Compliance Inspections of Natural Gas Systems

PHMSA

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

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Pipeline and Hazardous Materials Safety Administration

Safety Regulations Applicable to Natural Gas Systems

- Who are these people and why are they calling me?
- Where do they get their authority?

Safety Regulations Applicable to Natural Gas Systems

- The Minimum Federal Safety Standards Applicable to the Transportation of Natural Gas and for Pipeline Facilities Used for this Transportation, Are Found in Part 192, Title 49, of the Code of Federal Regulations.

Safety Regulations Applicable to Natural Gas Systems

- Authority: Natural Gas Pipeline Act of 1968 (49 U.S.C. sec. 1671 et seq.)
- Re-Authorized by the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 (PIPES)

Part 190 Regulatory Authority

§190.203 Inspections and Investigations.

(a) Officers, employees, or agents authorized by the Associate Administrator for Pipeline Safety, PHMSA, upon presenting appropriate credentials, are authorized to enter upon, inspect, and examine, at reasonable times and in a reasonable manner, the records and properties of persons to the extent such records and properties are relevant to determining the compliance of such persons with the requirements of 49 U.S.C. 60101 et seq., or regulations, or orders issued there under.

Part 190 Regulatory Authority

§190.203 Inspections and Investigations.

(b) Inspections are ordinarily conducted pursuant to one of the following:

(1) Routine scheduling by the Regional Director of the Region in which the facility is located;

(2) A complaint received from a member of the public;

(3) Information obtained from a previous inspection;

(4) Report from a State agency participating in the Federal Program under 49 U.S.C. 60105;

(5) Pipeline accident or incident; or

(6) Whenever deemed appropriate by the Administrator, PHMSA or his designee.

How Do I Prepare for an Inspection?

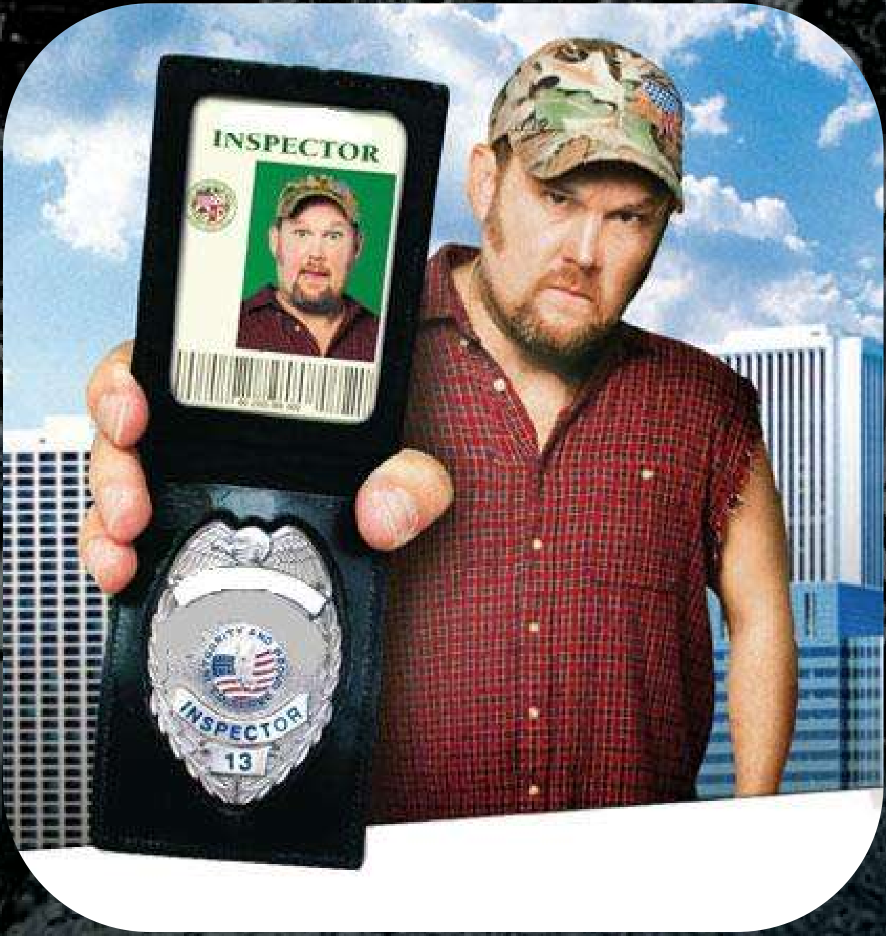
What do I do?
Where do I begin?
What do I look for?
What's the inspector going to look for?

