

GPTC GUIDE FOR GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEMS

2003 EDITON

ADDENDUM NO. 11, April, 2008

The changes in this addendum are marked by wide vertical lines inserted to the left of modified text, overwriting the left border of most tables, and use of a block symbol (■) where needed. The Federal Regulations were changed by one amendment action that affected 10 sections of the Guide. Thirteen (13) transactions by GPTC affected 20 sections of the Guide.

Editorial updates include application of the Editorial Guidelines, updating reference titles, adjustments to page numbering, and adjustment of text on pages. While only significant editorial updates are marked, all affected pages carry the current addendum footnote. Editorial updates affected 18 sections of the Guide.

The following table shows the affected sections, the pages to be removed, and their replacement pages.

FS Amendment - Amdt. Number
New or Updated GM - TR Number
GM Under Review - GMUR
Editorial Update – EU

Guide Section	Reason For Change	Pages to be Removed	Replacement Pages
Title Page	EU	i/ii	i/ii
Contents	EU	iii/iv, ix/x	iii/iv, ix/x
Historical Reconstruction of Part 191	RIN 2137-AE29	xvii/xviii	xvii/xviii
Historical Record of Amdts to Part 191	RIN 2137-AE29	xxi/xxii	xxi/xxii
Historical Reconstruction of Part 192	RIN 2137-AE29	xxiii/xxiv, xxix/xxx, xxx(a)/xxx(b)	xxiii/xxiv, xxix/xxx, xxx(a)/xxx(b)
Historical Record of Amdts to Part 192	RIN 2137-AE29	xlix/l	xlix/l
GPTC Membership	EU	li/lii thru lvii/lviii	li/lii thru lvii/lviii
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191.23	EU	9/10	9/10
191.27	RIN 2137-AE29		
Subpart A 192.3	EU, TR 04-41, TR 06-21, TR 07-21	11/12,15/16 thru 19/20	11/12,15/16 thru 19/20
192.7	RIN 2137-AE29	21/22, 25/26	21/22, 25/26
192.11	TR 03-16	28(c)/28(d) thru 28(g)/28(h)	28(c)/28(d) thru 28(g)/28(h)
Subpart F 192.281	TR 03-16	99/100	99/100
Subpart G 192.305	TR 03-16	109/110	109/110
Subpart I 192.457	EU	147/148, 149/150	147/148, 149/150
192.459	TR 03-16		
192.475	TR 07-02, TR 07-03	159/160	159/160
Subpart L 192.605	EU, TR 03-16	187/188 thru 197(b)/198, 201/202	187/188 thru 197(b)/198, 201/202
192.611	EU, TR 04-21		
192.614	EU, TR 03-16, TR 07-20		
192.617	TR 03-16	213/214	213/214
Subpart M 192.727	RIN 2137-AE29	237/238, 239/240	237/238, 239/240
192.739	EU, TR 03-16	243/244 thru 247/248	243/244 thru 247/248
192.741	EU		
192.743	EU		
Subpart O 192.913	TR 04-38	262(s)/262(t)	262(s)/262(t)
192.919	TR 04-41	262(w)/262(x)	262(w)/262(w-1) thru 262(w-4)/262(x)
192.939	TR 04-51	262(ao)/262(ap) thru 262(au)/262(av)	262(ao)/262(ap) thru 262(av-1)/262(av-2)
192.945	EU		
192.949	EU, RIN 2137-AE29		
192.951	RIN 2137-AE29, TR 07-15		
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GMA G-192-11A	EU, TR 03-16	375/376	375/376
GMA G-192-12	EU, TR 03-16	387/388, 389/390	387/388, 389/390
GMA G-192-13	EU, TR 06-08, TR 06-28	391/392, 393/394	391/392, 393/394

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PLEASE NOTE

Addenda to this Guide will also be issued in loose-leaf format so that users will be able to keep the Guide up-to-date by replacing the pages that have been revised with the new pages. It is advisable, however, that pages which have been revised be retained so that the chronological development of the Federal Regulations and the Guide is maintained.

CAUTION

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EDITORIAL NOTES FOR THE HISTORICAL RECONSTRUCTION OF PARTS 191 AND 192

Part 191 became effective on February 9, 1970. Part 192 became effective on November 12, 1970. Subsequent amendments have been issued with some adding new sections and some amending pre-existing sections.

The date following the text listing (i.e., Section heading) of this Guide is the effective date of the latest amendment (*if any*).

To aid the user in reconstructing the history of a particular section, the user is advised that the complete text of Parts 191 and 192 as originally issued, plus all amendments through Amdts. 191-15 and 192-93, are contained in AGA X69804, "Historical Collection of Natural Gas Pipeline Safety Regulations."

Additionally, to aid the user, the following tabulations of amendments are provided.

HISTORICAL RECONSTRUCTION OF PART 191 (Complete through RIN 2137-AE29)

Part 191 Section	Effective Date of Original Version if other than 2/09/70	Amendments (if any)
191.1		191-5, 191-6, 191-11, 191-12, 191-15, RIN 2137-AD77
191.3		191-5, 191-10, 191-12, RIN 2137-AD43, RIN 2137-AD77
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191.23	09/29/88	191-6, 191-14
191.25	09/29/88	191-6, 191-7, 191-8, 191-10
191.27	01/06/92	191-9, 191-14, RIN 2137-AD77, RIN 2137-AE29

Reserved

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Amdt 191-	Subject	Vol FR Pg#	Published Date	Docket No.	Effective Date	Affected Sections 191.
13	Periodic Updates*	63 FR 7721	02/17/98	RSPA 97-2251	05/04/98	21
13	DFR Confirmation	63 FR 38757	07/20/98	RSPA 97-2251	05/04/98	Confirmation Date
14	Metric Equivalents	63 FR 37500	07/13/98	PS-153	07/13/98	23, 27
--	Revision; Definition of Administrator	68 FR 11748	03/12/03	RIN 2137-AD43	03/12/03	3
15	Producer - Operated Outer Continental Shelf Natural Gas and Hazardous Liquid Pipelines that Cross Directly Into State Waters	68 FR 46109	08/05/03	RSPA 99-6132	09/04/03	1
16	Periodic Updates	69 FR 32886	06/14/04	RSPA 99-6106	07/14/04	7
--	Agency Reorganization	70 FR 11135	03/08/05	RIN 2137-AD77	03/08/05	1, 3, 7, 27
--	Administrative Procedures, Address Updates, and Technical Amendments*	73 FR 16562	03/28/08	RIN 2137-AE29	04/28/08	7, 27
* Issued as a Direct Final Rule (DFR) or Interim Final Rule.						

