

American Gas Association



September 9, 2009

Mr. Jeffrey D. Wiese
Associate Administrator for Pipeline Safety
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
East Building, 2nd Floor
1200 New Jersey Ave., SE
Washington, DC 20590

Re:

Petition for Rulemaking

Request for Stay of Enforcement Plastic Pipe Color and UV Stabilizer

Dear Mr. Wiese:

Pursuant to 49 CFR §190.331, I have enclosed an original and three copies of the American Gas Association's Petition for Rulemaking to make a minor amendment to 49 CFR §192.7. The Petition requests that PHMSA incorporate by reference the 2009 edition of ASTM D2513 - Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings section, A1.3.5 Color and UV Stabilizer, to replace the old edition already incorporated by reference. The Petition also requests a Stay of Enforcement.

AGA believes it is beneficial to incorporate voluntary consensus standards as part of federal pipeline safety regulations when the standards have been tested and incorporating these standards advances safety. The pipeline safety code is still operating with the 1987 and 1999 editions of ASTM D2513. AGA believes that granting this Petition and Stay of Enforcement will benefit pipeline safety.

Please file the Petition to the docket in your normal manner.

Sincerely,

Philip Bennett

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BEFORE THE PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION UNITED STATES DEPARTMENT OF TRANSPORTATION WASHINGTON, D.C.

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Petition for Rulemaking and Request for a Stay of Enforcement From The American Gas Association

COMES NOW the American Gas Association, hereafter called AGA, and submits this petition for rulemaking and stay of enforcement. In support of said petition, AGA states:

- 1. AGA submits the petition to the Associate Administrator of the Pipeline and Hazardous Materials Safety Administration, PHMSA, pursuant to 49 CFR §190.331 *Petitions for rulemaking*.
- 2. The petition requests that the PHMSA make minor amendments to its regulations in accordance with 49 CFR §190.339 *Direct final rulemaking*.
- 3. The minor amendment is to incorporate by reference part of the most recent edition of ASTM D2513 Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings section, A1.3.5 Color and UV Stabilizer.
- 4. The AGA also requests that PHMSA issue a stay of enforcement for the requirements of 49 CFR §192.59, but limit the stay of enforcement to the requirements set forth in ASTM D2513 (2009), section A1.3.5.
- 5. AGA believes the requested regulatory changes promptly remove barriers encountered by operators in achieving higher levels of pipeline safety.
- 6. An expedited review of the petition is warranted because of the inherent time limits in the ASTM standard; state regulators and operators are already requesting special permits to waive existing requirements and adopt ASTM D 2513 (2009), in part; granting the petition can avoid redundant regulatory efforts; and the suggested amendment is minor.
- 7. The most recent version of ASTM D2513 recognizes that modern polyethylene pipe contains sufficient carbon black to provide protection against ultraviolet (UV) light during outside storage longer than the two-year limit in the previous ASTM D2513 standard, which is currently incorporated by reference in 49 CFR §192.7.

- 8. AGA is not aware of any objections to the relevant special permits. AGA knows of no technical objections to the relevant section of the ASTM standard.
- 9. Granting this request for a stay of enforcement would prevent PHMSA from being inundated with special permit requests to adopt ASTM D2513, section A.1.3.5 (2009).
- 10. The public benefits from this petition because it increases pipeline safety by adopting the latest technology provided by a consensus standard. Operators will be able to use emergency pipe stock that might otherwise be destroyed because of the existing time exposure limits to UV light.
- 11. The regulatory language for the existing and proposed sections is provided herein for PHMSA's review.
- 12. AGA does not expect that the adoption of the proposed language would either increase costs to gas utilities or have any adverse consequences.
- 13. The adoption of the proposed language will not create burdens on small businesses, small organizations and small governmental jurisdictions.
 - 14. No changes are recommended to recordkeeping requirements.

I. Petitioner

The American Gas Association, founded in 1918, represents 202 local energy companies that deliver clean natural gas throughout the United States. There are more than 70 million residential, commercial and industrial natural gas customers in the U.S., of which almost 93 percent — more than 65 million customers — receive their gas from AGA members. AGA is an advocate for natural gas utility companies and their customers and provides a broad range of programs and services for member natural gas pipelines, marketers, gatherers, international natural gas companies and industry associates. Today, natural gas meets almost one-fourth of the United States' energy needs.

II. Background

There are more than two million miles of piping serving more that 70 million customers in the nation's natural gas distribution system. Plastic has surpassed steel for the majority of installed piping. Most residential pipe installed in the last 30 years has been plastic. Plastic is the material of choice because of its flexibility and its resistance to corrosion.

The foundation of this plastic pipe infrastructure is ASTM D2513 - Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings. This specification covers the

requirements and test methods for material, dimensions, hydrostatic burst strength, tensile strength, chemical resistance, sustained pressure, heat fusion, and impact resistance of plastic pipes, tubing, and fittings used for direct burial and reliner applications in fuel gas mains and services for the distribution of natural gas. This specification does not cover threaded pipe.

Gas operators often store medium and high density polyethylene (PE) pipes for new construction and maintenance work outdoors due to large storage floor space requirements. Outdoor storage of plastic pipe means that some pipe gets exposed to direct sunlight. To protect PE pipes and fittings from UV light degradation, manufacturers add a UV stabilizer to the pipe formation process to absorb UV rays and prevent them from attacking the plastic. The stabilizers are tested by pipe manufacturers and demonstrate safe protection of yellow pipe for greater than three years and black pipe for greater than a twelve year period. With the added stabilizer, plastic pipe properties perform as specified by the manufacturer, if installed within the three or twelve years, respectively, from date of manufacture. Plastic pipe outdoor storage requirements are regulated by 49 CFR §192.59, which incorporates by reference ASTM D2513 Standard, 1999 edition.

