

**Plastic Pipe Final Rule
Key Changes to 49 CFR Part 192
(Docket # PHMSA-2014-0098/Amendment #192-124)**

This document provides a brief summary of the DOT/PHMSA Plastic Pipe Rule changes that directly apply to PPI members and their products. This is not intended to be an exhaustive compilation of the changes included in the new regulations. The new regulations go into effect **January 22, 2019** with a mandatory compliance date of **December 31, 2019** for marking requirements.

- **Incorporation by Reference (IBR) of Plastics Related Standards and Technical Documents into §192.7**
 - **ASTM D2513-12ae1:** Updated standard IBR that includes the requirement for the F2897 16-digit alphanumeric/barcode. Polyethylene (PE) piping and fittings products must meet this specification
 - **ASTM F2785-12:** New standard IBR that permits the use of Polyamide 12 (PA-12) piping and fittings products
 - **ASTM F2945-12a:** New standard IBR that permits the use of Polyamide 11 (PA-11) piping and fittings products that expands operators' ability by removing certain limitations on pressure and dimensions
 - **ASTM F2620-12:** New standard IBR that provides procedures on making heat fusion joints
 - **PPI TR-4:** New technical document IBR that requires that all pressure pipe compounds must have a listing at an established Hydrostatic Design Basis (HDB) rating
 - **PPI TR-3 (2012):** Updated technical document IBR to 2012 revision
- **Marking Requirements (Clarified in §192.63):**
 - In accordance with ASTM D2513-12ae1 (IBR §192.7)
 - All physical markings prescribed in the specification must be legible until the time of installation
- **Heat Fusion Joining**
 - Each heat fusion pipe, except for electrofusion joints, must comply with ASTM F2620-12 (IBR §192.7)
 - PE heat fusion joints must be visually inspected and tested in accordance with ASTM F2620-12 (IBR §192.7)
 - Each operator must maintain equipment used in joining plastic pipe in accordance with manufacturer recommended practice or written procedures
- **Fittings and Components**
 - Plastic fittings must meet a listed specification
 - Mechanical Fittings must be Category 1 (joint w/ axial tensile strength at least equal to that of the pipe)
 - Each plastic pipeline component installed after January 22, 2019, must be able to withstand operating pressures and other anticipated loads in accordance with listed specifications
 - Factory assembled anodeless risers must be designed and tested in accordance with ASTM F1973-13 (IBR §192.7)

- **Design Factor (MAOP Calculation):** Raised from 0.32 to 0.40 for PE2708/PE4710 materials
 - Products manufactured AFTER January 22, 2019
 - ≤ 12-in sizes (125 psi maximum pressure limit)
 - > 12-in sizes still have 0.32 design factor (100 psi maximum pressure limit)
 - Maximum test pressure reduced from 3.0 to 2.5 times design pressure (due to increase in design factor)
 - PA-11 and PA-12 allowable size/pressure limits increased from 4-in/200 psi to 6-in/250 psi
- **Minimum Wall Thickness/DR Specification:**
 - 0.090-in for ½-in and ¾-in CTS
 - DR 9.3 (0.090-in) for ½-in IPS
 - **1-in CTS – under review by PHMSA**
 - DR 11 for ¾-in and 2-in IPS
 - DR 13.5 for 4-in
 - DR 21 for 6-in through 12-in
- **Handling and Installation**
 - Each operator must have and follow written procedures for storage and handling of plastic pipe and components
 - Limit bend radius to manufacturer recommendations
 - Trenchless Installation - “Weak link” (defined in §192.3) must be used
- **Gas Gathering Regulations:** Regulated Type B gathering lines (Some Class 2, Class 3 and 4) must meet requirements in 49 CFR 192 for transmission and operators must comply with requirements for plastic pipe including: damage prevention; public education; MAOP; line markers; and leak surveys.