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 Memoran	dum
Inspector/Submit Date:	Inspector/Submit Date: Peer Review/Date: Director Approval/Date:	
POST INSPECTIO	N MEMORANDUM (PIM)	
Name of Operator:		OPID #:
Name of Unit(s):		Unit #(s):
Records Location:		
Unit Type & Commodity:		
Inspection Type:	Inspection Date(s):	
PHMSA	A	AFO Days:
Representative(s):		

Summary:

**Findings:** 

Name of Operator:		
OP ID No. <sup>(1)</sup>	Unit ID No. <sup>(1)</sup>	
HQ Address:	System/Unit Name & Addr	ress: <sup>(1)</sup>
Co. Official: Phone No.: Fax No.:	Activity Record ID No.: Phone No.: Fax No.:	
Emergency Phone No.:	Emergency Phone No.:	
Persons Interviewed	Title	Phone No.
PHMSA Representative(s) <sup>(1)</sup>	Inspection Date(s) <sup>(1)</sup>	
Company System Maps (Copies for Region Files)	):	

**Unit Description** 

**Portion of Unit Inspected:** <sup>(1)</sup>

For gas transmission and distribution pipeline inspections, the attached evaluation form should be used in conjunction with 49CFR Parts 191 and 192.

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

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.

GAS SYSTEM OPERATIONS												
Gas Supplier	Date:											
Unaccounted for Gas:	Service	Residential Commercial Industrial										
<b>Operating Pressure(s):</b>	MAOP (Within last y	(Within last year) Actual Operating Pressure (At time of Inspection)			ure							
Feeder:												
Town:												
Other:												
Does the operator have any transmission pipeline	?											
For compressor station inspections, use Attachme	nt 4.											

#### **49CFR PART 191**

		REPORTING PROCEDURES	S	U	N/A	N/C
.605(b)(4)	Procedures for gatherin	g data for incident reporting		•	•	
	191.5 Telephonic	cally reporting incidents to NRC (800) 424-8802				
	191.15(a) 30-day foll	ow-up written report (Form 7100-2)				
	191.15(b) Supplement	tal report (to 30-day follow-up)				
.605(a)	191.23 Reporting	safety-related condition (SRCR)				
	191.25 Filing the S	SRCR within 5 days of determination, but not later than 10 days after discovery				
.605(d)	Instructions to enable of	peration and maintenance personnel to recognize potential Safety Related Conditions				

Comments:

#### **49CFR PART 192**

.13(c)		CUSTOMER AND EFV INSTALLATION NOTIFICATION PROCEDURES	S	U	N/AN/C
		Procedures for notifying new customers, within <b>90 days</b> , of their responsibility for those selections of service lines not maintained by the operator.			
	.381	If EFVs are installed, they must meet the performance requirements of §192.381			
	.383	If the operator has a voluntary installation program for excess flow valves, the program must meet the requirements outlined in \$192.383.			
	.383	If the operator does not have a voluntary program for EFV installations, customers must be notified in accordance with §192.383.			

.605(a)		NORMAL OPERATING and MAINTENANCE PROCEDURES	S	U	N/A	N/C
	.605(a)	O&M Plan review and update procedure (1 per year/15 months)				
	.605(b)(3)	Making construction records, maps, and operating history available to appropriate operating personnel				
	.605(b)(5)	Start up and shut down of the pipeline to assure operation within MAOP plus allowable buildup				
	.605(b)(8)	Periodically reviewing the work done by operator's personnel to determine the effectiveness and adequacy of the procedures used in normal operation and maintenance and modifying the procedures when deficiencies are found				
	.605(b)(9)	Taking adequate precautions in excavated trenches to protect personnel from the hazards of unsafe accumulations of vapors or gas, and making available when needed at the excavation, emergency rescue equipment, including a breathing apparatus and a rescue harness and line				
	.605(b)(10)	Routine inspection and testing of pipe-type or bottle-type holders				

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.

	NORMAL OPERATING and MAINTENANCE PROCEDURES	S	U	N/A	N/C
.605(b)(11)	Responding promptly to a report of a gas odor inside or near a building, unless the operator's				l
	emergency proced. under §192.615(a)(3) specifically apply to these reports.				

**Comments:** 

.605(a)		CHANGE in CLASS LOCATION PROCEDURES	S	U	N/A	N/C
	.609	Class location study				
	.611	Confirmation or revision of MAOP				

**Comments:** 

.613		CONTINUING SURVEILLANCE PROCEDURES	S	U	N/AN/C
	.613(a)	Procedures for surveillance and required actions relating to change in class location, failures, leakage history, corrosion, substantial changes in <b>CP</b> requirements, and unusual operating and maintenance conditions			
	.613(b)	Procedures requiring <b>MAOP</b> to be reduced, or other actions to be taken, if a segment of pipeline is in unsatisfactory condition			

**Comments:** 

.605(a)		DAMAGE PREVENTION PROGRAM PROCEDURES	S	U	N/AN
	.614(c)	Participation in a qualified one-call program, or if available, a company program that complies with the following:		<u> </u>	
		(1) Identify persons who engage in excavating			
		(2) Provide notification to the public in the One Call area			
		(3) Provide means for receiving and recording notifications of pending excavations			
		(4) Provide notification of pending excavations to the members			
		(5) Provide means of temporary marking for the pipeline in the vicinity of the excavations			
		(6) Provides for follow-up inspection of the pipeline where there is reason to believe the pipeline could be damaged			
		(i) Inspection must be done to verify integrity of the pipeline			
		(ii) After blasting, a leak survey must be conducted as part of the inspection by the operator			

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:** 

.615		EMERGENCY PROCEDURES	S	U	N/AN	i/C
	.615(a)(1)	Receiving, identifying, and classifying notices of events which require immediate response by the operator				
	.615(a)(2)	Establish and maintain communication with appropriate public officials regarding possible emergency				
	.615(a)(3)	Prompt response to each of the following emergencies:				
		(i) Gas detected inside a building				
		(ii) Fire located near a pipeline				
		(iii) Explosion near a pipeline				
		(iv) Natural disaster				
	.615(a)(4)	Availability of personnel, equipment, instruments, tools, and material required at the scene of an emergency				
	.615(a)(5)	Actions directed towards protecting people first, then property				
	.615(a)(6)	Emergency shutdown or pressure reduction to minimize hazards to life or property				
	.615(a)(7)	Making safe any actual or potential hazard to life or property				
	.615(a)(8)	Notifying appropriate public officials required at the emergency scene and coordinating planned and actual responses with these officials				
	.615(a)(9)	Instructions for restoring service outages after the emergency has been rendered safe				
	.615(a)(10)	Investigating accidents and failures as soon as possible after the emergency				
	.615(b)(1)	Furnishing applicable portions of the emergency plan to supervisory personnel who are responsible for emergency action				
	.615(b)(2)	Training appropriate employees as to the requirements of the emergency plan and verifying effectiveness of training				
	.615(b)(3)	Reviewing activities following emergencies to determine if the procedures were effective				
	.615(c)	Establish and maintain liaison with appropriate public officials, such that both the operator and public officials are aware of each other's resources and capabilities in dealing with gas emergencies				

		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 and Amdt 192-not numbered pub 12/13/07 eff 12/13/07) The Clearinghouse recently reviewed the procedures applicable to API 1162.				
	.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;				
		(2) Possible hazards associated with unintended releases from a gas pipeline facility;				
		(3) Physical indications of a possible release;				

#### **STANDARD INSPECTION REPORT OF A GAS DISTRIBUTION OPERATOR** herwise noted, all code references are to 49CFR Part 192. S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked

Unless otherwise noted, all code references are to 49CFR Part 192. S – Satisfactory U – Unsatisfactory N/A – Not Applicable If an item is marked U, N/A, or N/C, an explanation must be included in this report.

