

## Abbreviated Procedures

### STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

A completed **Standard Inspection Report** is to be submitted to the Director within 60 days from completion of the inspection. A **Post Inspection Memorandum (PIM)** is to be completed and submitted to the Director within 30 days from the completion of the inspection, or series of inspections, and is to be filed as part of the **Standard Inspection Report**.

Inspection Report	Post Inspection Memorandum	
Inspector/Submit Date: Al Jones / July 13, 2009	Sr Eng Review Date: Dave Lykken / July 14, 2009	
	Peer Review/Date: Tom Finch	
	Director Approval/Date: Chris Hoidal	
<b>POST INSPECTION MEMORANDUM (PIM)</b>		
Name of Operator: Puget Sound Energy	Name of Unit(s): Jackson Prairie Storage Facility	OPID #: 22189 Unit #(s): 3387
Records Location: Jackson Prairie Storage Facility	Unit Type & Commodity: Interstate Natural Gas Storage	
Inspection Type: Standard	Inspection Date(s): June 8-11, 2009	
PHMSA Representative(s): Al Jones, UTC	AFO Days: 4	

**Summary:**

Natural gas is transported from Williams Pipeline to the Jackson Prairie Storage via underground piping through 14, 16, 20, and 24-inch diameter pipes each approximately 9,032 feet in length. When gas is returned to the Williams Pipeline it is scrubbed of debris such as sand and water before being compressed to line pressure. A review of records included: cathodic protection for plant piping and transmission pipeline including casings and rectifiers, maintenance of valves, pressure recording data, Emergency Plan, Safety related condition reports, and Welding results, Field inspection included: new wellhead construction, new turbine compressor, CP for piping and rectifiers, ROW, firefighting equipment, pipe supports, facility security, and the SCADA system.

**Findings:**

Area of Concerns:

1. The compressor stations are equipped with automatic exhaust ventilation systems that are activated by temperature setting within each building. The exhaust fans will not be activated if gas accumulates in the buildings. The gas detectors are designed to ESD the station at 40% LEL. While testing of the gas sensors, the station's ESD was activated, detected in the control room, and the ventilation blowers were not activated to exhaust the gas. The ventilation system is currently wired to operate to vent heat at a predetermined temperature setting, not for the ventilation of gas. CFR 192.173 Compressor Stations: Ventilation, address employees safety where gas could accumulate in a room. Staff recommends that all compressor buildings be wired to automatically activate the exhaust ventilation systems when gas is detected in the building at least 40% LEL.
2. Several above ground pipe supports were found with atmospheric corrosion between the support and the bottom of the pipe. Insulating saddles have been installed at similar location except at: wells #88, well #89, and SU #10 (Zone 1 storage piping).
3. The Gas Field Procedure Manual list several reasons for Abnormal Operating Conditions (Section 4515.1205) when a positive pipe-to-soil reading is observed while using a copper-copper sulfate cell. The list is not comprehensive and omits lessons learned from another PSE's rectifier problem. It is recommended that the manual include the possibility that a rectifier could be incorrectly wired to the pipeline and the anode. Jackson Prairie Storage rectifiers (16 units) operate at 440 vAC, safety precautions need to be reviewed with the operator, and verify rectifier output wires to the pipe and anode are properly identified.
4. The Gas Operation Standards revised section (effective 3/1/2009) for compliance with CFR 192.615 (b)(3) Emergency Plans - review employee activities to determine whether the procedures were effectively followed in each emergency. The Standards Manual require periodic refresher training such as table top or simulation exercises be provided and verify the effectiveness of the

**Abbreviated Procedures**  
**STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE**

**Findings:**

training. Staff recommends such exercises be documented for attendance; identify the emergency skills reviewed, the effectiveness of the training i.e. what worked and what needs to be improved.

5. The only exception to the minimum CP criteria was at the Triethylene Glycol (TEG) piping located near the concrete footings within the plant facility. The TEG lines are not considered jurisdictional piping, but could impact the plant's operation if the line were to fail from a corrosion leak. Staff recommend the low pipe-to-soil values (-0.576 vDC and -0.76 vDC) found on a 2" diameter pipe near coalescer tower #10, be mitigated by placing anodes in proximity to the pipelines.

**Abbreviated Procedures**  
**STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE**

<b>Name of Operator:</b> Puget Sound Energy		<b>Unit ID No. <sup>(1)</sup></b>
<b>OP ID No. <sup>(1)</sup></b> 22189		<b>System/Unit Name &amp; Address: <sup>(1)</sup></b>
<b>HQ Address:</b> Puget Sound Energy PO Box 90868, EST-07W Bellevue, WA. 98009-0868		Puget Sound Energy Jackson Prairie Natural Gas Storage Facility 239 Zandecki Road Chehalis, WA
<b>Co. Official:</b> Bert Valdman	<b>Activity Record ID No.:</b>	
<b>Phone No.:</b> 425-462-3193	<b>Phone No.:</b>	
<b>Fax No.:</b>	<b>Fax No.:</b>	
<b>Emergency Phone No.:</b> 800-552-7171	<b>Emergency Phone No.:</b>	
<b>Persons Interviewed</b>	<b>Title</b>	<b>Phone No.</b>
Jim Janson	Manager, Jackson Prairie Storage Operations	360-262-3365
Darryl Hong	Compliance Coordinator	425-462-3911
<b>PHMSA Representative(s) <sup>(1)</sup></b>	<b>Inspection Date(s) <sup>(1)</sup></b>	
<b>Company System Maps (Copies for Region Files):</b>		

**Unit Description:**  
 See Gas Storage Field Review report.

**Portion of Unit Inspected: <sup>(1)</sup>**  
 See Gas Storage Field Review report.

<sup>1</sup> Information not required if included on page 1.