What Type of Inspector Will I Get?

What an inspector will focus on may vary depending on their personality, work background, or recent industry events.

Let's look at a few misconceptions about inspectors.

Different Types of Inspectors



Different Types of Inspectors

Different Types of Inspectors

Where Do I Begin?

- Think like an inspector.
  - Think about code requirements and not just company requirements.
  - Make sure you have current operator name, operator official, address, and contact information.
  - Make sure you have a complete, up-to-date operations and maintenance manual.
    - Does the manual have the right company information?
    - Does the manual have procedures and processes to instruct someone how to safely perform operations and maintenance tasks your system, and do all employees have access to it?
    - Does the manual have procedures for handling emergencies?
      - Emergency response procedures.
      - Actions directed toward people first.

Where Do I Begin?

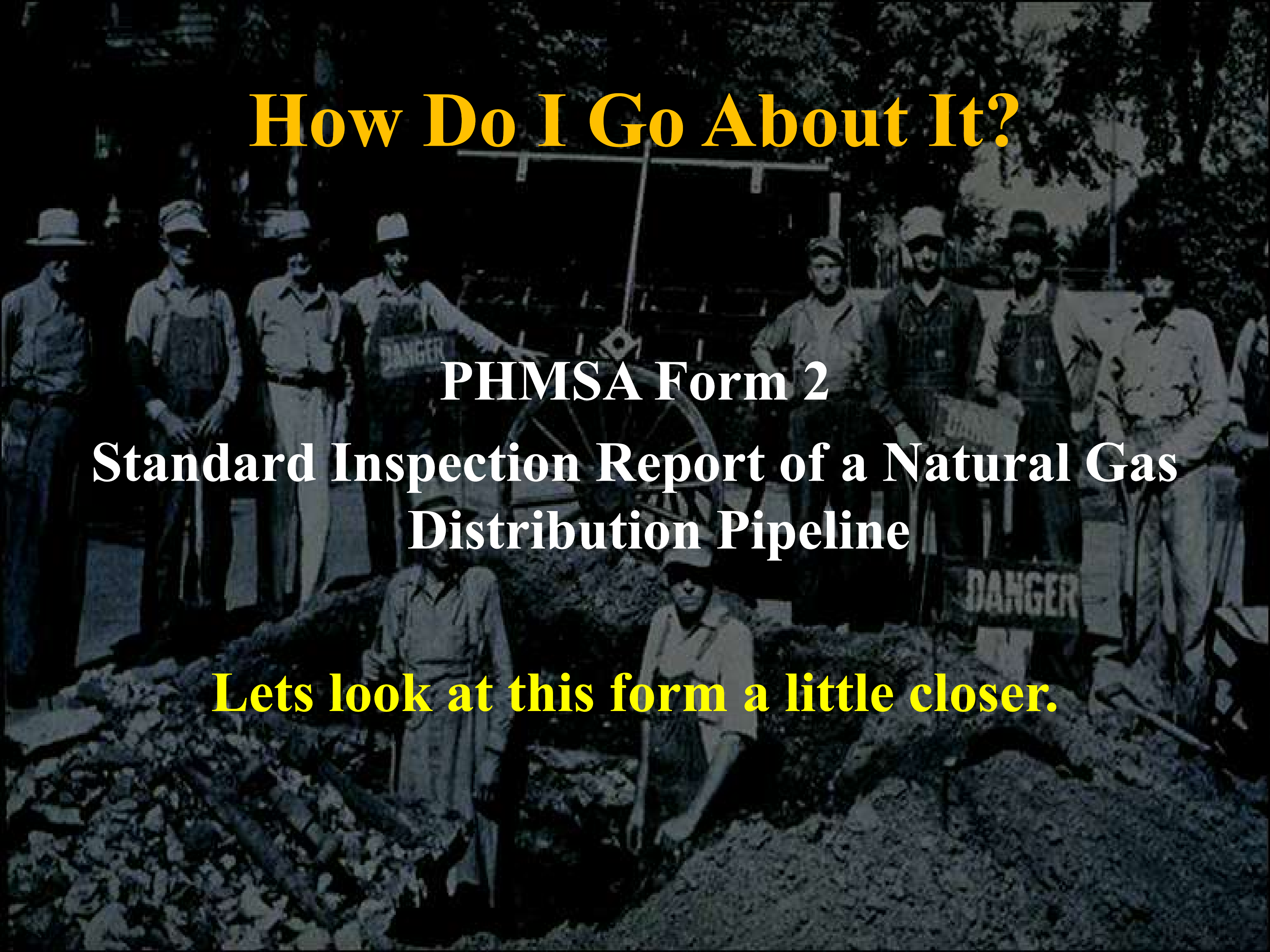
- Think like an inspector.
  - Make sure you have a complete and up-to-date operations and maintenance manual. (Continued)
    - Does your manual have procedures for reporting accidents / incidents and safety related conditions?
  - Make sure you have a complete and up-to-date damage prevention plan.
  - Make sure you have a complete and up-to-date public awareness plan.
    - Does your plan meet the requirements of API Standard 1162?
  - Make sure you have an up-to-date operator qualification plan.
  - Make sure you have an up-to-date drug and alcohol plan.

