Utilities and Transportation Commission Standard Inspection Report for Small LPG Systems Records Review and Field Inspection (Form F2)

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

A completed Standard Inspection Checklist, OQ Field Validation Protocol form and Cover Letter/Field Report are to be submitted to the Senior Engineer within 30 days from completion of the inspection.

	Inspection Re	port	-	
Docket Number	PG-090051			
Inspector/Submit Date	Lex Vinsel / November 5, 2009			
Sr. Eng Review/Date	David Lykken / November 6, 2009			
	Operator Infor	mation		
Name of Operator:	Puget Sound Energy		OP ID #:	22189
Name of Unit(s):	LP Gas Distribution			
Records Location:	PSE Tacoma Office			
Date(s) of Last (unit) Inspection:	October 24-25, 2006	Inspection Date(s):	November 2	2-4, 2009

Inspection Summary:			
	•		
LP Gas Distribution – Valley Crest			
7510 171 Ave Ct. E			
7516 171 Ave Ct. E			
7521 171 Ave Ct. E			
7523 171 Ave Ct. E			
7417 171 Ave Ct. E			
There are 3 abandoned services on the system.			
•			
•			

HQ Address:		System/Unit Name & Add		dress:	
Puget Sound Energy			LP Gas Distribution – Valley Crest		
355 110 th Ave NE			171 Ave Ct. E (See addres	ses above)	
Bellevue, WA 98004			Sumner, WA		
Co. Official:	Bert A. Valdm	an	Phone No.:	425/882-4690	
Phone No.:	(425)462-3715		Fax No.:		
Fax No.:	(425)462-3770	,	Emergency Phone No.:	800/552-7171	
Emergency Phone No.:	1-888-225-577	3		800/710-1515	
Persons Intervi	ewed	T	itle	Phone No.	
Darryl Hong	g	Compliance Coordinator		(425)766-3388	
Greg Lillehaug		Operator		(206)391-8126	
Chuck Doughe	erty	Supe	ervisor	(253)261-0044	
		 -			

WI	WUTC staff conducted an abbreviated procedures inspection on 192 O&M and WAC items that changed since the last inspection. This checklist focuses on Records and Field items per a routine standard inspection.				
	(check one below and enter appropriate date)				
	Team inspection was performed (Within the past five years.) or, Date:				
⊠	Other WUTC Inspector reviewed the O & M Manual (Since the last yearly review of the manual by the operator.)	Date:	12/2006		

GAS SYSTEM OPERATIONS				
Propane Supplier	Ferrellgas			
Services: Residential 5 Com	mercial Industrial	Other		
Number of reportable	e safety related conditions last year	None -	Number of deferred leaks in system None	
Number of non-repor	rtable safety related conditions last y	year None	Number of third party hits last year None	

Pipe Specifications:			
Year Installed (Range)	1973 (PE 2000)	Pipe Diameters (Range)	1 1/4 Steel; 5/8 PE
Material Type	Steel wrap and PE	Line Pipe Specification Used	Sch. 40, .140 wt,
Mileage	Approximately 900 feet	SMYS %	

Operator Qualification Field Validation

Important: Per OPS, the OQ Field Inspection Protocol Form (Rev 3, Mar 07) shall be used by the inspector as part of this standard inspection. When completed, the inspector will upload this information into the PHMSA OQ Database (OQDB) located at http://primis.phmsa.dot.gov/oqdb/home.oq Date Completed 11/9/09

		REPORTING RECORDS	S	U	N/A	N/C
1.	191.5	Telephonic reports to NRC (800-424-8802) - None			х	
2.	480-93-200(1)	Telephonic Reports to UTC Pipeline Safety Incident Notification 1-888-321-9146 (Within 2 hours) for events which; - None			х	
3.	480-93-200(1)(a)	Result in a fatality or personal injury requiring hospitalization; - None			Х	
4.	480-93-200(1)(b)	Results in damage to property of the operator and others of a combined total exceeding fifty thousand dollars; - None			Х	
5.	480-93-200(1)(c)	Results in the evacuation of a building, or high occupancy structures or areas; - None			Х	
6.	480-93-200(1)(d)	Results in the unintentional ignition of gas; - None			Х	
7.	480-93-200(1)(e) Results in the unscheduled interruption of service furnished by any operator to twenty five or more distribution customers; - None				х	
8.	480-93-200(1)(f)	Results in a pipeline or system pressure exceeding the MAOP plus ten percent or the maximum pressure allowed by proximity considerations outlined in WAC 480-93-020 None			х	
9.	480-93-200(1)(g)	Is significant, in the judgment of the operator, even though it does not meet the criteria of (a) through (g) of this subsection; or - None			х	
10.					х	
11.	480-93-200(2)(a)	The uncontrolled release of gas for more than two hours; - None			X,	
12.	480-93-200(2)(c)	A pipeline or system operating at low pressure dropping below the safe operating conditions of attached appliances and gas equipment; or -None			х	
13.	480-93-200(2)(d)	A pipeline or system pressure exceeding the MAOP - None			X	
14.	191.9 9 (a)	Incidents: 30-day follow-up written report (Form 7100-1) - None			Х	
15.	480-93-200(4)	Written incident reports to the Commission (within 30 days); supplemental incident reports - None			Х	
16.	480-93-200(5)	Written report within 45 days of receiving the failure analysis of any incident or hazardous condition due to construction defects or material failure - None			x	
17.	480-93-200(6)(a)	To the Commission a copy of PHMSA F-7100.1-1 and F-7100.2-1 annual report required by U.S. Department of Transportation, PHMSA/Office of Pipeline Safety Pipeline length and information for this unit is incorporated in regional PSE report.	х	٠		
18.	480-93-200(6)(c)	Annual report on construction defects or material failures - None			X	
19.	480-93-200(9)	Submitting copy of DOT Drug and Alcohol Testing MIS Data Collection Form when required (eff 6/02/05) - None			х	
20.	191.25	Filing the SRCR within 5 days of determination, but not later than 10 days after discovery - None			Х	