	PUBLIC AWARENESS PROGRAM PROCEDURES (Also in accordance with API RP 1162)	S	U	N/A	N/C
	(4) Steps to be taken for public safety in the event of a gas pipeline release; and				
	(5) Procedures to report such an event (to the operator).				
.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:** 

.617		FAILURE INVESTIGATION PROCEDURES	S	U	N/A	N/C
	.617	Analyzing accidents and failures including laboratory analysis where appropriate to determine cause and prevention of recurrence				

	MAOP PROCEDURES			S	U	N/A	N/C
.619	9 Establishing <b>MAOP</b> so that it is commensurate with the class lo	ocation					
	MAOP cannot exceed the lowest of the following:						
	(a)(1) Design pressure of the weakest element						
	(a)(2) Test pressure divided by applicable factor						
	(a)(3) The highest actual operating pressure to which the segmen preceding the applicable date in second column, unless the seg after the applicable date in the third column or the segment was u	ment was tested a	ccording to .619(a)(2)				
	Pipeline segment	Pressure date	Test date				
	- Onshore transmission line that was a gathering line not subject to this part before March 15, 2006.	March 15, 2006, or date line becomes subject to this part, whichever	5 years preceding applicable date in second column.				
A	All other pipelines.	is later. July 1, 1970.	July 1, 1965.				
	(a)(4) Maximum safe pressure determined by operator.						
	(b) Overpressure protective devices must be installed if .619(a)(4	) is applicable					

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.

	MAOP PROCEDURES	S	U	N/A	N/C
	(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				
.621	MAOP - High Pressure Distribution Systems				
.623	Max./Min. Allowable Operating Pressure - Low Pressure Distribution Systems				

**Comments:** 

**.13**(c)

.503 Pressure testing

**Comments:** 

.605(a)		ODORIZATION of GAS PROCEDURES	S	U	N/AN/C
	.625(a)	Distribution lines must contain odorized gas. – must be readily detectable by person with normal sense of smell at $\frac{1}{5}$ of the LEL			
	.625(b)	Odorized gas in <b>Class 3</b> or <b>4</b> locations (if applicable).			
	.625(f)	Periodic gas sampling, using an instrument capable of determining the percentage of gas in air at which the odor becomes readily detectable.			

PRESSURE TEST PROCEDURES

**Comments:** 

.605(a)		TAPPING PIPELINES UNDER PRESSURE PROCEDURES	S	U	N/AN/C
	.627	Hot taps must be made by a qualified crew			
		NDT testing is suggested prior to tapping the pipe. Reference API RP 2201 for Best Practices.			

**Comments:** 

.605(a)		PIPELINE PURGING PROCEDURES	S	U	N/AI	N/C
	.629	Purging of pipelines must be done to prevent entrapment of an explosive mixture in the pipeline			••••	
		(a) Lines containing air must be properly purged.				
		(b) Lines containing gas must be properly purged				

**Comments:** 

S U

N/AN/C

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:** 

.605(a)		MAINTENANCE PROCEDURES	S	U	N/A	N/C
	.703(b)	Each segment of pipeline that becomes unsafe must be replaced, repaired, or removed from service				
	(c)	Hazardous leaks must be repaired promptly				

**Comments:** 

.605(b)	Т	RANSMISSION LINES	- PATROLLING & LEAKAGE SURV	EY PROCEDURES	S	U	N/A	N/C
	705(a)	Patrolling ROW condition	ns					
	(b)	Maximum interval betwe	en patrols of lines:			-	1	1
		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)				
	706	Leakage surveys – 1 yea	r/15 months					
		Leak detector equipmer	at survey requirements for lines transporting un	-odorized gas				
		(a) Class 3 locations - '	7 <sup>1</sup> /2 months but at least twice each calendar ye	ear				
		(b) Class 4 locations -	4 <sup>1</sup> / <sub>2</sub> months but at least 4 times each calendar	year				

**Comments:** 

DIS	<b>FRIBUTION SYSTEM PATROLLING &amp; LEAKAGE SURVEY PROCEDURES</b>	S	U	N/A	N/C
.721(a)	Frequency of patrolling mains must be determined by the severity of the conditions which could cause failure or leakage (i.e., consider cast iron, weather conditions, known slip areas, etc.)				
.721(b)	Mains in places or on structures where anticipated physical movement or external loading could cause failure or leakage must be patrolled				
(b)(1)	In business districts at intervals not exceeding $4\frac{1}{2}$ months, but at least four times each calendar year; and				
(b)(2)	Outside business districts at intervals not exceeding 71/2 months, but at least twice each calendar year				
.723(a) & (b)	Periodic leak surveys determined by the nature of the operations and conditions.				
(b)(1)	In business districts as specified, 1/yr (15 months)				
(b)(2)	Outside of business districts as specified, once every 5 calendar years/63 mos.; for unprotected lines subject to .465(e) where electrical surveys are impractical, once every 3 years/39 mos.				

