# What affects the taste of my water?

The Blissfield Water treatment plant is a complete treatment plant, meaning that we have multiple steps that our water goes through, physically and chemically, before it is fed to our community. Our treatment plant gets water from the River Raisin; this makes us a surface water treatment plant. When you are treating surface water there are many "things" that can get in the water; unlike a ground water system. All run off from farm fields, storm drains in roads and parking lots makes its way into our drinking water supply.

Our treatment begins with two (2) strong oxidizers, carbon and potassium permanganate. These chemicals are used to oxidize the organic materials in the water, which lead to issues like taste and odor. The next step is coagulation and flocculation. These steps are a combination of chemicals, time and mixing. The chemicals that we use in coagulation is ferric sulfate and a cationic polymer. During the chemistry of coagulation, the PH of the water drops. Therefore, we add caustic soda to raise the PH to safe levels for consumption, generally 7.8-8.0. After almost 10 hours of treatment at this time, the first dose of chlorine is added. Then the water is filtered and receives fluoride, phosphate, and last dose of chlorine. The taste you may be experiencing is linked to geosmin. Geosmin is a naturally occurring chemical that is produced by bacteria. The taste of dirt may fluctuate with the lifecycle of Streptomyces bacteria. When these organisms die, geosmin is released in large quantities, causing the inevitable change in taste. Geosmin is harmless, but you will always be able to taste it. Humans have very sensitive receptors for the flavor of geosmin.

## How can you help the taste in your home?

We always recommend that homeowners are cleaning their faucet aerators at least monthly.

## Want to know more about the treatment plant process?

Watch for our Water Treatment Plant Tours; these tours are offered quarterly and shared to social media and via email communications.

### Want to sign up for email communications?

Visit <a href="https://blissfieldmichigan.gov/stay-informed/">https://blissfieldmichigan.gov/stay-informed/</a> or call our office and provide your email to any of our staff, 517-486-4347.

# WATER INTAKE COAGULATION DISTRIBUTION STORAGE

WATER TREATMENT

<sup>\*</sup>This diagram is a representation of the treatment process. For more detailed information on our treatment process, we recommend attending a water treatment plant tour.