	CUSTOMER	and EXCESS FLOW VALVE INSTALLATION NOTIFICATION	S	U	N/A	N/C
21.	192.16	New customers notified, within 90 days, of their responsibility for those service lines not maintained by the operator	х	,		
22.	192.381	Does the excess flow valve meet the performance standards prescribed under §192.381?	Х			
23.	192.383	Does the operator have a voluntary installation program for excess flow valves and does the program meet the requirements outlined in §192.383? Are records adequate?	х			
24.	192.383	If no voluntary program for EFV installations, are customers notified in accordance with §192.383? Are records adequate? No Voluntary Program.			· x	

Comments:	-	
		r - 1

1	100		S	U	N/A	N/C
25.	5.2.1.1	Are containers designed, fabricated, tested, and marked (or stamped) in accordance with the regulations of the U.S. Department of Transportation (DOT), the ASME Boiler and Pressure Vessel Code, Section VIII, "Rules for the Construction of Unfired Pressure Vessels," or the API-ASME Code for Unfired Pressure Vessels for Petroleum Liquids and Gases, except for UG-125 through UG-136?				·
26.	5.2.5.6	Are connections for safety relief devices located and install in such a way as to have direct communication with the vapor space?				
27.	5.2.8.3	Are the markings specified for ASME containers on a stainless steel metal nameplate attached to the container, and located to remain visible after the container is installed?	Х			
28.	5.2.8.3 (A)	Nameplate attached in such a way to minimize corrosion of the nameplate or its fasteners and not contribute to corrosion of the container? Nameplate attached to standoff plate.	Х			
29.	5.2.8.3 (B)	Where the container is buried or otherwise covered so the nameplate is obscured, is the information contained on the nameplate duplicated and installed on adjacent piping or a structure in a clearly visible location? ASME nameplate visible on top of tank.	,		х	
30.	5.2.8.3 (1)	Are ASME containers marked with the following information? Service for which the container is designed (for example, underground, aboveground, or both) LP - Gas	х			
31.	5.2.8.3 (2)	Name and address of container supplier or trade name of container. Trinity Industries, Inc., Dallas TX	х			
32.	5.2.8.3 (3)	Water capacity of container in pounds or gallons 1000 gallons	Х			
33.	5.2.8.3 (4)	MAWP in pounds per square inch 250 psig @ 125F	Х			
34.	5.2.8.3 (5)	The wording "This container shall not contain a product that has a vapor pressure in excess of <u>215</u> psig at 100°F" (See Table 5.2.4.2)	Х			
35.	5.2.8.3 (6)	Outside surface in square feet 173 sq ft	Х			
36.	5.2.8.3 (7)	Year of manufacture 1979	х			
37.	5.2.8.3 (8)	Shell thickness and Head thickness Shell .318", Head .230"	х			
38.	5.2.8.3 (9)	OL (Overall Length), OD (Outside Diameter), HD (Head Design) OL 193.5 inch, OD 41 inch, HD HEMI.	х			
39.	5.2.8.3 (10)	Manufacturer's serial number #96462	Х			
40.	5.2.8.3 (11)	ASME code symbol	Х			