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:
-----------

.605(b)

#### LINE MARKER PROCEDURES

U N/AN/C

S

Line markers installed and labeled as required

**Comments:** 

.707

.605(b)		TRANSMISSION RECORD KEEPING PROCEDURES	S	U	N/AN/C
	.709	Records must be maintained			
		(a) Repairs to the pipe – <b>life of system</b>			
		(b) Repairs to "other than pipe" – 5 years			
		(c) Operation (Sub L) and Maintenance (Sub M) patrols, surveys, tests – 5 years or until next one			

.605(b)		TRANSMISSION FIELD REPAIR PROCEDURES	S	U	N/AN/C
		Imperfections and Damages			
	.713(a)	Repairs of imperfections and damages on pipelines operating above 40% SMYS			
		(1) Cut out a cylindrical piece of pipe and replace with pipe of $\geq$ design strength			
		(2) Use of a reliable engineering method			
	.713(b)	Reduce operating pressure to a safe level during the repair			
		Permanent Field Repair of Welds			·
	.715	Welds found to be unacceptable under §192.241(c) must be repaired by:			
		(a) Taking the line out of service and repairing in accordance with <b>§192.245</b> :			
		• Cracks longer than 8% of the weld length (except offshore) must be removed			
		• For each weld that is repaired, the defect must be removed down to clean metal and the pipe preheated if conditions demand it			
		Repairs must be inspected to ensure acceptability			
		• Crack repairs or defect repairs in previously repaired areas must be done in accordance with qualified written welding procedures			
		(b) If the line remains in service, the weld may be repaired in accordance with <b>§192.245</b> if:			
		(1) The weld is not leaking			
		(2) The pressure is reduced to produce a stress that is <b>20% of SMYS or less</b>			
		(3) Grinding is limited so that <sup>1</sup> / <sub>8</sub> inch of pipe weld remains			
		(c) If the weld cannot be repaired in accordance with (a) or (b) above, a full encirclement welded split sleeve must be installed			
		Permanent Field Repairs of Leaks			

Unless otherwise noted, all code references are to 49CFR Part 192. S – Satisfactory U – Unsatisfactory N/A – Not Applicable If an item is marked U, N/A, or N/C, an explanation must be included in this report.

	TRANSMISSION FIELD REPAIR PROCEDURES	S	U	N/AN
.717	Field repairs of leaks must be made as follows:			
	(a) Replace by cutting out a cylinder and replace with pipe similar or of greater design			
	(b)(1) Install a full encirclement welded split sleeve of an appropriate design unless the pipe is joined by mechanical couplings and operates at less than 40% SMYS			
	(b)(2) A leak due to a corrosion pit may be repaired by installing <b>a bolt on leak clamp</b>			
	(b)(3) For a corrosion pit leak, if a pipe is not more than <b>40,000 psi SMYS</b> , the pits may be repaired by <b>fillet welding a steel plate</b> . The plate must have <b>rounded corners</b> and the same <b>thickness or greater</b> than the pipe, and <b>not more than ½D</b> of the pipe size			
	(b)(4) Submerged offshore pipe or pipe in inland navigable waterways may be repaired with a mechanically applied full encirclement split sleeve of appropriate design			
	(b)(5) Apply reliable engineering method			
	Testing of Repairs			
.719(a)	Replacement pipe must be pressure tested to meet the requirements of a new pipeline			
(b)	For lines of <b>6-inch diameter or larger</b> and that <b>operate at 20% of more of SMYS</b> , the repair must be nondestructively tested in accordance with <b>§192.241</b> <sup>©</sup>			

**Comments:** 

.605(b)		TEST REQUIREMENTS FOR REINSTATING SERVICE LINES	S	U	N/A	N/C
	.725(a)	Except for .725(b), disconnected service lines must be tested the same as a new service line.				
	(b)	Service lines that are temporarily disconnected must be tested from the point of disconnection, the same as a new service line, before reconnect. See code for exception to this.				

**Comments:** 

	ABANDONMENT or DEACTIVATION of FACILITIES PROCEDURES	S	U	N/A	N/C
.727(b)	Operator must disconnect both ends, purge, and seal each end before abandonment or a period of deactivation where the pipeline is not being maintained. Offshore abandoned pipelines must be filled with water or an inert material, with the ends sealed				
(c)	Except for service lines, each inactive pipeline that is not being maintained under Part 192 must be disconnected from all gas sources/supplies, purged, and sealed at each end.				
(d)	Whenever service to a customer is discontinued, do the procedures indicate one of the following:				
	(1) The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized by the operator				
	(2) A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly				
	(3) The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed				
(e)	If air is used for purging, the operator shall ensure that a combustible mixture is not present after purging				
.727(g)	Operator must file reports upon abandoning underwater facilities crossing navigable waterways, including offshore facilities.				

**Comments:** 

N/C – Not Checked

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:** 

	PRESSURE LIMITING and R	EGULATING STATION PROCEDURES	S	U	N/A	N/C
.739(a)	Inspection and testing procedures for pr stations and equipment (1 per yr/15 m	ressure limiting stations, relief devices, pressure regulating <b>onths</b> )				
	(1) In good mechanical condition					
	(2) Adequate from the standpoint of c employed	capacity and reliability of operation for the service in which it is				
	(3) Set to control or relieve at correct	pressures consistent with .201(a), except for .739(b).				
oper.	(4) Properly installed and protected	from dirt, liquids, and other conditions that may prevent proper				
.739(b)	For steel lines if MAOP is determined	per .619(c) and the MAOP is 60 psi (414 kPa) gage or more		1	1	
	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				
.741	Telemetering or Recording Gauges					
	(a) In place to indicate gas pressure in	n the district that is supplied by more than one regulating station				
	(b) Determine the need in a distribution	on system supplied by only one district station				
	(c) Inspect equipment and take correct pressure	ctive measures when indications of abnormally high or low				
.743	Testing of Relief Devices			-		
.743	(a) Capacity must be consistent with .2	01(a) except for .739(b), and be determined 1 per yr/15 mo.				
	(b) If calculated, capacities must be correquired.	ompared; annual review and documentation are				
	(c) If insufficient capacity, new or ad	ditional devices must be installed to provide required capacity.				

.605(b)		VALVE AND VAULT MAINTENANCE PROCEDURES	S	U	N/A	N/C
		Transmission Valves			•	
	.745	<ul> <li>(a) Inspect and partially operate each transmission value that might be required during an emergency (1 per yr/15 months)</li> </ul>				
	.745	(b) Prompt remedial action required, or designate alternative valve.				
		Distribution Valves				
	.747	<ul> <li>(a) Check and service each valve that may be necessary for the safe operation of a distribution system</li> <li>(1 per yr/15 months)</li> </ul>				
		(b) Prompt remedial action required, or designate alternative valve.				
		Vaults				
	.749	Inspection of vaults greater than 200 cubic feet (1 per yr/15 months)				

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)		PREVENTION of ACCIDENTAL IGNITION PROCEDURES	S	U	N/AN/C
	.751	Reduce the hazard of fire or explosion by:			
		(a) Removal of ignition sources in presence of gas and providing for a fire extinguisher			
		(b) Prevent welding or cutting on a pipeline containing a combustible mixture			
		(c) Post warning signs			

.605(b)		CAULKED BELL AND SPIGOT JOINTS PROCEDURES	S	U	N/AN/C
	.753	Cast-iron caulked bell and spigot joint repair:			
		<ul> <li>(a) When subject to more than 25 psig, sealed with mechanical clamp, or sealed with material/device which does not reduce flexibility, permanently bonds, and seals and bonds as prescribed in §192.753(a)(2)(iii)</li> </ul>			
		(b) When subject to 25 psig or less, joints, when exposed for any reason, must be sealed by means other than caulking			