Where Do I Begin?

- Think like an inspector.
  - Make sure you have all of the records required by the code for your system.
  - Make sure company records contain all code required information for your system.
  - Make sure records are complete and up-to-date.
    - What work was performed? (New Const., Repair, O&M Task)
    - Who performed the work? (Company or Contractor) (OQ)
    - When was the work performed? (Date & Time)
    - Where was the work performed? (System, Line Segment, Station)

How Do I Go About It?

- Use the tools and inspector will use.
  - Use a current and up-to-date code book.
    - Some code books are only updated once a year and are out of date when they are printed.
    - Download the most current code book from the PHMSA website.
  - Use a federal inspection report sheet.
    - You can download a copy of any of the federal inspection sheets from the PHMSA website.
    - Standard, Specialized, Accident, and IMP inspection sheets are all available on the website.



How Do I Go About It?

PHMSA Form 2

Standard Inspection Report of a Natural Gas Distribution Pipeline

Lets look at this form a little closer.

STANDARD INSPECTION REPORT OF A GAS DISTRIBUTION OPERATOR

Name of Operator:		
OP ID No. (1)		Unit ID No. (1)
HQ Address:		System/Unit Name & Address: (1)
Co. Official: Phone No.: Fax No.: Emergency Phone No.:		Activity Record ID No.: Phone No.: Fax No.: Emergency Phone No.:

Persons Interviewed	Title	Phone No.

PHMSA Representative(s) (1)	Inspection Date(s) (1)
Company System Maps (Copies for Region Files):	

Unit Description

Portion of Unit Inspected: (1)

GAS SYSTEM OPERATIONS			
Gas Supplier		**Date:**	
Unaccounted for Gas:		**Services:**	*Residential* / *Commercial* / *Industrial* / *Other*

Operating Pressure(s):	**MAOP (Within last year)**	**Actual Operating Pressure** (At time of Inspection)
Feeder:		
Town:		
Other:		
Does the operator have any transmission pipelines?		
For compressor station inspections, use Attachment 4.		

49CFR PART 191

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

49CFR PART 192

.13(c)	CUSTOMER AND EFV INSTALLATION NOTIFICATION PROCEDURES		S	U	N/A	N/C
	.16	Procedures for notifying new customers, within **90 days**, 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				

.605(a)	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 emergency proced. under §192.615(a)(3) specifically apply to these reports.				

