

HOW SCWA ENSURES THE QUALITY OF YOUR WATER

From the Director of Water Quality & Lab Services, Karen A. Randazzo

The most important information contained in this report is that the SCWA's drinking water quality continues to meet all state and federal regulations. We are committed to providing the highest quality drinking water to our customers. The SCWA laboratory is both state and federally certified. Our approach to water quality testing is aggressive and comprehensive. We test our water at the wellhead, at various stages of treatment and within the distribution system for bacteria and a wide range of inorganic and organic chemicals. In fact, we test our drinking water for far more chemicals than required and at a frequency far in excess of local, state and federal regulations. In 2012 we tested for over 300 chemical constituents, analyzed more than 53,000 water samples to produce more than 176,000 test results. **Because of these stringent safeguards, we can reassure all our customers that the water we deliver to them meets all drinking water standards and guidelines.**

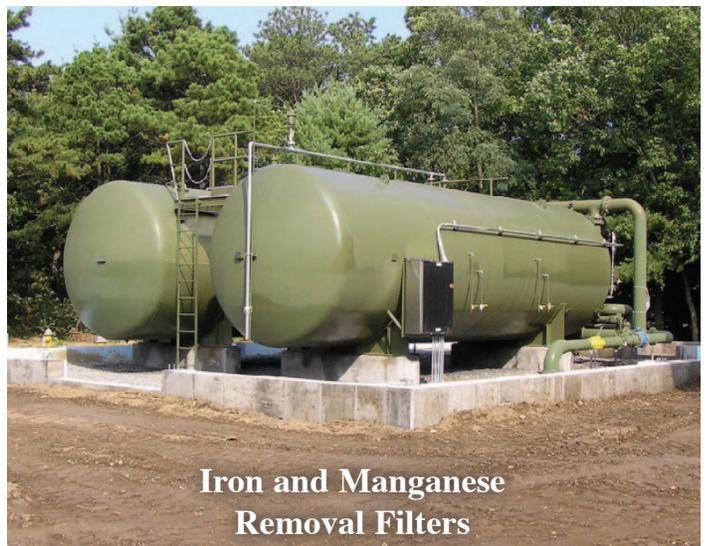
Water Treatment

As most of our groundwater already meets all state and federal water quality standards, it generally does not receive extensive treatment. Minute traces of chlorine are routinely added according to the specifications of the state health department to prevent bacterial growth that could occur in our water mains and tanks.

We also adjust the pH level of the water we deliver to you because the water, which we pump from the ground, is naturally acidic (pH can range from 4.5 to 6.8). To prevent corrosion of home plumbing, our water is chemically "buffered" by adding a hydrated lime product to increase the pH level. Soda ash is sometimes used instead of hydrated lime in certain portions of our system. This greatly reduces or eliminates the leaching of lead and copper from customers' interior plumbing. Our test results for Bacteriology and Lead and Copper can be found on page 36.

In areas where the groundwater naturally contains iron levels higher than the standard, sequestering agents such as polyphosphates may be added to control the iron and keep it in solution. We also use specialized iron and manganese removal filters, and employ strategies such as systematic flushing of water mains to reduce these naturally occurring metals.

Approximately 22% of our wells receive treatment using granular activated carbon filtration to remove pesticides/herbicides and volatile organic compounds.



