

We at the City of Bordentown Water Department work hard each day to provide high-quality water to every tap. We ask that all our customers help us protect and conserve our water resources, which are the heart of our community, our way of life, and our children's future.

Mission Statement

For more information...

Water quality - call the U.S. Environmental Protection Agency's Safe Drinking Water Hotline, 1-800-426-4791

State of New Jersey Department of Environmental Protection, Bureau of Safe Drinking Water: www.state.nj.us/dep/watersupply (609) 292-5550

Local drinking water quality - call the City of Bordentown Water Department at 609-298-2121, ext. 5

What if I have questions?

If you have any questions about this Consumer Confidence Report or concerning your water utility, please contact the City of Bordentown at 609-298-2121, ext. 5

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled public meetings. They are held at 7:00 p.m. on the second Monday of each month at the Carlslake Community Center, 207 Crosswicks Street in Bordentown. If you have questions regarding the source water assessment report or summary, please contact the NJDEP's Bureau of Safe Drinking Water at (609) 292-5550.

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Bordentown, NJ 08505

Joseph D. Myers,
Commissioner "Public Property, Streets & Water"



City of Bordentown Water Department

(PWS ID# 0303001)

2020 Annual Drinking Water Quality Report

2019 Data

We're pleased to present to you this year's Annual Drinking Water Quality Report.

This report is designed to inform you about the quality of the water and the services that the City of Bordentown Water Department (BWD) delivers to you every day. Our constant goal is to provide you with a dependable supply of high-quality drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Where does my water come from?

The raw water we treat comes from four groundwater wells supplied from the Magothy-Raritan aquifer. The City does not use any other sources of supply. For 2019 we produced approximately 1.45 million gallons of high-quality drinking water for our customers on a daily basis.

How is my water treated?

The BWD water treatment plant uses a treatment process consisting of WRT radiological filtration, a packed tower aerator and disinfection, with pH adjustment and corrosion control treatment. In November 2015 a radium removal treatment process was added to assist in the removal of radioactive contaminants.

Where does my water come from?

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. The Bordentown Water Department routinely monitors for constituents in your drinking water, according to Federal and State laws. The table on the other side of this report shows the results of our monitoring for January 1st to December 31st, 2019. Drinking water, incl. bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily mean your 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 (1-800-426-4791).

Waived Requirements

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system has been granted a waiver for asbestos.

How do drinking water sources become polluted?

(NJDEP-required descriptive language)

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 materials, and can pick up substances resulting from human or animal activity. 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, livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metal which may be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil or gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants**, which may be naturally-occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic or 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.

Violations

ALE for LEAD: The lead action level (ALE) was exceeded in both semi-annual monitoring periods in 2019. The 90th percentile value was 40 ppb (15 ppb action level) for Jan – June, and 25 ppb for July-December. We will continue semi-annual sampling until the 90th percentile value is below the action level. As part of our corrective action plan and consistent with NJDEP guidelines, homes were retested and all results from the retesting came back with no action level exceedances; meaning, the BWD's retesting of the original lead exceedances came back with no exceedances. Please visit our website <https://cityofbordentown.com/lead-testing-information/> for additional information on BWD's lead results and

steps taken to reduce lead exceedances. Free water testing is available to residents upon request. 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. BWD 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 the 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>. 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. Bordentown also received violations for failure to report additional lead samples collected during the July 1, 2018 to December 31, 2018 monitoring period by January 10, 2019 and the January 1, 2019 to June 30, 2019 monitoring period by July 10, 2019. These samples were taken outside the regular monitoring locations by resident request as part of the City's free testing program. The results were subsequently submitted to the DEP and reported on in the Water Quality Results table on this report. Bordentown was required to collect 20 samples for pH, orthophosphate, and alkalinity at the distribution system for the monitoring period January 2019 to June 2019. Only 19 samples were submitted to the DEP. Internal procedures were adjusted to avoid sampling errors for these contaminants in the future.