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

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

.605(a)	DAMAGE PREVENTION PROGRAM PROCEDURES		S	U	N/A	N/C
	.614(c)	Participation in a qualified one-call program, or if available, a company program that complies with the following:				
		(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				

.615	EMERGENCY PROCEDURES		S	U	N/A	N/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				

.605(a)	MAOP PROCEDURES	S	U	N/A	N/C
	.619 Establishing **MAOP** so that it is commensurate with the class location				
	MAOP cannot exceed the lowest of the following				
	(a)(1) Design pressure of the weakest element				
	(a)(2) Test pressure divided by applicable factor				

.605(a)	MAOP PROCEDURES	S	U	N/A	N/C
	(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.				
	(a)(4) Maximum safe pressure determined by operator.				
	(b) Overpressure protective devices must be installed if .619(a)(4) is applicable				
	(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 Note: New PA-11 design criteria is incorporated into 192.121 & .123, (Final Rule Pub. 24 December, 2008)				
	.623 Max./Min. Allowable Operating Pressure - Low Pressure Distribution Systems				

Table in (a)(3):

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 is later.	5 years preceding applicable date in second column.
All other pipelines.	July 1, 1970.	July 1, 1965.

.605(b)	DISTRIBUTION SYSTEM PATROLLING & LEAKAGE SURVEY PROCEDURES	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 4½ months, but at least four times each calendar year; and				
(b)(2)	Outside business districts at intervals not exceeding 7½ 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.				

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

(.739(b) 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

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

.605(b)	PREVENTION of ACCIDENTAL IGNITION PROCEDURES		S	U	N/A	N/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				

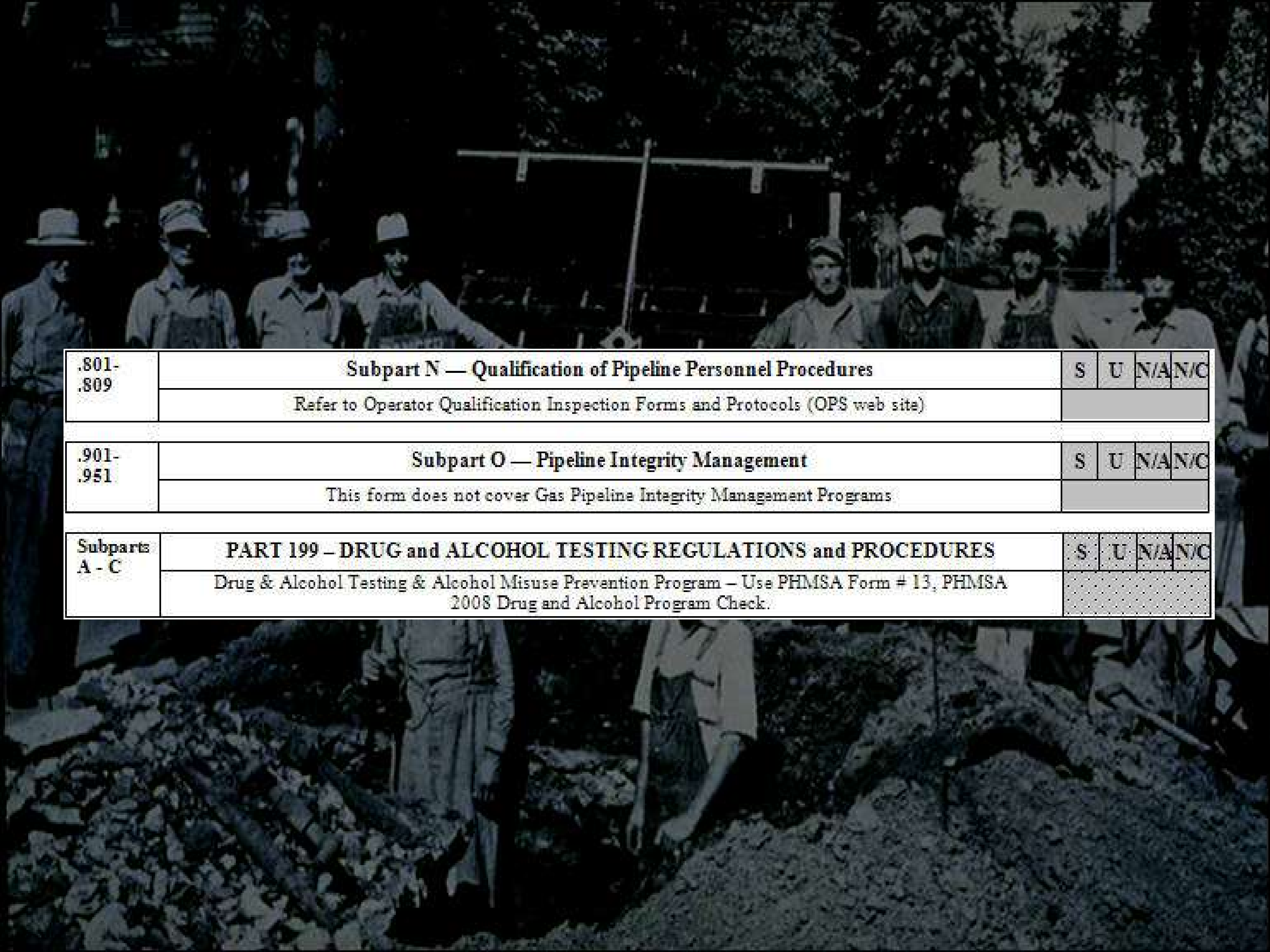
13(c)		WELDING AND WELD DEFECT REPAIR/REMOVAL PROCEDURES	S	U	N/A	N/C
	.227	(a) Welders must be qualified by **Section 6 of API 1104** (19th ed 1999, 10/31/01 errata) or **Section IX of ASME Boiler and Pressure Code** (2004 ed. Including addenda through July 1, 2005) See exception in .227(b).				
		(b) Welders may be qualified under **section I of Appendix C** 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 **6 months**				
		(c) A welder qualified under .227(a)–				
	.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 **7½ months** but at least **twice per year** 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	(a) Visual inspection must be conducted by an individual qualified by appropriate training and experience to ensure:				
		(1) Compliance with the welding procedure				
		(2) Weld is acceptable in accordance with **Section 9 of API 1104**				
		(b) Welds on pipelines to be **operated at 20% or more of SMYS** must be nondestructively tested in accordance with **192.243** except welds that are visually inspected and approved by a qualified welding inspector if:				
		(1) The nominal pipe diameter is less than **6 inches**, 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				

