2015 CONSUMER CONFIDENCE REPORT

Where your water comes from: Gloucester City pumps its water from an underground aquifer known as the Potomac Raritan Magothy (PRM) by way of four wells. Each well is designed to deliver 1,000 GPM (gallons per minute). The water enters the Johnson Boulevard Water Treatment Plant at the aerator tower, where atmospheric air is forced to interface with the water. This process changes the state of the iron in the water from ferrous state to a ferric state. The water is then collected in a 1 million gallon reservoir. Sodium Hypochlorite is added to oxidize iron, manganese ions and disinfect the water. It is then pumped to the three green sand filters. These filters capture the iron floc and potassium permanganate is added here to regenerate the bed in order to maintain proper ion exchange. Sodium Hypochlorite is added to maintain a slight chlorine residual in order to guard against bacteria infection. The water then flows under pressure into the distribution system in order to maintain acceptable flows and pressure.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radio-active materials, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Contaminants that may be present in source water before we treat it include:

* ***Microbial contaminants,*** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

* ***Inorganic contaminants,*** such as salts and metals, which can be naturally-occurring or result from urban storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

* ***Pesticides and herbicides,*** which may come from a variety of sources such as agriculture and residential uses.

* ***Radioactive contaminants,*** which are naturally occurring.

* ***Organic chemical contaminants,*** including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

* ***Lead*** **-** If present, elevated levels can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Gloucester Utility Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from the Safe Drinking Water Hotline or at *http://www.epa.gov/safewater/lead*.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Special Consideration Regarding Children, Pregnant Women, and Nursing Mothers: Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or development effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is sufficient toxicity information for a chemical (for example, lack of data on reproductive or development effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

WATER QUALITY

The table below lists all the drinking water contaminants that we detected during the 2015 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 - December 31, 2015. The state requires us to monitor for certain contaminants less than once per year because the concentration of these contaminants are not expected to vary significantly from year to year.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG): the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Minimum Detection Level: The minimum concentration of contaminant that can be identified, measured and reported with 99% confidence that the contaminant concentration is greater than zero.
Action Level (AL): Action level is not an MCL, it is a trigger point at which remedial action is to take place. The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.
Treatment Technique: A required process intended to reduce the level of contaminant in drinking water.
PPM: Parts Per Million (1ppm = 1" in 16 miles), PPB: Parts Per Billion (1ppb = 1" in 16,000 miles),
PPT: Parts Per Trillion (1ppt = 1" in 16,000,000 miles), BFL: Billion Fibers per Liter, CU: Color Units

SECONDARY

SUBSTANCE	UNITS	MCL	HIGHEST DETECTED	MAJOR SOURCE IN DRINKING WATER	HEALTH EFFECTS
SODIUM	PPM	50	48	Erosion of natural deposits in our environment.	For healthy individuals, sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be a concern to individuals on a sodium restricted diet.
SULFATE	PPM	250	30	Erosion of natural deposits in our environment.	Not Applicable
CHLORIDE	PPM	250	39	Erosion of natural deposits in our environment.	Not Applicable
IRON	PPM	0.3	0.03	Erosion of natural deposits in our environment.	Not Applicable
P.H.	SU	6.5-8.5	8.2	Erosion of natural deposits in our environment.	Not Applicable
HARDNESS	PPM	50-250	104	Erosion of natural deposits in our environment.	Not Applicable

TRIHALOMETHANES (THMS)

SUBSTANCE	UNITS	MCL	HIGHEST DETECTED	MAJOR SOURCE IN DRINKING WATER	HEALTH EFFECTS
NITRATE	PPM	10	0.15	The major sources of nitrates in drinking water are runoff from fertilizer use; leaking from septic tanks, sewage; and erosion of natural deposits.	Infants below six months who drink water containing nitrate in excess of the maximum contaminant level (MCL) could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

SUBSTANCE	UNITS	MCL	HIGHEST DETECTED	MAJOR SOURCE IN DRINKING WATER	HEALTH EFFECTS
TTHM'S TOTAL TRIHALOMETHANE	PPB	80	27	By-product of chlorination process of water treatment.	Some people who drink water containing trihalomenthanes well in excess of the MCL over many years could risk cancer mortality or morbidity. Liver, kidney, or central nervous systems.