Reserved

HISTORICAL RECONSTRUCTION OF PART 192

(Complete through Amendment RIN 2137-AE29)

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SUBPART A – GENERAL	192.1		192-27, 192-67, 192-78, 192-81, 192-92, RIN 2137-AD77, 192-102, 192-103
	192.3		192-13, 192-27, 192-58, 192-67, 192-72 + Ext., 192-78, 192-81, 192-85, 192-89, RIN 2137-AD43, 192-93, 192-94, 192-98, RIN 2137-AD77
	192.5		192-27, 192-56, 192-78, 192-85
	192.7		192-37, 192-51, 192-68, 192-78, 192-94, RIN 2137-AD77, 192-99, 192-102, 192-103, RIN 2137-AE29
	192.8	04/14/06	192-102
	192.9		192-72 + Ext., 192-95 Corr., 192-102
	192.10	03/19/98	192-81, RIN 2137-AD77
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	[192.17]	01/01/71	192-1, 192-27A Ext., 192-38 (removed)
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	192.59		192-19, 192-58
	192.61		192-62 (removed and reserved)
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	192.105		192-47, 192-85
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	192.119		192-62 (removed and reserved)
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SUBPART O – PIPELINE INTEGRITY MANAGEMENT	Header	2/14/04	192-95, 192-103
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	192.907	2/14/04	192-95, 192-103
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	192.911	2/14/04	192-95, 192-103
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	App. B		192-3, 192-12, 192-19, 192-22, 192-32, 192-37, 192-41, 192-51, 192-61, 192-62, 192-65, 192-68, 192-76, 192-85, 192-94, 192-103
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(Continued)

Amdt 192-	Subject	Vol FR Pg#	Published Date	Docket No.	Effective Date	Affected Sections 192.
102	Gas Gathering Line Definition	71 FR 13289	03/15/06	RIN 2137- AB15	04/14/06	1, 7, 8, 9, 13, 452, 619
103	Update of Regulatory References to Technical Standards	71 FR 33402	06/09/06	RIN 2138- AD68	07/10/06	7, 121, 123, 145, 225, 227, 229, 241, 283, 616, 619, Header before 761, Subpart O Header, 903, 907, 911, 913, 917, 921, 923, 925, 927, 929, 931, 933, 935, 937, 939, 945, App. B
103 [Amended]	Update of Regulatory References to Technical Standards [Amending that published [06/09/06]	72 FR 4655	02/01/07	RIN 2137- AD68	03/05/07	1, 7, 227, 727, 903, 949, 951
[No Amdt No.]	Design and Construction Standards to Reduce Internal Corrosion in Gas Transmission Pipelines	72 FR 20055	04/23/07	RIN 2137- AE09	05/23/07	143, 476

HISTORICAL RECORD OF AMENDMENTS TO PART 192

(Continued)

Amdt 192-	Subject	Vol FR Pg#	Published Date	Docket No.	Effective Date	Affected Sections 192.
104	Integrity Management Program Modifications and Clarifications	72 FR 39012	07/17/07	RIN 2137- AE07	08/16/07	933
[No Amdt No.]	Applicability of Public Awareness Regulations to Certain Gas Distribution Operators	72 FR 70808	12/13/07	RIN 2137- AE17	01/14/08	616
[No Amdt No.]	Administrative Procedures, Address Updates, and Technical Amendments*	73 FR 16562	03/28/08	RIN 2137- AE29	04/28/08	7, 727, 949, 951
* Issued as a Direct Final Rule (DFR) or Interim Final Rule.						

GAS PIPING TECHNOLOGY COMMITTEE MEMBERSHIP LIST

Abbreviations: Chairperson: Chair First Vice Chairperson: 1 st V Chair Second Vice Chairperson: 2 nd V Chair Secretary: Sec Damage Prevention - Emergency Response: DP/ER Operation and Maintenance: O&M	Main Body	DIVISIONS			TASK GROUPS					SECTIONS			
		Distribution	Manufacturers	Transmission	Design	DP/ER	IMP/Corrosion	O&M/OQ	Plastic Pipe	Editorial	Executive	Liaison	Regulations
Abraham, Richard A. Marathon Pipe Line LLC, Findlay, OH	X	X				X				X			
Affonso, Joaquin J. Consumers Energy, Jackson, MI	X			X		X	X						
Alexander, Thomas D. Willbros Engineers, Inc., Tulsa, OK	X			X	X								
Arita, Richard T. Pacific Gas & Electric Co., Walnut Creek, CA		X			X			X					
Armstrong, Glen F. EN Engineering, Woodridge, IL	X	Chair				X	X		X		X		X
Ashcraft, Nicholas D. Kiefner & Associates, Worthington, OH		X					X						
Barkei, David E. We Engeries, Milwaukee, WI		X			X		X						
Bateman, Stephen Long Beach Energy, Long Beach, CA		X											
Beaver, Brett Advantica, Mechanicsburg, PA		X			X		X						
Becken, Robert C. Energy Experts International, Pleasant Hill, CA	X			X	X			X					
Benedict, Andrew G. Opvantek, Inc., Newtown, PA		X						X					
Bennett, Frank M. PPL Gas Utilities Corp., Lancaster, PA		X				X	X						

GAS PIPING TECHNOLOGY COMMITTEE MEMBERSHIP LIST

(Continued)

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Bervers, Bruce S. Williams Gas Pipeline, Houston, TX				X		X		X					
Blaney, Steven D. NY State Dept. of Public Service, Albany, NY	X	X				X	X			X			
Booth, Lloyd E. Telemark Solutions, Coppell, TX			X		X			X					
Boros, Stephen Plastics Pipe Institute, Irving, TX			X						X				
Borski, Lawrence W. Transcontinental Gas Pipe Line Corp., Houston, TX				X				X					
Breaux, David A. Broen, Inc., Birmingham, AL			X		X			X					
Brown, Charles E. NTH Consultants, Ltd., Lansing, MI		X				X		X					
Bull, David E. ViaData LP, Tobyhanna, PA	X	X				Sec		X					
Cabot, Paul W. American Gas Association, Washington, DC	Sec										Sec		
Cadorin, Robert J. TransCanada Corp., Troy, MI	X			Sec				X					

