

**Utilities and Transportation Commission
Standard Inspection Report for Small LPG Systems
Records Review and Field Inspection**

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 Report			
Docket Number	7858		
Inspector/Submit Date	6/26/2019		
Sr. Eng Review/Date			
Operator Information			
Name of Operator:	New Roche Harbor LLC	OP ID #:	39661
Name of Unit(s):	The New Roche Harbor Resort		
Records Location:	248 Reuben Memorial Dr. Friday Harbor		
Date(s) of Last (unit) Inspection:	TA 05/09/2017	Inspection Date(s):	06/04 – 06/06/2019

<p>Inspection Summary:</p> <p>The 2019 New Roche Harbor LLC LPG standard inspection for The New Roche Harbor Resort unit (RH) was conducted in Friday Harbor, WA. This was the first comprehensive Program, Procedures, Records and Field review inspection for RH. Weather: Mild/Cloudy Temp: Unknown</p> <p>Description: The New Roche Harbor LLC LPG distribution system consists of a 30,000 gal. tank which serves [10] commercial and [39] residential customers through a direct-fired vaporizer, with polyethylene (PE) piping underground and black-iron piping above ground at some locations. A cursory Technical Assistance (TA) inspection [7380] in 2017 resulted in [19] findings/probable violations.</p> <p>Field Operator Qualification (OQ) assessments were planned for this inspection but because of a medical emergency involving vital RH personnel, it was agreed upon that OQ assessment in the field would be conducted during the inspection of the RH operated Snug Harbor Resort unit later this year. In the field, staff reviewed the tank and all valve locations, as well as, all commercial and residential services and meter sets. A brief exit interview was conducted on Thu 06/06, but due to Greg Casey's absence, there were numerous issues still outstanding. It was agreed upon that Roche Harbor would be allowed a brief period of time (until 06/18) to resolve these outstanding issues, as staff would not be working on the inspection report until after returning from a scheduled annual leave. As a result of this inspection [31] probable violations were identified and [2] areas of concern.</p>
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Operator Address: PO Box 4001 Roche Harbor WA 98250	System/Unit Name & Address: The New Roche Harbor Resort 248 Reuben Memorial Dr. Friday Harbor WA 98250	
Co. Official: Greg Casey/Property Manager Phone No.: (360) 298-8660 Fax No.: Emergency Phone No.: (800) 586-3590	Phone No.: (360) 298-8660 Fax No.: Emergency Phone No.: (800) 586-3590	
Persons Interviewed	Title	Phone No.
Mike Sims	Principle/M. Sims LP Gas Safety Consulting LLC	(970) 765-1688

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)

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<input type="checkbox"/>	Team inspection was performed (Within the past five years.) or,	Date:	
<input type="checkbox"/>	Other WUTC Inspector reviewed the O & M Manual (Since the last yearly review of the manual by the operator.)	Date:	

GAS SYSTEM OPERATIONS

Propane Supplier	Petrogas/Tesoro Anacortes WA		
Number of Services: <i>Residential [39] Commercial [10] Industrial Other</i>			
Number of reportable safety related conditions last year	0	Number of deferred leaks in system	0
Number of <u>non-reportable</u> safety related conditions last year	0	Number of third party hits last year	0
Total storage capacity in gallons: (Over 4,000 aggregate, use NFPA 59 Code where applicable)	30,000	Number above ground tanks	1
Year tank(s) installed (Range)	2016	Number below ground tanks	0
		Cathodic Protection on tank(s)	0
		Cathodic Protection on pipeline	0

Pipe Specifications:			
Year Installed (Range)	2006 - Estimated (No records)	Pipe Diameters (Range)	1-1/4, 1/2 Inch
Material Type(s)	Polyethylene (PE) / Black Iron	Line Pipe Specification Used	
Less than a mile	YES	Mileage (If over a mile)	

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** N/A – Will observe OQ Field procedures at Snug Harbor unit inspection later this year, due to medical emergency involving personnel.