		S	U	N/A	N/C
5.2.8.3 (12)	Minimum design metal Temperature 125 °F at MAWP 250 psi	Х			
5.2.8.3 (13)	Type of Construction "W"	Х			
5.2.8.3 (14)	Degree of radiography "RT- 3 "	Х			
5.7.1.1	Are container appurtenances fabricated of materials that are compatible with LP-Gas and resistant to the action of LP-Gas under service conditions? The following may not be used (1) Grey cast iron, (2) Nonmetallic materials shall not be used for bonnets or bodies of valves of regulators Bonnet is made of metal, as are all valves.	. X			
5.7.1.4 (A)	Are gaskets used to retain LP-Gas in containers resistant to the action of LP-Gas and made of metal or other suitable material having a melting point over 1,500 °F? Note: Gaskets for use with approved or listed liquid level gauges for installation on a container of 3500 gal water capacity or less are exempt from the minimum melting point requirement. Storage tank water capacity is 1000 gallons, Brass	х			
5.7.1.4 (B)	When a flange is opened, is the gasket replaced? No flanges			Х	
5.7.1.4 (C)	Aluminum O-rings and spiral wound metal gaskets shall be permitted.	Х			
5.7.1.4 (D)	Gaskets for use with approved or listed liquid level gauges for installation on a container of 3500 gal (13.2 m3) water capacity or less shall be exempt from the minimum melting point requirement. Storage tank water capacity is 1000 gallons	Х			
5.7.2.8 (1)	withThe pressure (psig) at which the valve is set to start-to-leak	х			
5.7.2.8 (2)	The rated relieving capacity in cubic feet per minute of air at 60°F (16°C and 14.7 psia (101 kPa) 4.038 cu ft/min	х			
5.7.2.8 (3)	The manufacturer's name and catalog number Sherwood - UV443AM	Х			
5.7.5.1	Is pipe or tubing used to vent regulators on of the followingMetal pipe and tubing in accordance with 5.8.3 (5.7.5.1 (1)) or PVC meeting the requirements of UL 651, Schedule 40 or 80 Rigid PVC Conduit (5.7.5.1 (2)) Direct vent to atmosphere.			х	
5.7.7.1	Do containers ≤ 2000 water capacity comply with Table 5.7.7.1?				
5.7.7.1	(A) The requirement for internal spring-type pressure relief valves that are shown in Table 5.7.7.1 for stationary ASME containers up to and including 4000 gal (15.2 m3) water capacity shall not apply to underground containers where external pressure relief valves are permitted or to containers that were originally equipped with external pressure relief valves. (B) Containers of 125 gal through 4000 gal (0.5 m3 through 15.2 m3) water capacity shall be provided with an actuated liquid withdrawal excess-flow valve with a connection not smaller than ¾-in. national pipe thread. (C) An actuated liquid withdrawal excess-flow valve shall not be required on container connections equipped for liquid withdrawal with a positive shutoff valve that is located as close to the container as practical in combination with an excess-flow valve installed in the container connection. (D) The actuated liquid withdrawal excess flow valve shall not be connected for continuous use unless the valve is recommended by the manufacturer for such service. (E) An overfilling prevention device shall not be required for engine fuel cylinders used on industrial (and forklift) trucks powered by LP-Gas or for engine fuel cylinders used on vehicles (including floor maintenance machines) having LP-Gas-powered engines mounted on them. (F) Excess-flow protection shall not be required for manual shutoff valves for vapor service where an approved regulator is directly attached or attached with a flexible connector to the outlet of the manual shutoff valve for vapor service and the controlling orifice between the container contents and the shutoff valve outlet does not exceed in (8 mm) in diameter.		x		
	5.2.8.3 (13) 5.2.8.3 (14) 5.7.1.1 5.7.1.4 (A) 5.7.1.4 (B) 5.7.1.4 (C) 5.7.1.4 (D) 5.7.2.8 (1) 5.7.2.8 (2) 5.7.2.8 (3) 5.7.5.1	5.2.8.3 (13) Type of Construction "W" 5.2.8.3 (14) Degree of radiography "RT- 3." Are container appurtenances fabricated of materials that are compatible with LP-Gas and resistant to the action of LP-Gas under service conditions? The following may not be used (1) Grey cast iron. (2) Nonmetallic materials shall not be used for bonnets or bodies of valves of regulators Bonnet is made of metal, as are all valves. Are gaskets used to retain LP-Gas in containers resistant to the action of LP-Gas and made of metal or other suitable material having a melting point over 1,500 °P? Note: Gaskets for use with approved or listed liquid level gauges for installation on a container of 3500 gal water capacity is 1000 gallons, Brass 5.7.1.4 (B) When a flange is opened, is the gasket replaced? No flanges 5.7.1.4 (C) Aluminum O-rings and spiral wound metal gaskets shall be permitted. Gaskets for use with approved or listed liquid level gauges for installation on a container of 3500 gal (13.2 m3) water capacity or less shall be exempt from the minimum melting point requirement. Storage tank water capacity is 1000 gallons. 5.7.2.8 (1) For ASME containers; is the pressure-relief valve plainly and permanently marked withThe pressure (psig) at which the valve is set to start-to-leak 5.7.2.8 (2) The rated relieving capacity in cubic feet plat minute of air at 60°F (16°C and 14.7 psia (101 kPa) 4.038 cu ft/min 5.7.5.1 Is pipe or tubing used to vent regulators on of the following Metal pipe and tubing in accordance with 5.8.3 (5.7.5.1 (1)) or PVC meeting the requirements of UL 651, Schedule 40 or 80 Rigid PVC Conduit (5.7.5.1 (2)) Direct vent to atmosphere. 5.7.7.1 Note: Refer to Table 5.7.7.1 Note: Refer to Table 5.7.7.1 Note: Refer to Table 5.7.7.1 Note: Refer to Table 5.7.7.1 (A) The requirement for internal spring-type pressure relief valves that are shown in Table 5.7.7.1 (a) The requirement for internal spring-type pressure relief valves where an approximation of 125 gal through 4000 gal (0.5 m3 throu	5.2.8.3 (12) Minimum design metal Temperature 125 °F at MAWP 250 psi X 5.2.8.3 (13) Type of Construction "W" X 5.2.8.3 (14) Degree of radiography "RT-3_" X 5.2.8.3 (14) Degree of radiography "RT-3_" X 5.2.8.3 (14) Degree of radiography "RT-3_" X 5.7.1.1 Degree of radiography "RT-3_" X 5.7.1.1 Arc container appurtenances fabricated of materials that are compatible with LP-Gas and resistant to the action of LP-Gas under service conditions? The following may not be used (1) Grey cast iron, (2) Mometallic materials shall not be used for bonnets or bodies of valves of regulators Bonnet is made of metal, as are all valves. Are gaskets used to retain LP-Gas in containers resistant to the action of LP-Gas and made of metal or other suitable material having a melting point over 1,500 °F? Note: Gaskets for use with approved or listed liquid level gauges for installation on a container of 3500 gal water capacity is 1000 gallons. Brass 5.7.1.4 (C) Aluminum O-rings and spiral wound metal gaskets shall be permitted. S.7.2.8 (1) For ASME containers, is the pressure-relief valve plainly and permanently marked withThe pressure (psig) at which the valve is set to start-to-leak The rated relieving capacity in cubic feet perminute of air at 60°F (16°C and 14.7 psia (101 kPa) 4.038 cu (17min) 5.7.2.8 (2) The manufacturer's name and catalog number Sherwood – UV443AM X Is pipe or tubing used to vent regulators on of the followingMetal pipe and tubing in accordance with 5.8.3 (5.7.5.1 (1) or PVC meeting the requirements of UL 651. 5.7.7.1 Note: Refer to Table 5.7.7.1 Alote: Refer to Table 5.7.7.1 Alote: Refer to Table 5.7.7.1 (A) The requirement for internal spring-type pressure relief valves that are shown in Table 5.7.7.1 (evalves are permitted or to containers that were originally equipped with external pressure relief valves are permitted or to containers that were originally equipped with external pressure relief valves are permitted or to containers that were originally equipped with external pressure rel	5.2.8.3 (12) Minimum design metal Temperature 125 °F at MAWP 250 psi X 5.2.8.3 (14) Degree of radiography "RT- 1." Are container appurtenances fabricated of materials that are compatible with LP-Gas and resistant to the action of LP-Gas under service conditions? The following may not be used. In (1) Grey cast into (2) Nometallian materials shall not be used for bonnes or bodies of valves of regulators Bonnet is made of metal, as are all valves. Are gaskets used to retain LP-Gas in containers resistant to the action of LP-Gas and made of metal or other suitable material having a melting point over 1,500 °F? Note: Gaskets for use with approved or istend figure level gauges for installation on a container of 3500 gall water capacity or less are exempt from the minimum melting point requirement. Storage talk water capacity is 1000 gallons, Brass 5.7.1.4 (D) Aluminum O-rings and spiral wound metal gaskets shall be permitted. \$ 4	5.2.8.3 (14) Minimum design metal Temperature 125 °F at MAWP 259 psi X 5.2.8.3 (14) Type of Construction "W" X 5.2.8.3 (14) Degree of radiography "RT- 3." Are container appurtenances fabricated of materials that are compatible with LP-Gas and resistant to the action of LP-Gas under service conditions? The following may not be used (1) Grey east inor, (2) Nometallia materials shall not be used for bornets or bodies of valves of regulators Bornet is made of metal, as are all valves. Are gaskets used to retain IP-Gas in containers resistant to the action of LP-Gas and made of metal or other suitable material having a melting point over 1,500 °F? Note: Gaskets for use with approved of listed fluid level gauges for installation on a container of 3500 gal water capacity or less are exempt from the minimum melting point requirement. Storage tank water capacity is 1000 gallons, Brass 5.7.1.4 (C) Aluminum O-rings and spiral wound metal gasket shall be permitted. Gaskets for use with approved or listed fluid level gauges for installation on a container of 3500 gal (13.2 m3) water capacity or less shall be exempt from the minimum melting point requirement. Storage tank water capacity is 1000 gallons. 5.7.1.4 (D) Aluminum O-rings and spiral wound metal gasket shall be permitted. Gaskets for use with approved or listed fluid level gauges for installation on a container of 3500 gal (13.2 m3) water capacity or less shall be exempt from the x minimum melting point requirement. Storage tank water capacity is 1000 gallons. 5.7.2.8 (1) For ASME containers, is the pressure relief valve plainly and permanently marked with