## Abbreviated Procedures

### STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

For gas transmission pipeline inspections, the attached evaluation form should be used in conjunction with 49 CFR 191 and 192 during PHMSA inspections. For those operators, procedures do not have to be evaluated for content unless: 1) new or amended regulations have been placed in force after the team inspection, or 2) procedures have changed since the team inspection. Items in the procedures sections of this form identified with "\*" reflect applicable and more restrictive new or amended regulations that became effective between 03/23/04 and 03/23/09.

**Western Region: Conducted abbreviated procedures inspection on 192 Operations and Maintenance Items that changed since the last inspection. Items that were included in the operator's O & M Manual at the previous inspection (as per date entered below) may be marked with a "1" in the N/C column to reflect the standard "Note 1" in the Comments blocks. Records And Field Item Will Be Inspected As Per A Routine Inspection.**

(check one below and enter appropriate date)

X	Team inspection was performed (Within the past five years.) or,	Date:	11/14/2005
	Western Region Inspector reviewed the O & M Manual (Since the last yearly review of the manual by the operator.)	Date:	

#### 49 CFR PART 192

.605(a)	CHANGE in CLASS LOCATION PROCEDURES	S	U	N/A	N/C
*	.611 Confirmation or revision of MAOP. Final Rule Pub. 10/17/08, eff. 12/22/08.				1

**Comments:**

Note 1: This item was reviewed in the O & M Manual since the effective date of the applicable amendment.

PUBLIC AWARENESS PROGRAM PROCEDURES (Also in accordance with API RP 1162)			S	U	N/A	N/C
.605(a)	*	.616	Public Awareness Program also in accordance with API RP 1162. Amdt 192-99 pub. 5/19/05 eff. 06/20/05.			
		.616(d)	The operator's program must specifically include provisions to educate the public, appropriate government organizations, and persons engaged in excavation related activities on:			
		(1)	Use of a one-call notification system prior to excavation and other damage prevention activities;			1
		(2)	Possible hazards associated with unintended releases from a gas pipeline facility;			1
		(3)	Physical indications of a possible release;			1
		(4)	Steps to be taken for public safety in the event of a gas pipeline release; and			1
		(5)	Procedures to report such an event (to the operator).			1
		.616(e)	The operator's program must include activities to advise affected municipalities, school districts, businesses, and residents of pipeline facility locations.			
		.616(f)	The operator's program and the media used must be comprehensive enough to reach all areas in which the operator transports gas.			
		.616(g)	The program conducted in English and any other languages commonly understood by a significant number of the population in the operator's area?			

**Comments:**

Note 1: This item was reviewed in the O & M Manual since the effective date of the applicable amendment.

## Abbreviated Procedures

# STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

Unless otherwise noted, all code references are to 49CFR Part 192. 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.