.605(b)		PROTECTING CAST-IRON PIPELINE PROCEDURES	S	U	N/AI	N/C
	.755	Operator has knowledge that the support for a segment of a buried cast-iron pipeline is disturbed must provide protection.		<u> </u>		
		(a) Vibrations from heavy construction equipment, trains, trucks, buses or blasting?				
		(b) Impact forces by vehicles?				
		(c) Earth movement?				
		(d) Other foreseeable outside forces which might subject the segment of pipeline to a bending stress				
		(e) Provide permanent protection for the disturbed section as soon as feasible				

.13(c)		WELDING AND WELD DEFECT REPAIR/REMOVAL PROCEDURES	S	U	N/A	N/C
	.225	<ul> <li>(a) Welding procedures must be qualified under Section 5 of API 1104 (19<sup>th</sup> ed.1999, 10/31/01 errata) or Section IX of ASME Boiler and Pressure Code (2004 ed. Including addenda through July 1, 2005) by destructive test.</li> </ul>				
		(b) Retention of welding procedure – details and test				
	.227	<ul> <li>(a) Welders must be qualified by Section 6 of API 1104 (19<sup>th</sup> ed.1999, 10/31/01 errata) or Section IX of ASME Boiler and Pressure Code (2004 ed. Including addenda through July 1, 2005) See exception in .227(b).</li> </ul>				
		(b) Welders may be qualified under <b>section I of Appendix C</b> to weld on lines that operate at < 20% SMYS.				
	.229	(a) To weld on compressor station piping and components, a welder must successfully complete a destructive test				
		(b) Welder must have used welding process within the preceding <b>6 months</b>				
		(c) A welder qualified under .227(a)–				

Unless otherwise noted, all code references are to 49CFR Part 192. S – Satisfactory U – Unsatisfactory N/A – Not Applicable If an item is marked U, N/A, or N/C, an explanation must be included in this report.

N/C – Not C	hecked
-------------	--------

	WELDING AND WELD DEFECT REPAIR/REMOVAL PROCEDURES	S	U	N/A	N/(
.229(c)	(1) May not weld on pipe that operates at ≥ 20% SMYS unless within the preceding 6 calendar months the welder has had one weld tested and found acceptable under the sections 6 or 9 of API Standard 1104; may maintain an ongoing qualification status by performing welds tested and found acceptable at least twice per year, not exceeding 7½ months; may not requalify under an earlier referenced edition.				
	(2) May not weld on pipe that operates at < 20% SMYS unless is tested in accordance with .229(c)(1) or requalifies under .229(d)(1) or (d)(2).				
	(d) Welders qualified under .227(b) may not weld unless:				
	(1) Requalified within 1 year/15 months, or				
	(2) Within <b>7<sup>1</sup>/<sub>2</sub> months</b> but at least <b>twice per year</b> had a production weld pass a qualifying test				
.231	Welding operation must be protected from weather				
.233	Miter joints (consider pipe alignment)				
.235	Welding preparation and joint alignment				
.241	<ul> <li>(a) Visual inspection must be conducted by an individual qualified by appropriate training and experience to ensure:</li> </ul>				
	(1) Compliance with the welding procedure				
	(2) Weld is acceptable in accordance with <b>Section 9 of API 1104</b>				
	(b) Welds on pipelines to be <b>operated at 20% or more of SMYS</b> must be nondestructively tested in accordance with <b>192.243</b> except welds that are visually inspected and approved by a qualified welding inspector if:				
	(1) The nominal pipe diameter is less than <b>6 inches</b> , or				
	(2) The pipeline is to operate at a pressure that produces a hoop stress of less than 40% of SMYS and the welds are so limited in number that nondestructive testing is impractical				
.241	(c) Acceptability based on visual inspection or NDT is determined according to Section 9 of API 1104. If a girth weld is unacceptable under Section 9 for a reason other than a crack, and if Appendix A to API 1104 applies to the weld, the acceptability of the weld may be further determined under that appendix.				
	Repair and Removal of Weld Defects				
.245	(a) Each weld that is unacceptable must be removed or repaired. Except for offshore pipelines, a weld must be removed if it has a crack that is more than 8% of the weld length				
	(b) Each weld that is repaired must have the defect removed down to sound metal, and the segment to be repaired must be preheated if conditions exist which would adversely affect the quality of the weld repair. After repair, the weld must be inspected and found acceptable.				
	(c) Repair of a crack or any other defect in a previously repaired area must be in accordance with a written weld repair procedure, qualified under §192.225				
	• Sleeve Repair – low hydrogen rod (Best Practices –ref. API 1104 App. B, In Service Welding)				

.13(c)		NONDESTRUCTIVE TESTING PROCEDURES	S	U	N/A	N/C
	.243	(a) Nondestructive testing of welds must be performed by any process, other than trepanning, that clearly indicates defects that may affect the integrity of the weld				
		(b) Nondestructive testing of welds must be performed:				
		(1) In accordance with a written procedure, and			1	
		(2) By persons trained and qualified in the established procedures and with the test equipment used				
		(c) Procedures established for proper interpretation of each nondestructive test of a weld to ensure acceptability of the weld under 192.241 <sup>®</sup>				

Unless otherwise noted, all code references are to 49CFR Part 192. S – Satisfactory U – Unsatisfactory N/A – Not Applicable If an item is marked U, N/A, or N/C, an explanation must be included in this report.

N/C – Not Checked

NONDESTRUCTIVE TESTING PROCEDURES	S	U	N/AN/C
<ul> <li>(d) When nondestructive testing is required under §192.241(b), the following percentage of each day's field butt welds, selected at random by the operator, must be nondestructively tested over the entire circumference</li> </ul>			
(1) In Class 1 locations at least 10%			
(2) In Class 2 locations at least 15%			
(3) In Class 3 and 4 locations, at crossings of a major navigable river, offshore, and within railroad or public highway rights-of-way, including tunnels, bridges, and overhead road crossings, 100% unless impractical, then 90%. Nondestructive testing must be impractical for each girth weld not tested.			
(4) At pipeline tie-ins, <b>100%</b>			
<ul> <li>(e) Except for a welder whose work is isolated from the principal welding activity, a sample of each welder's work for each day must be nondestructively tested, when nondestructive testing is required under §192.241(b)</li> </ul>			
(f) Nondestructive testing – the operator must retain, for the life of the pipeline, a record showing by mile post, engineering station, or by geographic feature, the number of welds nondestructively tested, the number of welds rejected, and the disposition of the rejected welds.			

