



Lodi Gas Storage, L. L. C.

INNOVATORS IN NATURAL GAS

October 25, 2016

Mr. Kenneth Bruno
Program Manager
California Public Utilities Commission
Safety and Enforcement Division
Gas Safety and Reliability Branch
505 Van Ness Avenue
San Francisco, CA 94102-3298

Certified Mail Receipt No. 70151730000110699059

RE: General Order 112 Gas Inspection of Lodi Gas Storage, L.L.C.

Dear Mr. Bruno:

Lodi Gas Storage, L.L.C. (LGS) submits this written response to the Safety and Enforcement Division (SED) of the California Public Utilities Commission (Commission). On behalf of the SED, Mohammad Ali and Terence Eng conducted a General Order 112 inspection of LGS on June 27 – July 1, 2016. The inspection findings identified by SED were provided to LGS on September 25, 2016. LGS addresses the inspection findings as noted by SED in the Summary of Inspection Findings in the following enclosed documents:

- Attachment #1 – LGS Responses to Summary of Inspection Findings
- Attachment #2 – Revised Valve Inspection Form (Form 7.01A from LGS Operations & Maintenance Manual)
- Attachment #3 – Signature Cross Reference
- Attachment #4 – Operator Qualification Records

If you have any questions, or require more information, please contact me at gclark@lodistorage.com or at (209) 368-9277 x21.

Sincerely,

Gregory N. Clark
Compliance Manager

Enclosures

cc: File #S3.03
M. Ali, K. Bruno, A. Cauguiran, T. Eng (via e-mail)
A. Anderson, S. Dupéré, E. Kuykendall, R. Russell (via e-mail)

Attachment #1



Lodi Gas Storage, L.L.C.

ATTACHMENT #1 – LGS RESPONSES TO SUMMARY OF INSPECTION FINDINGS

I. Probable Violations

1. Title 49 Code of Federal Regulations (CFR) §192.745(a) states:

“Each transmission line valve that might be required during any emergency must be inspected and partially operated at intervals not exceeding 15 months, but at least once each calendar year.”

Additionally,

Title 49 CFR §192.709(c) states:

“A record of each patrol, survey, inspection, and test required by subparts L and M of this part must be retained for at least 5 years or until the next patrol, survey, inspection, or test is completed, whichever is longer.”

SED discovered LGS failed to provide records as required by §192.709(c) of its inspection and/or operation of its emergency valves for the calendar years 2013 through 2015 to demonstrate compliance with 49 CFR §192.745(a). The details are listed in Table 1 below.

ATTACHMENT #1 – LGS RESPONSES TO SUMMARY OF INSPECTION FINDINGS

Table 1. List of Valves missing inspection, partial operation, Inspectors’ signature and Supervisor’s signature

Item#	Issues	Years of Inspection		
		2013	2014	2015
1	Valves not partially operated	SDV4521	SDV4521	SDV-W2210-2502
		MLV-59440	MLV-59440	XV-6250
		HW12 B/V	MLV-123778	
		S.I. MANUAL ISO	SDV-1301	
		SDV 2001	SDV 1101	
		SDV 1301	SDV 1103	
		SDV 1101	M3 B/V	
		SDV 1103	M3A B/V	
		M3 MAIN B/V	M4 B/V	
		M4 MAIN B/V	M4A B/V	
		M4B MAIN B/V	M4B B/V	
		M5 MAIN B/V	M5 B/V	
		M6 MAIN B/V	M6 B/V	
		M6A MAIN B/V	M6A B/V	
		SDV 1001	SDV 1001	
		SDV 1003	SDV 1003	
		D2 MAIN ISO	D-2 B/V	
		D-3 MAIN B/V	D-3 B/V	
		D-3A MAIN B/V	D-3A B/V	
		D-3B MAIN B/V	D-3B B/V	
		D-4A MAIN B/V	D-4 B/V	
			D-4A B/V	
			D-5 B/V	
	D-5A B/V			
	D5B B/V			
	XV-6250			
2	Valves not inspected		MLV-163655	XV-6250
			SDV-2001	
			XV-6250	
3	Missing signature of Inspector		M3 B/V	
			M3A B/V	
			M5 B/V	
			M6 B/V	
			M6A B/V	
			D-3 B/V	
			D-3A B/V	
			D-5 B/V	
			D-5A B/V	
	D5B B/V			
4	Missing signature of Supervisor		M3 B/V M3A B/V SDV-1003	