.605(a)	MAOP PROCEDURES	S	U	N/A	N/C															
	<b>Note: If the operator is operating at 80% SMYS with waivers, the inspector needs to review the special conditions of the waivers.</b>																			
	.619 MAOP cannot exceed the lowest of the following:																			
*	(a)(1) Design pressure of the weakest element, Amdt. 192-103 pub. 06/09/06, eff. 07/10/06	X																		
*	(a)(3) The highest actual operating pressure to which the segment of line was subjected during the 5 years preceding the applicable date in second column, unless the segment was tested according to .619(a)(2) after the applicable date in the third column or the segment was uprated according to subpart K. Amdt 192-102 pub. 3/15/06, eff. 04/14/06. <b>For gathering line related compliance deadlines and additional gathering line requirements, refer to Part 192 including this amendment.</b>																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Pipeline segment</th> <th style="width: 20%;">Pressure date</th> <th style="width: 20%;">Test date</th> </tr> </thead> <tbody> <tr> <td>--Onshore gathering line that first became subject to this part (other than § 192.612) after April 13, 2006.</td> <td>March 15, 2006, or date line becomes subject to this part, whichever is later.</td> <td>5 years preceding applicable date in second column.</td> </tr> <tr> <td>-- Onshore transmission line that was a gathering line not subject to this part before March 15, 2006.</td> <td></td> <td></td> </tr> <tr> <td>Offshore gathering lines.</td> <td>July 1, 1976.</td> <td>July 1, 1971.</td> </tr> <tr> <td>All other pipelines.</td> <td>July 1, 1970.</td> <td>July 1, 1965.</td> </tr> </tbody> </table>	Pipeline segment	Pressure date	Test date	--Onshore gathering line that first became subject to this part (other than § 192.612) after April 13, 2006.	March 15, 2006, or date line becomes subject to this part, whichever is later.	5 years preceding applicable date in second column.	-- Onshore transmission line that was a gathering line not subject to this part before March 15, 2006.			Offshore gathering lines.	July 1, 1976.	July 1, 1971.	All other pipelines.	July 1, 1970.	July 1, 1965.				X
Pipeline segment	Pressure date	Test date																		
--Onshore gathering line that first became subject to this part (other than § 192.612) after April 13, 2006.	March 15, 2006, or date line becomes subject to this part, whichever is later.	5 years preceding applicable date in second column.																		
-- Onshore transmission line that was a gathering line not subject to this part before March 15, 2006.																				
Offshore gathering lines.	July 1, 1976.	July 1, 1971.																		
All other pipelines.	July 1, 1970.	July 1, 1965.																		
*	(c) The requirements on pressure restrictions in this section do not apply in the following instance. An operator may operate a segment of pipeline found to be in satisfactory condition, considering its operating and maintenance history, at the highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column of the table in paragraph (a)(3) of this section. An operator must still comply with § 192.611. Amdt 192-102 pub. 3/15/06, eff. 04/14/06. <b>For gathering line related compliance deadlines and additional gathering line requirements, refer to Part 192 including this amendment.</b>				X															
	.620 If the pipeline is designed to the alternative MAOP standard in 192.620 does it meet the additional design requirements for:																			
*	<ul style="list-style-type: none"> <li>• General standards</li> <li>• Fracture control</li> <li>• Plate and seam quality control</li> <li>• Mill hydrostatic testing</li> <li>• Coating</li> <li>• Fittings and flanges</li> <li>• Compressor stations Final Rule Pub. 10/17/08, eff. 12/22/08.</li> </ul>				X															

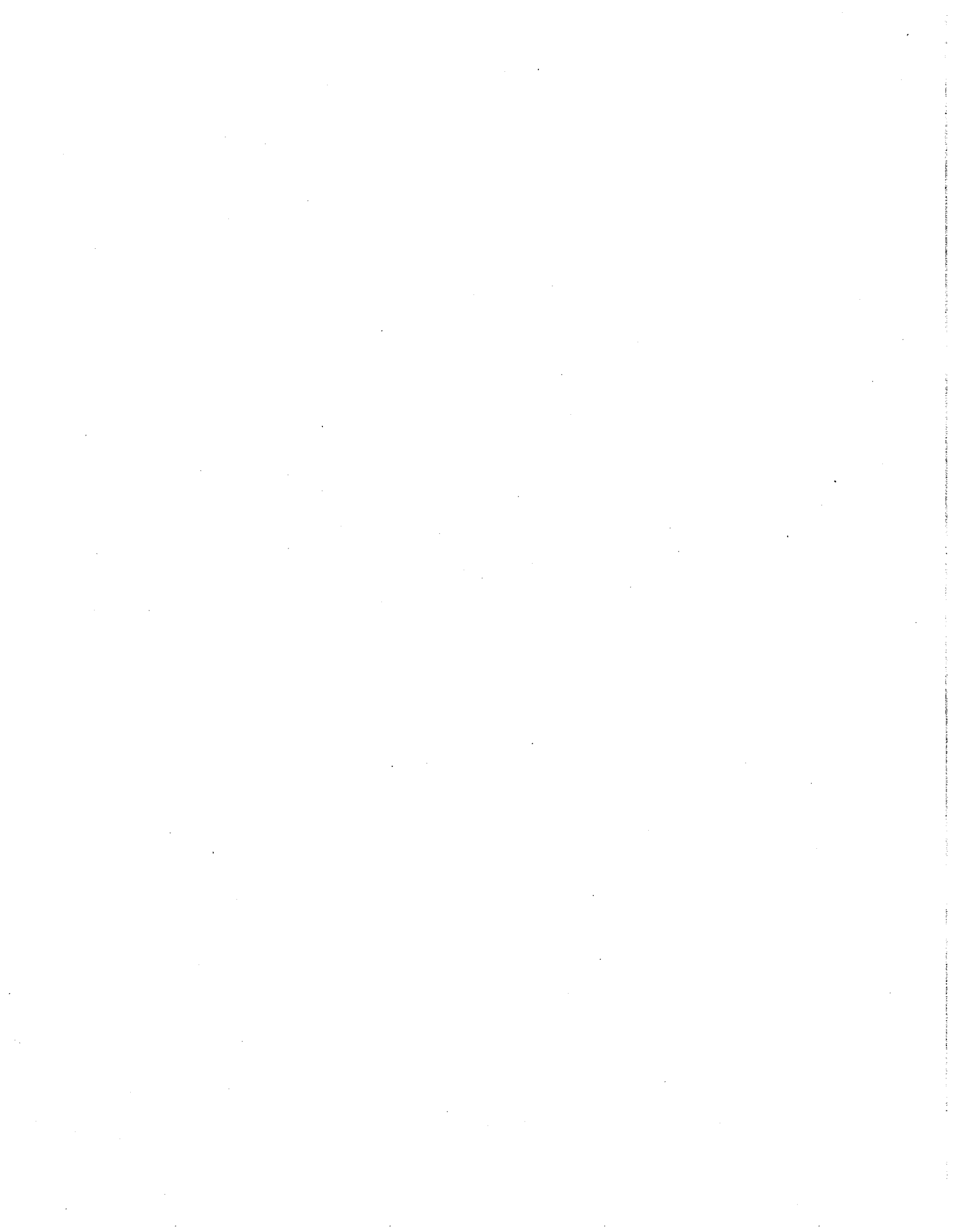
**Comments:**

Review hydrostatic test results for 14" pipeline at Williams tie-in.

