement of California Government Code Section 4216 (GC 4216), historically, did not incentivize compliance with the law. To address this issue, in 2016 California modified GC 4216 to include the California Underground Facilities Safe Excavation Board (Board) authorized to develop processes, and utilize education and penalty components, in order to enforce GC 4216 on all members of the excavation community.

Increased enforcement of GC 4216 has long been advocated by the Pipeline Hazardous Material and Safety Administration (PHMSA) and the CPUC. Therefore, the CPUC will interface with the Board and anticipates that increased compliance with GC 4216 will reduce the potential for excavation related injuries and damages. Moreover, within its June 2015 Decision 15-06-044, adopting General Order 112-F (GO 112-F), the CPUC included requirements for natural gas utilities to annually report details on their excavation damage prevention related data which will aid in better understanding respective utility programs and identifying areas for future improvements in GC 4216. These reports will now begin to be submitted starting in March 2018.

The Safety and Enforcement Division (SED) of the California Public Utilities Commission supports the new statewide effort to improve excavation safety and is developing a routine inspection to closely review operator's damage prevention programs. This inspection confirms that the operator's program complies with 49 CFR Part 192, Section 192.614, referenced by GO 112-F, and assures the operator's program has procedures for directional drilling/boring that include actions to protect its facilities from dangers posed by such trenchless technologies, and includes review of the operator's quality control process for confirming the adequacy of its internal performance measures regarding persons performing locating services and quality assurance programs. Our goal is to use information learned through this program, along with information from other SED investigations and that reported by the operators through GO 112-F requirements, towards assuring that the damage prevention efforts of all excavation stakeholders continue to be targeted appropriately.

SED conducted a General Order 112-F inspection review of Lodi Gas Storage's (LGS) Damage Prevention Program on September 26-28, 2018.¹ The inspection included a review of LGS' Damage Prevention Program and some related records for the period of 2016-through 2018. The inspection also included a field review of LGS' pipeline right-of-way.

SED's findings are noted in the Summary of Inspection Findings (Summary) which is enclosed with this letter. The Summary reflects only those records and pipeline facilities that SED inspected during the inspection.

Within 30 days of your receipt of this letter, please provide a written response indicating the measures taken by LGS to address the violations and observations noted in the Summary.

If you have any questions, please contact Sunil Shori at (415) 703-2407 or by email at Sunil.Shori@cpuc.ca.gov.

Sincerely,



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

Enclosure: Summary of Inspection Findings

¹ General Order 112-F was adopted by the Commission on June 25, 2015 via Decision 15-06-044.

SUMMARY OF INSPECTION FINDINGS

49 CFR, Part 192, Section 192.614(a), in part, states: “... *each operator of a buried pipeline shall carry out in accordance with this section a written program to prevent damage to that pipeline by excavation activities...An operator may perform any of the duties required by paragraph (b) of this section through participation in a public service program, such as a "one-call" system, but such participation does not relieve the operator of responsibility for compliance with this section.*”

49 CFR, Part 192, Section 192.614(b), in part, states: “*An operator may comply with any of the requirements of paragraph (c) of this section through participation in a public service program, such as a one-call system, but such participation does not relieve the operator of responsibility for compliance with this section. However, an operator must perform the duties of paragraph (c)(3) of this section through participation in a one-call system, if that one-call system is a qualified one-call system... An operator's pipeline system must be covered by a qualified one-call system where there is one in place...*”

Finally, 49 CFR, Part 192, Section 192.614(c) requires: The damage prevention program required by paragraph (a) of this section must, at a minimum:

- (1) Include the identity, on a current basis, of persons who normally engage in excavation activities in the area in which the pipeline is located.
- (2) Provides for notification of the public in the vicinity of the pipeline and actual notification of the persons identified in paragraph (c)(1) of this section of the following as often as needed to make them aware of the damage prevention program:
 - (i) The program's existence and purpose; and
 - (ii) How to learn the location of underground pipelines before excavation activities are begun.
- (3) Provide a means of receiving and recording notification of planned excavation activities.
- (4) If the operator has buried pipelines in the area of excavation activity, provide for actual notification of persons who give notice of their intent to excavate of the type of temporary marking to be provided and how to identify the markings.
- (5) Provide for temporary marking of buried pipelines in the area of excavation activity before, as far as practical, the activity begins.
- (6) Provide as follows for inspection of pipelines that an operator has reason to believe could be damaged by excavation activities:
 - (i) The inspection must be done as frequently as necessary during and after the activities to verify the integrity of the pipeline; and
 - (ii) In the case of blasting, any inspection must include leakage surveys.