273(b)			JOINING of PIPELINE MATERIALS	S	U	N/A	N/C
	.281	(a)	A plastic pipe joint that is joined by solvent cement, adhesive, or heat fusion may not be disturbed until it has properly set. Plastic pipe may not be joined by a threaded joint or miter joint.				
		(b)	Each solvent cement joint on plastic pipe must comply with the following:		•	•	
			(1) The mating surfaces of the joint must be clean, dry, and free of material which might be detrimental to the joint.				
			(2) The solvent cement must conform to ASTM Designation: D 2513.				
			(3) The joint may not be heated to accelerate the setting of the cement.				
		(c)	Each heat-fusion joint on plastic pipe must comply with the following:		1		
			(1) A butt heat-fusion joint must be joined by a device that holds the heater element square to the ends of the piping, compresses the heated ends together, and holds the pipe in proper alignment while the plastic hardens.				
			(2) A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature.				
			(3) An electrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of §192.283(a)(1)(iii), to be at least equivalent to those of the fittings manufacturer.				
			(4) Heat may not be applied with a torch or other open flame.				
		(d)	Each adhesive joint on plastic pipe must comply with the following:		•	•	
			(1) The adhesive must conform to ASTM Designation: D 2517.				
			(2) The materials and adhesive must be compatible with each other.				
		(e)	Each compression type mechanical joint on plastic pipe must comply with the following:		1		
			(1) The gasket material in the coupling must be compatible with the plastic.				
			(2) A rigid internal tubular stiffener, other than a split tubular stiffener, must be used in conjunction with the coupling.				
	.283	(a)	Before any written procedure established under §192.273(b) is used for making plastic pipe joints by a heat fusion, solvent cement, or adhesive method, the procedure must be qualified by subjecting specimen joints made according to the procedure to the following tests:		-	-	
			(1) The burst test requirements of-				

Unless otherwise noted, all code references are to 49CFR Part 192. S – Satisfactory U – Unsatisfactory N/A – Not Applicable If an item is marked U, N/A, or N/C, an explanation must be included in this report.

N/C – Not Checked

	JOINING of PIPELINE MATERIALS	S	U	N/A	N/C
	(i) Thermoplastic pipe: paragraph 6.6 (sustained pressure test) or paragraph 6.7 (Minimum $H_{1}$ ( $h_{1}$ ( $h_{2}$ ( $h_{2}$ ( $h_{3}$ ( $h$				
	Hydrostatic Burst Test) or paragraph 8.9 (Sustained Static pressure Test) of ASTM D2513 (ii) Thermosetting plastic pipe: paragraph 8.5 (Minimum Hydrostatic Burst Pressure) or				
	paragraph 8.9 (Sustained Static Pressure Test) of ASTM D2517; or				
	(iii) Electrofusion fittings for polyethylene pipe and tubing: paragraph 9.1 (Minimum Hydraulic Burst Pressure Test), paragraph 9.2 (Sustained Pressure Test), paragraph 9.3 (Tensile				
	Strength Test), or paragraph 9.4 (Joint Integrity Tests) of ASTM Designation F1055.				
	(2) For procedures intended for lateral pipe connections, subject a specimen joint made from pipe sections joined at right angles according to the procedure to a force on the lateral pipe				
	until failure occurs in the specimen. If failure initiates outside the joint area, the procedure				
	<ul><li>qualifies for use; and,</li><li>(3) For procedures intended for non-lateral pipe connections, follow the tensile test</li></ul>				
	(3) For procedures intended for non-lateral pipe connections, follow the tensile test requirements of ASTM D638, except that the test may be conducted at ambient temperature				
	and humidity If the specimen elongates no less than 25 percent or failure initiates outside				
(b)	the joint area, the procedure qualifies for use. Before any written procedure established under §192.273(b) is used for making mechanical				
	plastic pipe joints that are designed to withstand tensile forces, the procedure must be qualified				
	by subjecting five specimen joints made according to the procedure to the following tensile test: (1) Use an apparatus for the test as specified in ASTM D 638 (except for conditioning).				
	<ol> <li>Use an apparatus for the test as specified in ASTM D 638 (except for conditioning).</li> <li>The specimen must be of such length that the distance between the grips of the apparatus</li> </ol>				$\left  - \right $
	(2) The specifien must be of such length that the distance between the grips of the apparatus and the end of the stiffener does not affect the joint strength.				
	(3) The speed of testing is 0.20 in. (5.0 mm) per minute, plus or minus 25 percent.				
	(4) Pipe specimens less than 4 inches (102 mm) in diameter are qualified if the pipe yields to an elongation of no less than 25 percent or failure initiates outside the joint area.				
	(5) Pipe specimens 4 inches (102 mm) and larger in diameter shall be pulled until the pipe is				
	subjected to a tensile stress equal to or greater than the maximum thermal stress that would be produced by a temperature change of $100^{\circ}$ F (38° C) or until the pipe is pulled from the				
	fitting. If the pipe pulls from the fitting, the lowest value of the five test results or the				
	manufacturer's rating, whichever is lower must be used in the design calculations for stress.			-	
	<ul><li>(6) Each specimen that fails at the grips must be retested using new pipe.</li><li>(7) Results pertain only to the specific outside diameter, and material of the pipe tested, except</li></ul>			-	
	(7) Results pertain only to the specific outside diameter, and material of the pipe tested, except that testing of a heavier wall pipe may be used to qualify pipe of the same material but with				
( )	a lesser wall thickness.				
(c)	A copy of each written procedure being used for joining plastic pipe must be available to the persons making and inspecting joints.				
(d)	Pipe or fittings manufactured before July 1, 1980, may be used in accordance with procedures				
.285 (a)	that the manufacturer certifies will produce a joint as strong as the pipe. No person may make a plastic pipe joint unless that person has been qualified under the				
.205 (a)	applicable joining procedure by:				
	(1) Appropriate training or experience in the use of the procedure; and				
	(2) Making a specimen joint from pipe sections joined according to the procedure that passes the inspection and test set forth in paragraph (b) of this section.				
(b)	The specimen joint must be:				
	(1) Visually examined during and after assembly or joining and found to have the same				
	appearance as a joint or photographs of a joint that is acceptable under the procedure; and (2) In the case of a heat fusion, solvent cement, or adhesive joint;				
	(i) Tested under any one of the test methods listed under §192.283(a) applicable to the type of				
	joint and material being tested;				
	(ii) Examined by ultrasonic inspection and found not to contain flaws that may cause failure; or				
	<ul><li>(iii) Cut into at least three longitudinal straps, each of which is:</li><li>(A) Visually examined and found not to contain yolds or discontinuities on the cut surfaces of</li></ul>				
	(A) Visually examined and found not to contain voids or discontinuities on the cut surfaces of the joint area; and				
	(B) Deformed by bending, torque, or impact, and if failure occurs, it must not initiate in the joint area.				
(c)	A person must be requalified under an applicable procedure, if during any 12-month period that person:				
	(1) Does not make any joints under that procedure; or				

Unless otherwise noted, all code references are to 49CFR Part 192. S – Satisfactory U – Unsatisfactory N/A – Not Applicable N If an item is marked U, N/A, or N/C, an explanation must be included in this report.

