

Pataskala Utilities Department

Valve Exercising Program

The City of Pataskala Utilities Department conducts an annual valve exercising program to keep the main line water valves in the distribution system in good working condition.

The City owns and maintains nearly 4,000 water valves that vary in size from 2" to 12" in diameter. These valves range in age from brand new to 85 years old! For a valve to continue to operate properly for over 80 years, it needs to be well maintained. Valves that are not maintained have a tendency to seize up and subsequently break when they are operated, limiting the Department's ability to properly respond to emergencies that require water service to be shutdown.



Every year, members of our Systems Team locate and exercise half of the valves on a rotating schedule. They will shut the valve completely, and then re-open it. This verifies proper operation of the valve. Valves require anywhere from 9 to 39 revolutions for complete operation. As you can imagine, this process can be quite tiring to the employees who are tasked with it. That's where the City's Hurco Spin Doctor 4000 comes in.



In 2012, the city purchased a hydraulically operated valve exercising machine. This machine can be connected to the receiver of a pick-up truck, providing a counterbalance. The articulating arm can travel from the driver side door to the passenger side door and reach everything in between. The valve exerciser comes with a torque regulator that helps to prevent the breakage of older and difficult to operate valves. When the torque limit is reached, the operator simply works the valve open and closed (exercises) until the valve eventually operates freely.

Valve failure is an expensive problem. The valve must be dug up in order to be repaired or replaced.

The City budgets around \$40,000 a year to address valve replacements and repairs. This cost, coupled with the difficulties that faulty valves add to addressing emergencies, makes the Valve Exercising Program a crucial component of distribution system maintenance.

We are happy to answer any questions at: Utilities Department, 621 W Broad St, 740-964-6275

Chris Sharrock
Utility Director
csharrock@ci.pataskala.oh.us