GAS PIPING TECHNOLOGY COMMITTEE MEMBERSHIP LIST

(Continued)

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		Distribution	Manufacturers	Transmission	Design	DP/ER	IMP/Corrosion	O&M/OQ	Plastic Pipe	Editorial	Executive	Liaison	Regulations
Cardin, Jeanne L. Southwest Gas Corp., Las Vegas, NV				X			X						
Carey, Willard S. Public Service Elec. & Gas Co., Newark, NJ	X	X				X		Chair			X		
Chin, John S. TransCanada Corp., Farmington Hills, MI	X			X	X	X	Chair				X		X
Clarke, Allan M. Spectra Energy Corp., Houston, TX				X	X	X	X						
Cody, Leo T. KeySpan Energy Delivery, Waltham, MA		X				X		X					
Craig, Jim M. McElroy Manufacturing, Inc., Tulsa, OK			X					X	X				
Del Buono, Amerigo J. Steel Forgings, Inc., League City, TX	X		X										
DeVore, James C. Consultant, Green Valley, AZ			X		X		X		X				
Dockweiler, Kenneth D. SourceGas Distribution LLC, Casper, WY	X			X		X		X					
Dolezal, Denise L. Metropolitan Utilities District, Omaha, NE		X			X		X						
Duncombe, Lauri Williams Gas Pipeline, Salt Lake City, UT				X	X		X						

GAS PIPING TECHNOLOGY COMMITTEE MEMBERSHIP LIST

(Continued)

	Main Body	DIVISIONS			TASK GROUPS					SECTIONS			
		Distribution	Manufacturers	Transmission	Design	DP/ER	IMP/Corrosion	O&M/OQ	Plastic Pipe	Editorial	Executive	Liaison	Regulations
Abbreviations: Chairperson: Chair First Vice Chairperson: 1 st V Chair Second Vice Chairperson: 2 nd V Chair Secretary: Sec Damage Prevention - Emergency Response: DP/ER Operation and Maintenance: O&M													
Erickson, John P. American Public Gas Association, Washington, DC		X						X					
Faulkenberry, Michael J. Avista Utilities Corp., Spokane, WA		X			X			X					
Fleet, F. Roy F. Roy Fleet, Inc., Westmont, IL	X			X		X				X			
Frantz, John H. Consultant, Philadelphia, PA	X										X	Chair	
Frederick, Victor M., III Utility Line Services, Conshohocken, PA		X						X	X				
Friend, Mary S. Columbia Gas Trmn. Corp., Charleston, WV	X			X		X		X					
Fuller, William R. Xcel Energy Inc., Denver, CO		X			X		X		X				
Galante, Julie CYCLA Corp., Springfield, VA		X					X						
Gilchrist, Hart Intermountain Gas Co., Boise, ID		X						X					
Goble, Gregory H. R. W. Lyall & Co., Corona, CA	X		X		X				X				
Groeber, Steve A. Philadelphia Gas Works, Philadelphia, PA		X				X		X	X	X			
Gunther, Karl M. NTSB, Washington, DC	X	X							X				

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GAS PIPING TECHNOLOGY COMMITTEE MEMBERSHIP LIST

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		Distribution	Manufacturers	Transmission	Design	DP/ER	IMP/Corrosion	O&M/OQ	Plastic Pipe	Editorial	Executive	Liaison	Regulations
Hansen, James P. Elster Perfection Corp., Madison, OH			X				X						
Hart, Thomas L. NSTAR Electric & Gas Corp., Westwood, MA		X				X		X					
Hazelden, Glyn Hazelden Group, Oak Park, IL		X				X		X					
Heintz, James R. UGI Utilities, Inc., Reading, PA	1 st V Chair										Chair		
Henningsgaard, David R. CenterPoint Energy, Minneapolis, MN		X			X	X		X					
Henry, Jill A. Ohio PUC, Columbus, OH	X	X				X			X				
Hotinger, James M. VA State Corp. Comm., Richmond, VA		X				X	X						
Humes, Dennis W. Mueller Co.- Gas Products Div., Decatur, IL	X		X										X
Hurbanek, Stephen F. Pennsylvania PUC, Harrisburg, PA		X				X							
Huriaux, Richard D. PHMSA - OPS, Washington, DC	X			X			X						
Kottwitz, John D. MO Public Service Comm., Jefferson City, MO	X	X				Chair		X		X	X		

GAS PIPING TECHNOLOGY COMMITTEE MEMBERSHIP LIST

(Continued)

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Krummert, Lawrence M. Columbia Gas of PA, Inc., New Castle, PA		X						X					
Lathrap, Philip A. Consultant, Lafayette, CA	X	X			X	X		X					
Lewis, Raymond D. Rosen USA, Houston, TX				X			X						
Loker, Jon O. Pipeline Safety Consultant, Saint Albans, WV	X			X						Chair	X		
Lomax, George S. Heath Consultants Inc., Montoursville, PA	X		X			X		X					
Lopez, Paul El Paso Corp., Colorado Springs, CO				X				X					
Lueders, John D. DTE Energy - MichCon, Grand Rapids, MI		X				X		X					
Mackay-Smith, Seth UMAC Inc., Malvern, PA	X		X		X	X							
Marek, Marti Southwest Gas Corp., Las Vegas, NV	Chair										X		
McKenzie, James E. Atmos Energy Corp., Jackson, MS		X					X						
Miller, D. Lane Transportation Safety Inst., Oklahoma City, OK	X	X					X		X	Sec			
Modha, Kirit Iroquois Pipeline Operating Co., Shelton, CT				X			X						

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GAS PIPING TECHNOLOGY COMMITTEE MEMBERSHIP LIST

(Continued)

