Written Statement for the Senate Committee on Environment and Public Works/Subcommittee on Water and Wildlife on "Our Nation’s Water Infrastructure: Challenges and Opportunities," Tuesday, December 13, 2011.

Sustainable, Corrosion-Proof Piping for America’s Water and Wastewater Infrastructure

The Uni-Bell PVC Pipe Association is a not-for-profit organization representing 95 percent of the manufacturing capacity of the North American PVC pipe industry. Our pipe producing members operate over 90 facilities in the U.S. and our associate members (suppliers) hundreds more. PVC pipe extrusion facilities are found in 32 states across the United States: California has the most plants (9), followed by Texas (6), Arizona (5) and Pennsylvania (5).

The PVC pipe industry serves a vast and complex market including 54,000 drinking water systems, 10,000 wastewater facilities and 15,000 sewer and wastewater contracting firms. PVC water and sewer pipe producers contribute in excess of $14 billion annually to the U.S. economy and support over 25,000 jobs.

Building and replacing water and sewage lines across the U.S. will cost between $660 billion to $1.1 trillion over the next 20 years. These pipelines, however, are deteriorating faster than the rate at which they can be replaced because of corrosion, which is the leading cause of the watermain break epidemic in North America (estimated at some 300,000 breaks annually). According to a 2002 congressional study, corrosion is also a drag on the economy, costing U.S. drinking water and wastewater systems over $50.7 billion annually. As a result, any comprehensive and truly sustainable underground infrastructure strategy must address corrosion.

Today’s corrosion crisis is due to the materials used in America’s piping networks over the last hundred years. At first, cast iron was used, with ductile iron gradually replacing it as the material of choice. Both now suffer from corrosion. Moreover, the burden of old technology materials is not limited to the cost of repairing and replacing failed pipelines. It includes the cost of losing treated water from leaking systems. Leaking pipes made from old technology materials lose an estimated 2.6 trillion gallons of drinking water annually, or 17 percent of all treated water pumped in the United States.
The solution to these problems begins with sustainability, durability and corrosion resistance, and this is why more utilities must actively consider alternative piping materials like PVC in their bidding processes. Increased durability means fewer leaks, better water conservation and lower costs. Accordingly, any comprehensive action plan for water and wastewater infrastructure renewal must also include reform of municipal procurement practices that limit competition, shackle innovation and increase costs. We believe that to get the most efficient and sustainable use of federal money for water and wastewater projects, fair and open competition must be the operating standard. Federal grants provided to municipalities should have open competition stipulations similar to those used by the United States Department of Agriculture for its water and sewer grant programs for rural communities. In this way federal dollars obtain maximum value for taxpayers.

With over two million miles in service, PVC pipe has been celebrated by *Engineering News Record* as one of the top 20 engineering advancements of the last 125 years. A study by the American Water Works Research Foundation recently quantified the life expectancy of PVC pipe at more than 110 years – making it excellent for long-term asset management and sustainability. Furthermore, PVC pipe is more efficient to manufacture, taking four times less energy to make than concrete pressure pipe, and half that used for iron pipe. As well, PVC pipe is cost-effective, has watertight joints and its lightweight reduces transportation and installation costs, yielding additional greenhouse gas reductions. It is also totally recyclable, though most of it has yet to enter the recycling stream given its great durability.

The PVC pipe industry is an active member of the Clean Water Council (CWC). We support continued federal funding of FY 2012 of the State Revolving Funds (SRF’s) for drinking water and clean water programs. These are essential programs that greatly help to maintain and improve these very important infrastructure systems. With the proposed decreases in government spending for water and wastewater systems we also believe S.939, the Sustainable Water Infrastructure Act of 2011, is critical to the continuous funding of this infrastructure. This legislation is important because it removes state volume caps on Private Activity Bond’s (PAB’s) for water and wastewater projects – opening the door for much needed additional revenues.

The PVC pipe industry thanks you for letting us submit a statement for this important hearing and we will be pleased to answer any questions you may have.

Respectfully,

Bruce Hollands  
Executive Director