N/C – Not Checked

	JOINING of PIPELINE MATERIALS	S	U	N/A	N/(
	(2) Has 3 joints or 3 percent of the joints made, whichever is greater, under that procedure that are found unacceptable by testing under §192.513.				
	(d) Each operator shall establish a method to determine that each person making joints in plastic pipelines in the operator's system is qualified in accordance with this section.				
.287	No person may carry out the inspection of joints in plastic pipes required by §§192.273(c) and 192.285(b) unless that person has been qualified by appropriate training or experience in evaluating the acceptability of plastic pipe joints made under the applicable joining procedure.				

	CORROSION CONTROL PROCEDURES	S	U	N/A	N/C
.453	Are corrosion procedures established and carried out by or under the direction of a qualified person for:			,	
	• Design				
	Operations				
	• Installation				
	• Maintenance				
.455	<ul> <li>(a) For pipelines installed after July 31, 1971, buried segments must be externally coated and</li> <li>(b) cathodically protected within one year after construction (see exceptions in code)</li> <li>(c) Aluminum may not be installed in a buried or submerged pipeline if exposed to an environment with a natural pH in excess of 8 (see exceptions in code)</li> </ul>				
.457	<ul> <li>(a) All effectively coated steel transmission pipelines installed prior to August 1, 1971, must be cathodically protected</li> </ul>				
	(b) If installed <b>before August 1, 1971</b> , cathodic protection must be provided in areas of active corrosion for: bare or ineffectively coated transmission lines, and bare or coated c/s, regulator sta., meter sta. piping, and (except for cast iron or ductile iron) bare or coated distribution lines.				
.459	Examination of buried pipeline when exposed: if corrosion is found, further investigation is required				
.461	Procedures must address the protective coating requirements of the regulations. External coating on the steel pipe must meet the requirements of this part.				
.463	Cathodic protection level according to Appendix D criteria				
.465	(a) Pipe-to-soil monitoring (1 per yr/15 months) or short sections (10% per year, all in 10 years)				
	(b) Rectifier monitoring (6 per yr/2 <sup>1</sup> / <sub>2</sub> months)				
	(c) Interference bond monitoring (as required)				
	(d) Prompt remedial action to correct any deficiencies indicated by the monitoring				
.465	(e) Electrical surveys (closely spaced pipe to soil) on bare/unprotected lines, cathodically protect active corrosion areas (1 per 3 years/39 months)				
.467	Electrical isolation (include casings)				
.469	Sufficient test stations to determine CP adequacy				
.471	Test lead maintenance				
.473	Interference currents				
.475	(a) Proper procedures for transporting corrosive gas?				
	(b) Removed pipe must be inspected for internal corrosion. If found, the adjacent pipe must be inspected to determine extent. Certain pipe must be replaced. Steps must be taken to minimize internal corrosion.				
.476	Systems designed to reduce internal corrosion Amdt 192-(no number) Pub. 4/23/07, eff. 5/23/07 (a) New construction				
	(b) Exceptions – offshore pipeline and systems replaced before 5/23/07				
	(c) Evaluate impact of configuration changes to existing systems				

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 PROCEDURES	S	U	N/A	N/C
.477	Internal corrosion control coupon (or other suit. Means) monitoring (2 per yr/7 <sup>1</sup> / <sub>2</sub> months)				
.479	(a) Each exposed pipe must be cleaned and coated (see exceptions under .479(c))				
	Offshore splash zones and soil-to-air interfaces must be coated				
	(b) Coating material must be suitable				
	Coating is not required where operator has proven that corrosion will:		•		
	(c) (1) Only be a light surface oxide, or				
	(2) Not affect safe operation before next scheduled inspection				
.481	<ul> <li>(a) Atmospheric corrosion control monitoring (1 per 3 yrs/39 months onshore; 1 per yr/15 months offshore)</li> </ul>				
.481	(b) Special attention required at soil/air interfaces, thermal insulation, under disbonded coating, pipe supports, splash zones, deck penetrations, spans over water				
.481	(c) Protection must be provided if atmospheric corrosion is found (per §192.479)				
.483	Replacement and required pipe must be coated and cathodically protected (see code for exceptions)				
.485	(a) Procedures to replace pipe or reduce the <b>MAOP</b> if general corrosion has reduced the wall thickness?				
	(b) Procedures to replace/repair pipe or reduce <b>MAOP</b> if localized corrosion has reduced wall thickness (unless reliable engineering repair method exists)?				
	(c) Procedures to use <b>Rstreng</b> or <b>B-31G</b> to determine remaining wall strength?				
.487	Remedial measures (distribution lines other than cast iron or ductile iron)				
.489	Remedial measures (cast iron and ductile iron pipelines)				
.491	Corrosion control maps and record retention (pipeline service life or 5 yrs)				

#### **Comments:**

.801- .809	Subpart N — Qualification of Pipeline Personnel Procedures	S	U N/AN/C
	Refer to Operator Qualification Inspection Forms and Protocols (OPS web site)		
.901- .951	Subpart O — Pipeline Integrity Management	S	U N/AN/C

Subparts A - C	PART 199 – DRUG and ALCOHOL TESTING REGULATIONS and PROCEDURES	S	U	N/AN/C
	Drug & Alcohol Testing & Alcohol Misuse Prevention Program – Use PHMSA Form # 13, PHMSA 2008 Drug and Alcohol Program Check.			
	2000 Brug and Theonor Program Cheek.			

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.

	PIPELINE INSPECTION (Field)	S	U	N/A	N/C
.179	Valve Protection from Tampering or Damage				
.463	Cathodic Protection				
.465	Rectifiers				
.476	Systems designed to reduce internal corrosion				
.479	Pipeline Components Exposed to the Atmosphere				
.605	Knowledge of Operating Personnel				
.707	ROW Markers, Road and Railroad Crossings				
.719	Pre-pressure Tested Pipe (Markings and Inventory)				
.741	Telemetering, Recording gauges				
.739/.743	Pressure Limiting and Regulating Devices (spot-check field installed equipment vs. inspection records)				
.745	Valve Maintenance				
.751	Warning Signs				
.801809	Operator Qualification - Use PHMSA Form 15 Operator Qualification Field Inspection Protocol Form				

	<b>REGULATORY REPORTING PERFORMANCE AND RECORDS</b>	S	U	N/A	N/C
191.5	Telephonic reports to NRC				
191.15	Written incident reports; supplemental incident reports (Form F 7100.2)				
191	Annual Reports (Forms 7100.1-1, 7100.2-1)				
191.23	Safety related condition reports				
192.16	Customer Notification (Verification – 90 days – and Elements)				
192.727 (g)	Abandoned facilities offshore, onshore crossing commercially navigable waterways reports				

	CONSTRUCTION PERFORMANCE AND RECORDS	S	U	N/A	N/C
.225	Test Results to Qualify Welding Procedures				
.227	Welder Qualification				
.241 (a)	Visual Weld Inspector Training/Experience				
.243 (b)(2)	Nondestructive Technician Qualification				
(c)	NDT procedures				
(f)	Total Number of Girth Welds				
(f)	Number of Welds Inspected by NDT				
(f)	Number of Welds Rejected				
(f)	Disposition of each Weld Rejected				
.273/.283	Qualified Joining Procedures Including Test Results				
.285	Personnel Joining Qualifications				
.287	Joining Inspection Qualifications				
.303	Construction Specifications				
.325	Underground Clearance				

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.