.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				
		(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©**				
		(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				
		(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, **100%**				
		(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)**				
		(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) 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:				

.273(b)	JOINING of PIPELINE MATERIALS	S	U	N/A	N/C
	(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.				

.605(b)	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	(a) (b) For pipelines installed **after July 31, 1971**, buried segments must be externally coated and cathodically protected within **one year** after construction (see exceptions in code)				
		(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)				
	.457	(a) All effectively coated steel transmission pipelines installed prior to **August 1, 1971**, must be cathodically protected				
		(b) If installed **before August 1, 1971**, 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/2½ 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				



		S	U	N/A	N/C
.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)				

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

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

	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				
.801 - .809	Operator Qualification - Use PHMSA Form 15 Operator Qualification Field Inspection Protocol Form				

REGULATORY REPORTING PERFORMANCE AND RECORDS		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				

OPERATIONS and MAINTENANCE PERFORMANCE AND RECORDS			S	U	N/A	N/C
.517 (a)		Pressure Testing (operates at or above 100 psig) – **useful life of pipeline**				
.517 (b)		Pressure Testing (operates below 100 psig, service lines, plastic lines) – 5 years				
.603(b)	.605(a)	Procedural Manual Review – Operations and Maintenance (**1 per yr/15 months**)				
	.605(b)(3)	Availability of construction records, maps, operating history to operating personnel				
	.605(b)(8)	Periodic review of personnel work – effectiveness of normal O&M procedures				
	.605(c)(4)	Periodic review of personnel work – effectiveness of abnormal operation procedures				
.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 effectiveness of training				
	.615(b)(3)	Employee Emergency activity review, determine if procedures were followed.				
	.615(c)	Liaison Program with Public Officials				
	.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:				
	.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.				