REPORTING RECORDS

			S	U	N/A	N/C
1.	191.5	Telephonic reports to NRC (800-424-8802)			X	
2.	480-93-200(1)	Telephonic Reports to UTC Pipeline Safety Incident Notification 1-888-321-9146 (Within 2 hours) for events which;			X	
3.	480-93-200(1)(a)	Result in a fatality or personal injury requiring hospitalization;			X	
4.	480-93-200(1)(b)	Results in damage to property of the operator and others of a combined total exceeding fifty thousand dollars;			X	
5.	480-93-200(1)(c)	Results in the evacuation of a building, or high occupancy structures or areas;			X	
6.	480-93-200(1)(d)	Results in the unintentional ignition of gas;			X	
7.	480-93-200(1)(e)	Results in the unscheduled interruption of service furnished by any operator to twenty five or more distribution customers;			X	
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			X	
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			X	
10.	480-93-200(2)	Telephonic Reports to UTC Pipeline Safety Incident Notification 1-888-321-9146 (Within 24 hours) for;			X	
11.	480-93-200(2)(a)	The uncontrolled release of gas for more than two hours;			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			X	
13.	480-93-200(2)(d)	A pipeline or system pressure exceeding the MAOP			X	
14.	191.9 9 (a)	Incidents: 30-day follow-up written report (Form 7100-1)			X	
15.	480-93-200(4)	Written incident reports to the Commission (within 30 days); supplemental incident reports			X	
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			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			X	
18.	480-93-200(6)(c)	Annual report on construction defects or material failures			X	
19.	480-93-200(9)	Submitting copy of DOT Drug and Alcohol Testing MIS Data Collection Form when required (eff 6/02/05)			X	
20.	191.25	Filing the SRCR within 5 days of determination, but not later than 10 days after discovery			X	

Comments:
Q1 thru Q20 – There were no incidents that required any of these reporting records.

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			X	
22.	192.381	Does the excess flow valve meet the performance standards prescribed under §192.381?			X	
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? ***Not required for LP-Gas operators			X	
24.	192.383	If no voluntary program for EFV installations, are customers notified in accordance with §192.383? Are records adequate? ***Roche Harbor has multiple services without excess flow valves (EFV) required on new services installed after Apr 14, 2017		X		

Comments:
Q21 thru Q22 Does not apply to Roche Harbor at this time

			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?	X			
26.	5.2.5.6	Are connections for safety relief devices located/installed in such a way as to have direct communication with the vapor space?	X			
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?	X			
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?	X			
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? ***No buried containers			X	
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)	X			
31.	5.2.8.3 (2)	Name and address of container supplier or trade name of container	X			
32.	5.2.8.3 (3)	Water capacity of container in pounds or gallons	X			
33.	5.2.8.3 (4)	MAWP in pounds per square inch	X			
34.	5.2.8.3 (5)	The wording "This container shall not contain a product that has a vapor pressure in excess of ____ psig at 100°F" (See Table 5.2.4.2) ***Not marked on container		X		
35.	5.2.8.3 (6)	Outside surface in square feet ***Not marked on container		X		
36.	5.2.8.3 (7)	Year of manufacture	X			
37.	5.2.8.3 (8)	Shell thickness and Head thickness ***Not marked on container		X		
38.	5.2.8.3 (9)	OL (Overall Length), OD (Outside Diameter), HD (Head Design) ***Not marked on container		X		
39.	5.2.8.3 (10)	Manufacturer's serial number	X			