	CONSTRUCTION PERFORMANCE AND RECORDS				N/C
.327	Amount, Location, Cover of each Size of Pipe Installed				
.383(e)	EFV customer notification				
.455	Cathodic Protection				

	OPE	RATIONS and MAINTENANCE PE	RFORMANCE AND RECORDS	S	U	N/A	N/(	
.517 (a)		Pressure Testing (operates at or above 10	0 psig) – <b>useful life of pipeline</b>					
.517 (b)		Pressure Testing (operates below 100 psi	g, service lines, plastic lines) – <b>5 years</b>				1	
.603(b)	.605(a)	Procedural Manual Review – Operations					+	
	.605(b)(3)	· · · · · · · · · · · · · · · · · · ·	s, operating history to operating personnel					
							+	
	.605(b)(8)	Periodic review of personnel work – effect	-			<u> </u>	_	
-	.605(c)(4)							
.709	.614	Damage Prevention (Miscellaneous)						
	.609	Class Location Study (If Applicable)						
.603(b)	.615(b)(1)	Location Specific Emergency Plan						
	.615(b)(2)	Emergency Procedure training, verify effo	ectiveness of training				T	
	.615(b)(3)	.615(b)(3) Employee Emergency activity review, determine if procedures were followed.						
		.615(c) Liaison Program with Public Officials						
	.616	Public Awareness Program			L	-	1	
	.616(e & f)	Program requirements - Stakeholder Au method and frequency, supplemental en mailing rosters, postage receipts, return	reflects implementation of operator's Public Awareness dience identification, message type and content, delivery nancements, program evaluations, etc. (i.e. contact or receipts, audience contact documentation, etc. for chool superintendents, program evaluations, etc.). See table					
	Operators in existence on June 20, 2005, must have completed their written programs no later than June						1	
	20, 2006. See 192.616(a) and (j) for exceptions. API RP 1162 Baseline* Recommended Message Deliveries							
	5	Stakeholder Audience (Natural Gas	Baseline Message Frequency					
		Transmission Line Operators)	(starting effective date of Plan)					
		nts Along Right-of-Way and Places of	2 years					
	Congre	procy Officials	Annual					
		Officials	3 years					
		tor and Contractors	Annual					
		Il Centers	As required of One-Call Center					
	St	akeholder Audience (Gathering Line Operators)	Baseline Message Frequency (starting from effective date of Plan)					
	Resider	ts and Places of Congregation	Annual					
		ency Officials	Annual					
		Officials	3 years					
		tors and Contractors	Annual					
	One-Ca	ll Centers Stakeholder Audience (LDCs)	As required of One-Call Center Baseline Message Frequency (starting from offseting data of Plan)					
	Resider	nts Along Local Distribution System	(starting from effective date of Plan) Annual					
		ustomers	Twice annually					
		ency Officials	Annual					
		Officials	3 years					
	Excava	tor and Contractors	Annual					
		ll Centers	As required of One-Call Center					
		to API RP 1162 for additional requirements nental requirements, recordkeeping, program	s, including general program recommendations, n evaluation, etc.					
	.616(g)	The program conducted in English and an	y other languages commonly understood by a significant				Γ	
		number of the population in the operator's	s area.					

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.

	OPE	<b>RATIONS and MAINTE</b>	NANCE PERFORMANCE AND REC	ORDS	S	U	N/A	N/0
.517		Pressure Testing						
.709	.619 .621 .62	23 Maximum Allowable Ope	rating Pressure (MAOP)					1
	.625	Odorization of Gas						
	.705	Patrolling (Refer to Table	Below)					
	•							
		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 Ta	able Below)					Ì
		, , , , , , , , , , , , , , , , , , ,						
		<b>Class Location</b>	Required	Not Exceed				
		1 and 2	1/yr	15 months	_			
		3	2/yr*	7½ months	_			
		4	4/yr*	4 <sup>1</sup> / <sub>2</sub> months				
	* Leak	detector equipment survey	required for lines transporting un-odorized gas	s.				
.603(b)	.721(b)(1)	Patrolling Business Distric	et (4 per yr/4 <sup>1</sup> / <sub>2</sub> months)					
	.721(b)(2)	Patrolling Outside Busines	ss District (2 per yr/7½ months)					
	.723(b)(1)	Leakage Survey – business	s District (1 per yr/15 months)					
	.723(b)(2)	Leakage Survey						<b>.</b>
		<ul> <li>Outside Business Dis</li> </ul>	trict (5 years)					
		Cathodically unprotect	cted distribution lines (3 years)					
	.725	Tests for reinstating servic	e lines					
.603b/.727g	.727	Abandoned Pipelines; Und	lerwater Facility Reports					
.709	.739	Pressure Limiting and Reg	Pressure Limiting and Regulating Stations (1 per yr/15 months)					
	.743	Pressure Limiting and Reg	ulator Stations – Capacity (1 per yr/15 month	s)				
	.745	Valve Maintenance Transr	nission Lines (1 per yr/15 months)					
.603(b)	.747	Valve Maintenance Distrib	pution Lines (1 per yr/15 months)					
.709	.749	Vault Maintenance (≥200	cubic feet)(1 per yr/15 months)					
.603(b)	.751	Prevention of Accidental I	gnition (hot work permits)					
	.755	Caulked Bell and Spigot Jo	pint Repair					
	.225(b)	Welding – Procedure						
	.227/.229	Welding – Welder Qualifie	cation					
	.243(b)(2)	NDT – NDT Personnel Qu	alification					
	.283	Joining - Procedures						
	.285	Joining - Personnel Qualif	ications					1
	.287	Joining - Inspector Qualifi	cations					1
.709	.243(f)	NDT Records (Pipeline L	ife)					1
		Repair: pipe (Pipeline Life	e); Other than pipe (5 years)					1

