TENNESSEE REGULATORY AUTHORITY

460 James Robertson Parkway
Nashville, Tennessee 37243-0505

January 18, 2011

Mr. Brent Haywood, P.E.
Vice President – Technical Services
Memphis Light, Gas, and Water
220 South Main Street
Memphis, Tennessee 38103

Re: Docket 08-00124, Petition of Memphis Light Gas and Water for a Waiver to Permit the Continued Use of Plastic Piping, which is in service and had a Storage Period in Excess of 2 Years prior to Installation.

Dear Mr. Haywood:

The Gas Pipeline Safety Division (GPSD) of the Tennessee Regulatory Authority (TRA) is in receipt of a letter dated December 15, 2010 from the Pipeline and Hazardous Materials Safety Administration (PHMSA) in response to the above referenced waiver request. A copy of the PHMSA letter accompanies. The letter contains no objections to the order of 49 CFR 192.7 as specified in the TRA submission dated August 19, 2010, however, it does include three (3) conditions as follows:

1. The operator must remove and discard a minimum of two times the diameter in length of all polyethylene (PE) pipe ends that have been stored outdoors at any time without properly fastened end-caps. This is due to UV exposure at these ends, which may be greater than exposure at other points in the pipe.
2. The 80 degree C (80°C) test **(ASTM D2513-09a)** must be performed for samples of the 4-inch, 6-inch and 8-inch pipe which have been most exposed to UV. To confirm the performance of the PE pipe materials in question, follow 5.6.2 (Procedure II) of ASTM D2837-08 **(or most current version referenced through ASTM D2513-09a)**. The test conditions are to be taken from Table 3 of D2837-08, or for a PE material with an HDB of 1600 psi, a test hoop stress of 825 psi and a test temperature of 176°F (80°C). The linear extrapolation of the stress regression curve to 438,000 hours (50 years) is substantiated when the log average failure time of the test specimens at 176°F (80°C) surpasses 6,000 hours.
3. All pipe must be inspected for surface damage including cuts, gouges, scratches, and similar imperfections. Any pipe segments with surface damage penetrating greater than 10 percent (10%) of the wall thickness must be removed.

According to Mr. Richard Sanders of PHMSA, these conditions are applicable to stored pipe. The GPSD is in agreement with these conditions and requests that MLGW provide a schedule for completing the testing as set forth in condition 2 by letter within sixty (60) after receipt of this letter. Upon completion MLGW shall provide a copy of the test results to the GPSD.

We appreciate MLGW's continuing patience and work relative to the resolution of this issue. Should you have any questions or wish to discuss any issues or concerns, please contact us.

Sincerely,

Larry K. Borum, Chief
Gas Pipeline Safety Division

cc: Richard Collier, TRA General Counsel
TRA Docket File #08-00124

U.S. Department
of Transportation

Pipeline and Hazardous
Materials Safety
Administration

1200 New Jersey Avenue, SE
Washington, D.C. 20590

DEC 1 5 2010

Mr. Larry K. Borum, Chief
Gas Pipeline Safety Division
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennessee 37243-0505

Dear Mr. Borum:

Pursuant to 49 USC 60118 (a), the Pipeline and Hazardous Materials Safety Administration (PHMSA) reviewed your letter of August 19, 2010, notifying us that the Tennessee Regulatory Authority (TRA) issued an approval order to Memphis Light Gas and Water (MLGW). This order from TRA to MLGW is for the continued use in its operations of polyethylene pipe that has an unprotected storage period in excess of two years prior to installation.

PHMSA does not object to the order of 49 CFR 192.7 as specified in the TRA submission. PHMSA, however, recommends that the following three conditions are upheld.

1. The operator must remove and discard a minimum of two times the diameter in length of all Polyethylene (PE) pipe ends that have been stored outdoors at any time without properly fastened end-caps. This is due to UV exposure at these ends, which may be greater than the exposure at other points in the pipe.

2. The 80 degree C (80°C) test **(ASTM D2513-09a)** must be performed for samples of the 4-inch, 6-inch, and 8-inch pipe which have been most exposed to UV. To confirm the performance of the PE pipe materials in question, follow 5.6.2 (Procedure II) of ASTM D2837-08 **(or most current version referenced through ASTM D2513-09a)**. The test conditions are to be taken from Table 3 of D2837-08, or for a PE material with an HDB of 1600 psi, a test hoop stress of 825 psi and a test temperature of 176°F (80°C). The linear extrapolation of the stress regression curve to 438,000 hours (50 years) is substantiated when the log average failure time of the test specimens at 176°F (80°C) surpasses 6000 hours.

3. All pipe must be inspected for surface damage including cuts, gouges, scratches, and similar imperfections. Any pipe segments with surface damage penetrating greater than 10 percent (10%) of the wall thickness must be removed.

If you wish to discuss this or any other pipeline safety matter related to this request, my staff would be pleased to assist you. Please call John Gale, Director of Standards and Rulemaking Division (202-366-0434) for regulatory matters or Jeffery Gilliam, Director of Engineering and Research Division (202-603-1550), for technical matters specific to this request.

Sincerely, .

Jeffrey D. Wiese
Associate Administrator for Pipeline Safety