ATTACHMENT #1 – LGS RESPONSES TO SUMMARY OF INSPECTION FINDINGS

LGS Response:

Lodi Gas Storage, L.L.C. (LGS) conducts a formal inspection and maintenance protocol on each one of its emergency valves once each calendar year. Valves are also routinely operated during normal injection and withdrawal operations, as LGS demonstrated to SED during its GO 112 inspection. However, to address the deficiencies with documentation of the emergency valve inspections, LGS has implemented the following mitigating actions:

- LGS revised the valve inspection form (Form 7.01A from the LGS Operations & Maintenance Manual) to clarify its compliance with 49 CFR §192.745(a). A copy of the revised inspection form has been included as Attachment #2.
- LGS shall conduct training on the new valve inspection form and the lessons learned from this CPUC GO 112 inspection during a 4th Quarter 2016 Team Safety Meeting.

2. Title 49 Code of Federal Regulations (CFR) §192.805 states:

“Each operator shall have and follow a written qualification program. The program shall include provisions to:

...

(b) Ensure through evaluation that individuals performing covered tasks are qualified;”

On several 2014 valve inspection records, SED and LGS staff were unable to identify the inspector from the signature. Since the inspector could not be identified, his/her Operator Qualification could not be verified.

LGS Response:

This finding was not discussed during the GO 112 inspection closing conference. The form used by LGS to document valve inspections in 2014 included an “inspected by” signature line but not an “inspected by” printed name line. This led to the unfortunate circumstance that upon initial request during the GO 112 inspection, LGS staff were unable to identify the inspector from the signature on the form.

However, on the following day, LGS staff were able to match signatures from other compliance records to the valve inspection form signatures, therefore identifying the individual conducting the valve inspection (see Attachment #3). This process was simplified by the fact that only select LGS job classifications conduct valve inspections, so the potential employee pool was limited. The Operator Qualification records were at that time provided to SED on June 30, 2016, and have been included here as Attachment #4.

Attachment #2



Lodi Gas Storage, L.L.C.

EMERGENCY VALVE INSPECTION REPORT

FORM7.01A

JOB #

Company	Operating Location	Date
LGS		
System	Valve Description	Valve ID

VALVE LOCATION

Above Ground Valve in Vault Under Ground (Buried)

VALVE SPECIFICATIONS

Manufacturer		Type	Model
Size	Rating	End Connection	S/N
		<input type="checkbox"/> Threaded <input type="checkbox"/> Flanged <input type="checkbox"/> Welded <input type="checkbox"/> Unknown	
Operator: <input type="checkbox"/> Valve Handle / Wrench <input type="checkbox"/> Hand Wheel <input type="checkbox"/> Gear <input type="checkbox"/> Actuator			

MAINTENANCE PERFORMED

Valve Inspected?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Valve Partially Operated?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO (If Not Operated, Supervisor must be notified.)	
Power Operator Tested?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Inspected for Atmospheric Corrosion?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Repairs Required?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	

VALVE SECURITY

Lock And Chain Required?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Lock And Chain In Place?	<input type="checkbox"/> YES	<input type="checkbox"/> NO

REMARKS

*INSPECTED BY:

OPERATIONS MANAGER:

SIGNATURE

SIGNATURE

PRINTED NAME

PRINTED NAME

* Inspector must have valid operator qualification for valve inspections

Attachment #3



Lodi Gas Storage, L.L.C.

