HOW A TREATMENT FACILITY WORKS

COAGULATION/CLARIFICATION

Alum is used in water treatment plants as a coagulant in a critical step to clarify water by causing suspended particles to clump together. When added to water, alum forms flocs that trap impurities, the floc sticks to beads similar to the ones in the photo on the left.

FILTRATION

Anthracite, garnet sand, silica sand, coarse garnet, and gravel are used in water treatment plants as filter media because they have varying sizes and densities, which allows them to effectively trap and remove different-sized particles and impurities from water. This multilayered filtration system ensures thorough purification by progressively removing finer particles as water passes through each layer, resulting in cleaner and safer drinking water.

CHEMICALS / DISINFECTION

An important step in water treatment is the use of chemicals for various purposes. The chemicals we use are: Sodium Hypochlorite for disinfection, Caustic Soda for pH adjustment, Zinc Orthophosphate for corrosion control, Alum for coagulation, and Sodium Fluoride for oral treatment.

FLUSHING / BACKWASH

Flushes and backwashes maintain the efficiency and longevity of filtration systems. Flushes remove accumulated sediments and trapped contaminants from filter media while backwashing reverses the flow to dislodge trapped particles, preventing clogs and ensuring continuous, effective water purification. These procedures ensure that the treatment plant operates efficiently and consistently produces clean and safe drinking water.

STORAGE / DISTRIBUTION

Water storage tanks play a crucial role in the distribution of water from a treatment plant by providing a reserve supply, ensuring consistent water pressure, and serving as a buffer during peak demand periods. Our treatment plant has a 1.3 and 2.0 million gallon tank on site at our plant.