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		participal programmes and the first stage of the stage of				
			S	Ū	N/A	N/C
55.	5.7.7.2	Are ASME containers over 4000 gal (15.2 m3) water capacity equipped in accordance with 5.7.7.2(A) through 5.7.7.2(G) and Table 5.7.7.3.? Storage tank water capacity is 1000 gallons				
		Note: Also refer to table 5.7.7.3. A) Vapor withdrawal openings shall be equipped with either of the following: (1) A positive shutoff valve located as close to the container as practical in combination with an excess-flow valve installed in the container				
		(2) An internal valve (B) Liquid withdrawal openings in new installations shall be equipped with an internal valve that is fitted for remote closure and automatic shutoff using thermal (fire) actuation where the thermal element is located within 5 ft (1.5 m) of the internal valve.				
		(C) Liquid withdrawal openings in existing installations where the container is equipped with an internal valve that is not fitted for remote closure and automatic shutoff using thermal (fire) actuation shall be equipped for remote and thermal closure by July 1, 2003.				
		(D) Liquid withdrawal openings in existing installations shall be equipped with either of the following by July 1, 2011:(1) An internal valve that is fitted for remote closure and automatic shutoff using				
,		thermal (fire) actuation where the thermal element is located within 5 ft (1.5 m) of the internal valve (2) An emergency shutoff valve that is installed in the line downstream as close as				
		practical to a positive shutoff valve in combination with an excess flow valve installed in the container (E) Vapor inlet openings shall be equipped with either of the following:				
		(1) A positive shutoff valve that is located as close to the container as practical in combination with either a backflow check valve or excess-flow valve installed in the container (2) An internal valve			•	
		(F) Liquid inlet openings in new installations shall be equipped with either of the following: (1) An internal valve that is fitted for remote closure and automatic shutoff using			X	
		thermal (fire) actuation where the thermal element is located within 5 ft (1.5 m) of the internal valve (2) A positive shutoff valve that is located as close to the container as practical in				
		combination with a backflow check valve that is designed for the intended application and is installed in the container (G) Liquid inlet openings in existing installations where the container is equipped				
, , , , , , , , , , , , , , , , , , ,		with an internal valve that is not fitted for remote closure and automatic shutoff using thermal (fire) actuation shall be equipped for remote and thermal closure by July 1, 2003.				
		(H) Liquid inlet openings in existing installations shall be equipped with any of the following by July 1, 2011: (1) An internal valve that is fitted for remote closure and automatic shutoff using			•	
		thermal (fire) actuation where the thermal element is located within 5 ft (1.5 m) of the internal valve (2) An emergency shutoff valve that is installed in the line upstream as close as				
		practical to a positive shutoff valve in combination with an excess flow valve installed in the container (3) A positive shutoff valve that is located as close to the container as practical in combination with a backflow check valve that is designed for the intended application				
		and is installed in the container (4) A backflow check valve that is designed for the intended application and is installed in the line upstream as close as practical to a positive shutoff valve in				
		combination with an excess-flow valve installed in the container (I) Container openings that are not compatible with internal valves shall be permitted to utilize both an excess flow valve installed in the container and a valve complying with API 607, Fire Test for Soft-Seated Quarter Turn Ball Valves, with the following				
		features: (1) The valve shall be activated either hydraulically or pneumatically and shall fail in the closed position. (2) The valve shall be equipped for remote closure and thermal actuation with a				
50	5770	thermal element located within 5 ft of the valve.				
56.	5.7.7.3	Are appurtenances used on inlet and outlet connections of containers larger than 2000 gallons water capacity through 4000 gallons water capacity in accordance with Table 5.7.7.1? Are appurtenance requirements for inlet and outlet connections of containers in bulk plant and industrial plant service in accordance with Table			x	
		5.7.7.3? Storage tank water capacity is 1000 gallons				
		Note: Refer to tables.				

