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## STUDY OF DISINFECTANTS ON PE PIPE COMPLETED – REPORT NOW AVAILABLE Chlorine Resistance and Durability Examined

IRVING, TX – July 27, 2010 - The Plastics Pipe Institute, Inc. (PPI) today announced that an analysis has been completed on the potential effects of disinfectants on potable water supply polyethylene (PE) pipe. The findings are now available to the industry in a report posted online. Commissioned by the PPI and The Alliance for PE Pipe, the study, conducted by Jana Laboratories, examines the various areas of a potable water system including chlorination, durability, oxidative aggressiveness, temperature and pressure/stress. Case studies of actual systems encompassing a range of operating conditions, scope of service and system life were also included. Ontario, Canada-based Jana Laboratories is a world-recognized authority on testing and evaluating the effects of disinfectants on pipe materials.

"The base resin in a PE pipe formulation is highly engineered to provide the balance of properties required by the end-use application," stated Tony Radoszewski, executive director of the PPI. "This latest study helps to answer the question 'How will PE pipe perform in my utility?' and identifies the areas that should be addressed during an evaluation. It will also help a utility manager or a water system design engineer respond to questions about the longevity of PE pipe."

Radoszewski explained the background behind the Jana study and the significance of this PPI initiative for the industry. "Polyethylene pipe materials have been successfully used in potable water applications for more than 50 years and enjoy a consistently high satisfaction rating from water utilities. During this time, there has been a continual evolution in PE resins and their performance in pipe systems. To demonstrate and validate the long-term performance of these resins, the industry has been working for more than ten years to develop accelerated test and analysis methodologies that will help project long term performance in specific end-use environments. This report is a result of that effort.

"Current models project that high performance PE piping materials can, conservatively, provide more than 100 years of resistance to chlorine and chloramine treated potable water through the vast majority of potable water systems when properly designed and installed."

The report, which can be found directly at <u>http://www.janalab.com/pdf/disinfection.pdf</u> contains case study examples, charts, figures, photographs and other illustrations. It also provides a summary of the efforts; details the mechanisms of long-term aging of PE materials in potable water applications; examines the primary end-use and product factors impacting the long-term aging mechanisms; reports on the methodology to project long-term performance of PE piping materials in potable water applications; validates the methodology; and provides the resulting performance projections based on the currently available data.

"The methodology we used for forecasting long-term aging shows that performance is a function of the water quality, water temperature and operating stress, all of which will vary by utility," stated Ken Oliphant, Ph.D., P.Eng, executive vice president of Jana Laboratories, Inc. "Overall, the methodology developed to project PE pipe performance shows that current generation materials are expected to have excellent longevity across the majority of end-use applications and good performance even in very aggressive end-use environments."

For more information, visit the Plastics Pipe Institute website: <u>www.plasticpipe.org</u>.

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## About PPI:

The Plastics Pipe Institute Inc. (PPI) is the major trade association representing all segments of the plastic pipe industry and is dedicated to promoting plastics as the material of choice for pipe applications. PPI is the premier technical, engineering and industry knowledge resource publishing data for use in development and design of plastic pipe systems. Additionally, PPI collaborates with industry organizations that set standards for manufacturing practices and installation methods.

## About The Alliance for PE Pipe:

The Alliance for PE Pipe is composed of leaders in the PE pipe industry who are committed to the advancement of polyethylene pipe in the municipal water industry. Their goal is to help the world realize the benefits and long-term cost-effectiveness of using PE pipe. They are concerned over the state of water in the United States and want the industry to realize that PE pipe is the best choice for conserving water and protecting the environment.

## About Jana Laboratories:

Jana Laboratories is the leading piping systems technology firm in the world. Jana is a practical, solutionsbased engineering firm with a strong reliance on empirical testing data. Jana is positioned between a pure test lab, (which would have minimal engineering capability), and a full research lab (which would focus on theoretical science development). Jana places an applicable context on data and, through this analysis, is focused on providing a solution to its clients.

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