Both one-call systems (regional notification centers) instrumental in the operation of California's one-call damage prevention program, USANorth811 and DigAlert, meet the requirements of 49 CFR, Part 198, Section 198.39 and almost the entirety of Section 198.37. Therefore, both one-call systems are considered as a "qualified one-call system" per federal regulations. Moreover, since LGS' subsurface gas pipeline facilities traverse the respectively defined territory of only USA North811, LGS is a member of only this notification center.

I. Probable Violations

§192.13(c) states:

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

We believe that LGS needs to modify its Procedure 3.01, Damage Prevention Program, to address the following:

- a) Section 1 - Most current CGA Best Practices version needs to be reviewed and incorporated during annual reviews of this procedure. The inspection noted that the procedure referenced outdated versions of California Government Code 4216 (GC 4216) (2007 version) as well as Common Ground Alliance (CGA) Best Practices (2015 version). Also, LGS needs to provide a clear statement within its Damage Prevention Program (DPP) that it will comply with all requirements of California Government Code 4216 (GC 4216) applicable to facility operators as well as excavators.
- b) Section 5.1.1 – LGS needs to modify section by replacing "will" with "does" or other mandatory language.
- c) Section 5.1.2 - This section requires activities which LGS is not performing (i.e., periodic confirmation of procedure requirements performed by a "one-call" system). LGS needs to modify this section or begin performing and documenting activities included herein. Also, instead of "may be performed," LGS needs to be clear in its procedure as to what specific activities are performed by the one-call center and what is performed by LGS.
- d) Section 5.4.1 – This section requires more details on the USA ticket receipt process and what LGS does to direct excavators to the one-call center if an excavator contacts, or is identified by LGS, outside of the USA process.
- e) Section 5.5.1 – This section requires more details on the LGS process for determining, logging, and responding to USA notifications. For example, determination of "no conflict", field review and GC 4216 required field meets for high priority facilities which LGSs pipelines are.
- f) Section 5.6.2 – LGS needs to provide more details for this procedure including need to capture/document communications between LGS and excavators noted on USA Tickets. Also, this section needs to provide more information regarding USA North (GC 4216) time period for tickets (i.e., ticket time periods for calling in a ticket and renewing a ticket).
- g) Section 5.6.4 – LGS needs to provide more detail and specifications in this procedure. In general, within its Procedure 3.01, Section 5.6, LGS provides what are generally

statements related to its mark and locate activities. LGS includes a document, California Marking Guidelines, from USA North; however, LGS has not converted the generic guidelines to be specific to its operations nor made the guidelines a mandatory requirement of its own procedures. LGS needs to modify its procedures to confirm that they continue to be as, or more stringent, than the most recent version of CGA Best Practices.

- h) Section 5.6.7 – LGS needs to modify this procedure to include how LGS confirms/communicates with excavators to determine job is completed before removing stakes and/or flags.
- i) Section 5.6.8 – LGS needs to tie/reference this section to Section 5.5. Also, LGS needs to strike "greater than 6-inches nominal pipe diameter" since this is not in the definitions contained in GC 4216.
- j) Section 5.6.10 - LGS needs to clarify if this section is applicable to its own staff and/or contractors, working for LGS or not (i.e., third-party excavators).
- k) Sections 5.6.11 - 5.6.19 - LGS needs to provide more procedural details for these Advisory Bulletins, including details on how they are implemented by LGS.
- l) Section 5.7.1 - LGS needs to clarify and document standby activities. In this section, LGS also needs to clarify what is meant/included by "may make other provisions." LGS inspection and monitoring (standby) procedures are detailed in Procedure 3.01, Section 5.7. LGS procedures require that its Form 3.01B or equivalent "should" be used for reporting purposes; however, it's not clear what an equivalent form would be. LGS needs to establish a clear form to capture more details on what LGS expects an employee to do as part of stand-by and recording of the activity, itself. The use of this form needs to be made mandatory and the form needs to capture the time duration personnel are on-site during standby.
- m) Section 5.7.4 - LGS's requirement to mandate an excavator to hand excavate within 36-inches of the surface of its facilities would appear to have no legal basis because it exceeds the 24-inch tolerance zone specified by GC 4216.
- n) Section 5.7.5 - LGS needs to modify "should be utilized" to "must be utilized" regarding use of Form 3.01B. Also, LGS needs to clarify what an "equivalent" form would be.
- o) Section 5.9 - LGS needs to add language to clarify those requirements applying to its contractors/staff vs. other contractors not working for the company (i.e., third-party).
- p) Section 5.9.4 - LGS needs to clarify the significance of its soil characteristics statement and how this influences LGS procedure currently included under this section.
- q) Section 5.9.5 - LGS needs to clarify what the procedure means as "problems" as discussed in this section and specific actions to be taken in response.
- r) Section 5.10 - LGS needs to specify pipeline examination requirements to persons on stand-by/monitoring activities and require documentation of this activity on its Form 3.01B. Also, LGS needs to mandate the investigation of external corrosion found instead of the "may be" statement currently stated in this section