III. Justification and Suggested Amended Language

AGA recognizes that the PHMSA staff participates in more than 25 national voluntary consensus standards committees. There are more than 60 standards and specifications incorporated by reference into 49 CFR parts 192, 193, and 195. PHMSA, state regulators and industry have expended an enormous amount of effort to participate in various committees in standard development associations. AGA supports the proposed non-substantive edits and regulatory clarifications published in the July 22, 2009 federal register notice, titled, *Periodic Updates of Regulatory References to Technical Standards and Miscellaneous Edits.* However, AGA is disappointed that PHMSA did not adopt in whole or in part the latest version of *ASTM D2513, ASTM Designation: "Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings (2009).* The latest version of the standard provides some significant upgrades over the 1999 edition. In the proposed rule, PHMSA states,

"PHMSA believes that a number of important issues need to be fully addressed by ASTM Committee F-17 and D20.10 before we adopt any new editions. Among these are the issues of appurtenances, marking and or traceability, increase in design factor, and

qualifications requirements for new materials. Therefore, we are proposing to continue to reference in the gas pipeline safety regulations the standards found in ASTM D¹638 (2003 edition), (ASTM D2513 1987 and 1999 edition), ASTM D2517 (2000 edition) and ASTM F1055 (1998 edition) for plastic pipe and fittings..."

The ASTM D 2513 standard is the foundation of the gas utility infrastructure, and it is important not to limit technical progress to versions of standards that are 10 and 22 years old. The 2009 edition of ASTM D2513 incorporates advances in manufacturing and installing polyethylene piping. Section *A.1.3.5 Color and UV Stabilizer*, takes into account the significant advances that have occurred to plastic materials, including the UV stabilizers that are added to these materials. The revised edition provides for more realistic regulation for the current absorptive properties of carbon black against exposure to ultraviolet light than the ASTM standard that was issued more than a decade ago.²

The specification for color and UV stabilizer has been revised in the 2009 edition of the standard to state:

A.1.3.5 Color and UV Stabilizer – PE materials shall be Code C or E as defined in Specification D3350. Code C material shall contain 2 to 3 percent well dispersed carbon black, and due to absorptive properties of the carbon black, is considered to be stabilized against deterioration from unprotected exposure to UV for not less than 10 years. Code E material shall be stabilized and protected against deterioration from unprotected UV exposure for not less than 3 years.

The fundamental problem caused by not adopting the latest version of ASTM D2513 is that the comprehensive resolution of all of the issues involved in specifications for plastic pipe manufacture and use may take many years to resolve; while uncontested issues, like the UV limitation, are prevented from improving pipeline safety.³ The petition knows of no disputes with the consensus standard position on UV light protection.

Since PHMSA has provided notice that it does not intend, at this time, to adopt the latest addition of ASTM D2513, AGA believes, at a minimum, PHMSA should provide a Stay of

¹ Fed Reg Page 36140, col 2

² Portions of the 1987 and 1999 versions of ASTM D2513 are incorporated by reference into 29 CFR 192

³ AGA submitted a petition for rulemaking to address the cited increased design factor, with the recognition that rulemaking will be delayed until results from field testing are completed.

Enforcement from section A1.5.7 *Color and UV Stabilizer* in the 1999 edition of ASTM D2513. This section stipulates that PE pipe stored more than two years outdoors requires additional testing to prove it meets the requirements of ASTM D2513-99. Manufacturers, independent labs and operators have conducted significant testing related to outdoor storage of plastic pipe. The latest version of ASTM D2513 allows unprotected yellow pipe and fittings to be stored outdoors for three years and unprotected black pipe and fittings to be stored outdoors for ten years.

There is no controversy regarding the technical vigor of the revised section as it pertains to the ability of plastic piping to withstand ultraviolet light. Gas utility operators and their state regulators have already sought waivers to take advantage of the new standard. AGA believes adoption of this section is consistent with the prudence PHMSA, NAPSR and AGA share regarding regulations. Finally, the Stay of Enforcement would eliminate the need for dozens of states and hundreds of operators to seek special permits for applying the storage requirements adopted in the current consensus standard.

This petition requests a minor amendment to revise 49 CFR §192.7 to incorporate by referenced ASTM section as presented below. If accepted, the addition will supersede the previous rule amendment by PHMSA.

The proposed regulatory language is simply to add the following section to 49 CFR 192.7.

Source and name of referenced material	49 CFR reference
(13) ASTM Designation: D2513-09 "Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings", A.1.3.5 Color and UV Stabilizer.	<u>§192.59.</u>

IV. Conclusion

AGA appreciates the effort that PHMSA has expended in supporting more than 25 voluntary national consensus organizations. AGA believes it is beneficial to incorporate voluntary consensus standards as part of federal pipeline safety regulations when the standards have been tested and incorporating these standards advances safety. AGA also believes it is

beneficial to update standards that PHMSA incorporates by reference to allow pipeline operators to use current technology, materials and operating practices. The pipeline safety code is still operating with the 1987 and 1999 editions of ASTM D2513. The 2009 edition of the standard enhances pipeline safety. Priority should be given to incorporating the standard by reference. Immediate pipeline safety improvement can be achieved with a stay of enforcement as presented in this petition.

Please let us know if AGA can provide you with assistance.

Respectfully submitted,

Date:

By:

Christina Sames

For further information, please contact:

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CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the Petition of the American Gas Association to be served upon the Administrator, Pipeline and Hazardous Materials Safety Administration by depositing the same in United States mail, to the addresses shown, with proper postage, on the 9 day of September, 2009.

Pipeline and Hazardous Materials Safety Administration U.S. Department of Transportation- East Building 1200 New Jersey Ave, SE Washington, DC 20590

Philip Bennett

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