

| | |
|-------------------------|---|
| TR Number | 2021-44 |
| Primary | GMA G-192-1A |
| Purpose | Update GMA G-192-1A to reflect the IBRs published since 2018. |
| Origin/Rationale | Lists all the IBR's over time and has not been updated since 2018. Needs to be updated to reflect new IBRs. |
| Notes | <i>Executive – moved scope of 24-18 into this TR.</i> For 192.7 and GMA G-192-1A: Review, revise, and update GM in light of Amdt 192-135 for incorporated by reference standards. (added July 2024) |
| Assigned To | Editorial Section |

Note: Revisions are shown in **yellow highlight** and **red font**.

GUIDE MATERIAL APPENDIX G-192-1A

(See guide material under §§192.7 and 192.144)

EDITIONS OF MATERIAL SPECIFICATIONS, CODES, AND STANDARDS PREVIOUSLY INCORPORATED BY REFERENCE IN THE REGULATIONS

Asterisk (*) marked entries show documents no longer included for reference in §192.7.

[Editorial Note: Several sections of the existing GMA have been moved to align with current order of §192.7. See the red font revisions to the section lettering below.]

~~A-B~~ American Petroleum Institute (API)

- (1) API RP 5L1, Recommended Practice for Railroad Transportation of Line Pipe (1967, 1972, 1990, 2002).
- (2) API RP 5LW, Transportation of Line Pipe on Barges and Marine Vessels (1996).
- (3)* API Spec 5A, API Specification for Casing, Tubing, and Drill Pipe (1968, 1971, 1973, + Supp. 1, 1979).
- (4) API Spec 5L, Specification for Line Pipe (1967, 1970, 1971 + Supp. 1, 1975, 1980, 1985, 1988, 1992, 1995, 2000, 2004, 2007 with Add. 2009, **2013**).
- (5)* API Spec 5LS, API Specification for Spiral-Weld Line Pipe (1967, 1970, 1971 + Supp. 1, 1973 + Supp. 1, 1975 + Supp. 1, 1977, 1980). (Combined with 5L 3/31/82).
- (6)* API Spec 5LX, API Specification for High-Test Line Pipe (1967, 1970, 1971 + Supp. 1, 1973 + Supp. 1, 1975 + Supp. 1, 1977, 1980). (Combined with 5L 3/31/82).
- (7)* API Spec 6A, API Specification for Wellhead and Christmas Tree Equipment (1968, 1974, 1979).
- (8) API Spec 6D, Specification for Pipeline Valves (Gate, Plug, Ball and Check Valves) (1968, 1974, 1977, 1991, 1994, 2002, **2008 with Errata 1-6 & Addenda 1-3**).
- (9) API Std 1104, Welding of Pipelines and Related Facilities (1968, 1973, 1980, 1988, 1994, 1999, **2005 with Errata 1-2 & Addendum**).

~~B-D~~ American National Standards Institute, Inc. (ANSI), ANSI/The American Society of Mechanical Engineers (ASME), or ~~The~~ American Society of Mechanical Engineers (ASME)

- (1)* ANSI A21.1, Thickness Design of Cast-Iron Pipe (1967, 1972) (Discontinued and not replaced).
- (2)* ANSI A21.3, Specification for Cast-Iron Pit Cast Pipe for Gas (1953) (Discontinued and not replaced).