			S	U	N/A	N/C
57.	5.7.10.1 AOC	Are container openings equipped with one of the following: (1) A positive shutoff valve in combination with either an excess-flow check valve or a backflow check valve, plugged (2) An internal valve, plugged (3) A backflow check valve, plugged (4) An actuated liquid withdrawal excess-flow valve, normally closed and plugged, with provision to allow for external actuation (5) A plug, blind flange, or plugged companion flange Need plug at fill port.		х		
58.	5.7. 2.4 (a) AOC	Are ASME containers for LP-Gas equipped with direct spring-loaded pressure relief valves conforming with applicable requirements of UL 132, Standard on Safety Relief Valves for Anhydrous Ammonia and LP-Gas, or other equivalent pressure relief valve standards?		х		
59.	5.7.2.5	Is the minimum rate of discharge of pressure relief valves in accordance with Table 5.7.2.5 or calculated using the following formula: Flow Rate (ft3/min air) = 53.632 x A to the power of 0.82 where: A = total outside surface area of container in square feet A = 173 sq feet. Flow Rate is adequate per Table 5.7.2.5.	х			
60.	5.7.8	Do Liquid Level Gauging Devices comply with the following? 5.7.8.1 Liquid level gauging devices shall be installed on all containers filled by volume. 5.7.8.2 The gauging devices shall be either fixed maximum liquid level gauges or variable gauges of the slip tube, rotary, or float types (or combinations of such gauges). 5.7.8.3* Every container designed to be filled on a volumetric basis shall be equipped with a fixed maximum liquid level gauge(s) to indicate the maximum filling level(s) for the service(s) in which the container is to be filled or used (see 7.4.3.3)	x			·
61.	5.7.9.1	Are pressure gauges attached directly to the container opening or to a valve or fitting that is directly attached to the container opening?	х			
62.	5.7.11	Are shutoff valves located as close to the container as practical and readily accessible for operation and maintenance under normal and emergency conditions? Are valves, regulators, gauges, and other container appurtenances protected against physical damage?	х			
63.	5.8.3.1	Are all pipe and tubing of the proper materials and joint design for pressure and strength?	Х			
64.	5.8.5	Are joints in polyamide and polyethylene pipe and polyethylene tubing made by heat fusion, by compression-type mechanical fittings, or by factory-assembled transition fittings?			х	
65.	5.8.6	Are hose, hose connections, and flexible connectors fabricated of materials that are resistant to the action of LP-Gas both as liquid and vapor? (A) If wire braid is used for reinforcement, it shall be of corrosion-resistant material such as stainless steel. (B) Hose shall be designed for a working pressure of 350 psig (2.4 MPag) with a safety factor of 5 to 1 and shall be continuously marked with LP-GAS, PROPANE, 350 PSI WORKING PRESSURE, and with the manufacturer's name or trademark. (C) Hose assemblies, after the application of couplings, shall have a design capability of not less than 700 psig (4.8 MPag).			x	
66.	5.10	Are pressure-containing metal parts of valves of steel, ductile (nodular) iron, malleable iron, or brass? Are all materials used, including valve seat discs, packing, seals, and diaphragms, resistant to the action of LP-Gas under service conditions? Are emergency shutoff valves approved and incorporate all of the following means of closing: (1) Automatic shutoff through thermal (fire) actuation (2) Manual shutoff from a remote location (3) Manual shutoff at the installed location If fusible elements are used, do they have a melting point not exceeding 250°F (121°C). Are valves in polyethylene piping systems manufactured from thermoplastic materials listed in ASTM D 2513, Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing and Fittings, and have been shown to be resistant to the action of LP-Gas and comply with ASTM D 2513? Are metallic valves in polyethylene and polyamide piping systems protected to minimize corrosion in	x			
67.	5.11	accordance with 6.14? Do hydostatic relief valves installed in sections of liquid piping between closed shutoff valves have pressure settings not less than 400 psig (2.8 MPag) or more than 500 psig (3.5 MPag)? None, vapor withdrawal only.			Х	

