

December 21, 2020

RESEARCH STUDY SLAMMING

PLASTIC PIPE FLAWED

Statement and Analysis from PPI, the Major North American Trade Association Representing the Plastics Pipe Industry

A recent published article is based on flawed research conducted by Purdue University. Authored by Andrew Whelton, Amisha Shah and Kristofer Isaacson of the university, *“Plastic pipes are polluting drinking water systems after wildfires – it’s a risk in urban fires, too”* (THE CONVERSATION, December 14, 2020) contains flawed methodology and unsubstantiated inferences.

“Dr. Whelton’s latest foray into trying to disparage plastic pipe contains numerous innuendos and incorrect statements and information,” stated David Fink, president of the Plastics Pipe Institute, Inc. (PPI). “One inconsistency is that plastic pipes will in fact collapse under the temperature used in this study, and therefore will no longer be able to convey water. This is counter to the claim in the article that: ‘Heat-damaged plastic pipes can continue to leach chemicals into water over time, and ridding a water system of the contamination can take months and millions of dollars.’

“In one of their tests, they heated tiny pipe fragments at extreme temperatures which no plastic pipe can withstand, then shaved the remnant blobs into high surface area fragments to increase their extraction rate. This has no relevance to how plastic materials are used as water pipes in underground or plumbing applications. No credible conclusion, therefore, can be drawn from this work on how the quality of drinking water delivered by a plastic pipe system would be affected after a fire.

“There has been no evidence that plastic pipes are responsible for the production of the benzene or any other contaminant from the heating of the pipes during the Camp Fire in California during 2018,” stated David Fink. “It’s evident that the contamination was from the millions of tons

of the fire-ravaged environment that got sucked into the emptied water system. This was backed up by the Town Manager of Paradise, California where Whelton focused his attention. Kevin Phillips told us that ‘What the district saw was that the contamination from the fire was not associated with any particular pipe material and that even the galvanized and copper pipes that were in the ground saw the same amount of contamination as the polyethylene’.

“PPI members produce many certified plastic water products that meet and even exceed the health effect requirements and performance criteria for drinking water as stipulated in the ANSI/NSF/CAN-61 standard for potable water applications.”

“The study done by Dr. Whelton and his group,” Fink continued, “fails to present any practical, meaningful evidence of the effect of fire or heat on safe water delivery. And Whelton himself contradicts his own findings. In a November 11, 2020 CONSUMER REPORTS article, he is quoted as saying: ‘But I haven’t seen evidence yet that plastics are solely responsible for contamination after wildfires.’”

As a service to the industry, PPI has recently published a technical report -- TR-51 “*Investigation of Benzene in Drinking Water Following the “Camp Fire” in Paradise, CA*”. It is available free at the PPI website -- <https://plasticpipe.org/pdf/ppi-tr-51-2020.pdf>.

“Even though we find Whelton’s flawed study to be a disservice to communities who need reliable and trusted information on water safety, we would like to help,” Fink stated. “PPI is willing to work with universities and organizations on water quality studies, and we are disappointed that we were not contacted to support Whelton’s efforts.”

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About PPI:

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