			S	U	N/A	N/C
40.	5.2.8.3 (11)	ASME code symbol	X			
41.	5.2.8.3 (12)	Minimum design metal Temperature ____ °F at MAWP ____ psi	X			
42.	5.2.8.3 (13)	Type of Construction "W"	X			
43.	5.2.8.3 (14)	Degree of radiography "RT- ____"	X			
44.	5.4.1.5	Above ground containers shall be orientated so that their longitudinal axis does not point towards other containers, flammable liquid or gas tanks. *NFPA 59 requirement only	X			
45.	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	X			
46.	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.	X			
47.	5.7.1.4 (B)	When a flange is opened, is the gasket replaced? ***Flange has never been open			X	
48.	5.7.1.4 (C)	Aluminum O-rings and spiral wound metal gaskets shall be permitted. ***No Aluminum O-rings			X	
49.	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. ***There are none of these gaskets			X	
50.	5.7.2.8 (1)	For ASME containers, is the pressure relief valve plainly and permanently marked with.....The pressure (psig) at which the valve is set to start-to-leak ***Roche Harbor failed to provide this data		X		
51.	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)	X			
52.	5.7.2.8 (3)	The manufacturer's name and catalog number	X			
53.	5.7.2.9	Shut-off valves shall not be installed between the container and pressure relief	X			
54.	5.7.2.10	Pressure relief devices shall be designed to minimize tampering	X			
55.	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)) ***Roche Harbor failed to provide this data for PVC tubing used to vent regulators		X		
56.	5.7.7.1	Do containers ≤ 2000 water capacity comply with Table 5.7.7.1? ***None of these type of containers			X	
57.	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 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. (G) Overfilling prevention devices shall be required on cylinders having 4 lb through 40 lb (1.8 kg through 18 kg) propane capacity for vapor service. (See 5.7.6.)			X	

			S	U	N/A	N/C
58.	5.7.7.2	<p>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?</p> <p>Note: Also refer to table 5.7.7.3.</p> <p>A) Vapor withdrawal openings shall be equipped with either of the following:</p> <p>(1) A positive shutoff valve located as close to the container as practical in combination with an excess-flow valve installed in the container</p> <p>(2) An internal valve</p> <p>(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.</p> <p>(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.</p> <p>(D) Liquid withdrawal openings in existing installations shall be equipped with either of the following by July 1, 2011:</p> <p>(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</p> <p>(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</p> <p>(E) Vapor inlet openings shall be equipped with either of the following:</p> <p>(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</p> <p>(2) An internal valve</p> <p>(F) Liquid inlet openings in new installations shall be equipped with either of the following:</p> <p>(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</p> <p>(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</p> <p>(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.</p> <p>(H) Liquid inlet openings in existing installations shall be equipped with any of the following by July 1, 2011:</p> <p>(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</p> <p>(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</p> <p>(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</p> <p>(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</p> <p>(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:</p> <p>(1) The valve shall be activated either hydraulically or pneumatically and shall fail in the closed position.</p> <p>(2) The valve shall be equipped for remote closure and thermal actuation with a thermal element located within 5 ft of the valve.</p>	X			
59.	5.7.7.3	<p>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 5.7.7.3? ***There are none of these types of containers</p> <p>Note: Refer to tables.</p>			X	

			S	U	N/A	N/C
60.	5.7.10.1	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	X			
61.	5.7.2.4 (a)	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? ***Roche Harbor failed to provide this data		X		
62.	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 (ft ³ /min air) = 53.632 x A to the power of 0.82 where: A = total outside surface area of container in square feet ***Roche Harbor failed to provide this data		X		
63.	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) ***Roche Harbor failed to provide this data		X		
64.	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?	X			
65.	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?	X			
66.	5.8.3.1	Are all pipe and tubing of the proper materials and joint design for pressure and strength?	X			
67.	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?	X			
68.	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			
69.	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 accordance with 6.14?	X			
70.	5.11	Do hydrostatic 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)? ***Roche Harbor failed to install a hydrostatic relief valve on the liquid flow piping to vaporizer		X		
71.	6.3.1	Above ground tanks positioned no closer than 3 feet apart up to 2,000 gal, 5 feet apart 2,001 gallons or more ***No additional above ground tanks			X	