			S	U	N/A	N/C
68.	6.4.5.2	Is loose or piled combustible material and weeds and long dry grass separated from containers by a minimum of 10 ft (3 m)?	х			
69.	6.4.7	Are structures such as fire walls, fences, earth or concrete barriers, and other similar structures not permitted around or over installed nonrefrigerated containers? Note: Exceptions as follows: (1) Structures partially enclosing containers shall be permitted if designed in accordance with a sound fire protection analysis. (2) Structures used to prevent flammable or combustible liquid accumulation or flow shall be permitted in accordance with 6.4.5.3. (3) Structures between LP-Gas containers and gaseous hydrogen containers shall be permitted in accordance with 6.4.5.9. (4) Structures such as fences shall be permitted in accordance with 6.16.5.	x			·
70.	6.6.3.1	Are containers designed for permanent installation in stationary service above ground placed on masonry or other noncombustible structural supports located on concrete or masonry foundations with the container supports? (A) Where saddles are used to support the container, do they allow for expansion and contraction and prevent an excessive concentration of stresses? (B) Where structural steel supports are used, do they shall comply with 6.6.3.3	x			
71.	6.7.2.1	Are pressure relief devices installed so that the relief device is in direct communication with the vapor space of the container?	Х		,	
72.	6.7.2.3	Are pressure relief devices on ASME containers installed so that any gas released is vented away from the container upward and unobstructed to the open air?	x			
73.	6.7.2.4	Are rain caps or other means provided to minimize the possibility of the entrance of water or other extraneous matter into the relief device or any discharge piping? Are provision made for drainage where the accumulation of water is anticipated?	х	·		
74.	6.7.2.7	Is the pressure relief valve discharge on each aboveground container of more than 2000 gal (7.6 m3) water capacity piped vertically upward to a point at least 7 ft (2.1 m) above the top of the container, and the discharge opening unobstructed to the open air? Storage tank water capacity is 1000 gallons			х	
75.	6.7.4.4	Are all regulators for outdoor installations designed, installed, or protected so their operation will not be affected by the elements (freezing rain, sleet, snow, ice, mud, or debris)? Under Bonnet	х			
76.	6.7.4.5	Is the point of discharge from the relief device on regulating equipment installed outside of buildings located not less than 3 ft (1 m) horizontally away from any building opening below the level of such discharge, and not beneath any building unless this space is well ventilated to the outside and is not enclosed for more than 50 percent of its perimeter?	х			,
77.	6.7.4.6	Is the point of discharge also located not less than 5 ft (1.5 m) in any direction away from any source of ignition, openings into direct-vent (sealed combustion system) appliances, or mechanical ventilation air intakes?	х			
78.	6.9.2	Are indirect-fired vaporizers installed outdoors, or in separate buildings or structures that comply with Section 10.2, or in attached structures or rooms that comply with Section 10.3? If a building or structure is used, does it have any unprotected drains to sewers or sump pits? Are the pressure relief valves on vaporizers within buildings piped to a point outside the building or structure and discharged vertically upward? None			х	
79.	6.9.3	If a direct-fired vaporizer is installed in a separate structure, is the separate structure constructed in accordance with Chapter 10? Does the housing for direct-fired vaporizers not have any drains to a sewer or a sump pit that is shared with any other structure? Does the pressure relief valve discharges on direct-fired vaporizers piped to a point outside the structure or building? Is the direct-fired vaporizers connected to the liquid space or to the liquid and vapor space of the ASME container? 6.19.3.5 A manually operated shutoff valve shall be installed in each connection of the ASME container supplying the vaporizer. None			х	
80.	6.9.5	Are emergency remote shutdown stations identified by a sign, visible from the point of transfer, incorporating the words "Propane - Container Liquid Valve Emergency Shutoff" in block letters of not less than 2 in. (51 mm) in height on a background of contrasting colors to the letters? No Liquid Withdrawal			Х	
81.	6.10.9 AOC	Are emergency shutoff valves and backflow check valves required by the code tested annually, and are the results of the test documented? No information at end of inspection.		х		
82.	6.10.10 AOC	Do all emergency shutoff valves comply with the following? (1) Each emergency shutoff valve shall have at least one clearly identified and easily accessible manually operated remote emergency shutoff device. (2) The shutoff device shall be located not less than 25 ft (7.6 mm) or more than 100 ft (30.5 m) in the path of egress from the emergency shutoff valve. No designated Emergency Shut Off Valve.		х		

		And the second	S	U	N/A	N/C
83.	6.11	Are hydrostatic relief valves, or a device providing pressure-relieving protection, installed in each section of piping and hose in which liquid LP-Gas can be isolated between shutoff valves so as to relieve the pressure that could develop from the trapped liquid to a safe atmosphere or product-retaining section? None, vapor withdrawal only.			X.	
84.	6.13	In areas where heavy snowfall is anticipated, are the piping, regulators, meters, and other equipment protected from the forces anticipated as a result of accumulated snow.			х	
85.	6.15.4	Are strainers installed so that the strainer element can be removed without removing equipment or piping? None			х	

Comments:		
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			S	U	N/A	N/C
86.	6.16.5.2	Is the facility area enclosed with at least a 6 ft (1.8 m) high industrial-type fence, chain link fence, or equivalent protection? Is there at least two means of emergency egress from the enclosure except as follows: (1) The fenced or otherwise enclosed area is not over 100 ft2 (9 m2) (2) The point of transfer is within 3 ft (1 m) of the gate (3) Containers are not filled within the enclosure Is clearance of at least 3 ft (1 m) provided to allow emergency access to the required means of egress. Note: Fencing shall not be required where devices that can be locked in place are provided that prevent unauthorized operation of valves, equipment, and appurtenances.			X	
87.	6.23.4.2	Is each industrial plant, bulk plant, and distributing point provided with at least one approved portable fire extinguisher having a minimum capacity of 18 lb (8.2 kg) of dry chemical with a B:C rating?			х	
88.	6.23.4.4	Are emergency controls conspicuously marked, and the controls located so as to be readily accessible in emergencies			Х	
89.	192.201 (a) AOC	Is pressure-limiting equipment set to operate so that the MAOP + allowable buildup pressure will not be exceeded? Is adequate consideration given to any buildup over the set pressure required to fully open each relief valve?		х		
90.	192.469	Are there sufficient test stations or test points?	Х			
91.	192.605(a)	Are O&M procedures (for LPG Systems) reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year? Are appropriate procedures kept at locations where LPG O&M activities are conducted?	х			
92.	192.615(b)(1)	Does the operator provide each supervisor who is responsible for emergency action with a current copy of the applicable emergency procedures;	х			
93.	192.615(b)(2)	Does the operator train operating personnel in the emergency procedures and verify that the training was effective (Test); and,	х		·	
94.	192.615(b)(3)	review employee's activities to determine whether procedures are effectively followed in each emergency (does not have to be an incident)?	х			
95.	192.615(c)	Have face-to-face meetings taken place with fire, police, or other public officials to: (1) Learn their responsibility and resources to respond to gas pipeline emergencies; (2) Acquaint officials with the operator's ability to respond; (3) Identify the types of gas pipeline emergencies that the operator would notify officials; and, (4) Plan how they can engage in mutual assistance to minimize hazards?	x			
96.	192.616	Has the operator established a continuing education program to better inform the public on how to recognize and report potential pipeline emergencies? Customized for LPG users? (TV, Newspaper, mailing, trade shows, etc.)	х			
97.	192.616 (a)	Each pipeline operator must develop and implement a written continuing public education program that follows the guidance provided in the American Petroleum Institute's (API) Recommended Practice (RP) 1162 (IBR, see § 192.7).	х			