- s) Section 5.11 - LGS has no documentation for activities shown in this section. LGS needs to establish procedures for these activities and document them, or possibly consider removing this section.
- t) Section 6 - Unclear if this section applies only to pipelines above 30% SMYS since Section 6.2 applies to covered segments under 30% SMYS. LGS needs to clarify this section.
- u) Section 6.1 (items 5-6) – LGS’ language in this section is inconsistent with regulations. During the inspection, LGS representatives appeared to indicate that they intended to remove Section 6 from Procedure 3.01.
- v) Section 6.2 - LGS needs to review its language related to Class 3 & 4 to confirm it is consistent with GO 112-F requirements since GO 112-F considers all Class 3 and 4 locations as high consequence areas.
- w) Section 6.2 (item 5) – The requirements of this section do not apply to LGS due to the commissioning date of its facilities (i.e., LGS has no unprotected segment).
- x) Section 8 - LGS record retention requirements contained in this section do not appear to comport with GC 4216 requirements, nor would they allow for compliance review during an SED inspection. LGS record retention requirements to maintain notes and hard copies of USA tickets for 1 year is insufficient. Though we believe LGS should maintain all mark and locate records for 6 years, LGS needs to maintain records for at least 4 years for current SED audit purposes. Also, within its standards, LGS needs to mandate that subsurface abandoned facility records be retained indefinitely.
- y) LGS needs to update the telephone numbers in its Table 3.01 which were noted during the inspection as being incorrect.
- z) LGS has no written procedures for acceptance of vacuum excavations for which it may receive notice from an excavator. Per GC 4216, LGS, as an operator of facilities, must agree and allow vacuum excavation; therefore, it needs to have procedures to determine if there are instances in which vacuum excavation should not occur near its facilities.

II. Areas of Concern/Recommendations

- a) We are concerned that LGS does not have a process for submitting data into the CGA’s Damage Incident Reporting Tool (DIRT) excavation damage data collection process, LGS does not have a developed process to also submit the same data for any damages into the California DIRT data collection process. Since it would take almost no incremental resources for LGS to implement a process to submit excavation damage data into both DIRT and California DIRT, we recommend that LGS contact USA North 811 and learn what is necessary to implement reporting to both worthwhile damage prevention efforts.
- b) We recommend that Section 4.2 include asphalt and pavement work among the categories noted under 4.2.

- c) We recommend that Section 5.6.18 be brought in under Section 5.6 as a new subsection 5.6.1.
- d) We recommend that Sections 5.6.5 and 5.6.6 would be good locations for LGS to include as requirement what LGS representatives indicated is LGS' procedure to use photographs to document and retain as records of marks after they are placed.
- e) We recommend that Section 5.6.6 incorporate notifying 911, law enforcement and the California Safe Dig Board if an excavator does not cooperate and stop excavations near unmarked facilities.
- f) We recommend that within Section 5.6.21, LGS store locations of excavations that occur near its right-of-way as a layer in GIS.
- g) We recommend that in Section 5.8, LGS add a requirement to leak survey the area prior to any blasting operation for comparison with post blasting surveys.
- h) We recommend that LGS establish procedures for a quality assurance program related to M&L on some set frequency.