- replaced).
- (3)* ANSI A21.7, Cast-Iron Pipe Centrifugally Cast in Metal Molds for Gas (1962) (Discontinued and not replaced).
 - (4)* ANSI A21.9, Cast-Iron Pipe Centrifugally Cast in Sand-Lined Molds for Gas (1962) (Discontinued and not replaced).
 - (5)* ANSI A21.11, Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings (1964, 1972, 1979) (Discontinued as ANSI 21.11; however, see AWWA C111/ANSI 21.11 in 1.7 Fittings – Miscellaneous of GMA G-192-1).
 - (6)* ANSI A21.50, Thickness Design of Ductile-Iron Pipe (1965, 1971, 1976) (Discontinued and not replaced).
 - (7)* ANSI A21.52, Ductile-Iron Pipe, Centrifugally Cast, for Gas (1965, 1971, 1976) (Discontinued and not replaced).
 - (8) ANSI B16.1, Cast-Iron Pipe Flanges and Flanged Fittings (1967, 1975, 1989, 1998).
 - (9) ANSI B16.5, Steel Pipe Flanges and Flanged Fittings (1968, 1973, 1977, 1988 with October 1988 Errata and B16.5a-1992 Addenda, 1996 and B16.5a-1998 Addenda).
 - (10)* ANSI B16.24, Cast Copper Alloy Pipe Flanges and Flanged Fittings (1962, 1971, 1979) (Source: ASME B16.24).
 - (11) ASME B31.8, Gas Transmission and Distribution Piping Systems (1995, 2007).
 - (12) ASME B31.8S, Supplement to B31.8 on Managing System Integrity of Gas Pipelines (2001 Edition/2002 Publication).
 - (13)* ~~ANSI B36.10, Welded and Seamless Wrought Steel Pipe (1959, 1970, 1979, removed in 1989~~
{Note: current version in §192.7 (2018) was added to §192.7 in 2024}).
 - (14)* ANSI C1, National Electrical Code (1968, 1975) (See NFPA 70 for subsequent editions).
 - (15)* ANSI C101-67, Thickness Design of Cast Iron Pipe (1977) (Discontinued and not identified by ANSI; however, see AWWA C101 in 1.1 Pipe – Metallic of Appendix G-192-1).
 - (16) ASME Boiler and Pressure Vessel Code, Section I, Power Boilers (1992 with Interpretations, 1995 with Addenda, 1998, 2004 with Addenda).
 - (17) ASME Boiler and Pressure Vessel Code, Section VIII, Pressure Vessels, Division 1 (1968, 1974, 1977, 1992 with Interpretations, 1995 with Addenda, 2001, 2004 with Addenda).
 - (18) ASME Boiler and Pressure Vessel Code, Section VIII, Pressure Vessels, Division 2 Alternative Rules (1992 with Interpretations, 1995 with Addenda, 2001, 2004 with Addenda).
 - (19) ASME Boiler and Pressure Vessel Code, Section IX, Welding and Brazing Qualifications (1968, 1974, 1977, 1992 with Interpretations, 1995 with Addenda, 2001, 2004 with Addenda).

C American Society for Nondestructive Testing (ASNT)

[Reserved]

D-C American Society for Testing and Materials (ASTM)

- (1) ASTM A53, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless (1965, 1968, 1973, 1979, 1990b, 1995a, 1996, 1999b, 2004, 2007, 2010).
- (2)* ASTM A72, Standard Specification for Welded Wrought-Iron Pipe (1964T, 1968) (Discontinued and not replaced).
- (3) ASTM A106, Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service, (1966, 1968, 1972a, 1979b, 1991, 1994a, 1995, 1999, 2004, 2008, 2010).
- (4)* ASTM A134, Standard Specification for Pipe, Steel, Electric-Fusion (Arc)-Welded (Sizes NPS 16 and Over) (1964, 1968, 1973, 1974).
- (5)* ASTM A135, Standard Specification for Electric-Resistance-Welded Steel Pipe (1963T, 1968, 1973a, 1979).
- (6)* ASTM A139, Standard Specification for Electric-Fusion (Arc)-Welded Steel Pipe (NPS 4 and Over) (1964, 1968, 1973, 1974).
- (7)* ASTM A155, Standard Specification for Electric-Fusion-Welded Steel Pipe for High-Pressure Service (1965, 1968, 1972a). (Discontinued and replaced by A671, A672 and A691).
- (8)* ASTM A211, Standard Specification for Spiral-Welded Steel or Iron Pipe (1963, 1968, 1973, 1975)