Signature Cross Reference

EMERGENCY VALVE INSPECTION REPORT

FORM 7.01A

JOB# _____

COMPANY LG5	OPERATING LOCATION: LODI - SEP SITE	DATE 8-21-14 <small>MO-DAY-YR</small>
SYSTEM: 30" TO/FROM Comp SITE	STATION: SEP SITE TO/FROM Comp SITE	VALVELD SDV-1301

VALVE LOCATION

<input checked="" type="checkbox"/> Above Ground	<input type="checkbox"/> Valve in vault	<input type="checkbox"/> Under Ground (Buried)
<input checked="" type="checkbox"/> Mainline Block Valve	<input type="checkbox"/> Branch Block Valve	<input type="checkbox"/> Bypass
<input type="checkbox"/> Block Under Relief Valve	<input type="checkbox"/> Plant Block Valve	<input type="checkbox"/> Other _____
<input type="checkbox"/> Blowdown Valve	<input type="checkbox"/> Upstream	<input type="checkbox"/> Downstream

VALVE SPECIFICATIONS

Manufacture: Grove		Type: BALL VALVE	Model: BSRFXRE
Size: 24"	Rating: 600	End Connection: Flanged	Screwed- <input type="checkbox"/>
Operator: <input type="checkbox"/> Wrench		<input type="checkbox"/> Hand Wheel	<input type="checkbox"/> Gear
		<input checked="" type="checkbox"/> Flanged	SN: 012530002-1
		<input type="checkbox"/> Gear	<input checked="" type="checkbox"/> Operator

MAINTENANCE PERFORMED

Valve Inspected	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
Valve Partially Operated	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Stem & Gearing Pails Inspected	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Stem & Gearing Lubricated	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Power Operator Tested	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Valve Body Drained	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Inspected For Atmospheric Corrosion	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Repairs Required	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Proper Identification For Blow-Off Locations (GAS) <small>(Sign Should Indicate "Controlled Blowdown Required Due To Overhead Or Adjacent Facilities")</small>	<input type="checkbox"/> YES	<input type="checkbox"/> NO

N/A

VALVE SECURITY

Lock And Chain Required:	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Lock And Chain In Place:	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

REMARKS

Greased w/ Enso-lube 80

DISTRIBUTION:

SUPERVISOR:

Chris Raimundi

SIGNATURE

INSPECTED BY:

Juan Gutierrez

SIGNATURE

This is an example of a 2014 emergency valve inspection form signed by Chris Raimundi as the Supervisor and Juan Gutierrez as the Inspector.



Lodi Gas Storage, L.L.C.

Thursday, June 11, 2015

To: Lodi Ops

- Added Calculator button to LGS & KH. Screenshots attached.
- Added OPC Alarm to LGS & KH (previously sent details). Screenshots attached.
- Added Analog Signal Out-of-Range Alarms for every Analog Input and Output at LGS & KH
 - 1% below Zero (3.8 mA); 1% above Span (20.2 mA)
 - Alarm will look like: Tagname_FAILED
 - Alarm is set if instrument is Failed for 1 minute
 - Screenshots attached
- Changed NOx alarms at KH to Low Priority and the following limits:
 - 1000/2000: High=20 ppm; HIHI=23 ppm
 - 3000: High=7 ppm; HIHI=8 ppm
 - 4000: High=8 ppm; HIHI=9 ppm
- Fixed Hot Compressor Cylinder Temperature Alarms at LGS & KH
 - If the compressor is running, each cylinder alarms if it is more than 15 deg F higher than the average of all cylinders, with 3 deg F deadband
 - E.g. TE4813_HOT
 - Medium Priority
 - Add to HMI graphic later
- Added Cold Engine Cylinder Temperature Alarms at LGS & KH
 - If the engine is loaded (> 65%), each cylinder alarms if it is more than 100 deg F lower than the average of all cylinders, with a 25 deg F deadband.
 - E.g. CAT1000_CYL3EXHTEMP_COLD
 - Medium Priority
 - Add to HMI graphic later

Thanks,

Andy Anderson
Senior Operations Manager

Please Sign Below to acknowledge that you have read and understand the changes.

Jay Manding



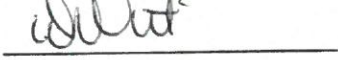

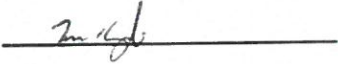
Date: 6/14/15

Jeff Jeanor

Date: 6/11/15



Lodi Gas Storage, L.L.C.