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:** 

		CORROSION CONTROL PERFORMANCE AND RECORDS	S	U	N/A	N/C
.491	.491(a)	Maps or Records				
.491	.459	Examination of Buried Pipe when Exposed				
.491	.465(a)	Annual Pipe-to-soil Monitoring (1 per yr/15 months) for short sections (10% per year; all in 10 years)				
.491	.465(b)	Rectifier Monitoring (6 per yr/2 <sup>1</sup> /2 months)				
.491	.465(c)	Interference Bond Monitoring – Critical (6 per yr/2 <sup>1</sup> / <sub>2</sub> months)				
.491	.465(c)	Interference Bond Monitoring – Non-critical (1 per yr/15 months)				
.491	.465(d)	Prompt Remedial Actions				
.491	.465(e)	Unprotected Pipeline Surveys, CP active corrosion areas (1 per 3 cal yr/39 months)				
.491	.467	Electrical Isolation (Including Casings)				
.491	.469	Test Stations – Sufficient Number				
.491	.471	Test Lead Maintenance				
.491	.473	Interference Currents				
.491	.475(a)	Internal Corrosion; Corrosive Gas Investigation				
.491	.475(b)	Internal Corrosion; Internal Surface Inspection; Pipe Replacement				
.491	.476 (d)	Internal Corrosion; New system design; Evaluation of impact of configuration changes to existing systems				
.491	.477	Internal Corrosion Control Coupon Monitoring (2 per yr/7 <sup>1</sup> / <sub>2</sub> months)				
.491	.481	Atmospheric Corrosion Control Monitoring (1 per 3 cal yr/39 months onshore; 1 per yr/15 months offshore)				
.491	.483/.485	Remedial: Replaced or Repaired Pipe; coated and protected; corrosion evaluation and actions				

# Attachment 1

 Distribution Operator Compressor Station Inspection

 Unless otherwise noted, all code references are to 49CFR Part 192.
 S – Satisfactory
 U – Unsatisfactory
 N/A – Not Applicable

 If an item is marked U, N/A, or N/C, an explanation must be included in this report.

N/C – Not Checked

.605(b)		COMPRESSOR STATION PROCEDURES	S	U	N/A	N/C
	.605(b)(6)	Maintenance procedures, including provisions for isolating units or sections of pipe and for purging before returning to service				
	.605(b)(7)	Starting, operating, and shutdown procedures for gas compressor units				
	.731	Inspection and testing procedures for remote control shutdowns and pressure relieving devices (1 per yr/15 months), prompt repair or replacement				
	.735	<ul> <li>(a) Storage of excess flammable or combustible materials at a safe distance from the compressor buildings</li> </ul>				
		(b) Tank must be protected according to NFPA #30				
	.736	Compressor buildings in a compressor station must have fixed gas detection and alarm systems ( <b>must be performance tested</b> ), unless:				
		• 50% of the upright side areas are permanently open, or				
		• It is an unattended field compressor station of <b>1000 hp or less</b>				

		COMPRESSOR STATIONS INSPECTION (Field) (Note: Facilities may be "Grandfathered")	S	U	N/A	N/C
.163	(c)	Main operating floor must have (at least) two (2) separate and unobstructed exits				
		Door latch must open from inside without a key				
		Doors must swing outward				
	(d)	Each fence around a compressor station must have (at least) 2 gates or other facilities for emergency exit				
		Each gate located within 200 ft of any compressor plant building must open outward				
		When occupied, the door must be opened from the inside without a key				
	(e)	Does the equipment and wiring within compressor stations conform to the National Electric Code, ANSI/NFPA 70?				
.165 (	(a)	If applicable, are there liquid separator(s) on the intake to the compressors?				
	(b)	Do the liquid separators have a manual means of removing liquids?				
		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?				
.167	(a)	ESD system must:		-		
		- Discharge blowdown gas to a safe location				
		- Block and blowdown the gas in the station				
		<ul> <li>Shut down gas compressing equipment, gas fires, electrical facilities in compressor building and near gas headers</li> </ul>				
		- Maintain necessary electrical circuits for emergency lighting and circuits needed to protect equipment from damage				
		ESD system must be operable from at least two locations, each of which is:				
		- Outside the gas area of the station				
		- Not more than 500 feet from the limits of the station				
		- ESD switches near emergency exits?				
	(b)	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?				
	(c)	Are ESDs on platforms designed to actuate automatically by				
		- For unattended compressor stations, when:				
		The gas pressure equals MAOP plus 15%?				

# Attachment 1

 
 Distribution Operator Compressor Station Inspection

 Unless otherwise noted, all code references are to 49CFR Part 192.
 S – Satisfactory
 U – Unsatisfactory
 N/A – Not Applicable

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

		<b>COMPRESSOR STATIONS INSPECTION (Field)</b>	S	II	N/A	
		(Note: Facilities may be "Grandfathered")	3	U	1 <b>1</b> /A	IV/C
		An uncontrolled fire occurs on the platform?				
		- For compressor station in a building, when		•		
		An uncontrolled fire occurs in the building?				
		<ul> <li>Gas in air reaches 50% or more of LEL in a building with a source of ignition (facility conforming to NEC Class 1, Group D is not a source of ignition)?</li> </ul>				
.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.				
	(b)	Do the compressor station prime movers (other than electrical movers) have over-speed shutdown?				
	(c)	Do the compressor units alarm or shutdown in the event of inadequate cooling or lubrication of the unit(s)?				
	(d)	Are the gas compressor units equipped to automatically stop fuel flow and vent the engine if the engine is stopped for any reason?				
	(e)	Are the mufflers equipped with vents to vent any trapped gas?				
.173		Is each compressor station building adequately ventilated?				
.457		Is all buried piping cathodically protected?				
.481		Atmospheric corrosion of aboveground facilities				
.603		Does the operator have procedures for the start-up and shut-down of the station and/or compressor units?				
		Are facility maps current/up-to-date?				
.615		Emergency Plan for the station on site?				
.619		Review pressure recording charts and/or SCADA				
.707		Markers				
.731		Overpressure protection – reliefs or shutdowns				
.735		Are combustible materials in quantities exceeding normal daily usage, stored a safe distance from the compressor building?				
		Are aboveground oil or gasoline storage tanks protected in accordance with NFPA standard No. 30?				
.736		Gas detection – location				

**Comments:** 

	COMPRESSOR STATION O&M PERFORMANCE AND RECORDS				N/A	N/C
.709	.731(a)	Compressor Station Relief Devices (1 per yr/15 months)				
	.731(c)	Compressor Station Emergency Shutdown (1 per yr/15 months)				
	.736(c)	Compressor Stations – Detection and Alarms (Performance Test)				

# Recent PHMSA Advisory Bulletins (Last 2 years)

Leave this list with the operator.

<u>Number</u>	<u>Date</u>	Subject
ADB-06-01	January 17, 2006	Pipeline Safety: Notice to Operators of Natural Gas and Hazardous Liquid Pipelines To Integrate Operator Qualification Regulations into Excavation Activities
ADB-06-02 ADB-06-03	June 16, 2006 November 22, 2006	Submission of Public Awareness Programs for Review
ADB-06-04	December 28, 2006	Construction-Related Excavation Activities Commence Near the Pipelines Pipeline Safety: Lessons Learned From a Security Breach at a Liquefied Natural Gas Facility
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-08-02 ADB-08-03	February 28, 2008 March 10, 2008	Identifying Issues with Mechanical Couplings that Could Lead to Failure Dangers of Abnormal Snow and Ice Build-Up on Gas Distribution Systems

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