			S	U	N/A	N/C
72.	6.3.3	Above ground tanks of 501 gallons to 2,000 gallons at a minimum 25 feet away from buildings			X	
73.	6.3.4	Underground tanks of 2,000 gallons to 30,000 gallons at a minimum of 10 feet away from other tanks			X	
74.	6.3.4.2	No part of an underground ASME container shall be less than 10 feet from a building or line of adjoining property.			X	
75.	6.3.4.3	No part of a mounded ASME container installed above grade shall be less than 5 feet from a building or line of adjoining property that can be built upon.			X	
76.	6.3.7.1 6.3.7.2	Cylinders installed alongside of buildings shall be positioned so that the discharge from the cylinder pressure relief device is located at least 3 feet away from any building opening and at least 5 feet in any direction away from any exterior source of ignition, openings into direct-vent (sealed combustion system) appliances, or mechanical ventilation air-intakes			X	
77.	6.4.4.5	Where more than one row of containers is installed, the adjacent ends of the containers in each row shall be separated by not less than 10 feet			X	
78.	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)? ***Staff noted a stack of small empty LP containers and a large wooden support within 10ft of container		X		
79.	6.4.7	Are structures such as fire walls, fences, earth or concrete barriers, and other similar structures not permitted around or over installed non-refrigerated 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			
80.	6.6.1.1	Containers shall be positioned so that the pressure relief valve is in direct communication with the vapor space of the container	X			
81.	6.6.1.2	Containers shall be protected from traffic/vehicles	X			
82.	6.6.1.4	Aboveground containers shall be painted	X			
83.	6.6.2.1	Cylinders shall not be in contact with the soil	X			
84.	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			
85.	6.6.6.1	If subject to loading from vehicles, there is at least eighteen inches of cover (for a non-interchangeable tank or, if the tank is interchangeable, twelve inches)	X			
86.	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?	X			
87.	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			
88.	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?	X			
89.	6.7.2.7	Is the pressure relief valve discharge on each aboveground container of more than 2000 gal (7.6 m ³) 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?	X			
90.	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)?	X			
91.	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?	X			
92.	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?	X			
93.	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? ***There are no indirect-fired vaporizers			X	

			S	U	N/A	N/C
94.	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. ***There are no vaporizers in a structure			X	
95.	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?	X			
96.	6.10.9	Are emergency shutoff valves and backflow check valves required by the code tested annually, and are the results of the test documented? ***Roche Harbor failed to provide this data		X		
97.	6.10.10	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.	X			
98.	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? ***Roche Harbor failed to install a hydrostatic relief valve on the liquid flow piping to vaporizer		X		
99.	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. ***Does not apply at this location			X	
100.	6.15.4	Are strainers installed so that the strainer element can be removed without removing equipment or piping?	X			

Comments:

Q57 There are none of these type of containers
Q72 thru Q77 None of these apply to Roche Harbor at this time

			S	U	N/A	N/C
101.	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			
102.		Indirect-Fired & Electric Vaporizers				
103.	6.19.2.1	Indirect-fired vaporizers installed in a building must comply with section 10.2 or 10.3			X	
104.	6.19.2.2	The building or structure shall not have any unprotected drains to sewer or sump pits			X	
105.	6.19.2.3	Pressure relief valves must be piped to the outside			X	
106.	6.19.2.4	If the heat source is gas-fired and located with 15 feet, see direct-fired vaporizers for requirements (6.19.3)			X	
107.	6.19.2.6	If gas-fired heat source, it must have an automatic safety device			X	
108.		Direct-Fired Vaporizers				
109.	6.19.3.1	Direct-fired vaporizers in a building must be built according to Chapter 10			X	
110.	6.19.3.2	Drains or sumps cannot be shared with another structure			X	