.605(b)	ABANDONMENT or DEACTIVATION of FACILITIES PROCEDURES	S	U	N/A	N/C
*	.727 (g) Operator must file reports upon abandoning underwater facilities crossing navigable waterways, including offshore facilities. Amdt. 192-103 corr. pub 02/01/07, eff. 03/05/07.			X	

**Comments:**

Note 1: This item was reviewed in the O & M Manual since the effective date of the applicable amendment.



## Abbreviated Procedures

### STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

Unless otherwise noted, all code references are to 49CFR Part 192. 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.

.605(b)		S	U	N/A	N/C
*	<b>COMPRESSOR STATION PROCEDURES</b>				
	(b) Tank must be protected according to NFPA #30; Amdt 192-103 pub. 06/09/06 eff. 07/10/06.				1

**Comments:**

Note 1: This item was reviewed in the O & M Manual since the effective date of the applicable amendment.

.605(b)		S	U	N/A	N/C						
*	<b>PRESSURE LIMITING and REGULATING STATION PROCEDURES</b>										
*	.739(a) (3) Set to control or relieve at correct pressures consistent with .201(a), except for .739(b). Amdt. 192-96 pub. 5/17/04, eff.10/8/04			X							
*	.739(b) For steel lines if MAOP is determined per .619(c) and the MAOP is 60 psi (414 kPa) gage or more . . . Amdt. 192-96 pub. 5/17/04, eff.10/8/04										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">If MAOP produces hoop stress that</th> <th style="width: 50%;">Then the pressure limit is:</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Is greater than 72 percent of SMYS</td> <td style="text-align: center;">MAOP plus 4 percent</td> </tr> <tr> <td style="text-align: center;">Is unknown as a percent of SMYS</td> <td style="text-align: center;">A pressure that will prevent unsafe operation of the pipeline considering its operating and maintenance history and MAOP</td> </tr> </tbody> </table>	If MAOP produces hoop stress that	Then the pressure limit is:	Is greater than 72 percent of SMYS	MAOP plus 4 percent	Is unknown as a percent of SMYS	A pressure that will prevent unsafe operation of the pipeline considering its operating and maintenance history and MAOP			X	
If MAOP produces hoop stress that	Then the pressure limit is:										
Is greater than 72 percent of SMYS	MAOP plus 4 percent										
Is unknown as a percent of SMYS	A pressure that will prevent unsafe operation of the pipeline considering its operating and maintenance history and MAOP										
*	.743 (a) Capacity must be consistent with .201(a) except for .739(b), and be determined <b>1 per yr/15 mo.</b> Amdt. 192-96 pub. 5/17/04, eff.10/8/04			X							

**Comments:**

All regulators are for the IP distribution system reviewed as part of PSE Thurston/Lewis County intrastate inspection.

.13(e)		S	U	N/A	N/C
*	<b>WELDING AND WELD DEFECT REPAIR/REMOVAL PROCEDURES</b>				
*	.225 (a) Welding procedures must be qualified under <b>Section 5 of API 1104</b> (19 <sup>th</sup> ed.1999, 10/31/01 errata) or <b>Section IX of ASME Boiler and Pressure Code</b> (2004 ed. Including addenda through July 1, 2005 ) by destructive test. Amdt.192-94 pub. 6/14/04, eff. 7/14/04; Amdt. 192-103 pub 06/09/06, eff. 07/10/06.				1
	Note: Alternate welding procedures criteria are addressed in API 1104 Appendix A, section A.3.				
*	.227 (a) Welders must be qualified by <b>Section 6 of API 1104</b> (19 <sup>th</sup> ed.1999, 10/31/01 errata) or <b>Section IX of ASME Boiler and Pressure Code</b> (2004 ed. Including addenda through July 1, 2005) See exception in .227(b). Amdt.192-94 pub. 6/14/04, eff. 7/14/04; Amdt. 192-103 pub 06/09/06, eff. 07/10/06; Amdt. 192-103 corr. Pub 02/01/07 eff. 03/05/07.				1
*	.229(c) (1) May not weld on pipe that operates at $\geq 20\%$ SMYS unless within the preceding 6 calendar months the welder has had one weld tested and found acceptable under the <b>sections 6 or 9 of API Standard 1104</b> ; may maintain an ongoing qualification status by performing welds tested and found acceptable at least <b>twice per year</b> , not exceeding <b>7½ months</b> ; may not requalify under an earlier referenced edition. Amdt.192-94 pub. 6/14/04, eff. 7/14/04.				1
*	.241 (a) Visual inspection must be conducted by an individual qualified by appropriate training and experience to ensure: Amdt.192-94 pub. 6/14/04, eff. 7/14/04				1
	(1) Compliance with the welding procedure				1
	(2) Weld is acceptable in accordance with <b>Section 9 of API 1104</b>				1

## Abbreviated Procedures

### STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

Unless otherwise noted, all code references are to 49CFR Part 192. 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.