SUBSTANCE	UNITS	MCL	HIGHEST DETECTED	MAJOR SOURCE IN DRINKING WATER	HEALTH EFFECTS
CHLORINE	PPM	N/A	.95	Water additive used to control microbes.	Not Applicable

VOLATILE ORGANIC CONTAMINANTS (V.O.C.)

SUBSTANCE	UNITS	MCL	HIGHEST DETECTED	MAJOR SOURCE IN DRINKING WATER	HEALTH EFFECTS
Carbon Tetrachloride	PPB	5.0	1.7	The major sources of carbon tetrochloride in drinking water are discharge from chemical plants and other industrial activities.	Some people who drink water containing carbon tetrachloride well in excess of the maximum contaminant level (MCL) for many years could experience problems with their liver and may have an increased risk of getting cancer.

SUBSTANCE	UNITS	MDL	HIGHEST DETECTED	MAJOR SOURCE IN DRINKING WATER	HEALTH EFFECTS
1,4-Dioxane	PPB	3.0	1.1	Most of the 1,4-dioxane that is found in air comes from industrial processes that use the chemical. 1,4- dioxane does not stick to soil and can enter surface water or groundwater. It can migrate rapidly in groundwater and is relatively resistant to degradation in the environment.	Studies in laboratory animals have also demonstrated that exposure to 1,4-dioxane can result in liver and kidney damage. Animals exposed to 1,4-dioxane also experienced nasal irritation and inflammation.

Gloucester City violated a drinking water standard. Even though this was not an emergency, as our customer, you have the right to know what happened and what was done to correct the situation. Part of our water quality monitoring requirements is testing for volatile organic compounds. The requirements are testing on a quarterly schedule. During 2014, specifically during the 3rd quarter of that year the sample was missed. What this means is there is nothing you need to do. Once we were aware of our mistake we immediately took action to resolve the problem of the monitoring deficiency. At no time were there any health or any other issues. Should you have any questions, please feel free to contact Fred Schindler at 856 456-0169.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for the public water system, which is available at www.state.nj.us/dep/swap/ or by contacting the NJDEP, Bureau of Safe Drinking Water at (609) 292-5550.

The source water assessment performed on our source determined the following:

	Pathogens			Nutrients 1			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection By product Precursors		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells -4		4		1	3			1	3	4			4			4				1	3	4		

Security Issues: In response to September 11, 2001 and the State's Domestic Security Preparedness Act, the Gloucester City Environmental Utilities Department is in the process of updating and initiating a security system within the Department.

- **Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
- **Nutrients:** Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
- **Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE) and vinyl chloride.
- **Pesticides:** Man-made chemicals used to control pests, weeds, and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.
- **Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead and nitrate.
- **Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
- **Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to http://www.nj.gov/dep/rpp/radon/index.htm or call (800) 648-0394.
- **Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection by products are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessment, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

ENVIRONMENTAL UTILITIES DEPARTMENT INFORMATION

Website: www.cityofgloucester.org
Business Hours: 7:30 AM - 3:30 PM, 7 Days a Week - Including Holidays.
Phone Number: All service emergency and non-emergency calls directed to our service number (856) 456-0169. **All billing inquiries** directed to our Tax Department Office Number: (856) 456-1250.
Emergency: During non-business hours, emergency phone calls to our service number (856) 456-0169 will be handled by our answering service and promptly responded to.
Council Meetings: 4th Thursday of the month, 8 pm, City Hall Court Room, 313 Monmouth Street, Gloucester City, NJ.
Fred A. Schindler Jr., Licensed Superintendent **PUBLIC WATER SYSTEM ID# 0414001**