TR Number	**23-07**
Primary Reference	192.1007(a)(5)
Secondary Reference	192.63, 192.143(c), 192.149, 192.67
Purpose	To create guide material to outline the information an operator should retain for plastic pipe and plastic fittings to prove compliance with listed specifications and provide information for calculation of MAOP.
Origin/Rationale	While code is very specific regarding the records (such as MTR's) that transmission line operators must retain for the life of the facility for steel pipe, there is no equivalent guidance for distribution operators and plastic pipe. Some of the code sections that discuss specifications include: 192.63 requires pipe and fitting to be marked. 192.143(c) states that each component of the pipeline must withstand operating pressures and loads in accordance with the listed specification, but there is no GM for this section, and 192.149 requires plastic fittings to meet a listed specification. 192.619(a)(1) requires an operator to use the design pressure of the weakest element for calculating the MAOP using design pressure 192.1007a requires an operator to gain knowledge of their system, and specifically 192.1007(a)(5) requires the operator to capture and retain data on any new pipeline installed. So, what is the information that an operator should documenting and maintaining? [192.67 required transmission operators to retain the steel pipe records.]
Assigned to	Plastics

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

Section 192.59 – Plastic pipe

1 GENERAL

Each operator should establish that new or used pipe complies with the requirements of the applicable ASTM piping specification (listed specifications are IBR in §192.7) for the type of plastic pipe, such as ASTM D2513 for polyethylene (PE), ASTM F2945 for polyamide 11 (PA11), ASTM F2785 for polyamide 12 (PA12), or ASTM D2517 for thermosetting plastics by one of the following methods.

(a) Inspection and testing by an accredited laboratory with written certification.
(b) Inspection and testing by the user.
(c) Written certification from the manufacturer at the time of purchase. Included as part of this certification should be copies of the production quality control records referenced by lot and shift numbers.

2 RECORDS FOR LISTED SPECIFICATION – PLASTIC PIPE

(a) Plastic pipe should be documented by the 16-digit alpha-numeric code provided on plastic gas pipe and components (ASTM F2897). This 16-digit alpha-numeric code identifies:
(1) Manufacturer,
(2) Lot code,
(3) Production date,
(4) Material,
(5) Type of component, and
(6) Size.

(b) Additional documentation could include the following.
(1) Material certification from the manufacturer which provides that the plastic pipe meets the specification by which it was manufactured.
(2) Material specifications and purchasing records.

[2nd Letter Ballot notes for §192.149:
TR 19-02 is approved to the Guide by ANSI Public Review and is awaiting publication. TR 19-02 deletes the GM note for Amdt. 192-124 and makes the GM revision shown below in green font. Since that revision does not fit under the proposed heading of Steel Fittings, the revision is being moved to another proposed heading for Plastic Fittings as an editorial change shown below.]

Section 192.149 - Standard fittings

1 STEEL FITTINGS

(a) Steel butt-welding fittings should comply with either ASME B16.9 or MSS SP-75 and should have pressure and temperature ratings based on stresses for pipe of the same or equivalent material.

(b) Steel induction bends should comply with ASME B16.49 and should have pressure and temperature ratings based on stresses for pipe of the same or equivalent material.

(c) Threaded fittings should comply with ASME B16.3, ASME B16.4, ASME B16.11, ASME B16.14, ASME B16.15, ASTM A733, MSS SP-83, or equivalent as appropriate.

(d) Socket welding fittings should comply with ASME B16.11, MSS SP-79, or MSS SP-83 or equivalent as appropriate.

~~(e) For plastic fittings and components, see guide material under §192.143.~~

2 PLASTIC FITTINGS

For plastic fittings and components, see guide material under §192.143.

3 RECORDS FOR LISTED SPECIFICATION – PLASTIC ~~PIPE AND~~ FITTINGS

(a) Plastic ~~pipe and~~ fittings ~~can~~ should be documented by the 16-digit alpha-numeric code provided on plastic gas pipe and components (ASTM F2897). This 16-digit alpha-numeric code identifies:
(1) Manufacturer,
(2) Lot code,
(3) Production date,
(4) Material,
(5) Type of component, and
(6) Size.

(b) Additional documentation ~~can~~ could include the following. ~~material certification from the manufacturer.~~
(1) Material certification from the manufacturer which provides ~~The operator should have information providing~~ that the plastic ~~pipe and components~~ fittings meet the specification by which it was manufactured.
~~(2) Additional information that shows the pipe and components meet the specification listed in Appendix B to Part 192 by which it was manufactured.~~
(2) Material specifications and purchasing ~~practices~~ records.

GMA G-192-8

GUIDE MATERIAL APPENDIX G-192-8

(See §§192.1001, 192.1003, 192.1005, 192.1007, 192.1011, 192.1015, and Guide Material Appendix G-192-8A)

DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM (DIMP)

...

3.3 Additional information.

In addition to the Annual Report information, an operator should review other records for additional information to evaluate significant threats.

Local system personnel may provide additional information about the system. For example, field personnel might know of construction techniques that were not recorded. When developing knowledge of its distribution system, an operator should consider the following.

(a) Pipe specifications and component information, including diameter, grade or yield strength, and wall thickness for steel pipe; manufacturer, date of manufacture, and Standard Dimension Ratio (SDR) for plastic pipe; size, location, and type for valves and pressure regulators. Plastic pipe and fittings ~~can~~ should also be documented by the 16-digit alpha-numeric code provided on plastic gas pipe and components (ASTM F2897). This 16-digit alpha-numeric code identifies the following.

(1) Manufacturer.
(2) Lot code.
(3) Production date.
(4) Material.
(5) Type of component.
(6) Size.

(b) ...