

Annual Drinking Water Quality Report
Borough of Pitman Water Department
For the Year 2019, Results from the Year 2018

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of 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. Our water source is are wells that draw groundwater from the Potomac-Raritan-Magothy Aquifer and we purchase water from the NJ American Water Company (Their Water Report is included).

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your Pitman water at 856-589-1040 to obtain information regarding your water system's Source Water Assessment.

We are pleased to report that our drinking water meets all federal and state safety requirements. This report shows our water quality and what it means. We want our customers to be informed about their water utility. If you want to learn more, please attend our regular scheduled council meetings at 110 S. Broadway. Meetings are held the 2nd and 4th Mondays each month at 7 pm.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).

EPA requires monitoring for over 80 drinking water contaminants. Those contaminants listed in the table are only contaminants detected in your water.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Likely Source of Contamination
Microbiological Contaminants 2018						
Total Coliform Bacteria	No	0/100 ml	P/A	N/A	0	Naturally present in the environment
Radioactive Contaminants tested on 4/3/2018						
Gross Alpha Test results 2018	No	Range- ND Highest avg. < 3	pCi/l	0	15	Erosion of natural deposits
Combined Radium- 228 & 226 Test results 2018	No	Range – ND Highest avg. <1	pCi/l	0	5	Erosion of natural deposits

Inorganics tested on 4/3/2018						
Barium	No	Range-0.03-.037	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	No	Range -0.0018-0.0019	ppm	0.10	0.10	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper 9/12/18 Result at 90 th Percentile	No	0.041 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride 4/3/18	No	Range – 1.9-2.0	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead 9/12/18 Result at 90 th Percentile	No	0.0 No samples exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) Tested 4/3/18	No	Range –ND -<1.0	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM 2018 Total Trihalomethanes	No	Range 0 -37.8 Highest annual - 37.8	ppb	N/A	80	By-product of drinking water disinfection
HAA5 2018 Haloacetic Acids	No	Range 0.0 – 23.7 Highest annual- 23.7	ppb	N/A	60	By-product of drinking water disinfection

Regulated Disinfectants	Level Detected (Average & Highest Detect)	MRDL	MRDLG
Chlorine 2018	0.10-0.40	4.0 ppm	4.0 ppm

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 Level 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.

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).

Secondary Contaminant	Level Detected	Units of Measure	RUL
Sodium 4/3/18	128-133	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.

The Pitman Water Dept. and NJ American Water Company routinely monitor for contaminants in your drinking water according to Federal and State laws. The tables show the results of the monitoring period from January 1, 2018 to December 31, 2018. The state allows monitoring for some contaminants less than once per year because the concentrations of these contaminants don't change frequently. Some of the data, through representative, are more than one year old.

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.

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 storm water 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 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.

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.

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.

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

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.

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 Level 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.

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. Pitman Water Dept. 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 second to 2 minutes before using water for drinking and cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water hotline or at <http://www.epa.gov/safewater/lead>.

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 received monitoring waivers for asbestos and synthetic organic compounds.

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. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

We at Pitman Water Dept. work hard to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call 856-589-1040 if you have questions, or attend a council meeting at 110 South Broadway on the second and fourth Mondays of each month. We ask that all of our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

SEWER MAINTENANCE

The Borough of Pitman is responsible for maintaining wastewater flow in the sanitary sewer system. The line that connects a house or building to the Borough system is called a lateral. If a blockage occurs causing a backup, the borough encourages residents to call so we can verify whether the sewer main or lateral is obstructed. If the main is clear the property owner will be notified of the need to call a plumber to clear the service lateral.

All property owners are responsible for the service lateral from the house/building to the sewer main.

Many things clog sewer pipes such as grease, roots, sanitary products, sticks, paper towels, Baby wipes, etc. Blockages can be avoided by not flushing anything but toilet paper. If you Have any questions, please call us @ 856-589-1040

PLEASE CONTINUE TO CONSERVE WATER. ALL NON ESSENTIAL USE IS TO OCCUR ON AN ODD/EVEN BASIS.