	Main Body	DIVISIONS			TASK GROUPS					SECTIONS			
		Distribution	Manufacturers	Transmission	Design	DP/ER	IMP/Corrosion	O&M/OQ	Plastic Pipe	Editorial	Executive	Liaison	Regulations
Abbreviations: Chairperson: Chair First Vice Chairperson: 1 st V Chair Second Vice Chairperson: 2 nd V Chair Secretary: Sec Damage Prevention - Emergency Response: DP/ER Operation and Maintenance: O&M													
Naper, Robert C. KeySpan Energy Delivery, Waltham, MA	X	X				X							
Nichols, Danny Energy Transfer Company, Houston, TX				X		X	X						
Oleksa, Paul E. Oleksa & Assoc., Akron, OH	X	X			X		X			X			
Palermo, Eugene F. Palermo Plastics Pipe Consulting, Friendsville, TN	X		X		X				X				
Peters, Kenneth C. El Paso Energy, Pipeline Group, Birmingham, AL	X			Chair		X		Sec			X		
Pioli, Christopher A. Jacobs Consultancy, Pasadena, CA		X			X	X	X						
Quezada, Leticia Nicor Gas, Naperville, IL	X	X				X			X		X		Chair
Reynolds, Donald Lee NiSource Corporate Services, Columbus, OH	X	X			Chair		X				X		
Schmidt, Robert A. Hackney Ladish Inc., Russellville, AR	X		Chair		X						X		
Scott, Edward W. Ameren Illinois Utilities, Pawnee, IL		X					X		X				
Seamands, Patrick A. Laclede Gas Co., Saint Louis, MO		X				X			X	X			
Sher, Philip CT Dept. Public Utility Control, New Britain, CT	2 nd V Chair										X		

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GAS PIPING TECHNOLOGY COMMITTEE MEMBERSHIP LIST

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	Main Body	DIVISIONS			TASK GROUPS					SECTIONS			
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Abbreviations: Chairperson: Chair First Vice Chairperson: 1 st V Chair Second Vice Chairperson: 2 nd V Chair Secretary: Sec Damage Prevention - Emergency Response: DP/ER Operation and Maintenance: O&M													
Siedlecki, Walter AEGIS Insurance Services, Inc., East Rutherford, NJ	X	X						X					
Slagle, Richard Vectren Energy Delivery, Evansville, IN	X	Sec				X			Chair		X		
Sprenger, Roger W. San Diego Gas & Elec. Co., San Diego, CA		X				X		X					
Themig, Jerome S. Ameren Services Co., Pawnee, IL		X				X		X					
Torbin, Robert N. Cutting Edge Solutions LLC, Framingham, MA		X					X						
Troch, Steven J. Baltimore Gas & Electric Co., Baltimore, MD		X					X						
Ulanday, Alfredo S. Integrus Gas, Chicago, IL		X				X		X					
Veerapaneni, Ram DTE Energy – MichCon, Detroit, MI				X		X	X			X			
Vetter, Daniel J. GTI – Gas Technology Institute, Des Plaines, IL		X				X		X					
Volgstadt, Frank R. Volgstadt & Associates, Madison, OH	X		Sec						Sec				

§191.7

Addressee for written reports.

■ [Effective Date: 4-28-08]

Each written report required by this part must be made to Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, PHP-10, 1200 New Jersey Avenue SE, Washington, DC 20590. However, incident and annual reports for intrastate pipeline transportation subject to the jurisdiction of a state agency pursuant to a certification under section 5(a) of the Natural Gas Pipeline Safety Act of 1968 may be submitted in duplicate to that state agency if the regulations of that agency require submission of these reports and provide for further transmittal of one copy within 10 days of receipt for incident reports and not later than March 15 for annual reports to the Information Resources Manager. Safety-related condition reports required by §191.23 for intrastate pipeline transportation must be submitted concurrently to that state agency, and if that agency acts as an agent of the Secretary with respect to interstate transmission facilities, safety-related condition reports for these facilities must be submitted concurrently to that agency.

[Amdt. 191-3, 46 FR 37250, July 20, 1981; Amdt. 191-4, 47 FR 32719, July 29, 1982; Amdt. 191-5, 49 FR 18956, May 3, 1984; Amdt. 191-6, 53 FR 24942, July 1, 1988 with Amdt. 191-6 Correction, 53 FR 26560, July 13, 1988; Amdt. 191-16, 69 FR 32886, June 14, 2004; RIN 2137-AD77, 70 FR 11135, Mar. 8, 2005; RIN 2137-AE29, 73 FR 16562, Mar. 28, 2008]

GUIDE MATERIAL

No guide material necessary.

§191.9

Distribution system: Incident report.

[Effective Date: 6-4-84]

(a) Except as provided in paragraph(c) of this section, each operator of a distribution pipeline system shall submit Department of Transportation Form RSPA F 7100.1 as soon as practicable but not more than 30 days after detection of an incident required to be reported under §191.5.

(b) When additional relevant information is obtained after the report is submitted under paragraph (a) of this section, the operator shall make supplementary reports as deemed necessary with a clear reference by date and subject to the original report.

(c) The incident report required by this section need not be submitted with respect to master meter systems or LNG facilities.

[Amdt. 191-3, 46 FR 37250, July 20, 1981; Amdt. 191-5, 49 FR 18956, May 3, 1984]

GUIDE MATERIAL

See Guide Material Appendix G-191-2, Form PHMSA F 7100.1 and related instructions. Report forms can be downloaded from the OPS website at <http://ops.dot.gov/library/forms/forms.htm>. Additional state requirements may exist for intrastate facilities.

GUIDE MATERIAL

For the purpose of Safety-Related Condition Reports, "in-service facilities" are those that are pressurized with gas, regardless of flow conditions. Facilities that are not "in-service" are completely depressurized and isolated from all pressurized facilities by valves or physical separation.

See Guide Material Appendix G-191-6 for a chart useful in determining if reports must be filed.

§191.25

Filing safety-related condition reports.

[Effective Date: 4-26-96]

(a) Each report of a safety-related condition under §191.23(a) must be filed (received by the Associate Administrator, OPS) in writing within five working days (not including Saturday, Sunday, or Federal holidays) after the day a representative of the operator first determines that the condition exists, but not later than 10 working days after the day a representative of the operator discovers the condition. Separate conditions may be described in a single report if they are closely related. Reports may be transmitted by facsimile at (202) 366-7128.