			S	U	N/A	N/C
111.	6.19.3.3	Pressure relief valve must be piped to the outside			X	
112.	6.19.3.5	A manual shutoff shall be installed for each connection of the container that is supplying the vaporizer	X			
113.	6.19.3.6	For direct-fired vaporizers see this section and (6.19.4.5) <ul style="list-style-type: none"> Vaporizer 10 feet from container Vaporizer 15 feet from container shutoffs; Vaporizer 15 feet from point of transfer (if transfer is within 15 feet, burner and pilot shut off when transferring liquid) Vaporizer 25 feet from nearest building or property line 	X			
114.	6.19.6.1	If electrically heated, all electrical equipment must be Class 1, Group D ***Not electrically heated			X	
115.	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?	X			
116.	6.23.4.4	Are emergency controls conspicuously marked, and the controls located so as to be readily accessible in emergencies	X			
117.	192.201 (a)	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?	X			
118.	192.469	Are there sufficient test stations or test points?	X			
119.	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? ***Roche Harbor failed to have a procedure for dealing with PE stubs		X		
120.	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;	X			
121.	192.615(b)(2)	Does the operator train operating personnel in the emergency procedures and verify that the training was effective (Test); and,	X			
122.	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)? ***Roche Harbor failed to provide this data		X		
123.	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? ***Roche Harbor failed to provide this data		X		
124.	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.) ***Roche Harbor failed to provide this data		X		
125.	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). ***Not required for LP-Gas operators			X	
126.	192.616 (b)	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? ***Not required for LP-Gas operators			X	
127.	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. ***Not required for LP-Gas operators			X	
128.	192.619 (a)	Are MAOP's established for each segment of the pipeline?	X			
129.	480-93-015(2)	Odorization of Gas	X			
130.	480-93-015(2)	Monthly Odorant Testing	X			
131.	480-93-015(3)	Odorant Testing Equipment Calibration/Intervals (Annually or Manufacturers Recommendation)	X			
132.	480-93-124(3)	Pipeline markers attached to bridges or other spans inspected? 1/yr(15 months) ***There are no bridge spans			X	

			S	U	N/A	N/C								
133.	480-93-124(4)	Markers reported missing or damaged replaced within 45 days ? *** There are no markers			X									
134.	480-93-140(2)	Service regulators and associated safety devices tested during initial turn-on	X											
135.	480-93-155(1)	Up-rating of system MAOP to >60 psig ? Procedures and specifications submitted 45 days prior? *** No uprate was performed			X									
136.	480-93-185(1)	Reported gas leaks investigated promptly graded. Records retained?	X											
137.	480-93-185(3)	Leaks originating from a foreign source reported promptly/notification by mail. Records retained?			X									
138.	480-93-186(3)	Leak evaluations: Are follow-up inspections performed within 30 days of a leak repair?			X									
139.	480-93-186(4)	Leak evaluations: Grade 1 and 2 leaks (if any), downgraded once to a grade 3 without physical repair?			X									
140.	480-93-187	Gas leak records: at a minimum include required information listed under 480-93-187(1-13)			X									
141.	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?	X											
142.	480-93-188(2)	Gas detection instruments tested for accuracy/intervals (Mfct rec or monthly not to exceed 45 days) *** Roche Harbor failed to provide this data		X										
143.	480-93-188(3)	Leak survey frequency (Refer to Table Below) *** Roche Harbor failed to provide this data		X										
<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Business Districts (implement by 6/02/07)</td> <td>1/yr (15 months)</td> </tr> <tr> <td>High Occupancy Structures</td> <td>1/yr (15 months)</td> </tr> <tr> <td>Pipelines Operating ≥ 250 psig</td> <td>1/yr (15 months)</td> </tr> <tr> <td>Other Mains: CI, WI, copper, unprotected steel</td> <td>2/yr (7.5 months)</td> </tr> </table>							Business Districts (implement by 6/02/07)	1/yr (15 months)	High Occupancy Structures	1/yr (15 months)	Pipelines Operating ≥ 250 psig	1/yr (15 months)	Other Mains: CI, WI, copper, unprotected steel	2/yr (7.5 months)
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144.	480-93-188(4)(a)	Special leak surveys - Prior to paving or resurfacing, following street alterations or repairs			X									
145.	480-93-188(4)(b)	Special leak surveys - areas where substructure construction occurs adjacent to underground gas facilities, and damage could have occurred			X									
146.	480-93-188(4)(c)	Special leak surveys - Unstable soil areas where active gas lines could be affected			X									
147.	480-93-188(4)(d)	Special leak surveys - areas and at times of unusual activity, such as earthquake, floods, and explosions			X									
148.	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			X									
149.	480-93-188(5)	Gas Survey Records *** Roche Harbor failed to provide this data		X										
150.	192.603(b)	Patrolling Business District (4 per yr/4½ months) 192.721(b)(1) *** Not a Business District			X									
151.	192.603(b)	Patrolling Outside Business District (2 per yr/7½ months) 192.721(b)(2)	X											
152.	192.603(b)	Leakage Survey - Outside Business District (5 years) 192.723(b)(1) *** Roche Harbor failed to provide this data		X										
153.	192.603(b)	Tests for Reinstating Service Lines 192.725			X									
154.	192.603(b)/.727(g)	Abandoned facilities 192.727			X									
155.	192.709	Pressure Limiting and Regulating Stations (1 per yr/15 months) .739			X									
156.	192.709	Pressure Limiting and Regulator Stations – Capacity (1 per yr/15 months) .743			X									
157.	192.709	Valve Maintenance – Transmission (1 per yr/15 months) .745			X									
158.	192.709	Valve Maintenance – Distribution (1 per yr/15 months) .747 *** Roche Harbor failed to provide this data		X										
159.	480-93-100(3)	Service valve maintenance (1 per yr/15 months) *** Roche Harbor failed to provide this data		X										
160.	480-93-100(4)	Service valve installation and maintenance program	X											
161.	192.707	Line Markers placed and maintained over each buried main or transmission line. *** Staff noted that there were no markers placed at public road crossings		X										
162.	192.709	Vault maintenance (≥200 cubic feet)(1 per yr/15 months) .749 *** There are no vaults			X									
163.	192.603(b)	Prevention of Accidental Ignition (hot work permits) .751 *** Roche Harbor failed to provide this data		X										
164.	192.709	Repair: pipe (pipeline life); Other than pipe (5 years)			X									