Western System - PWSID NJ 0327001

2018 Data Table of Detected Contaminants

Towns Served by this System: Audubon, Audubon Park, Barrington, Bellmawr in part, Beverly, Burlington Twp in part, Camden (11th & 12th wards, Cramer Hill), Cherry Hill in part, Cinnaminson, Clementon, Delanco, Delran, Edgewater Park, Elk Twp in part, Gibbsboro, Gloucester Twp in part, Haddonfield, Haddon Heights, Haddon Twp in part, Hi-Nella, Laurel Springs, Lawnside, Lindenwold, Magnolia, Maple Shade in part, Mt Ephraim, Mt Laurel in part, Oaklyn, Palmyra, Pennsauken in part, Riverside, Riverton, Runnemede, Somerdale, Stratford, Voorhees

Regulated contaminants not listed in this table were not found in the treated water supply.

In addition to local ground water, the Western System receives treated surface water from the Delaware River Regional Water Treatment Plant. 2018 data is presented below.

Regulated Substances

Parameter	Units	Compliance Achieved	MCLG	MCL	Highest Compliance	Range Detected	Typical Source
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Inorganics

Barium (2017) ⁵	ppm	Yes	2	2	0.1	ND to 0.1	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nickel (2017) ^{1,5}	ppb	Yes	NA ¹	NA ¹	64	ND to 64	Erosion of natural deposits
Nitrate	ppm	Yes	10	10	1.52	ND to 1.52	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits

Turbidity

Turbidity	NTU	Yes	NA	TT = 1 NTU	0.08	0.04 to 0.08	Soil runoff
	%	Yes	NA	TT = % of samples <0.3 NTU	100% ²	NA	Soil runoff

Treatment Byproducts Precursor Removal

Total Organic Carbon (TOC)	%	Yes	NA	TT ≥35% Removal	41% ³	41% to 69%	Naturally present in the environment.
Ratio of Actual / Required TOC Removal	Ratio	Yes	NA	TT: Running Annual Average ≥ 1.0	1.16 ³	1.16 to 1.96	Naturally present in the environment.

Disinfectants

Chlorine (Surface Water)	ppm	Yes	NA	TT ≥ 0.20	0.51 ⁴	0.51 to 1.08	Water additive used to control microbes
Chlorine (Distribution System)	ppm	Yes	MRDLG = 4	MRDL = 4	0.69 ⁶	0.05 to 1.58	Water additive used to control microbes

Disinfection By-Products

Total Trihalomethanes (THMs)	ppb	Yes	NA	80	43.3 ⁷	4.7 to 56.0	By-product of drinking water disinfection
Five Haloacetic Acids (HAA ₅)	ppb	Yes	NA	60	22.8 ⁷	ND to 21.9	By-product of drinking water disinfection

Radiologicals

Alpha Emitters	pCi/L	Yes	0	15	5.1 ⁷	3.78 to 4.8	Erosion of natural deposits
Combined Radium (226/228)	pCi/L	Yes	0	5	1 ⁷	ND to 1.49	Erosion of natural deposits

Lead and Copper Monitoring Program - At least 50 tap water samples were collected at customers' taps in 2018

Contaminant / Monitoring Period	Units	Compliance Achieved	MCLG	Action Level (AL)	90th Percentile	Homes Above Action Level	Typical Source
Lead - 6/1/2018 to 9/30/2018	ppb	Yes	0	15	2	1	Corrosion of household plumbing systems
Copper - 6/1/2018 to 9/30/2018	ppm	Yes	1.3	1.3	0.228	0	Corrosion of household plumbing systems

When a total coliform positive bacteria sample is collected, the Ground Water Rule states that all raw water wells contributing to that location must be sampled. All required sampling was conducted, but the reporting of these raw water samples were late. As a result, a reporting violation was issued. The system returned to compliance once the results were uploaded.

Footnotes

¹ Nickel monitoring is required. Currently there is no established MCL or MCLG

² 100% of the turbidity readings were below the treatment technique requirement of 0.3 NTU. Turbidity is a measure of the cloudiness of the water and a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

³ Data represents the lowest removal of Total Organic Carbon (TOC)

⁴ Data represents the lowest residual entering the distribution system from our surface water treatment plant

⁵ The State of New Jersey allows us to monitor for certain contaminants less than once a year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative, are more than one year old.

⁶ Data represents the highest monthly average of chlorine residuals measured throughout our distribution system.

⁷ Data represents the highest locational running annual average calculated quarterly



WE CARE ABOUT WATER. IT'S WHAT WE DO.®