The Distribution System

The potable water distribution system for the City of Azle consists of the Azle Water Treatment Plant; 125 miles of pipe through which potable water is transferred to businesses and residences; and, two elevated storage tanks. In all, the City maintains nearly 4 million gallons of water in storage to ensure an adequate supply.

The distribution system is very complex. Not only does pipe size change for example, a transmission line may be a 16” pipe that eventually works down to a 2” service line; but also, pipe composition can vary from iron to PVC—both size and composition can affect water quality.

Other features of the distribution system that have potential to affect water quality are: cross connection prevention devices; valve and fire hydrant maintenance (these elements can affect the direction of flow and pressure); line repair and new additions, likewise may affect water quality by creating disruptions to existing lines. So considering the complexity of the distribution system, just through these few examples, the only way to verify the quality of water that we serve to our customers is by routinely sampling a wide variety of locations throughout the system. By doing so, we monitor the “health” of our distribution system. In addition, the City will routinely flush water mains through fire hydrants to help improve water quality.

System-wide pressure studies show an average system pressure of 94 PSI

Flush Water Lines

At first glance, it seems like flushing is a waste of water—especially during periods of time when water conservation is required or when drought conditions are being experienced. However, flushing is vital to routine system maintenance. Flushing lines through fire hydrants removes mineral buildup and helps to maintain chlorine residual throughout the distribution system. In addition, it gives the City an opportunity to test hydrants for pressure and flow for fire protection. By routinely flushing, we actually minimize water loss because as water quality improves, hydrants can be flushed for shorter periods of time.

City employees are the only persons allowed to test hydrants. To help prevent water theft, please contact City Hall at 817-444-2541 and report running hydrants.

Water Loss Information

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 31st 2020, our system lost an average of 6.10 gallons of water per connection per day (GPCPD). This amount equates to 5.28% of the total volume of water produced in a year and is an exceptionally low volume. “Water loss” is water that cannot be accurately accounted for such as, water used in fighting fires, flushing water mains, testing fire hydrants, broken water mains, undetected leaking water mains, water theft, etc. If you have any questions regarding the water loss audit, please call the Water Treatment Plant at 817-752-2686.