

Aeration	The treatment process begins with aeration, which reduces carbon dioxide levels. In turn, this lowers treatment costs and improves taste.
Alum	Aluminum sulfate (alum) is added to the water before it passes into the flocculation basins. The alum prompts small particles to coagulate, or stick together, forming floc particles and removing color from the water. The floc particles continue to grow and stick together, becoming heavier before moving into the settling basins.
Potassium Permanganate	Potassium permanganate is added to oxidize and remove iron and manganese because iron and manganese may cause undesirable color, taste, and odor in water.
Settling Basins	In the settling basins, the floc particles settle to the bottom, forming a layer of solids, which is removed by a siphon device and discharged to lagoons. The clear water at the top of the settling basin flows into the filter basins.
Filter Basins	The filter basins consist of four feet of granular activated carbon (GAC) to remove any remaining fine particles. The GAC filter also removes any remaining tastes, odor and volatile organic compounds. In addition, the GAC filter aids in polishing the water as it passes onto the final process steps.
Chloramination	Chloramines are a form of chlorine that is created by adding ammonium sulfate to the water after chlorine is added. We have invested in the use of ammonium sulfate, a food-grade substance that safely transforms chlorine to form chloramines. Similar to chlorine, chloramines keep the water safe by protecting against biological growth throughout the distribution system. Chloramines, however, are more stable and also produce less disinfection by-products.

****The Town of Wilmington uses MRWA water as a supplemental supply. For information regarding the treatment process of MWRA water, please see www.mwra.com.**