

October 25, 2017

To: Members of the Ohio Senate Committee on Energy and Natural Resources

Re: Support Senate Bill 95

Chairman Balderson, Vice Chair Jordan, Ranking Member O'Brien, and members of the committee, thank you for the opportunity to offer this testimony in support of SB 95.

My name is Mike Whitehouse and I work at ISCO Industries, joining the company in 1994. ISCO is an employee owned company with headquarters in Louisville, Ky. We have approximately 450 employees servicing all of the United States, and Canada with a number of International locations for export of U.S. products and services. We have 4 employees who are actively working out of the State of Ohio, and annual sales to support projects in Ohio for 2016 were approximately \$6 Million and sales in Ohio over the past five years exceeds \$58 Million. We service municipal water and sewer projects, very active in landfill piping applications, a leader in renewable energy using geroexchange / geothermal systems, along with industrial projects including power and chemical plants. ISCO provides piping products and solutions to Ohio based or owned businesses. I am an active volunteer member with American Water Works Association (AWWA), with the Plastics Pipe Institute (PPI) serving as Municipal and Industrial Educational Chair, with ASTM International as a voting member in F17 Plastics Division, and with American Society of Civil Engineers (ASCE) where I am helping to develop guidelines for earthquake resistant piping systems, for water distribution.

I write today in support of H.B. 121 and S.B. 95. I feel it is important to allow the engineer of record to select the piping material that they feel is best suited for the city or municipal water distribution and supply system. Current regulations limit the materials allowed and some specify a single material type for use. This removes the ability of the Engineer of Record to specify the product type might be best suited for use and ties their decision making to a single material type. I understand that these bills provide local governments the needed flexibility to

consider all piping materials for water infrastructure projects and apply the power of competition to help save taxpayer money.

As a manufacturer who supplies materials for Ohio projects I know that this is a straightforward fix to what has long been a problem. In too many jurisdictions across the state taxpayers have been hurt unfairly by virtual monopolies of legacy materials due to many local regulations and requirements. I am not suggesting that I know the best material choice for every project, but I do know that allowing for consideration of alternatives will drive innovation and reduce costs. We have seen this work very effectively across the country in all of the industries we serve.

The data supports our own technical, market and research experience. A recent study from BCC research showed that municipalities that have “closed competition” pay between 32% and 35% more for pipe materials, regardless of what material is used. That means even if the alternate material is not chosen, the municipality can still save nearly \$100,000 per mile of pipe. This is a significant amount of savings for municipalities that are dealing with tighter and tighter budgets. To be clear, these savings are not based on choosing a less expensive material, but rather result from free and open competition.

I also know that the Nuclear Regulatory Commission (NRC), the Electric Power Research Institute (EPRI) and the American Society of Mechanical Engineers (ASME) together made a collective decision to move to plastic piping materials, specifically allowing the use of HDPE for critical raw water piping at Nuclear Facilities.¹ This was not a decision made lightly and the plastic material was researched and studied for more than a decade by engineers, codes and standards organizations, and other leaders in the piping industry, determining that the performance benefits of plastic piping, as compared to metallic piping for the critical piping

¹ <https://www.nrc.gov/public-involve/conference-symposia/ric/past/2011/docs/posters/04-hdpe-piping-final.pdf> and http://www.dow.com/plasticpipes/na/featured_stories/power-of-plastic.htm

service applications were significant, especially related to reliability, longevity of service and maintenance issues. ISCO helped to lead those efforts and we obtained “Nuclear Stamps” to allow us to provide piping solutions to these highly demanding and highly critical piping applications.

I also know that Non-Revenue water is a huge problem facing water districts in OH, and across the nation. Water districts on average lose 22% of their revenue assets daily through leakage and some systems have leak rates approaching 40% according to the Water Research Foundation (WRF).² These are revenues that are ultimately being unfairly funded by tax payers and community residents. Many metallic piping systems are joined by a slip on gasketed bell and spigot connection. These systems often also have an allowable leak rate during initial pressure testing used to commission and accept a newly installed water distribution system. There are many thermofusible plastic piping products that can be joined by butt fusion to provide a totally leak free connection where individual pipe segments and fittings are joined. The HDPE pipe selected by the NRC is an example of fused piping systems. The allowable leak rate for an HDPE fused system is ZERO. How many people would keep their money in a bank if they knew that they would likely lose 20% or 40% of the money due to “leaks” in their bank account? Sadly, many tax payers do not know that their communities have similar asset losses.

Many studies have been conducted both in the U.S. in Europe and other countries that show very clear and conclusive evidence that failure rates in plastic piping are much lower than those found in metallic systems. And HDPE as a thermofusible plastic material represents one of the lowest leak rates of all plastics historically. In the Christ Church Earthquakes in New Zealand, and in the Kobe Earthquake in Japan, there were hundreds of miles of piping distributions systems that failed.³ In those events there were zero system failures in existing HDPE piping

² <http://www.waterworld.com/articles/print/volume-26/issue-80/editorial-features/water-audit-helps.html>

³ https://www.researchgate.net/publication/261878688_Earthquake_Response_of_Underground_Pipeline_Networks_in_Christchurch_NZ

systems. None. So just as in the Nuclear Application when piping products are placed in very severe environmental or service environments, the plastic materials have simply proven to be superior to the alternate material choices that have been used in the same environments and in the same service conditions.

I was pleased to read in the bills that this consideration is limited to materials that “meet the engineering specifications for the project as determined by the design engineer...” With this important clause, along with discussions for fair evaluation of material performance, we can trust that our knowledgeable professionals will be able to make the right decisions to protect and improve our water systems. I want to help in that respect in any way that I can, and am committed to helping provide piping solutions to owners, States and municipalities.

I would be happy to answer any questions you may have.

Sincerely,

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