(b) The report must be headed "Safety-Related Condition Report" and provide the following information:

- (1) Name and principal address of operator.
- (2) Date of report.
- (3) Name, job title, and business telephone number of person submitting the report.
- (4) Name, job title, and business telephone number of person who determined that the condition exists.
- (5) Date condition was discovered and date condition was first determined to exist.
- (6) Location of condition, with reference to the state (and town, city, or county) or offshore site, and as appropriate, nearest street address, offshore platform, survey station number, milepost, landmark, or name of pipeline.
- (7) Description of the condition, including circumstances leading to its discovery, any significant effects of the condition on safety, and the name of the commodity transported or stored.
- (8) The corrective action taken (including reduction of pressure or shutdown) before the report is submitted and the planned follow-up or future corrective action, including the anticipated schedule for starting and concluding such action.

[Issued by Amdt. 191-6, 53 FR 24942, July 1, 1988 with Amdt. 191-6 Correction, 53 FR 26560, July 13, 1988 and Amdt. 191-6 Correction, 53 FR 29800, Aug. 8, 1988; Amdt. 191-7, 54 FR 32342, Aug. 7, 1989; Amdt. 191-8, 54 FR 40878, Oct. 4, 1989; Amdt. 191-10, 61 FR 18512, Apr. 26, 1996]

GUIDE MATERIAL

(a) The preamble to Amendment 191-7 ("Interpretation and Statement of Policy Regarding Discovery of Safety-Related Conditions by Smart Pigs and Instructions to Personnel") states:

"Discovery of a potentially reportable condition occurs when an operator's representative has adequate information from which to conclude the probable existence of a reportable condition. An operator would have adequate information for each anomaly that is physically examined. Absent physical examination, discovery may occur after the data are calibrated if the "adequate information" test is met. However, the adequacy of the information that pig data provide about anomalous conditions is contingent on a concurrent indication from a number of factors from which an operator could conclude the probable existence of a reportable condition. Among these are the

sophistication of the pig being used, the reliability of the data, the accuracy of data interpretation, and any other factors known by the operator relative to the condition of the pipeline."

- (b) See Guide Material Appendix G-191-7 for a form useful for reporting a safety-related condition.
- (c) Additional state requirements may exist for intrastate facilities.

§191.27

Filing offshore pipeline condition reports.

■ [Effective Date: 4-28-08]

(a) Each operator shall, within 60 days after completion of the inspection of all its underwater pipelines subject to §192.612(a), report the following information:

- (1) Name and principal address of operator.
- (2) Date of report.
- (3) Name, job title, and business telephone number of person submitting the report.
- (4) Total length of pipeline inspected.
- (5) Length and date of installation of each exposed pipeline segment, and location, including, if available, the location according to the Minerals Management Service or state offshore area and block number tract.
- (6) Length and date of installation of each pipeline segment, if different from a pipeline segment identified under paragraph (a)(5) of this section, that is a hazard to navigation, and the location, including, if available, the location according to the Minerals Management Service or state offshore area and block number tract.

(b) The report shall be mailed to Pipeline and Hazardous Materials Safety Administration, Department of Transportation, PHP-10, 1200 New Jersey Avenue SE, Washington, DC 20590.

[Issued by Amdt. 191-9, 56 FR 63764, Dec. 5, 1991; Amdt. 191-14, 63 FR 37500, July 13, 1998; RIN 2137-AD77, 70 FR 11135, Mar. 8, 2005; RIN 2137-AE29, 73 FR 16562, Mar. 28, 2008]

GUIDE MATERIAL

No guide material necessary.

PART 192

MINIMUM FEDERAL SAFETY STANDARDS

Authority: 49 U.S.C. 5103, 60102, 60104, 60108, 60109, 60110, 60113, 60116, and 60118; and 49 CFR 1.53.
Source: 35 FR 13257, Aug. 19, 1970, unless otherwise noted.

SUBPART A GENERAL

§192.1

What is the scope of this part?

[Effective Date: 3-05-07]

(a) This part prescribes minimum safety requirements for pipeline facilities and the transportation of gas, including pipeline facilities and the transportation of gas within the limits of the outer continental shelf as that term is defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331).

(b) This part does not apply to—

(1) Offshore gathering of gas in State waters upstream from the outlet flange of each facility where hydrocarbons are produced or where produced hydrocarbons are first separated, dehydrated, or otherwise processed, whichever facility is farther downstream;

(2) Pipelines on the Outer Continental Shelf (OCS) that are producer-operated and cross into State waters without first connecting to a transporting operator's facility on the OCS, upstream (generally seaward) of the last valve on the last production facility on the OCS. Safety equipment protecting PHMSA-regulated pipeline segments is not excluded. Producing operators for those pipeline segments upstream of the last valve of the last production facility on the OCS may petition the Administrator, or designee, for approval to operate under PHMSA regulations governing pipeline design, construction, operation, and maintenance under 49 CFR 190.9;

(3) Pipelines on the Outer Continental Shelf upstream of the point at which operating responsibility transfers from a producing operator to a transporting operator;

(4) Onshore gathering of gas—

(i) Through a pipeline that operates at less than 0 psig (0 kPa);

(ii) Through a pipeline that is not a regulated onshore gathering line (as determined in §192.8); and

(iii) Within inlets of the Gulf of Mexico, except for the requirements in §192.612; or

(5) Any pipeline system that transports only petroleum gas or petroleum gas/air mixtures to—

(i) Fewer than 10 customers, if no portion of the system is located in a public place; or

(ii) A single customer, if the system is located entirely on the customer's premises (no matter if a portion of the system is located in a public place).

[Amdt. 192-27, 41 FR 34598, Aug. 16, 1976; Amdt. 192-67, 56 FR 63764, Dec. 5, 1991; Amdt. 192-78, 61 FR 28770, June 6, 1996 with Amdt. 192-78 Correction, 61 FR 30824, June 18, 1996; Amdt. 192-81, 62 FR 61692, Nov. 19, 1997 with Amdt. 192-81 Confirmation, 63 FR 12659, Mar. 16, 1998; Amdt. 192-92, 68 FR 46109, Aug. 5, 2003; RIN 2137-AD77, 70 FR 11135, Mar. 8, 2005; Amdt. 192-102, 71 FR 13289, Mar. 15, 2006; Amdt. 192-103, 72 FR 4655, Feb. 1, 2007]

GUIDE MATERIAL

This guide material is under review following Amendment 192-102.