- (Discontinued and not replaced).
- (9) ASTM A333, Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service (1964, 1967, 1973, 1979, 1991a, 1994, 1999, 2005, [2011](#)).
 - (10) ASTM A372, Standard Specification for Carbon and Alloy Steel Forgings for Thin-Walled Pressure Vessels (1967, 1971, 1978, 1991a, 1995, 1999, 2003-reapproved 2008).
 - (11)* ASTM A377, Standard Index of Specifications for Grey Iron and Ductile Iron Pressure Pipe (1966, 1973, 1979).
 - (12) ASTM A381, Standard Specification for Metal-Arc-Welded Steel Pipe for Use with High-Pressure Transmission Systems (1966, 1968, 1973, 1979, 1989, 1993, ~~1996~~, 1996-reapproved 2001, ~~2001~~, [-reapproved 2005](#)).
 - (13)* ASTM A539, Standard Specification for Electric-Resistance-Welded Coiled Steel Tubing for Gas and Fuel Oil Lines (1965, 1973, 1979) (Discontinued and replaced by ASTM A450).
 - (14) ASTM A671, Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures (1977, 1989a, 1994, 1996, 2004, 2006, [2010](#)).
 - (15) ASTM A672, Standard Specification for Electric-Fusion-Welded Steel Pipe for High-Pressure Service at Moderate Temperatures (1979, 1989b, 1994, 1996, 2008).
 - (16) ASTM A691, Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High-Pressure Service at High Temperatures (1979, 1989a, 1993, 1998-reapproved 2002, -reapproved 2007, [2009](#)).
 - (17)* ASTM B42, Standard Specification for Seamless Copper Pipe, Standard Sizes (1962, 1966, 1972, 1980).
 - (18)* ASTM B68, Standard Specification for Seamless Copper Tube, Bright Annealed (1965, 1968, 1973, 1980).
 - (19)* ASTM B75, Standard Specification for Seamless Copper Tube (1965, 1968, 1973, 1980).
 - (20)* ASTM B88, Standard Specification for Seamless Copper Water Tube (1966, 1972, 1980, 1999).
 - (21)* ASTM B251, Standard Specification for General Requirements for Wrought Seamless Copper and Copper-Alloy Tube (1966, 1968, 1972, 1976).
 - (22) ASTM D638, Standard Test Method for Tensile Properties of Plastics (1977a, 1991, 1995, 1996, 1999).
 - (23) ASTM D2513, Standard Specification for ~~Thermoplastic-Polyethylene (PE)~~ Gas Pressure Pipe, Tubing, and Fittings (1966T, 1968, 1970, 1971, 1973, 1974a, 1978ES, 1981, 1987 except for §192.63(a)(1), 1990c, 1995c, 1996, [1999, 2009a](#)). [{Note: In the 1999 edition and prior editions, "Thermoplastic" instead of "Polyethylene" in title.}](#)
 - (24) ASTM D2517, Standard Specification for Reinforced Epoxy Resin Gas Pressure Pipe and Fittings (1966T, 1967, 1973, 1981-reapproved 1987, 1994).
 - (25) ASTM F1055, Standard Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene Pipe and Tubing (1995).

E Gas Technology Institute (GTI)

- (1)* [GRI 02/0057, Internal Corrosion Direct Assessment of Gas Transmission Pipelines Methodology \(2002\).](#)

F-E Manufacturers Standardization Society of the Valves and Fittings Industry, Inc. (MSS)

- (1)* MSS SP-25, Standard Marking System for Valves, Fittings, Flanges, and Unions (1964, 1978).
- (2) MSS SP-44, Steel Pipeline Flanges (1955, 1972, 1975, 1991, 1996, 2006, [2010 with 2011 errata](#)).
- (3)* MSS SP-52, Cast-Iron Pipe Line Valves (1957) (Discontinued and not replaced).
- (4)* MSS SP-70, Cast-Iron Gate Valves, Flanged and Threaded Ends (1970, 1976).
- (5)* MSS SP-71, Cast-Iron Swing Check Valves, Flanged and Threaded Ends (1970, 1976).
- (6)* MSS SP-78, Cast-Iron Plug Valves, Flanged and Threaded Ends (1972, 1977).

G-H NACE International (NACE)

- (1) NACE Standard RP (later SP) 0502, Pipeline External Corrosion Direct Assessment Methodology (2002, 2008).

H-F National Fire Protection Association (NFPA) or ANSI/National Fire Protection Association (NFPA)

- (1) NFPA 30, Flammable and Combustible Liquids Code (1969, 1973, 1977, 1990, 1993, 1996, 2003, 2008).
- (2) NFPA 58, Liquefied Petroleum Gas Code (1969, 1972, 1979, 1992, 1995, 1998, 2004).
- (3) NFPA 59, Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants (1968, 1979, 1992, 1995, 1998, 2004).
- (4)* NFPA 59A, Production, Storage and Handling of Liquefied Natural Gas (1971, 1972, 1979).
- (5) NFPA 70, National Electrical Code (1978, 1993, 1996, 2005, 2008, 2011) (See ANSI C1 for prior editions).

I-A Pipeline Research Council International, Inc. (PRCI)

[Reserved]

J-G Plastic Pipe Institute, Inc. (PPI)

- (1) PPI TR-3, Policies and Procedures for Developing Hydrostatic Design Basis (HDB), Pressure Design Basis (PDB), Strength Design Basis (SDB), and Minimum Required Strength (MRS) Ratings for Thermoplastic Piping Materials (2000, 2004).