



PROCESS
INDUSTRY
PRACTICES

COMPLETE REVISION
May 2024

Pipeline Systems

**PIP PLSC0019
Specification for Pressure Testing
HDPE Plastic Pipeline Systems**

PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

This Practice has been prepared by harmonizing technical requirements from existing standards of major industrial operators, contractors, and standards development organizations. While this Practice is intended to incorporate the majority of requirements, individual applications may have requirements which take precedence over this Practice. Determinations concerning fitness for purpose or application of this Practice to specific project or engineering situations should not be made solely on information contained in this Practice. All Practices are intended to be consistent with applicable laws and regulations. Should this Practice conflict with applicable laws or regulations, such laws or regulations must be followed. Consult an appropriate professional before applying or acting on any material contained in or suggested by this Practice.

Use of trade names should not be viewed as an expression of preference. Other brands having the same specifications are equally correct and may be substituted for those named.

This Practice is subject to revision at any time. For more information refer to PIP ADG001, *Specification for Developing Practices*.

© 2017 Process Industry Practices (PIP), Construction Industry Institute, and The University of Texas at Austin on behalf of the Board of Regents of the University of Texas System

Process Industry Practices
3925 West Braker Lane (R4500)

PUBLISHING HISTORY

November 2017 *Issued*
May 2024 *Complete Revision*

Not printed with State funds



PIP PLSC0019

Specification for Pressure Testing HDPE Plastic Pipeline Systems

Table of Contents

1. Scope	2
2. References	2
Industry Codes and Standards	2
3. Definitions	2
4. Requirements	3
4.1 Safety	3
4.2 Test Pressure and Duration	4
4.3 Testing Medium	5
4.4 Test Segment Isolation	5
4.5 Pre-test Notifications and Permits	5
4.6 Recording Instruments	5
4.7 Conducting the Pressure Test	9
4.8 Documentation	12

1. Scope

This Practice provides minimum requirements for performing pressure tests using a liquid medium on non-reinforced High Density Polyethylene (HDPE) plastic pipe intended for all service types (e.g., hydrocarbon, produced water).

This Practice describes the procedures, practices, and precautions to be used in pressure testing plastic pipelines in accordance with DOT *CFR 49 Part 192 Subpart J* and DOT *CFR 49 Part 195 Subpart E*.

2. References

Applicable parts of the following industry codes and standards shall be considered an integral part of this Practice. The edition in effect on the date of contract award shall be used, except as otherwise noted. Short titles are used herein where appropriate. Code section references below are specific to the code editions in effect at the issuance of this Practice.

Industry Codes and Standards

- American Society of Mechanical Engineers (ASME)
 - ASME B16.5 - *Pipe Flanges and Flanged Fittings: NPS 1/2 through NPS 24 Metric/Inch Standard*
 - ASME B16.48 - *Line Blanks*
- American Petroleum Institute (API)
 - API Standard 1104 - *Welding of Pipelines and Related Facilities*
- U.S. Department of Transportation (DOT)
 - Code of Federal Regulations (CFR) 49 Part 192 - *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards Subpart J Test Requirements*
 - Code of Federal Regulations (CFR) 49 Part 195 - *Transportation of Hazardous Liquids by Pipeline: Minimum Federal Safety Standards Subpart E Pressure Testing*

3. Definitions

owner: Party who owns facility or pipeline wherein piping will be used

purchaser: Party who awards contract to supplier. Purchaser may be owner or owner's authorized agent

supplier: Party responsible for providing testing services