			S	U	N/A	N/C
165.	192.725	Disconnected service lines tested before being reinstated			X	
166.	192.727	Is pipeline abandoned or not being maintained: Disconnected at both ends, purged, and sealed.			X	

Comments:

Q103 thru Q111 None of these apply to Roche Harbor at this time
Q144 thru Q148 None of these surveys applied to Roche Harbor at this time
Q153 thru Q157 None of these apply to Roche Harbor at this time
Q164 thru Q166 None of these apply to Roche Harbor at this time

CORROSION CONTROL RECORDS			S	U	N/A	N/C
167.	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.			X	
168.	192.453	Corrosion control procedures are established for design/installation			X	
169.	192.491	Maps or Records .491(a)			X	
170.	192.491	Examination of Buried Pipe when exposed .459			X	
171.	192.463	Cathodic protection level according to Appendix D criteria			X	
172.	480-93-110(8)	CP test reading on all exposed facilities where coating has been removed			X	
173.	192.491	Annual Pipe-to-soil monitoring (1 per yr/15 months) .465(a)			X	
174.		Isolated, Mains .465(a)			X	
175.		Isolated, Services .465(a)			X	
176.	192.491	Rectifier Monitoring (6 per yr/2½ months) .465(b)			X	
177.	192.491	Interference Bond Monitoring – Critical (6 per yr/2½ months) .465(c)			X	
178.	192.491	Interference Bond Monitoring – Non-critical (1 per yr/15 months) .465(c)			X	
179.	480-93-110(2)	Remedial action taken within 90 days (Up to 30 additional days if other circumstances. Must document) .465(d)			X	
180.	192.491	Unprotected Pipeline Surveys, CP active corrosion areas (1 per 3 cal yr/39 months) .465(e)			X	
181.	192.491	Electrical Isolation (Including Casings) .467			X	
182.	192.471	Test lead maintenance			X	
183.	480-93-110(5)	Casings inspected/tested annually not to exceed fifteen months			X	
184.	480-93-110(5)(a)	Casings w/no test leads installed prior to 9/05/1992. Demonstrate other acceptable test methods			X	
185.	480-93-110(5)(b)	Possible shorted conditions – Perform confirmatory follow-up inspection within 90 days			X	
186.	480-93-110(5)(c)	Casing shorts cleared when practical			X	
187.	480-93-110(5)(d)	Shorted conditions leak surveyed within 90 days of discovery. Twice annually/7.5 months			X	
188.	192.491	Interference Currents .473			X	
189.	192.491	Internal Corrosion; Corrosive Gas Investigation .475(a)			X	
190.	192.491	Internal Corrosion; Internal Surface Inspection; Pipe Replacement .475(b)			X	
191.	192.491	Internal Corrosion Control Coupon Monitoring (2 per yr/7½ months) .477			X	
192.	192.491	Atmospheric Corrosion Control Monitoring (1 per 3 cal yr/39 months onshore; 1 per yr/15 months offshore) .481			X	
193.	192.491	Remedial: Replaced or Repaired Pipe; coated and protected; corrosion evaluation and actions .483/.485			X	
194.	480-93-110(3)	CP Test Equipment and Instruments checked for accuracy/intervals (Mfct Rec or Opr Sched)			X	

