

Pataskala Utilities Department

Water Treatment Plants

Did you know that the City of Pataskala operates and maintains two Water Treatment Plants that treat the drinking water for our customers? The original water treatment plant was constructed at 7024 Hazleton-Etna Road in 1939, with expansion projects completed in 1955, 1965, 1985 and 1999 to increase capacity. The City constructed a second water treatment plant in 2006 at the intersection of Watkins Road and Refugee Road.



Both of these water plants are ground water treatment plants. A ground water treatment plant uses well pumps to pull water from underground wells. These well pumps push the raw water to an iron filter. Here, oxygen is introduced to oxidize the iron that is in suspension in the raw water. A filter media is used to separate the oxidized iron from the water, before it is sent on to the next phase of treatment. The filter media is cleaned by a process known as “backwashing”. This process is simply forcing water through the filter in reverse to wash away the iron solids collected. Once the filter media has been backwashed, it is ready to be returned to service until another backwashing cycle is needed.



After the Iron Filter stage, the water is sent through water softeners. These softeners use a process called “Ion Exchange” to remove calcium and other minerals that the water has collected on its way through the ground to the aquifer. These minerals are what gives a water its hardness. The softeners reduce the hardness to zero. This, however, creates a water that is aggressive in nature. Water will dissolve any material it is in contact with. To prevent the water from dissolving the materials that your private plumbing consists of, we blend in a specific amount of non-softened water so that the water is not aggressive. We maintain a hardness of 100-110 parts per million. This also prevents the water from feeling slimy and allows for less detergent use in cleaning activities. Once the water is softened, Chlorine is added to ensure that harmful microorganisms are not present at any point of the City’s water distribution system.

This treatment process costs the City a significant amount of money. Around \$200,000 a year is needed for the salt and chlorine alone. Additional costs include the electric for the pumps, the routine maintenance, the OEPA licensed operator as well as the 4,000 laboratory tests that are run every year to ensure that the drinking water provided to our customers is in compliance with all EPA regulations at an annual cost of \$10,000.

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

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