- (a) The guide material presented in this Guide includes information and some acceptable methods to assist the operator in complying with the Minimum Federal Safety Standards. The recommendations contained in the Guide are based on sound engineering principles, developed by a committee balanced in accordance with accepted committee procedures, and must be applied by the use of sound and competent engineering judgment. The guide material is advisory in nature and should not restrict the operator from using other methods of complying. In addition, the operator is cautioned that the guide material may not be adequate under all conditions encountered.
- (b) While the GPTC Guide is intended principally to serve natural gas pipelines, it is a valuable reference for other pipelines covered by Part 192. The user is cautioned that the unique properties and characteristics associated with other gases (e.g., density, corrosivity, and temperature extremes) may require special engineering, operations, and maintenance considerations. Operators of petroleum gas distribution and master meter systems may benefit from information provided in the "Training Guide for Operators of Small LP Gas Systems" (also referred to as "Guidance Manual") available at http://ops.dot.gov/regs/small_lp/SmallLPGas.htm.
- (c) As used in the Guide, the terms Personnel, Employees, and Workers refer to operator employees and, unless specifically noted otherwise, include other personnel used by operators to perform Part 192 functions.
- (d) The operator is responsible for the work of a contractor performing tasks covered under Part 192. The operator should ensure that contract personnel are familiar with applicable procedures prior to the start of work.
- (e) A reference for hydrogen pipelines is OPS Report No. DOT.RSPA/DMT-10-85-1, "Safety Criteria for the Operation of Gaseous Hydrogen Pipelines," (Discontinued).
- (f) For offshore pipelines, responsibilities have been assigned to the Department of Transportation and the Department of the Interior in accordance with their Memorandum of Understanding dated December 10, 1996 (Implemented per Federal Register, Vol. 62, No. 223, November 19, 1997). See Guide Material Appendix G-192-19.
- (g) Additional state requirements may exist for intrastate facilities.

§192.3 Definitions.

[Effective Date: 5-6-05]

As used in this part:

Abandoned means permanently removed from service.

Administrator means the Administrator, Pipeline and Hazardous Materials Safety Administration or his or her delegate.

Customer meter means the meter that measures the transfer of gas from an operator to a consumer.

Distribution line means a pipeline other than a gathering or transmission line.

Exposed underwater pipeline means an underwater pipeline where the top of the pipe protrudes above the underwater natural bottom (as determined by recognized and generally accepted practices) in waters less than 15 feet (4.6 meters) deep, as measured from mean low water.

Gas means natural gas, flammable gas, or gas which is toxic or corrosive.

Gathering line means a pipeline that transports gas from a current production facility to a transmission line or main.

Gulf of Mexico and its inlets means the waters from the mean high water mark of the coast of the Gulf of Mexico and its inlets open to the sea (excluding rivers, tidal marshes, lakes, and canals).

Cast iron. The unqualified term cast iron applies to gray-cast iron that is a cast ferrous material in which a major part of the carbon content occurs as free carbon in the form of flakes interspersed through the metal.

Cold-expanded pipe is seamless or welded pipe which is formed and then, expanded in the pipe mill while cold, so that the circumference is permanently increased by at least 0.50 percent.

Continuous-welded pipe is furnace-welded pipe which has a longitudinal butt joint that is forge-welded by the mechanical pressure developed in rolling the hot-formed skelp through a set of round pass welding rolls. It is produced in continuous lengths from coiled skelp and subsequently cut into individual lengths. Typical specifications: ASTM A53, API Spec 5L. See also *Furnace-butt-welded pipe and Pipe manufacturing processes*.

Control piping is pipe, valves, and fittings used to interconnect air, gas, or hydraulically operated control apparatus.

Curb valve is a valve installed for the purpose of shutting off the gas supply to a building. It is installed below grade in a service line, at or near the property line. It is operated by use of a removable key or wrench, through a curb box or standpipe.

Customer meter is a device that measures gas delivered to a customer for consumption on its premises.

Deactivation (Inactivation) is the process of making the pipeline inactive.

District regulator station or district pressure regulating station is a pressure regulating station that controls pressure to a high- or low-pressure distribution main. It does not include pressure regulation whose sole function is to control pressure to a manifold serving multiple customers.

Double submerged-arc-welded pipe is a pipe having longitudinal or spiral butt joints. The joints are produced by at least two passes, including at least one each on the inside and on the outside of the pipe. Coalescence is produced by heating with an electric arc or arcs between the bare metal electrode or electrodes and the work. The welding is shielded by a blanket or granular, fusible material on the work. Pressure is not used and filler metal for the inside and outside welds is obtained from the electrode or electrodes. Typical specifications: ASTM A381, API Spec 5L. See also *Pipe manufacturing processes*.

Ductile iron (sometimes called nodular iron) is a cast ferrous material in which the free graphite present is in a spheroidal form rather than a flake form. The desirable properties of ductile iron are achieved by means of chemistry and a ferritizing heat treatment of the castings.

Electric-flash-welded pipe is pipe having a longitudinal butt joint wherein coalescence is produced, simultaneously over the entire area of abutting surfaces, by the heat obtained from resistance to the flow of electric current between the two surfaces, and by the application of pressure after heating is substantially completed. Flashing and upsetting are accompanied by the expulsion of metal from the joint. Typical specification: API Spec 5L. See also *Pipe manufacturing processes*.

Electric-fusion-welded pipe is pipe having a longitudinal butt joint wherein coalescence is produced in the preformed tube by manual or automatic electric-arc welding. The weld may be single or double and may be made with or without the use of filler metal. Typical specifications: ASTM A134, ASTM A139: Single or double weld is permitted with or without the use of filler metal. ASTM A671, ASTM A672, ASTM A691, and API Spec 5L: Requires both inside and outside welds and use of filler metal.

Spiral-welded pipe is also made by the electric-fusion-welded process with either a butt joint, a lap joint or a lock-seam joint. Typical specifications: ASTM A134, ASTM A139, and API Spec 5L: Butt joint. ASTM A211: Butt joint, lap joint, or lock-seam joint. See also *Pipe manufacturing processes*.