.13(c)	WELDING AND WELD DEFECT REPAIR/REMOVAL PROCEDURES	S	U	N/A	N/C
*	.241 (c) Acceptability based on visual inspection or NDT is determined according to <b>Section 9 of API 1104</b> . If a girth weld is unacceptable under <b>Section 9</b> for a reason other than a crack, and if <b>Appendix A to API 1104</b> applies to the weld, the acceptability of the weld may be further determined under that appendix. Amdt.192-94 pub. 6/14/04, eff. 7/14/04				1
	Note: If the alternative acceptance criteria in API 1104 Appendix A are used, has the operator performed an Engineering Critical Assessment (ECA)?				

**Comments:**

Note 1: This item was reviewed in the O & M Manual since the effective date of the applicable amendment.

.273(b)	JOINING of PIPELINE MATERIALS	S	U	N/A	N/C
*	.283 Qualified joining procedures for plastic pipe must be in place Amdt.192-94 pub. 6/14/04, eff. 7/14/04; Amdt. 192-103 pub. 06/09/06, eff. 07/10/06.			X	
*	.285 Persons making joints with plastic pipe must be qualified Amdt.192-94 pub. 6/14/04, eff. 7/14/04			X	
*	.287 Persons inspecting plastic joints must be qualified Amdt.192-94 pub. 6/14/04, eff. 7/14/04			X	

**Comments:**

No plastic pipe at Jackson Prairie.

.605(b)	CORROSION CONTROL PROCEDURES	S	U	N/A	N/C
*	.476 Systems designed to reduce internal corrosion Final Rule Pub. 4/23/07, eff. 5/23/07. (a) New construction	X			
	(b) Exceptions – offshore pipeline and systems replaced before 5/23/07			X	

**Comments:**

A drip was installed on the new 24" pipeline and will be evaluated to determine if liquids are collected.

.605(b)	UNDERWATER INSPECTION PROCEDURES – GULF of MEXICO and INLETS	S	U	N/A	N/C
*	.612(a) Operator must have a procedure prepared by August 10, 2005 to identify pipelines in the Gulf of Mexico and its inlets in waters less than 15 feet (4.6 meters) deep that are at risk of being an exposed underwater pipeline or a hazard to navigation? Amdt. 192-98 pub. 8/10/04, eff. 9/9/04			X	
*	.612(b) Operator must conduct appropriate periodic underwater inspections based on the identified risk Amdt. 192-98 pub.8/10/04, eff. 9/9/04			X	

**Comments:**

.801-.809	Subpart N – Qualification of Pipeline Personnel Procedures	S	U	N/A	N/C
	Refer to Operator Qualification Inspection Forms and Protocols (OPS web site)				



## Abbreviated Procedures

# STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

Unless otherwise noted, all code references are to 49CFR Part 192. 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.

.901- .951	<b>Subpart O — Pipeline Integrity Management</b>	S	U	N/A	N/C
This form does not cover Gas Pipeline Integrity Management Programs					

Subparts A - C	<b>PART 199 – DRUG and ALCOHOL TESTING REGULATIONS and PROCEDURES</b>	S	U	N/A	N/C
Drug & Alcohol Testing & Alcohol Misuse Prevention Program – Use PHMSA Form # 13, PHMSA 2008 Drug and Alcohol Program Check.					

**Comments:**

PIPELINE INSPECTION (Field)		S	U	N/A	N/C
.179	Valve Protection from Tampering or Damage	X			
.463	Cathodic Protection	X			
.465	Rectifiers	X			
.476	Systems designed to reduce internal corrosion	X			
.479	Pipeline Components Exposed to the Atmosphere	X			
.605	Knowledge of Operating Personnel	X			
.612 (c) (2)	Pipelines exposed on seabed (Gulf of Mexico and Inlets): Marking	X			
613(b), .703	Pipeline condition, unsatisfactory conditions, hazards, etc.	X			
.707	ROW Markers, Road and Railroad Crossings	X			
.719	Pre-pressure Tested Pipe ( <b>Markings and Inventory</b> )	X			
.739/.743	Pressure Limiting and Regulating Devices (spot-check field installed equipment vs. inspection records)	X			
.745	Valve Maintenance	X			
.751	Warning Signs	X			
.801 - .809	Operator Qualification - Use PHMSA Form 15 Operator Qualification Field Inspection Protocol Form	X			

**Comments:**

COMPRESSOR STATIONS INSPECTION (Field)		S	U	N/A	N/C
(Note: Facilities may be "Grandfathered")					
.163 (c)	Main operating floor must have (at least) two (2) separate and unobstructed exits	X			
	Door latch must open from inside without a key	X			
	Doors must swing outward	X			
(d)	Each fence around a compressor station must have (at least) 2 gates or other facilities for emergency exit	X			
	Each gate located within 200 ft of any compressor plant building must open outward	X			
	When occupied, the door must be opened from the inside without a key	X			
(e)	Does the equipment and wiring within compressor stations conform to the <b>National Electric Code, ANSI/NFPA 70?</b>	X			
.165(a)	If applicable, are there liquid separator(s) on the intake to the compressors?	X			

## Abbreviated Procedures

# STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

Unless otherwise noted, all code references are to 49CFR Part 192. 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.