API RP 1162 Baseline* Recommended Message Deliveries	
Stakeholder Audience (Natural Gas Transmission Line Operators)	**Baseline Message Frequency (starting effective date of Plan)**
Residents Along Right-of-Way and Places of Congregation	2 years
Emergency Officials	Annual
Public Officials	3 years
Excavator and Contractors	Annual
One-Call Centers	As required of One-Call Center
Stakeholder Audience (Gathering Line Operators)	**Baseline Message Frequency (starting from effective date of Plan)**
Residents and Places of Congregation	Annual
Emergency Officials	Annual
Public Officials	3 years
Excavators and Contractors	Annual
One-Call Centers	As required of One-Call Center
Stakeholder Audience (LDCs)	**Baseline Message Frequency (starting from effective date of Plan)**
Residents Along Local Distribution System	Annual
LDC Customers	Twice annually
Emergency Officials	Annual
Public Officials	3 years
Excavator and Contractors	Annual
One-Call Centers	As required of One-Call Center

* Refer to API RP 1162 for additional requirements, including general program recommendations, supplemental requirements, recordkeeping, program evaluation, etc.

		OPERATIONS and MAINTENANCE PERFORMANCE AND RECORDS	S	U	N/A	N/C
	.616(j)	Operators of a master meter or petroleum gas systems - public awareness messages **2 times annually**: (1) A description of the purpose and reliability of the pipeline; (2) An overview of the hazards of the pipeline and prevention measures used; (3) Information about damage prevention; (4) How to recognize and respond to a leak; and (5) How to get additional information.				
.517		Pressure Testing				
.709	.619 .621 .623 Maximum Allowable Operating Pressure (**MAOP**) Note: New PA-11 design criteria is incorporated into 192.121 & .123. (Final Rule Pub. 24 December, 2008)					
	.625	Odorization of Gas				
	.705	Patrolling (**Refer to Table Below**)				

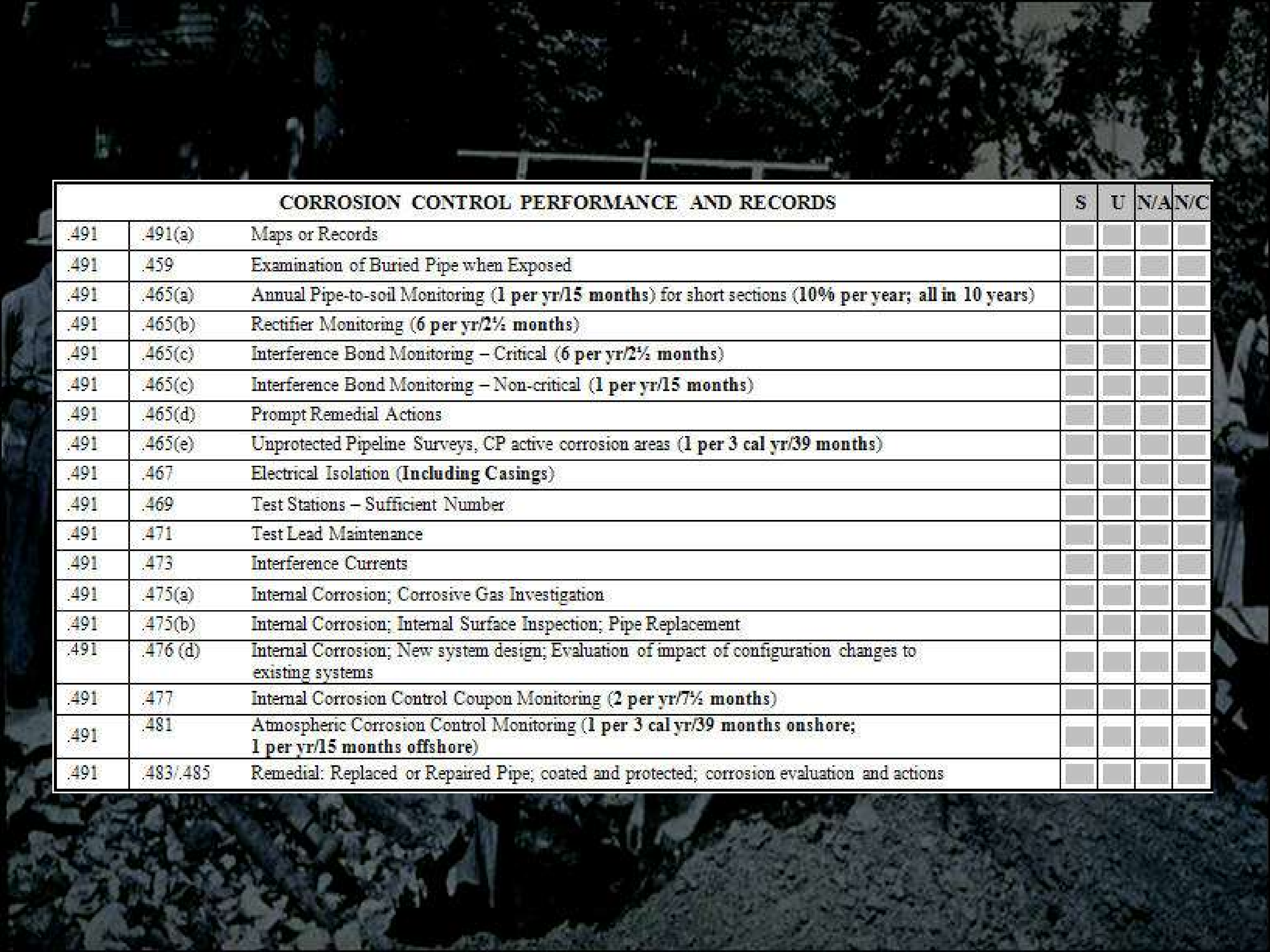
Class Location	At Highway and Railroad Crossings	At All Other Places
1 and 2	**2/yr (7½ months)**	**1/yr (15 months)**
3	**4/yr (4½ months)**	**2/yr (7½ months)**
4	**4/yr (4½ months)**	**4/yr (4½ months)**

