TENNESSEE REGULATORY AUTHORITY



460 James Robertson Parkway Nashville, Tennessee 37243-0505

August 19, 2010

Mr. Jeff Wiese, Assistant Administrator/Chief Safety Officer U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration East Building, 2nd Floor, Mail Stop: E24-455 1200 New Jersey Ave., SE Washington, DC 20590

TRA DUCKET ROO

RE: Request for Waiver of Sections 192.7 of Part 192 of U.S.C. Title 49, Appendix B and ASTM D 2513 by Memphis Light Gas and Water a Division of the City of Memphis ("MLGW"). TRA Docket Number 08-00124.

Dear Mr. Wiese:

Please find enclosed the order of the Tennessee Regulatory Authority (TRA) relative to the above referenced matter. We are submitting the order and petition of Memphis Light Gas and Water (MLGW) for review and action in accordance with 49 USC 60118(a). MLGW requests action on this matter to continue the use in its operations of polyethylene pipe that has an unprotected storage period in excess of two years prior to installation.

In accordance with the requirements of the Guidelines for States Participating in the Pipeline Safety Program, information is provided as follows:

1. Name, address and telephone number of the applicant-

Charlotte Knight Griffin Acting General Counsel 220 South Main Street Memphis, TN. 38103 Telephone: (901) 528-4721

2. The safety regulation involved-

MGLW has requested a waiver from the requirements of section 192.7, Appendix B and American Society of Testing Materials ("ASTM") D 2513 to allow for continued use of plastic pipe, which is in service and had a storage period in excess of two years prior to installation.

Although a previous edition of ASTM D 2513 is referenced in section 192.7, ASTM D 2513 has been revised since the request for this waiver. The revision includes new UV ray exposure limits for the classification of polyethylene pipe for which this waiver is requested. Due to the absorptive properties of the carbon black, Code C material containing 2 to 3 percent well dispersed carbon black is protected against deterioration from UV exposure for at least 10 years.

3. A description of the pipeline facilities involved-

MLGW has installed 29,094 feet of pipe at numerous locations throughout the distribution system with more than two years of exposure to UV rays. According to MLGW all installations of the pipe in question were accomplished following appropriate qualifications and using consistently good construction practices in accordance with the manufacturer's recommended procedures.

4. The justification for approving the waiver, including the reasons why the regulations are not appropriate and why the waiver is consistent with pipeline safety-

The pipe in question is high density polyethylene pipe (HDPE) manufactured with a minimum of two (2) percent finely dispersed carbon black to provide the highest degree of protection possible from ultraviolet exposure.

MLGW submitted three pipe samples to Performance Pipe for testing to confirm performance to ASTM D 2513: 4- inch diameter SDR 11 stored outside for nine years and not installed; 1-1/4-inch diameter SDR 11 stored outside for five years and installed for three years; 6-inch diameter SDR 11 stored outside for eight years and installed for four years. The results confirmed that all pipe samples tested conformed to ASTM D 2513 specifications.

The 6-inch diameter SDR 11 black HDPE exposed to UV radiation for eight years and in service for four years was tested by Performance Pipe at the ASTM D 2513 test conditions and it survived over 200 hours at 80° C/670 psi. The 6-inch diameter HDPE meets the ASTM D 2513 requirements for elevated temperature sustained pressure testing. This pipe is used in the MLGW natural gas distribution system at 99 psig.

MLGW performs various activities that provide long term monitoring of all pipe installed in the MLGW system. Patrolling and leak surveying, in accordance with 49 C.F.R. §§ 192.511, 192.513, 192.721 and 192.723, respectively are performed as long term monitoring and no incidence of pipe fatigue or failure has been recorded.

Although not included in the edition listed in §192.7, the 2009 revision to ASTM D 2513 indicates that due to the absorptive properties of the carbon black, Code C material containing 2 to 3 percent well dispersed carbon black is protected against deterioration from UV exposure for at least 10 years. The HDPE pipe in question is

Code C and contains a minimum of 2 percent well dispersed carbon black with less than 10 years of exposure to UV radiation.

MGLW will notify the TRA Gas Pipeline Safety Division of any leaks identified on any of the pipe in use that was exposed to UV radiation for more than two (2) years and the heat fusion melt pattern test suggested by MLGW'S consultant will be required for the installation of all currently stored pipe that was exposed to UV radiation for more than two (2) years but less than ten years.

Considering the above factors, the waiver request is consistent with pipeline safety. Therefore, approval of this waiver would be consistent with pipeline safety efforts.

We understand that the TRA's order will be effective upon approval or if the TRA does not receive a response from the Federal Office of Pipeline Safety within sixty days of receipt of the order. If you have any questions regarding this matter, please contact Richard Collier, General Counsel, at 1-800-342-8359 extension 170 or me at extension 185. Your prompt response to this request is appreciated.

Sincerely,

Gayl · Soum
Larry K. Borum, Chief

Gas Pipeline Safety Division

Enclosures: Petition (CD) and Order (attached)

c: Richard Collier

Wayne Lemoi, OPS-Southern Region

Charlotte Knight Griffin

TRA Docket File No. 08-00124