COMPRESSOR STATIONS INSPECTION (Field)		S	U	N/A	N/C
(Note: Facilities may be "Grandfathered")					
.165(b)	Do the liquid separators have a manual means of removing liquids?	X			
	If slugs of liquid could be carried into the compressors, are there automatic dumps on the separators, Automatic compressor shutdown devices, or high liquid level alarms?	X			
.167(a)	ESD system must:				
	- Discharge blowdown gas to a safe location	X			
	- Block and blowdown the gas in the station	X			
	- Shut down gas compressing equipment, gas fires, electrical facilities in compressor building and near gas headers	X			
	- Maintain necessary electrical circuits for emergency lighting and circuits needed to protect equipment from damage	X			
	ESD system must be operable from at least two locations, each of which is:				
.167 (b)	- Outside the gas area of the station	X			
	- Not more than 500 feet from the limits of the station	X			
	- ESD switches near emergency exits?	X			
	For stations supplying gas directly to distribution systems, is the ESD system configured so that the LDC will not be shut down if the ESD is activated?	X			
.167(c)	Are ESDs on platforms designed to actuate automatically by...				
	- For unattended compressor stations, when:				
	▪ The gas pressure equals MAOP plus 15%?	X			
	▪ An uncontrolled fire occurs on the platform?	X			
	- For compressor station in a building, when				
	▪ An uncontrolled fire occurs in the building?	X			
	▪ Gas in air reaches 50% or more of LEL in a building with a source of ignition (facility conforming to <b>NEC Class 1, Group D</b> is not a source of ignition)?	X			
.171(a)	Does the compressor station have adequate fire protection facilities? If fire pumps are used, they must not be affected by the ESD system.			X	
	(b) Do the compressor station prime movers (other than electrical movers) have over-speed shutdown?	X			
	(c) Do the compressor units alarm or shutdown in the event of inadequate cooling or lubrication of the unit(s)?	X			
	(d) Are the gas compressor units equipped to automatically stop fuel flow and vent the engine if the engine is stopped for any reason?	X			
	(e) Are the mufflers equipped with vents to vent any trapped gas?	X			
.173	Is each compressor station building adequately ventilated?		X		
.457	Is all buried piping cathodically protected?	X			
.481	Atmospheric corrosion of aboveground facilities	X			
.603	Does the operator have procedures for the start-up and shut-down of the station and/or compressor units?	X			
	Are facility maps current/up-to-date?	X			
.615	Emergency Plan for the station on site?	X			
.707	Markers	X			
.731	Overpressure protection – reliefs or shutdowns	X			
.735	Are combustible materials in quantities exceeding normal daily usage, stored a safe distance from the compressor building?	X			
	Are aboveground oil or gasoline storage tanks protected in accordance with <b>NFPA standard No. 30</b> ?	X			
.736	Gas detection – location	X			

**Comments:**

## Abbreviated Procedures

# STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

Unless otherwise noted, all code references are to 49CFR Part 192. 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.

**Comments:**

An Area of Concern was identified for the ventilation system at the Compressor stations in the Gas Storage Field Review form. The ventilation system is not automatically activated when gas is detected in the buildings.

<b>CONVERSION TO SERVICE PERFORMANCE and RECORDS</b>		S	U	N/A	N/C
.14 (a)(2)	Visual inspection of right of way, aboveground and selected underground segments			X	
(a)(3)	Correction of unsafe defects and conditions			X	
(a)(4)	Pipeline testing in accordance with Subpart J			X	
(b)	Pipeline records: investigations, tests, repairs, replacements, alterations (life of pipeline)			X	

<b>REPORTING PERFORMANCE and RECORDS</b>		S	U	N/A	N/C
191.5	Telephonic reports to NRC (800-424-8802)			X	
191.15	Written incident reports; supplemental incident reports (DOT Form RSPA F 7100.2)			X	
191.17 (a)	Annual Report (DOT Form RSPA F 7100.2-1)	X			
191.23	Safety related condition reports	X			
191.27	Offshore pipeline condition reports			X	
192.727 (g)	Abandoned facilities offshore, onshore crossing commercially navigable waterways reports			X	

<b>CONSTRUCTION PERFORMANCE and RECORDS</b>		S	U	N/A	N/C
.225	Test Results to Qualify Welding Procedures	X			
.227	Welder Qualification	X			
.241 (a)	Visual Weld Inspector Training/Experience	X			
.243 (b)(2)	Nondestructive Technician Qualification	X			
(c)	NDT procedures	X			
(f)	Total Number of Girth Welds	X			
(f)	Number of Welds Inspected by NDT	X			
(f)	Number of Welds Rejected	X			
(f)	Disposition of each Weld Rejected	X			
.303	Construction Specifications	X			
.325	Underground Clearance	X			
.327	Amount, Location, Cover of each Size of Pipe Installed				
.328	If the pipeline will be operated at the alternative MAOP standard calculated under 192.620 (80% SMYS) does it meet the additional construction requirements for: Quality assurance, Girth welds, depth of cover, initial strength testing, and interference currents?	X			
.455	Cathodic Protection	X			