Juan Gutierrez		Date: <u>6-18-15</u>
Keith Tankersley		Date: <u>6/12/15</u>
Dave Witt		Date: <u>6-15-15</u>
Chris Raimundi		Date: <u>6.29.15</u>
Tim Krogstad		Date: <u>6-23-15</u>



The signatures of Chris Raimundi and Juan Gutierrez were cross-referenced during the audit using a Management of Change memo like this example.

Attachment #4



Lodi Gas Storage, L.L.C.

Operator Qualification Records

Lodi Gas Storage Training Report

Yellow = Within 60 days of renewal date

Orange = Within 30 days of renewal date

Red = Past renewal date

Active Filters

Generated 10/20/2016

Date Range: to 10/20/2016, **Inactive Employees:** Chris Raimundi, **All Locations, All Job Titles, Main Categories:** DOT, EHS, OPS, **All Subcategories in the selected categories, Courses:** Valve Inspection, **All Regulations, All Training Providers, Sorting:** Name (Ascending)

Course Title	Course Code	Policy/Regulation	Training Provider	Completion	Cycle	Renewal
Raimundi, Chris (Inactive)	All					Maintenance
Valve Inspection	OQ20	49 CFR 192 Subpart N / 195 Subpart G	Compliance Services Inc.	03/15/11	36 mo.	03/15/14
Valve Inspection	OQ20	49 CFR 192 Subpart N / 195 Subpart G	Compliance Services Inc.	03/15/11	36 mo.	03/15/14
Valve Inspection	OQ20	49 CFR 192 Subpart N / 195 Subpart G	Compliance Services Inc.	02/13/14	36 mo.	02/13/17

Lodi Gas Storage Training Report

Yellow = Within 60 days of renewal date

Orange = Within 30 days of renewal date

Red = Past renewal date

Active Filters

Generated 10/20/2016

Date Range: to 10/20/2016, **Active Employees:** Juan Gutierrez, **All Locations,** **All Job Titles,** **Main Categories:** DOT, EHS, OPS, **All Subcategories in the selected categories,** **Courses:** Valve Inspection, **All Regulations,** **All Training Providers,** **Sorting:** Name (Ascending)

Course Title	Course Code	Policy/Regulation	Training Provider	Completion	Cycle	Renewal
Gutierrez, Juan	Lodi					Operator
Valve Inspection	OQ20	49 CFR 192 Subpart N / 195 Subpart G	Compliance Services Inc.	02/05/06	36 mo.	02/05/09
Valve Inspection	OQ20	49 CFR 192 Subpart N / 195 Subpart G	Compliance Services Inc.	07/31/10	36 mo.	07/31/13
Valve Inspection	OQ20	49 CFR 192 Subpart N / 195 Subpart G	Compliance Services Inc.	09/25/13	36 mo.	09/25/16
Valve Inspection	OQ20	49 CFR 192 Subpart N / 195 Subpart G	Compliance Services Inc.	02/09/16	36 mo.	02/09/19

Lodi Gas Storage Training Report

Yellow = Within 60 days of renewal date

Orange = Within 30 days of renewal date

Red = Past renewal date

Active Filters

Generated 06/30/2016

Date Range: to 06/30/2016, **Active Employees:** Tim Krogstad, **All Locations, All Job Titles, Main Categories:** DOT, EHS, OPS, **All Subcategories in the selected categories, Courses:** Valve Inspection, **All Regulations, All Training Providers, Sorting:** Name (Ascending)

Course Title	Course Code	Policy/Regulation	Training Provider	Completion	Cycle	Renewal
Krogstad, Tim	All					Maintenance
Valve Inspection	OQ20	49 CFR 192 Subpart N / 195 Subpart G	Compliance Services Inc.	06/23/10	36 mo.	06/23/13
Valve Inspection	OQ20	49 CFR 192 Subpart N / 195 Subpart G	Compliance Services Inc.	06/13/13	36 mo.	06/13/16
Valve Inspection	OQ20	49 CFR 192 Subpart N / 195 Subpart G	Compliance Services Inc.	06/15/16	36 mo.	06/15/19