

Breaking Barriers for PVC Pipes:

A Conversation With Uni-Bell PVC Pipe Association Executive Director Bruce Hollands

The Uni-Bell PVC Pipe Association (PVCPA) is at the forefront of the effort to promote the use of polyvinyl chloride (PVC) pipe for water transmission and distribution. PVCPA represents those directly or indirectly involved in manufacturing PVC pipes in North America, as well as internationally. The association seeks to educate local, state, and national decisionmakers about the benefits of PVC pipe and to encourage its adoption for new water projects.

Bruce Hollands is the executive director of PVCPA and has over 20 years of advocacy and government affairs experience. Mr. Hollands recently sat down with Municipal Water Leader's editor-in-chief, Kris Polly, to discuss the history and organization of the association, the advantages of PVC over other pipe materials, and how the organization is working to bring down barriers to the use of its materials.

Kris Polly: Tell us about the association and when it was founded.

Bruce Hollands: PVCPA was founded in 1971 as a nonprofit organization to represent the joint interests of the PVC pipe industry in North America. Our mission is to promote the use of longer-life, lower-maintenance, corrosion-proof PVC piping in water and wastewater systems—for real sustainability, strength, and long-term asset management. PVCPA serves the engineering, regulatory, public health, and standardization communities.

Introduced in North America in 1951, corrosion-proof PVC piping offers a superior, proven, and truly sustainable solution for underground infrastructure, helping municipalities spend smarter and giving taxpayers the best return on their dollar.

With over 2 million miles in service in North America, PVC pipe is the product of choice for buried water, sewer, drainage, and irrigation infrastructure. It is a widely used infrastructure material because of its light weight, durability, and cost effectiveness.

Kris Polly: How many members does your organization have? What kinds of entities make up your membership?



Bruce Hollands (left) with Michigan Lieutenant Governor Brian Calley.

Bruce Hollands: We have a number of membership categories. The pipe producers, which represent 95 percent of the PVC pipe manufacturing capacity in North America, are the biggest contributors to the association. There are seven producers that are currently members. All the major PVC pipe manufacturers are members of the association.

We also have pipe supply manufacturers; additive suppliers; equipment suppliers, who are associate members; and resin producers, who are resin-producing members. They do not make PVC pipe themselves, but they provide the materials needed for its production and manufacture. There are also international affiliate members that are involved in the manufacture of PVC all around the world, but not in North America. Organizations will also join the association for the purposes of education and information sharing. In addition, we have a category called certification/testing



Bruce Hollands and other PVC representatives visiting with Senator John Boozman of Arkansas.

members; members in this category are organizations that certify the health and safety of the pipe materials.

Kris Polly: How many jobs do you feel are represented by your membership?

Bruce Hollands: The PVC pipe industry contributes in excess of \$14 billion annually to the U.S. economy and supports over 25,000 jobs.

Kris Polly: What is the most important objective of your association?

Bruce Hollands: Our most important objective is to continue telling the great story of PVC pipe and getting that message out to decisionmakers in places where we are currently not allowed to be part of the bidding process for water and sewer projects. This is particularly true of the water sector, where there are outdated procurement policies in place at the local level. These closed markets drive up costs for consumers and taxpayers, since PVC pipe can be 70 percent less expensive than iron pipe, which is the main competitor to PVC in the water market. Long-term operations and maintenance costs for PVC are also lower because iron pipes are subject to corrosion, which leads to leaks and breaks.

Numerous studies confirm that PVC pipe has a lifespan in excess of 100 years, and a recent report for Utah State University's Buried Structures Laboratory shows that PVC water pipe has the lowest water main break rate of all materials. Open procurement is key to solving America's underground infrastructure crisis because the overall capital costs of projects also decrease when PVC is allowed to compete against iron-pipe-only bids. Iron-only specifications drive up costs because in those cases, the iron industry is only competing against itself.

Kris Polly: Have you seen a trend toward more open procurement processes across the country?

Bruce Hollands: Yes, there is a definite trend in the right direction for taxpayers. PVC pipe is a cost-effective, high-performance product that keeps eroding the market share of other materials, especially iron. Iron pipes require costly treatments and coatings to mitigate against corrosion, and yet the old technology material always succumbs to corrosion anyway. The iron pipe industry likes to brag about pipe that has been in service for a long time—say for 100 years. However, it's important to put this into proper context.

The fact is that most thicker iron pipes did not perform as designed for much of the time they were in service.

They were often plagued with water main breaks, water loss, and water quality issues, as well as higher operating and maintenance costs due to corrosion well before the century mark.

The pipe they produce today is even less durable. It has thinner walls—a 76 percent reduction in pipe wall thickness. Because corrosion attacks thin-walled ductile iron at the same rate as thick-walled cast iron, given the same environments, the expected life of ductile iron is significantly less than for older cast iron.

And corrosion can be deadly. When corrosion inevitably gets into the water supply, it lowers the chlorine count and reduces its effectiveness. This creates an opportunity for pathogens to enter the water supply.

Our water systems are at a critical crossroads due to the continued dangers of corrosion. The chances of new crises similar to that in Flint, Michigan, are likely, unless changes are made. Ironically, in many older cities PVC pipe is widely used in the suburbs but not allowed in the city boundaries because of outdated procurement policies, and this needs to change.

Kris Polly: Can you provide a case study or example of a success story of a system that has converted over to PVC?

Bruce Hollands: There are thousands of case studies to choose from. Every day, municipalities across the country are replacing corroded iron pipe networks with safer, corrosion-proof, sustainable PVC pipe. PVC pipe is the only water pipe in North America with an Environmental Product Declaration certified by the global health organization NSF International. As an example, PVC pipes used in Indianapolis have a failure rate 2.5 times less than traditional pipe materials, and this has realized significant cost savings for ratepayers. There is clear benefit to reducing barriers to competition for water and sewer piping in the U.S. market, which will give localities more options, spur innovation, and lower costs.

Kris Polly: What is the message about PVCPA that you would most like to deliver to water users and decisionmakers?

Bruce Hollands: We are a professional technical association that represents the manufacturers of gasketed PVC pipe, and studies show that PVC pipe is the longest-lasting, most cost-effective, and safest material available for water systems. It is time to unleash American competition in the water and sewer sector and rebuild the nation with the best materials available at a lower cost to taxpayers.