<b>OPERATIONS and MAINTENANCE PERFORMANCE and RECORDS</b>		S	U	N/A	N/C
.16	Customer Notification ( <b>Verification – 90 days – and Elements</b> )	X			
.603(b)	.605(a) Procedural Manual Review – Operations and Maintenance ( <b>1 per yr/15 months</b> )	X			
.603(b)	.605(c) Abnormal Operations	X			
.603(b)	.605(b)(3) Availability of construction records, maps, operating history to operating personnel	X			
.603(b)	.605(b)(8) Periodic review of personnel work – effectiveness of normal O&M procedures	X			
.603(b)	.605(c)(4) Periodic review of personnel work – effectiveness of abnormal operation procedures	X			

## Abbreviated Procedures

# STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

Unless otherwise noted, all code references are to 49CFR Part 192. 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.

OPERATIONS and MAINTENANCE PERFORMANCE and RECORDS			S	U	N/A	N/C												
.709	.609	Class Location Study (If Applicable)	X															
.603(b)	.612(b)	Gulf of Mexico/inlets: Periodic underwater inspections based on the identified risk			X													
.709	.614	Damage Prevention (Miscellaneous)	X															
.603(b)	.615(b)(1)	Location Specific Emergency Plan	X															
.603(b)	.615(b)(2)	Emergency Procedure training, verify effectiveness of training		X														
.603(b)	.615(b)(3)	Employee Emergency activity review, determine if procedures were followed.	X															
.603(b)	.615(c)	Liaison Program with Public Officials	X															
.603(b)	.616	Public Awareness Program																
	.616(e & f)	Documentation properly and adequately reflects implementation of operator's Public Awareness Program requirements - Stakeholder Audience identification, message type and content, delivery method and frequency, supplemental enhancements, program evaluations, etc. (i.e. contact or mailing rosters, postage receipts, return receipts, audience contact documentation, etc. for emergency responder, public officials, school superintendents, program evaluations, etc.). See table below:	X															
	<b>API RP 1162 Baseline* Recommended Message Deliveries</b>																	
	<b>Stakeholder Audience (Natural Gas Transmission Line Operators)</b>																	
	Residents Along Right-of-Way and Places of Congregation		<b>Baseline Message Frequency (starting from effective date of Plan)</b>															
	Emergency Officials		2 years															
	Public Officials		Annual															
	Excavator and Contractors		3 years															
	One-Call Centers		Annual															
	<b>Stakeholder Audience (Gathering Line Operators)</b>		As required of One-Call Center															
	Residents and Places of Congregation		<b>Baseline Message Frequency</b>															
	Emergency Officials		Annual															
	Public Officials		Annual															
	Excavators and Contractors		3 years															
One-Call Centers		Annual																
* Refer to API RP 1162 for additional requirements, including general program recommendations, supplemental requirements, recordkeeping, program evaluation, etc.		As required of One-Call Center																
.616(g)	The program must be conducted in English and any other languages commonly understood by a significant number of the population in the operator's area.		X															
.517	Pressure Testing		X															
.553(b)	Up-rating		X		X													
.709	.619 / .620	Maximum Allowable Operating Pressure (MAOP)	X															
.709	.625	Odorization of Gas			X													
.709	.705	Patrolling (Refer to Table Below)	X															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Class Location</th> <th style="width: 35%;">At Highway and Railroad Crossings</th> <th style="width: 35%;">At All Other Places</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1 and 2</td> <td style="text-align: center;">2/yr (7½ months)</td> <td style="text-align: center;">1/yr (15 months)</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">4/yr (4½ months)</td> <td style="text-align: center;">2/yr (7½ months)</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">4/yr (4½ months)</td> <td style="text-align: center;">4/yr (4½ months)</td> </tr> </tbody> </table>							Class Location	At Highway and Railroad Crossings	At All Other Places	1 and 2	2/yr (7½ months)	1/yr (15 months)	3	4/yr (4½ months)	2/yr (7½ months)	4	4/yr (4½ months)	4/yr (4½ months)
Class Location	At Highway and Railroad Crossings	At All Other Places																
1 and 2	2/yr (7½ months)	1/yr (15 months)																
3	4/yr (4½ months)	2/yr (7½ months)																
4	4/yr (4½ months)	4/yr (4½ months)																
.709	.706	Leak Surveys (Refer to Table Below)	X															

## Abbreviated Procedures

# STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

Unless otherwise noted, all code references are to 49CFR Part 192. 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.