Comments:

Q167 thru Q193 Does not apply to PE pipeline system at Roche Harbor

PIPELINE INSPECTION (Field)			S	U	N/A	N/C
195.	192.161	Supports and anchors	X			
196.	192.179	Valve Protection from Tampering or Damage	X			
197.	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?	X			
198.	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. ***Roche Harbor will contract out any new const. work			X	
199.	480-93-013	Personnel performing "New Construction" covered tasks OQ qualified? ***Roche Harbor will contract out any new const. work			X	
200.	480-93-015(1)	Odorization ***Testing equipment was not calibrated				X
201.	480-93-018(3)	Updated records, inc maps and drawings made available to appropriate operations personnel? (eff 6/02/05) ***Roche Harbor failed to provide this data		X		
202.	192.455	Pipeline coatings meet requirements of 192.461 (for buried pipelines installed after 7/31/71)			X	
203.	192.463	Levels of Cathodic Protection			X	
204.	192.465	Rectifiers			X	
205.	192.467	CP - Electrical Isolation			X	
206.	192.469	Sufficient test stations or test points?			X	
207.	192.479	Pipeline components exposed to the atmosphere			X	
208.	192.481	Atmospheric Corrosion: monitoring ***Roche Harbor failed to provide this data		X		
209.	192.491	Test Stations – Sufficient Number .469 *** Does not apply to PE pipeline system at Roche Harbor			X	
210.	480-93-115(2)	Casings – Test Leads (casings w/o vents installed after 9/05/1992)			X	
211.	480-93-115(2)	Mains or transmission lines installed in casings/conduit. Are casing ends sealed? eff 6/02/05			X	
212.	480-93-115(4)	Service lines installed in casings/conduit. Are casing ends nearest to building walls sealed?			X	
213.	192.605	Knowledge of Operating Personnel	X			
214.	480-93-124	Pipeline markers installed ***Staff noted that there were no markers placed at public road crossings		X		
215.	192.707	Warning Signs ***Staff noted that there were no markers placed at public road crossings			X	
216.	192.195	Overpressure protection designed and installed where required?	X			
217.	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? ***Roche Harbor failed to provide this data		X		
218.	192.743	Pressure Limiting and Regulating Devices (Capacities)	X			
219.	192.355	Customer meters and regulators. Protection from damage	X			
220.	192.355(c)	Pits and vaults: Able to support vehicular traffic where anticipated. ***No Pits or Vaults			X	
221.	480-93-140	Service regulators installed, operated and maintained per state/fed regs and manufacturers recommended practices? ***Staff noted a meter set and regulator located underneath an enclosed stairway		X		
222.	192.747	Valve Maintenance	X			

Comments:

Comments:

Q203 thru Q206 Does not apply to PE pipeline system at Roche Harbor

Q207 - *49 CFR 192.375(a)(2)(i) Service lines: Plastic

(a) Each plastic service line outside of a building must be installed below ground level, except that—

(2) It may terminate above ground level, if—

(i) The above ground level part of the plastic service line is protected against deterioration and external damage;

Finding:

In the 2017 Technical Assistance Inspection report, staff noted that numerous active polyethylene (PE) service stubs from 2006 (not verified) were above ground, susceptible to UV exposure and damage. During the 2019 inspection, staff found some of these service stubs in the same condition.

Q210 thru Q212 There are no casings