PVC was “Creating A Financial Burden” in Prescott Due to Repeated PVC Pipe Failures

Eight Arizona Water Service Providers, whose territory includes cities of Phoenix, Mesa, Scottsdale, and Tempe (representing a majority of AZ’s population), do not allow the use of PVC pipe in their water systems. This is increasingly becoming the narrative across the country as communities evaluate the pros and cons of their water pipe material. In February 2021, the Prescott City Council voted unanimously to ban PVC pipe from its water system after the Prescott City Council held a virtual study session in December 2020 to evaluate recent water pipe failures and the resulting damages to the city’s water system.

In 2016, city staff set Ductile iron pipe as the preferred material. However, the city allowed PVC pipe within city boundaries. Recently though, the PVC pipe that was installed led to costly failures and required replacements. In their presentation to the Prescott City Council, the city’s engineering team concluded that “allowing PVC has created a financial burden to the City’s Water Funds.”

In 1986, a PVC pipe in the city of Prescott exploded/ruptured injuring two workers.

“The plastic pipes that we have running under much of Prescott may have been cheaper to initially purchase when past city leaders chose to use them, but they crack more easily, don’t last as long, and can actually lose some of their ability to handle pressure at higher temperatures in the soil or even melt if exposed to high temperatures from a fire.”

- Cathey Rusing, Member, Prescott City Council, AZ, Sororan Alliance, 6/10/21

For more details on this case study or to discuss the benefits of Ductile iron pipe contact one of DIPRA’s Regional Engineers at https://www.dipra.org/contact-dipra/ask-an-engineer