Electric-resistance-welded pipe is pipe, which has a longitudinal butt joint wherein coalescence, is produced by the application of pressure and by the heat obtained from the resistance of the pipe to the flow of an electric current in a circuit of which the pipe is a part. It is produced in individual lengths or in continuous lengths from coiled skelp and subsequently cut into individual lengths. Typical specifications: ASTM A53, ASTM A135, and API Spec 5L. See also *Pipe manufacturing processes*.

Excess Flow Valve (EFV) is a device installed in a gas pipeline to automatically restrict or shut off the gas flow through the line when the flow exceeds a predetermined limit.

Excess Flow Valve-Bypass (EFVB) is an EFV that is designed to limit the flow of gas upon closure to a small, predetermined level. EFVBs reset automatically once the line downstream is made gastight and pressure is equalized across the valve.

Excess Flow Valve-Non-Bypass (EFVNB) is an EFV that is designed to stop the flow of gas upon closure. EFVNBs must be manually reset.

Furnace-butt-welded pipe. There are two such types of pipe defined in this glossary: *Bell-welded pipe* and *Continuous-welded pipe*. See also *Pipe manufacturing processes*.

Furnace-lap-welded pipe is pipe that has a longitudinal lap joint that is produced by the forge welding process. In this process, coalescence is produced by heating a preformed tube to welding temperature and then passing it over a mandrel. The mandrel is located between the two welding rolls that compress and weld the overlapping edges. Typical specification: API Spec 5L. The manufacture of this type of pipe was discontinued, and the process was deleted from API Spec 5L in 1962. See also *Pipe manufacturing processes*.

Gas control is a person or persons who acquire and maintain data to remotely monitor and direct the flow of gas to meet design and contractual obligations, and to assist in detecting pipeline emergencies and initiating response.

Ground temperature is the temperature of the earth at pipe depth. See also *Ambient temperature and Temperature*.

Heat fusion joint is a joint made in thermoplastic piping by heating the parts sufficiently to permit fusion of the materials when the parts are pressed together.

Holiday is a coating imperfection that exposes the pipe surface to the environment.

Holiday detection is testing of a coating for holidays using an instrument that applies a voltage between the external surface of the coating and the pipe.

Hoop stress is the stress in a pipe wall, acting circumferentially in a plane perpendicular to the longitudinal axis of the pipe, produced by the pressure of the fluid in the pipe. In this Guide, hoop stress in steel pipe is calculated by the formula:

$$S_h = \frac{PD}{2t}$$

Where:

- S_h = hoop stress, psi
- P = internal pressure, psig
- D = nominal outside diameter of pipe, inches
- t = nominal wall thickness, inches

See also *Maximum allowable hoop stress*.

Hot taps are connections made to transmission lines, mains, or other facilities while they are in operation.

The connecting and tapping is done while the facility is under gas pressure.

Hydrostatic Design Basis (HDB) is one of a series of established stress values specified in ASTM D2837, "Standard Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials or Pressure Design Basis for Thermoplastic Pipe Products," for a plastic compound, obtained by categorizing the long-term hydrostatic strength as determined in accordance with ASTM D2837.

Inactive pipeline is a pipeline that is being maintained under Part 192 but is not presently being used to transport gas.

Instrument piping is pipe, valves, and fittings used to connect instruments to main piping, to other instruments and apparatus, or to measuring equipment.

Iron. See *Cast iron*, *Ductile iron*, and *Malleable iron*.

Jeeping is a method of *Holiday detection*.

Joint. See *Length*.

Leakage surveys are systematic inspections made for the purpose of finding leaks in a gas piping system.

The types of inspections commonly made are described in Guide Material Appendix G-192-11 "Gas Leakage Control Guidelines for Natural Gas Systems" and Guide Material Appendix G-192-11A "Gas Leakage Control Guidelines for Petroleum Gas Systems."

Length is a piece of pipe as delivered from the mill. Each piece is called a length regardless of its actual longitudinal dimension. While this is sometimes called a "joint," the term "length" is preferred.

Light surface oxide is a non-damaging form of corrosion.

Long-term hydrostatic strength of plastic pipe is the estimated hoop stress, in psi, that would result in a failure of the pipe if the pipe were subjected to 100,000 hours of hydrostatic pressure.

Lower Explosive Limit (LEL) is the lower limit of flammability for a gas expressed as a percent, by volume, of gas in air.

Malleable iron is a mixture of iron and carbon, including small amounts of silicon, manganese, phosphorous and sulfur which, after being cast, is converted structurally by heat treatment into primarily a matrix of ferrite containing nodules of tempered carbon.

Maximum allowable hoop stress is the maximum hoop stress permitted for the design of a piping system. It depends upon the material used, the class location of the pipe, and the operating conditions. See also *Hoop stress*.

Maximum allowable test pressure is the maximum internal fluid pressure permitted for testing, for the materials and class location involved.

Meters. See *Customer meter and Meter set assembly*.

Meter set assembly is that exposed portion of the service line extending from the service line riser valve to the connection of the customer's fuel line, including the meter, and (if present) the regulator and relief vent line. In the absence of a service line riser valve, the meter set assembly starts at the first exposed fitting. The meter set assembly does not include the customer's buried or exposed fuel line.

Monitoring regulator is a pressure regulator, set in series with another pressure regulator, for the purpose of providing automatic overpressure protection in the event of a malfunction of the primary regulator.

Nodular iron. See *Ductile iron*.

Nominal outside diameter (D) is the outside diameter, in inches, as listed in Table 192.105i for nominal pipe size 12 inches and less, and is the same as the nominal pipe size greater than 12 inches. It is used in the design formula for steel pipe in §192.105 and the calculation for hoop stress.

Nominal wall thickness (t) is the wall thickness, in inches, computed by, or used in, the design formula for steel pipe in §192.105. Pipe may be ordered to this computed wall thickness without adding an allowance to compensate for the under-thickness tolerances permitted in approved specifications.

Operating stress is the stress in a pipe or structural member under normal operating conditions.