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 (1-800-426-4791).					
2019 Water Quality Results					
Radioactive Contaminants	MCLG	MCL	Level Detected	Violation	Likely Source
Combined Radium-228 & 226 Test Results Year 2019	0 pCi/L	5 pCi/L	Range: ND-1.5 RAA: 1.0	N	Erosion of natural deposits
Inorganic Chemicals	MCLG	MCL	Level Detected	Violation	Likely Source
Barium Test Results Year 2017	2 ppm	2 ppm	Range: 0.0016 Highest: 0.0016	N	Discharge of drilling wastes, metal refineries, and erosion of natural deposits
Beryllium Test Results Year 2017	4 ppb	4 ppb	Range: ND-0.5 Highest: 0.5	N	Discharge from metal refineries and coal-burning factories or electrical, aerospace, and defense industries
Cadmium Test Results Year 2017	5 ppb	5 ppb	Range: 0.33 Highest: 0.33	N	Corrosion of galvanized pipes; erosion of natural deposits
Nickel Test Results Year 2017	n/a	none	Range: 24.1 Highest: 24.1	N	Runoff from fertilizer, leaching from septic tanks, sewage, and erosion of natural deposits
Nitrate (as Nitrogen) Test Results Year 2019	10 ppm	10 ppm	Range: 2.16 Highest: 2.16	N	Corrosion of household plumbing systems and erosion of natural deposits
Selenium Test Results Year 2017	50 ppb	50 ppb	Range: 1.7 Highest: 1.7	N	Discharge from petroleum and metal refineries, erosion of natural deposits, discharge from mines
Copper & Lead	MCLG	AL	Level Detected	Violation	Likely Source
Copper Test Results January 2019 to June 2019	1.3 ppm	1.3 ppm	90th Percentile: 0.105 Samples > AL: 0 of 60	N	Corrosion of household plumbing systems and erosion of natural deposits
Lead Test Results January 2019 to June 2019	0 ppb	15 ppb	90th Percentile: 40 Samples > AL: 26 of 139	Y	Corrosion of household plumbing systems and erosion of natural deposits
Copper Test Results July 2019 to December 2019	1.3 ppm	1.3 ppm	90th Percentile: 0.05 Samples > AL: 0 of 62	N	Corrosion of household plumbing systems and erosion of natural deposits
Lead Test Results July 2019 to December 2019	0 ppb	15 ppb	90th Percentile: 25 Samples > AL: 10 of 83	Y	Corrosion of household plumbing systems and erosion of natural deposits
Copper, lead and nickel MCL's have not yet been established. Currently, only Action Levels (AL) of 1.3 ppm for copper and 15 ppb for lead apply.					
Regulated Disinfectants	RUL		Level Detected	Violation	Likely Source
Chlorine Test Results Year 2019		4.0 ppm	Range: 0.0-0.74 RAA: 0.41	N	Treatment process
Volatile Organic Compounds / Disinfection By-products	MCLG	MCL	Level Detected	Violation	Likely Source
HAA5 Haloacetic Acids Test Results Year 2019	n/a	60 ppb	Range: 0.0-6.67 Highest: 3.10 LRAA	N	Byproduct of drinking water disinfection
TTHM Total Trihalomethanes Test Results Year 2019	n/a	80 ppb	Range: 0.0-20.0 Highest: 13.45 LRAA	N	Byproduct of drinking water disinfection
Individual Contaminants	MCLG	MCL	Level Detected	Violation	Likely Source
Ethylene Dibromide Test Results Year 2019	0 ppb	0.05 ppb	Range: ND-0.01 Highest: 0.01	N	Discharge from industrial processes and petroleum production
The State allows monitoring for some contaminants every three years, since the concentrations do not change frequently. The latest sample dates are shown for these contaminants.					
Secondary Contaminants	RUL		Level Found	Violation	Likely Source
Iron Test Results Year 2019		0.3 ppm	Range: ND-0.06 Highest: 0.06	N	Erosion of natural deposits
Manganese Test Results Year 2019		0.05 ppm	Range: 0.02-0.02 Highest: 0.02	N	Erosion of natural deposits
Chloride Test Results Year 2018		250 ppm	Range: 10.5-11.6 Highest: 11.6	N	Erosion of natural deposits
pH Test Results Year 2019		6.5-8.5 Units	Range: 6.79-10.06 Highest: 10.06	N	Naturally present in the environment
Sulfate Test Results Year 2018		250 ppm	Range: 5.4-5.8 Highest: 5.8	N	Erosion from natural deposits; Industrial wastes
Hardness, Carbonate Test Results Year 2018		250 ppm	Range: 32.7-67.8 Highest: 67.8	N	Naturally present in the environment
Total Dissolved Solids (TDS) Test Results Year 2017		500 ppm	Range: 99.5 Highest: 99.5	N	Erosion from natural deposits
Note on Recommended Upper Limit Exceedances: Secondary standards are non-mandatory guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health.					
Microbiologicals-Revised Total Coliform Rule (RTCR)	Number Required	Number Completed	Corrective Actions Required	Corrective Actions Completed	
Level 1 Assessment - Total Coliform	0	0	0	0	
Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Bordentown had 2 positive results for coliform bacteria in 186 samples. No samples were positive for E.Coli.					

Source Water Assessments

The New Jersey Department of Environmental Protection (NJDEP) in 2005 completed and issued the Source Water Assessment Report and Summary for our public water system. It is available at <http://www.nj.gov/dep/watersup-ply/swap/index.html> or by contacting the NJDEP, Bureau of Safe Drinking Water at (609) 292-5550 or watersupply@dep.nj.gov. The list to the right provides the number of wells that have either a high (H), medium (M), or low (L) susceptibility rating for each of eight contaminant categories. The susceptibility ratings (in parentheses) for the four wells follow each contaminant category.

If a water 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, the DEP may change existing monitoring schedules based upon susceptibility ratings.

- Pathogens (4 Wells-M):** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
 - Nutrients (4 Wells-H):** Compounds, minerals and elements (both naturally occurring and man-made) that aid plant growth. Examples include nitrogen and phosphorus.
 - Pesticides (4 Wells-L):** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing of pesticides. Examples include herbicides such as atrazine, and insecticides such as chloro-dane.
- Radionuclides (2 Wells-H, 2 Wells-M):** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
 - Volatile Organic Compounds (4 Wells-H):** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
 - Inorganics (1 Well-H, 3 Wells-M):** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.
- Disinfection Byproduct Precursors (3 Wells-H, 1 Well-M):** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants used to kill pathogens (usually chlorine) react with dissolved organic material (leaves, etc.) in surface water.
 - Radon (4 Wells-M):** 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.

GLOSSARY

Parts per million (ppm) One part per million is equivalent to a single penny in ten thousand dollars.

Parts per billion (ppb) One part per billion is equivalent to a single penny in ten million dollars.

Non-detects (ND) Laboratory analysis indicates that the contaminant is not present at a detectable level.

n/a Not Applicable

Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Residual Disinfection Level Goal (MRDLG) The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Locational Running Annual Average (LRAA) The concentration of a contaminant averaged over the period of one year.

Picocuries per liter (pCi/L) A measure of radioactivity.

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 allows for a margin of safety.

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.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Others

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 developmental 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 insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental 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.