OPERATIONS and MAINTENANCE PERFORMANCE and RECORDS				S	U	N/A	N/C
		<b>Class Location</b>	<b>Required</b>	<b>Not Exceed</b>			
		1 and 2	1/yr	15 months			
		3	2/yr*	7½ months			
		4	4/yr*	4½ months			
* Leak detector equipment survey required for lines transporting un-odorized gas.							
.709	.731(a)	Compressor Station Relief Devices (1 per yr/15 months)		X			
.709	.731(c)	Compressor Station Emergency Shutdown (1 per yr/15 months)		X			
.709	.736(c)	Compressor Stations – Detection and Alarms (Performance Test)		X			
.709	.739	Pressure Limiting and Regulating Stations (1 per yr/15 months)				X	
.709	.743	Pressure Limiting and Regulator Stations – Capacity (1 per yr/15 months)				X	
.709	.745	Valve Maintenance (1 per yr/15 months)		X			
.709	.749	Vault Maintenance (≥ 200 cubic feet)(1 per yr/15 months)				X	
.603(b)	.751	Prevention of Accidental Ignition (hot work permits)		X			
.603(b)	.225(b)	Welding – Procedure		X			
.603(b)	.227/.229	Welding – Welder Qualification		X			
.603(b)	.243(b)(2)	NDT – NDT Personnel Qualification		X			
.709	.243(f)	NDT Records (Pipeline Life)		X			
.709	Repair: pipe (Pipeline Life); Other than pipe (5 years)			X			

Comments:

CORROSION CONTROL PERFORMANCE and RECORDS				S	U	N/A	N/C
.453	CP procedures (system design, installation, operation, and maintenance) must be carried out by qualified personnel			X			
.491	.491(a)	Maps or Records		X			
.491	.459	Examination of Buried Pipe when Exposed		X			
.491	.465(a)	Annual Pipe-to-soil Monitoring (1 per yr/15 months) or short sections (10 % per year, all in 10 years)		X			
.491	.465(b)	Rectifier Monitoring (6 per yr/2½ months)		X			
.491	.465(c)	Interference Bond Monitoring – Critical (6 per yr/2½ months)				X	
.491	.465(c)	Interference Bond Monitoring – Non-critical (1 per yr/15 months)				X	
.491	.465(d)	Prompt Remedial Actions		X			
.491	.465(e)	Unprotected Pipeline Surveys, CP active corrosion areas (1 per 3 cal yr/39 months)				X	
.491	.467	Electrical Isolation (Including Casings)		X			
.491	.469	Test Stations – Sufficient Number		X			
.491	.471	Test Leads		X			
.491	.473	Interference Currents				X	
.491	.475(a)	Internal Corrosion; Corrosive Gas Investigation				X	
.491	.475(b)	Internal Corrosion; Internal Surface Inspection; Pipe Replacement				X	
.491	.476 (d)	Internal Corrosion; New system design; Evaluation of impact of configuration changes to existing systems				X	
.491	.477	Internal Corrosion Control Coupon Monitoring (2 per yr/7½ months)		X			

## Abbreviated Procedures

# STANDARD INSPECTION REPORT OF A GAS TRANSMISSION PIPELINE

Unless otherwise noted, all code references are to 49CFR Part 192. 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.

CORROSION CONTROL PERFORMANCE and RECORDS			S	U	N/A	N/C
.491	.481	Atmospheric Corrosion Control Monitoring (1 per 3 cal yr/39 months onshore; 1 per yr/15 months offshore)		X		
.491	.483/485	Remedial: Replaced or Repaired Pipe; coated and protected; corrosion evaluation and actions	X			

**Comments:**

Leave this list with the operator.

**Recent PHMSA Advisory Bulletins (Last 2 years)**

<b><u>Number</u></b>	<b><u>Date</u></b>	<b><u>Subject</u></b>
ADB-07-01	April 27, 2007	Pipeline Safety: Senior Executive Signature and Certification of Integrity Management Program Performance Reports
ADB-07-02	September 6, 2007	Pipeline Safety: Updated Notification of the Susceptibility to Premature Brittle-Like Cracking of Older Plastic Pipe
ADB-07-02	February 29, 2008	Correction - Pipeline Safety: Updated Notification of the Susceptibility to Premature Brittle-Like Cracking of Older Plastic Pipe
ADB-08-01	May 13, 2008	Pipeline Safety - Notice to Operators of Gas Transmission Pipelines on the Regulatory Status of Direct Sales Pipelines
ADB-08-02	March 4, 2008	Pipeline Safety - Issues Related to Mechanical Couplings Used in Natural Gas Distribution Systems
ADB-08-03	March 10, 2008	Pipeline Safety - Dangers of Abnormal Snow and Ice Build-Up on Gas Distribution Systems
ADB-08-04	June 5, 2008	Pipeline Safety - Installation of Excess Flow Valves into Gas Service Lines
ADB-08-05	June 25, 2008	Pipeline Safety - Notice to Hazardous Liquid Pipeline Operators of Request for Voluntary Adv Notification of Intent To Transport Biofuels
ADB-08-06	July 2, 2008	Pipeline Safety - Dynamic Riser Inspection, Maintenance, and Monitoring Records on Offshore Floating Facilities

For more PHMSA Advisory Bulletins, go to <http://ops.dot.gov/regs/advise.htm>