			S	U	N/A	N/C
.709	.706	Leak Surveys (**Refer to Table Below**)				

Class Location	Required	Not Exceed
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.

			S	U	N/A	N/C
.603(b)	.721(b)(1)	Patrolling Business District (**4 per yr/4½ months**)				
	.721(b)(2)	Patrolling Outside Business District (**2 per yr/7½ months**)				
	.723(b)(1)	Leakage Survey – business District (**1 per yr/15 months**)				
	.723(b)(2)	Leakage Survey				
		• Outside Business District (**5 years**)				
		• Cathodically unprotected distribution lines (**3 years**)				
	.725	Tests for reinstating service lines				
.603b/.727g	.727	Abandoned Pipelines; Underwater Facility Reports				
.709	.739	Pressure Limiting and Regulating Stations (**1 per yr/15 months**)				
	.743	Pressure Limiting and Regulator Stations – Capacity (**1 per yr/15 months**)				
	.745	Valve Maintenance Transmission Lines (**1 per yr/15 months**)				
.603(b)	.747	Valve Maintenance Distribution Lines (**1 per yr/15 months**)				
.709	.749	Vault Maintenance (**∃200 cubic feet**)(**1 per yr/15 months**)				



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/2½ months**)				
.491	.465(c)	Interference Bond Monitoring – Critical (**6 per yr/2½ 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/7½ 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				

Recent PHMSA Advisory Bulletins (Last 2 years)

Leave this list with the operator.

Number	Date	Subject
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

What Happens When the Inspection is Over?

- The inspector will generally have a meeting with the operator to close out the inspection.
- The inspector will go over their findings with the operator, and describe what is out of compliance with the code (if anything) and why.
- The inspector will let the operator know what they might expect as a result of the inspection; letter of concern, warning letter, or violation letter.

What Happens When the Inspection is Over?

- What the inspector lists as issues found in the audit may or may not be found in the final letter from the state program manager or PHMSA regional director.
- The inspector is a fact finder and will make recommendations to their directors.
- The enforcement authority lies with the state program manager or PHMSA regional director, and that's who will send the letter.

Be an Informed Operator

Other Forms

- Operator Annual Report Forms
- Operator Incident Report Forms
- Incident Investigation Inspection Forms
- Operator Qualification Inspection Forms
- Drug and Alcohol Program Inspection Forms
- Integrity Management Inspection Forms
- Construction Inspection Forms

Information Websites

PHMSA Training and Qualification

http://www.phmsa.dot.gov/pipeline/tq

PHMSA Pipeline Safety Regulations

http://www.phmsa.dot.gov/pipeline/tq/regs

PHMSA Pipeline Safety Forms

http://www.phmsa.dot.gov/pipeline/library/forms

Remember,
We're with the Government
And We're Here to Help!