**Iron and Manganese
Removal Filters**

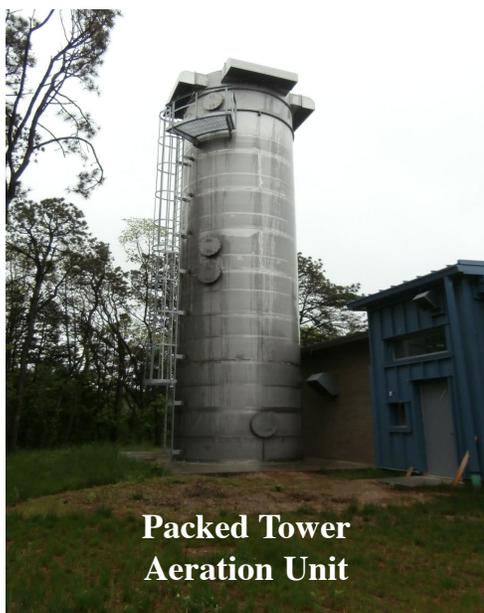


**Granular Activated Carbon
(GAC) Filtration Unit**

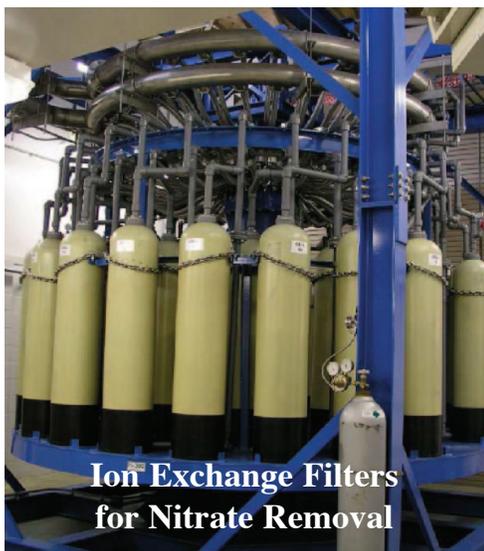
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Water Treatment

Packed Tower Aeration (PTA) units also called air strippers, ion exchange, reverse osmosis, and perchlorate resin filters are also used as needed. In some cases wells are blended together at the pump station to lower the amount of contaminants, such as nitrate and perchlorate, in the water we serve.



Packed Tower Aeration Unit



Ion Exchange Filters for Nitrate Removal

WELLS PLACED IN SERVICE IN 2012

In 2012, we added 5 new wells to our water system and replaced 4 wells. In addition, this table lists the 11 wells placed in service on GAC filtration and 2 wells (denoted with an *) placed in service on PTA treatment to remove the contaminant(s) noted. To reduce the level of the contaminant (denoted with a **) in the water our customers receive, 2 wells were blended.

WELL NAME(S)	LOCATION	CONTAMINANT(S)
Church St. #2	Holbrook	1,1-Dichloroethene; 1,1,1-Trichloroethane
Edgewood Av. #4	St. James	Tetrachloroethene
Horseblock Rd. #1	Farmingville	Nitrate**
Jayne Blvd. #1	Terryville	1,1-Dichloroethane; 1,1-Dichloroethene; MTBE; 1,1,1-Trichloroethane
Meehan Ln. #1A and 2	Coram	IPMP
Meade Dr. #4	Centerport	Trichloroethene
Middle Rd. #1	Southold	DCEPA Di-acid***; Metolachlor ESA; Metolachlor OA
New Highway #1 & 2*	East Farmingdale	Cis-1,2-Dichloroethene; 1,1-Dichloroethane; 1,1-Dichloroethene; Tetrachloroethene; 1,1,1-Trichloroethane; Trichloroethene; 1,1,2-Trichlorotrifluoroethane
Nicolls Rd. #1	Islandia	Chlordane**
Nicolls Rd. #2	Islandia	Chlordane
North Rd. #1 and 2	Greenport	MTBE
Rocky Point Rd. #6	East Marion	Alachlor ESA; DCEPA Di-acid***; Metalaxyl; Metolachlor ESA; Metolachlor OA
Virginia Av. #1	Lake Grove	MTBE

WELLS TAKEN OUT OF SERVICE IN 2012

In 2012, we retired 2 wells. In addition, the wells listed in this table were removed from service because they had elevated levels of the contaminant(s) noted.

WELL NAME(S)	LOCATION	CONTAMINANT(S)
Edgemere Rd. #2	Montauk	Carbamazepine; Gemfibrozil; Ibuprofen; Meprobamate; Naproxen
Middle Rd. #6	Peconic	DCEPA Di-acid***

***Also known as Tetrachloroterephthalic acid