			S	U	N/A	N/C
98.	192.616 (b) AOC	The operator's program must follow the general program recommendations of API RP 1162 and assess the unique attributes and characteristics of the operator's pipeline and facilities. For LPG systems?		х		
99.	192.616 (c)	The operator must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.	x	-		
100.	192.619 (a)	Are MAOP's established for each segment of the pipeline?	х			
101.	480-93-015(2)	Odorization of Gas	Х			
102.	480-93-015(2)	Monthly Odorant Testing	Х			
103.	480-93-015(3)	Odorant Testing Equipment Calibration/Intervals (Annually or Manufacturers Recommendation)	Х			
104.	480-93-124(3)	Pipeline markers attached to bridges or other spans inspected? 1/yr(15 months) None			Х	
105.	480-93-124(4)	Markers reported missing or damaged replaced within 45 days?	Х			
106.	480-93-140(2)	Service regulators and associated safety devices tested during initial turn-on None			Х	
107.	480-93-155(1)	Up-rating of system MAOP to >60 psig? Procedures and specifications submitted 45 days prior? None			Х	
108.	480-93-185(1)	Reported gas leaks investigated promptly graded. Records retained? None			Х	
109.	480-93-185(3)	Leaks originating from a foreign source reported promptly/notification by mail. Records retained? None			х	
110.	480-93-186(3)	Leak evaluations: Are follow-up inspections performed within 30 days of a leak repair? None	<u> </u>		Х	
111.	480-93-186(4)	Leak evaluations: Grade 1 and 2 leaks (if any), downgraded once to a grade 3 without physical repair? None			X	
112.	480-93-187	Gas leak records: at a minimum include required information listed under 480-93-187(1-13) None during inspection time period.			Х	
113.	480-93-188(1)	Gas leak surveys performed using a gas detection instrument covering the areas and circumstances identified under 480-93-188 (1) a thru e?	х			
114,	480-93-188(2)	Gas detection instruments tested for accuracy/intervals (Mfct rec or monthly not to exceed 45 days)	х			
115.	480-93-188(3)	Leak survey frequency (Refer to Table Below)	<u></u>		Х	
	Busir	ness Districts (implement by 6/02/07) 1/yr (15 months)		7		
		High Occupancy Structures 1/yr (15 months)		-		
,		Pipelines Operating ≥ 250 psig 1/yr (15 months) Mains: CI, WI, copper, unprotected steel 2/yr (7.5 months)				
	Other N	Mains: CI, WI, copper, unprotected steel 2/yr (7.5 months)				
116.	480-93-188(4)(a)	Special leak surveys - Prior to paving or resurfacing, following street alterations or repairs None			х	
117.	480-93-188(4)(b)	Special leak surveys - areas where substructure construction occurs adjacent to underground gas facilities, and damage could have occurred None			Х	
118.	480-93-188(4)(c)	Special leak surveys - Unstable soil areas where active gas lines could be affected None			Х	
119.	480-93-188(4)(d)	Special leak surveys - areas and at times of unusual activity, such as earthquake, floods, and explosions None			х	
120.	480-93-188(4)(e)	Special leak surveys - After third-party excavation damage to services, operators must perform a gas leak survey from the point of damage to the service tie-in None			х	
121.	480-93-188(5)	Gas Survey Records	х			
122.	192.603(b)	Patrolling Business District (4 per yr/4½ months) 192.721(b)(1) None			Х	
123.	192.603(b)	Patrolling Outside Business District (2 per yr/7½ months) 192.721(b)(2) None			Х	
124.	192.603(b)	Leakage Survey - Outside Business District (5 years) 192 .723(b)(1) Leakage Survey performed every 3 years.	х			
125.	192.603(b)	Tests for Reinstating Service Lines 192.725	Х			
126.	192.603(b)/.727(g)	Abandoned facilities 192.727			Х	
127.	192.709	Pressure Limiting and Regulating Stations (1 per yr/15 months) .739		Х		
128.	192.709	Pressure Limiting and Regulator Stations — Capacity (1 per yr/15 months) .743		х		
		1				

			S	U	N/A	N/C
129.	192.709	Valve Maintenance – Transmission (1 per yr/15 months) 745 None			Х	
130.	192.709	Valve Maintenance – Distribution (1 per yr/15 months) .747 (Done monthly)	X			
131.	480-93-100(3)	Service valve maintenance (1 per yr/15 months)			Х	
132.	480-93-100(4)	Service valve installation and maintenance program			Х	
133.	192.709	Vault maintenance (≥200 cubic feet)(1 per yr/15 months) .749 None			X	
134.	192. 603(b)	Prevention of Accidental Ignition (hot work permits) .751			Х	·
135.	192.709	Repair: pipe (pipeline life); Other than pipe (5 years) None			Х	

Comments:

96, 98, 99 – PSE has no Pubic Awareness information that addresses propane gas service.

127, 128 – No information was provided for these items.