Overpressure protection is the use of a device or equipment installed for the purpose of preventing pressure in a pipe system or other facility from exceeding a predetermined limit. See also *Pressure limiting station*, *Pressure regulating station*, *Pressure relief station*, and *Service regulator*.

Parallel encroachment pertains to that portion of the route of a transmission line or main that lies within, runs in a generally parallel direction to, and does not necessarily cross, the rights-of-way of a road, street, highway, or railroad.

Pipe. See *Bell-welded pipe*, *Cold expanded pipe*, *Continuous-welded pipe*, *Control piping*, *Double-submerged-arc-welded pipe*, *Electric-flash-welded pipe*, *Electric-fusion-welded pipe*, *Electric-resistance-welded pipe*, *Furnace-butt-welded pipe*, *Furnace-lap-welded pipe*, *Instrument piping*, *Length*, *Pipe-container*, *Pipe manufacturing processes*, *Pipe-type holder*, *Sample piping*, and *Seamless pipe*.

Pipe-container is a gastight structure assembled from pipe and end closures. See also *Pipe-type holder*.

Pipe manufacturing processes. A reference is ASME I00396 "History of Line Pipe Manufacturing in North America." Types and names of welded joints are used herein as defined in the American Welding Society (AWS) Publication A3.0 "Standard Welding Terms and Definitions" except for the following terms which are defined in this glossary.

- Bell-welded pipe*
- Continuous-welded pipe*
- Double-submerged-arc-welded pipe*
- Electric-flash-welded pipe*
- Electric-fusion-welded pipe*
- Electric-resistance-welded pipe*
- Furnace-butt-welded pipe*
- Furnace-lap-welded pipe*
- Seamless pipe*

Pipe-type holder is any pipe-container or group of interconnected pipe-containers installed at one location for the sole purpose of storing gas. See also *Pipe-container*.

Plastic (noun) is a material that contains one or more organic polymeric substances of high molecular weight as an essential ingredient, is solid in its finished state, and can be shaped by flow at some stage of its manufacture or processing into finished articles. The two general types of plastic referred to in this Guide are thermoplastic and thermosetting. See also *Thermoplastic* and *Thermosetting plastic*.

Plastic pipe joints. See *Adhesive joint*, *Heat fusion joint*, and *Solvent cement joint*.

Pressure (expressed in pounds per square inch above atmospheric pressure, i.e., gauge pressure (abbreviation: psig), unless otherwise stated). See also *Maximum allowable test pressure*, *Overpressure protection*, *Pressure limiting station*, *Pressure regulating station*, *Pressure relief station*, and *Standup pressure test*.

Pressure limiting station consists of apparatus which, under abnormal conditions, will act to reduce, restrict or shut off the supply of gas flowing into a transmission line, main, holder, pressure vessel or compressor station piping in order to prevent the gas pressure from exceeding a predetermined limit. While normal pressure conditions prevail, the pressure limiting station may exercise some degree of control of the flow of gas or may remain in the wide-open position. Included in the station are any enclosures and ventilating equipment, and any piping and auxiliary equipment, such as valves, control instruments, or control lines.

Pressure regulating station consists of apparatus installed for the purpose of automatically reducing and regulating the gas pressure in the downstream transmission line, main, holder, pressure vessel or compressor station piping to which it is connected. Included in the station are any enclosures and ventilating equipment, and any piping and auxiliary equipment, such as valves, control instruments, or control lines.

Pressure relief station consists of apparatus installed to vent gas from a transmission line, main, holder, pressure vessel, or compressor station piping in order to prevent the gas pressure from exceeding a predetermined limit. The gas may be vented into the atmosphere or into a lower pressure gas system capable of safely receiving the gas being discharged. Included in the station are any enclosures and ventilating equipment, and any piping and auxiliary equipment, such as valves, control instruments, or control lines.

Private rights-of-way are those that are not located on roads, streets or highways used by the public, or on railroad rights-of-way.

Proprietary items are items made by a company having the exclusive right of manufacture.

Public place is a place that is generally open to all persons in a community as opposed to being restricted to specific persons. A public place includes churches, schools, and commercial property, as well as any publicly owned right-of-way or property that is frequented by people.

Regulators. See *Pressure limiting station*, *Pressure regulating station*, *Pressure relief station*, and *Service regulator*.

Sample piping is pipe, valves, and fittings used for the collection of samples of gas or other fluids.

SCADA is supervisory control and data acquisition. SCADA is a remote control system that allows the transmission of data from a remote site (e.g., a delivery point) to a central control location. SCADA systems are used to monitor and control flow, pressure, and other parameters of the pipeline system. SCADA systems may generate an alarm when an event has occurred or an unusual situation is developing.

Seamless pipe is a wrought tubular product made without a welded seam. It is manufactured by hot working steel or, if necessary, by subsequently cold finishing the hot-worked tubular product to produce the desired shape, dimensions, and properties. See also *Pipe manufacturing processes*.

Secondary stress is stress created in the pipe wall by loads other than internal fluid pressure. Examples are backfill loads, traffic loads, beam action in a span and loads at supports and at connections to the pipe.

Service line valve is a valve located in the service line ahead of the service regulator, or ahead of the meter where there is no regulator.

Solvent cement joint is a joint made in PVC piping by using solvent cement to join the piping components.

Standup pressure test is a test to demonstrate that a pipe or piping system does not leak as evidenced by the lack of a drop in pressure over a specified period of time after the source of pressure has been isolated.

Steel is an iron-base alloy, malleable in some temperature range as initially cast, containing manganese, carbon, and often other alloying elements. See also *Carbon steel*.

Stress is the resultant internal force that resists change in the size or shape of a body acted on by external forces. See also *Hoop stress*, *Maximum allowable hoop stress*, *Operating stress*, *Secondary stress*, *Tensile strength*, and *Yield strength*.

Temperature (expressed in degrees Fahrenheit (°F) unless otherwise stated). See also *Ambient temperature* and *Ground temperature*.

Tensile strength is the highest unit tensile stress (referred to the original cross section) that a material can sustain before failure (psi)

Thermoplastic is a plastic that is capable of being repeatedly softened by increase of temperature and hardened by decrease of temperature. Examples of thermoplastic materials include polyethylene (PE), polyamide (PA or nylon), and polyvinyl chloride (PVC).