



U.S. Department of Transportation
**Pipeline and Hazardous Materials
Safety Administration**

1200 New Jersey Ave, S.E.
Washington, D.C. 20590

JUN - 9 2014

Dr. Gene Palermo
Palermo Plastics Pipe (P3) Consulting
654 Watershaw Drive
Friendsville, TN 37737

Dear Dr. Palermo:

In a letter to the Pipeline and Hazardous Materials Safety Administration (PHMSA) dated October 1, 2013, you requested an interpretation of a requirement of the Federal gas pipeline safety regulations at 49 CFR Part 192. Specifically, you asked whether the § 192.281(a) restriction on the use of miter joints applies to factory-made large diameter mitered tees and elbows.

You stated that for pipe sizes 12 inches and less in diameter, gas operators generally use molded fittings; however, for pipe sizes greater than 12 inches, molded fittings are not as readily available and gas operators need to use tees and elbows that are fabricated in a factory using several miter joints. You asked if a gas operator can install a fabricated fitting (tee or elbow) containing miter joints if the fitting was made in a factory under the regulations, or whether a special permit would be required.

In reviewing the relevant code sections, § 192.281(a) states:

(a) General. A plastic pipe joint that is joined by solvent cement, adhesive, or heat fusion may not be disturbed until it has properly set. Plastic pipe may not be joined by a threaded joint or miter joint.

However, the scope of 49 CFR Part 192, Subpart F does not apply to joining during the manufacture of pipe or pipeline components. Section 192.271(b) states:

(b) This subpart does not apply to joining during the manufacture of pipe or pipeline components.

In order to address your question, PHMSA reviewed the reference standards applicable to plastic pipe fittings. Appendix A1 of the American Society for Testing and Materials (ASTM) D2513-99, which is incorporated by reference in Part 192, addresses plastic pipe diameters greater than 12 inches and up to 24 inches. Section A1.4 of this appendix addresses fittings. It states that for butt-type fittings, the fittings must meet the requirements of ASTM D 3261. Section 4.1.2 of

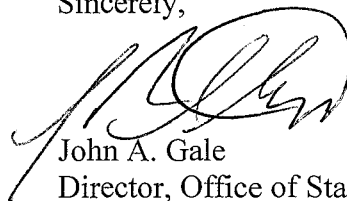
The Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety provides written clarifications of the Regulations (49 CFR Parts 190-199) in the form of interpretation letters. These letters reflect the agency's current application of the regulations to the specific facts presented by the person requesting the clarification. Interpretations do not create legally-enforceable rights or obligations and are provided to help the public understand how to comply with the regulations.

ASTM D 3261 states that fittings fabricated by thermal welding are not included in this specification.

Therefore, the referenced standard is not applicable to fabricated fittings. If an operator plans to use a fabricated fitting greater than 12 inches, the operator must first apply for a special permit under 49 CFR 190.341.¹

If we can be of further assistance, please contact Tewabe Asebe of my staff at 202-366-5523.

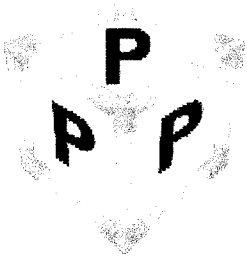
Sincerely,



John A. Gale
Director, Office of Standards
and Rulemaking

¹ With regard to the September 1979 letter to Mr. Petro of Plexco referenced in your request, it addresses the non-applicability of § 192.281 to manufactured fittings but does not discuss the requirements to qualify a fabricated fitting for use.

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October 1, 2013

OCT 17 2013

Mr. Jeffrey D. Wiese
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Mail Stop: E24-455
1200 New Jersey Ave., SE,
East Building, Second Floor
Washington, DC 20590-0001

Re: Request for Interpretation for Part 192.281(a):

Dear Mr. Wiese,

I respectfully request an interpretation for Part 192.281(a) as to whether a special permit is required for installation of large diameter fabricated mitered tees and elbows. For pipe sizes 12" and less, gas operators generally use molded fittings. For pipe sizes greater than 12", molded fittings are not as readily available and gas operators need to use tees and elbows that are fabricated in a factory using several miter joints.

At recent industry meetings, there has been some confusion on the interpretation of Part 192.281(a):

§ 192.281 Plastic pipe.

(a) General. A plastic pipe joint that is joined by solvent cement, adhesive, or heat fusion may not be disturbed until it has properly set. Plastic pipe may not be joined by a threaded joint or miter joint.

It is generally understood in the industry that the gas operator may not make miter joints in the field. The question is may a gas operator install a fabricated fitting (tee or ell) containing miter joints if the fitting was made in a factory, and may the gas operator install that miter fitting without the need for a special permit?

Some have the opinion that a special permit is not required because the fabricated miter fitting is made in a factory. This appears to be the interpretation of DOT in 1979 based on a letter from Cesar De Leon to Paul Petro – see Attachment A.

Others have the opinion that a special permit is required because, even though the fabricated miter fitting is made in a factory, it is not made in accordance with a product standard that is referenced in Part 192.

Our key question is whether or not a special permit is required for a gas operator to install fabricated mitered tees and elbows that are made in a factory. Thank you.

Respectfully,



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✓ CC: John Gale
PHP-30

Attachment A



DEPARTMENT OF TRANSPORTATION
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
WASHINGTON, D.C. 20590

REFER TO:

SEP 25 1979

Mr. P. P. Petro
Director - Technical Services
3240 North Mannheim Road
Franklin Park, Illinois 60131

Dear Mr. Petro:

This responds to your letter of July 6, 1979, asking if the rule in 49 CFR 192.281(a), stating that "plastic pipe may not be joined by a threaded joint or miter joint," applies to the manufacture of fittings in a plant.

As indicated by Section 192.271(b), neither section 192.281 nor any of the other provisions of Subpart F concerning the joining of materials apply to joining that is performed during the manufacture of pipe or components (including fittings). The regulations do apply to any joining of pipe or components that occurs for gas pipeline transportation purposes outside the manufacturing factory. Such joining is normally performed at a pipeline construction site or in fabrication shops.

Sincerely,

A handwritten signature in black ink that reads "Cesar De Leon".

Cesar De Leon
Associate Director for
Pipeline Safety Regulation
Materials Transportation Bureau