		CORROSION CONTROL RECORDS	S	U	N/A	N/C
136.	192.457(b)	Pipelines installed before 8/1/71; Is CP provided in areas of active corrosion? (1) Bare or ineffectively coated transmission lines, Bare or coated pipes at compressor, regulator, and measuring stations, Bare or coated distribution line. Wrapped steel installed 1973 Mans or Records 491(a)			х	
137.	192.491	Maps or Records .491(a)	Х			
138.	192.491	Examination of Buried Pipe when exposed .459 None			Х	
139.	480-93-110(8)	CP test reading on all exposed facilities where coating has been removed None			х	
140.		Annual Pipe-to-soil monitoring (1 per yr/15 months) .465(a) 2007, 2008	Х			
141.	192.491	Isolated, Mains .465(a) None			Х	
142.	1	Isolated, Services .465(a) None			х	
143.	192.491	Rectifier Monitoring (6 per yr/2½ months) .465(b) None, galvanic system			X	
144.	192.491	Interference Bond Monitoring - Critical (6 per yr/2½ months) .465(c) None			х	
145.	192.491	Interference Bond Monitoring – Non-critical (1 per yr/15 months) .465(c) None	<u> </u>		Х	
146.	480-93-110(2)	Remedial action taken within 90 days (Up to 30 additional days if other circumstances. Must document) .465(d) No Low Reads	Х			
147.	192.491	Unprotected Pipeline Surveys, CP active corrosion areas (1 per 3 cal yr/39 months) .465(e)			х	
148.	192.491	Electrical Isolation (Including Casings) .467			Х	
149.	480-93-110(5)	Casings inspected/tested annually not to exceed fifteen months			Х	
150.	480-93-110(5)(a)	Casings w/no test leads installed prior to 9/05/1992. Demonstrate other acceptable test methods		-	х	
151.	480-93-110(5)(b)	Possible shorted conditions – Perform confirmatory follow-up inspection within 90 days			Х	
152.	480-93-110(5)(c)	Casing shorts cleared when practical		ï	Х	
153.	480-93-110(5)(d)	Shorted conditions leak surveyed within 90 days of discovery. Twice annually/7.5 months			Х	
154.	192.491	Interference Currents .473			Х	
155.	192.491	Internal Corrosion; Corrosive Gas Investigation .475(a)			Х	
156.	192.491	Internal Corrosion; Internal Surface Inspection; Pipe Replacement .475(b)			X	
157.	192.491	Internal Corrosion Control Coupon Monitoring (2 per yr/7½ months) .477			Х	
158.	192.491	Atmospheric Corrosion Control Monitoring (1 per 3 cal yr/39 months onshore; 1 per yr/15 months offshore) .481 2004, 2006		х		
159.	192.491	Remedial: Replaced or Repaired Pipe; coated and protected; corrosion evaluation and actions .483/.485 None		·	Х	

		CORROSION CONTROL RECORDS	S	U	N/A	N/C
160.	480-93-110(3)	CP Test Equipment and Instruments checked for accuracy/intervals (Mfct Rec or Opr Sched)	х	·		

Comments:

#126, 127 – No information about regulators or regulator testing and maintenance.

#158 – Area of atmospheric corrosion observed above the soil to air interface where coating was damaged.

		PIPELINE INSPECTION (Field)	S	U	N/A	N/C
161.	192.161	Supports and anchors	Х			
162.	192.179	Valve Protection from Tampering or Damage		Х		
163.	192.199(e)	Regulator and Relief discharge stacks, vents, or outlet ports designed to prevent accumulation of water, ice, or snow, located where gas can be discharged into the atmosphere without undue hazard? Bonnet over regulator.	×			
164.	480-93-080(3)	Identification and qualification cards/certificates w/name of welder/joiner, their qualifications, date of qualification and operator whose qualification procedures were followed.	х			
165.	480-93-013	Personnel performing "New Construction" covered tasks OQ qualified? No new construction.			х	
166.	480-93-015(1)	Odorization	х			
167.	480-93-018(3)	Updated records, inc maps and drawings made available to appropriate operations personnel? (eff 6/02/05)	х			
168.	192.455	Pipeline coatings meet requirements of 192.461 (for buried pipelines installed after 7/31/71) Wrapped steel and PE	х			
169.	192.463	Levels of Cathodic Protection	х			
170.	192.465	Rectifiers None			х	
171.	192.467	CP - Electrical Isolation	X			
172.	192.469	Sufficient test stations or test points?	Х			
173.	192.479	Pipeline components exposed to the atmosphere	Х			
174.	192.481	Atmospheric Corrosion: monitoring	Х			
175.	192.491	Test Stations - Sufficient Number .469	х			
176.	480-93-115(2)	Casings – Test Leads (casings w/o vents installed after 9/05/1992) No casings			Х	
177.	480-93-115(2)	Mains or transmission lines installed in casings/conduit. Are casing ends sealed? eff 6/02/05 No casings			х	
178.	480-93-115(4)	Service lines installed in casings/conduit. Are casing ends nearest to building walls sealed? No casings			х	
179.	192.605	Knowledge of Operating Personnel	Х			
180.	480-93-124	Pipeline markers installed	Х			
181.	192.707	Warning Signs	Х			
182.	192.195	Overpressure protection designed and installed where required?		Х		
183.	192.727 (d)	Whenever service to a customer is discontinued, does the operator: (1) provide a locking device on the service line valve; (2) install a mechanical device to prevent the flow of gas: or, (3) disconnect the customer's piping from the gas supply and seal the open ends?	х			
184.	192.743	Pressure Limiting and Regulating Devices (Capacities)		Х		
185.	192.355	Customer meters and regulators. Protection from damage	Х			
186.	192.355(c)	Pits and vaults: Able to support vehicular traffic where anticipated. None			Х	
187.	480-93-140	Service regulators installed, operated and maintained per state/fed regs and manufacturers recommended practices?	X.			
188.	192.747	Valve Maintenance Valve exercised each month.	Х			

Comments:

Comments:

#162 - LP regulator is not secured against damage. Metal bonnet does not lock.

#180 – No pipeline marker on 11/4/09 – Marker installed 11/5/09.

#182, 184 – No information on where the regulator is set.