EXHIBIT A

PPI Statement A

Originally adopted January 2007

Relative Oxidative Aggressiveness of Chloramines and Free Chlorine Disinfectants Used in Treated Potable Water on Crosslinked Polyethylene (PEX) Pipe

At the request of the High Temperature Plastics Division of the Plastics Pipe Institute (PPI), Jana Laboratories, an accredited laboratory, examined the relative oxidative aggressiveness of the common potable water disinfectants free chlorine and chloramines on crosslinked polyethylene (PEX) pipes.

For this research, samples of a commercially available PEX pipe were tested in general accordance with Standard Test Method ASTM F 2023. PEX pipe samples were tested to failure in a continuous flow test setup designed to accelerate failure by using elevated temperatures.

This project's test procedure deviated from F 2023 by using a test fluid containing chloramines and a test fluid containing free chlorine, both at the same 4.0 ppm concentration throughout the test. (ASTM F 2023 is a test method for free chlorine, controlled by minimum ORP. The EPA maximum limit for these disinfectants is 4.0 ppm for treated potable water.)

Test fluids were controlled to a pH of 6.8. Testing was conducted at elevated temperatures of 105°C (221°F) and 115°C (239°F) at 60 psig constant pressure. Testing at 4 test conditions was initiated for a total of 20 specimens of the same pipe sample.

When the testing was complete, failure times of the PEX pipe specimens tested with the free chlorine test fluid were compared to failure times of the PEX pipe specimens tested with the chloramines test fluid. The results of this testing showed pipe failure times approximately 40% longer when tested with chloramines compared to testing with free chlorine at the tested conditions.

Based on these results, it is the position of PPI HTD that chloramines are less aggressive than free chlorine to PEX pipes, and that testing using free chlorine, in accordance with ASTM F 2023, will conservatively estimate the time-to-failure for PEX pipes when used with the disinfectant chloramines.

Jana Test Report, Project 04-2256 Rev. 1 is available from the PPI HTD upon request.

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