



# BOROUGH OF SWEDESBORO

## COUNTY OF GLOUCESTER

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## *2020 Annual Drinking Water Quality Report*

**Borough of Swedesboro Water Company**  
**For the Year 2020, Results from the Year 2019**

We are very pleased to provide you with the 2020 Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been to provide to you a safe and dependable supply of drinking water. Our water source is from groundwater wells located throughout the Borough of Swedesboro. These wells draw water from the Potomac-Raritan-Magothy Aquifer. The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for the Borough of Swedesboro which is available at [www.state.nj.us/dep/swap](http://www.state.nj.us/dep/swap) or by contacting NJDEP Bureau of Safe Drinking Water at (609) 292-5550. You may also contact the Borough of Swedesboro Water Department at (856) 467-0202.

The Borough of Swedesboro performed more than 120 analyses for constituents in your drinking water according to Federal and State laws. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2017-2019, we did not monitor for VOC's and Inorganics, and therefore cannot be sure of the quality of your water for those specific contaminants during that time. However, our monitoring during early 2020 showed that 26 VOC's & 12 Inorganics were sampled and none were detected above the MCL.

**We are pleased to report that our drinking water is safe and meets Federal and State safety requirements.** This report describes our water quality and what it means. If you have any questions about this report, please contact our offices at (856) 467-0202 or stop at our office to inspect our test data.

The Brough of Swedesboro Water Co. is a public community water system consisting of 3 wells, 0 wells under the influence of surface water, 0 surface water intake(s), 0 purchased ground water source(s) and 0 purchased surface water source(s).

**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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791)**

The table below illustrates the susceptibility ratings for the eight contaminant categories for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M) or low (L) for each contaminant category. The eight contaminant categories are defined at the bottom of this page. **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 assessments, NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

Source	Pathogens			Nutrients			Pesticides			Volatile Organic Compound			Inorganics			Radio-nuclides			Radon			DBPs		
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Well - 3			3			3			3			3		3			2	1			3			3

**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 byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example: leaves) present in surface water.

## DEFINITIONS

**In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:**

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) – one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Total Organic Carbon (TOC): We are required to remove a certain percentage of (TOC) from our drinking water on a monthly basis. Total Organic Carbon has no adverse health effects. However, TOC provides a medium for the formation of disinfection byproducts.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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 -The "Goal"(MCLG) is 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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Goal (MRDLG): The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination

Secondary Contaminant- Substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Recommended Upper Limit (RUL) – Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as odor, taste or appearance. RUL's are recommendations, not mandates.

Contaminants that may be present in source water 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 stormwater runoff, 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, urban stormwater

runoff, and residential uses.

- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

The Borough of Swedesboro routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2019.

**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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).**

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## TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Total coliform Bacteria	N	0		0	1 positive monthly sample.	Naturally present in the environment
<b>Inorganic Contaminants: Sampled 2015</b>						
Arsenic	N	1.10	ppb	n/a	5	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N	0.105	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper Result at 90 <sup>th</sup> Percentile <b>SAMPLED Dec 2019</b>	N	0.149  20 sites sampled Bi-Annually  0 Sites exceedances	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	N	0.241	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Result at 90 <sup>th</sup> Percentile <b>SAMPLED June 2019</b>	N	2.40  20 sites sampled Bi-Annually  1 Site exceedances	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nickel	N	0.30	ppb	N/A	N/A	Erosion of natural

						deposits
Nitrate (as Nitrogen)	N	<0.04	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	4.40	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
<b>Radioactive Contaminants - 2015</b>						
Gross Alpha	N	<3.00	pCi/1	0	15	Erosion of natural deposits
Combined Radium- 228 & 226	N	1.50	pCi/1	0	5	Erosion of natural deposits
<b>Disinfection By-Products: Sampled 2019</b>						
TTHM Total Trihalomethanes	N	Range = 2–18.1 Highest detected = 18.1	ppb	N/A	80	By-product of drinking water disinfection
HAA5 Haloacetic Acids	N	Range = 1–2.6 Highest detected = 2.6	ppb	N/A	60	By-product of drinking water disinfection

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. This past triennial sampling period we failed to monitor for the required VOC's (Volatile Organic Compounds) and Inorganics. However, in 2015 & early this year 26 VOC's & 12 Inorganics were sampled and none were detected above the MCL.

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 crypto sporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

**TEST RESULTS**

Secondary Contaminant	Level Detected	Units of	
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<b>t</b>		<b>Measurement</b>	<b>RECOMMENDED UPPER LIMIT (RUL)</b>
Sodium	34.40	ppm	50

**\* Sodium**

For healthy individuals the 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 (RUL) may be of concern to individuals on a sodium restricted diet.

<b>Regulated Disinfectants</b>	<b>Level Detected (Average &amp; Highest Detect)</b>	<b>MRDL</b>	<b>MRDLG</b>
Chlorine	0.6 ppm (avg) 0.7 ppm (high)	4.0 ppm	4.0 ppm

During 2019, NJDEP required the Borough of Swedesboro to monitor for Perfluorononanoic Acid (PFNA), plus 1,2,3 Trichloropropane, 1,2-DiBromo-3-Chloropropane, & Ethylene Dibromide and we are happy to report that none were detected in our drinking water.

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, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

- (1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.
- (2) Arsenic. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
- (3) Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
- (4) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who

drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

(5) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

(6) Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

(7) Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

(8) Selenium. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

(9) Alpha emitters. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

(10) Combined Radium 226/228. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

(11) TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

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- Pesticides and herbicides which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- Organic chemical contaminants including synthetic and volatile organic chemicals which are byproducts of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants which can be naturally occurring or be the result of oil and gas production and mining activities.

### **Lead**

If present elevated levels of lead 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. The Borough of Swedesboro Water Company 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>.

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. Food and Drug Administration Regulations establish limits for contamination in bottled water which must provide the same protection for public health.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline at 1-800-426-4791.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2017-2019, we did not monitor for VOC's and Inorganics, and therefore cannot be sure of the quality of your water for those specific contaminants during that time. However, our monitoring during early 2020 showed that 26 VOC's & 12 Inorganics were sampled and none were detected above the MCL.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, and synthetic organic chemicals. Our system received monitoring waivers for both of these types of contaminants.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

We at the Borough of Swedesboro Water Company work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water resources which are the heart of our community and our way of life.