We've Come a Long Way

Once again we are proud to present our annual water quality report covering the period between January 1 and December 31, 2018. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at any hour—to deliver the highest quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

Where Does My Water Come From?

Our drinking water comes from a blend of sources that may include ground water from the Potomac-Raritan-Magothy Aquifer and surface water from the Delaware River. Moorestown Township purchases surface water from New Jersey American Water.

Community Participation

You are invited to participate in our public forum and voice your questions about your drinking water at regularly scheduled Moorestown TWP Council meetings which are open to the public held at the Town Hall located at 111 W 2nd Street. Meeting date and time available on the Moorestown TWP website www.mooretown.nj.us/ or Phone: 856-235-0912

Township of Moorestown
PWS ID#: NJ0322001
601 East Third Street
Moorestown, NJ 08057

Questions?
We want you to be informed about your drinking water. For more information about this report, or for any questions relating to your drinking water, please call Martin Pratt at the Moorestown Township Department of Public Works at (856) 235-3520.

Township of
Moorestown

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2018 Annual Drinking Water Quality Report

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Source Water Assessment

SWAP (Source Water Assessment Program) is a program of the New Jersey Department of Environmental Protection (NJDEP) to study existing and potential threats to the quality of public drinking water sources throughout the state. Sources are rated depending upon their contaminant susceptibility.

DEP considered all surface water highly susceptible to pathogens; therefore, all intakes received a high rating for the pathogen category. For the purpose of the Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and a low rating was assigned.

Susceptibility Ratings for the Township of Moorestown Water Department Sources

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intake that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The seven contaminant categories are defined at the bottom of this page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

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, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

	PATHOGENS			NUTRIENTS			PESTICIDES			VOLATILE ORGANIC COMPOUNDS			INORGANICS			RADIONUCLIDES			RADON			DISINFECTION BYPRODUCT 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 - 7			7			7			7			7		7			7				7		7	

For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report. The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for Moorestown's public water system, which is available at http://www.nj.gov/dep/watersupply/swap/index.html, or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550 or watersupply@dep.nj.gov.

Unregulated Contaminant Monitoring

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

Lead in Home Plumbing

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. We are 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, 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.

Substances that Could be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity.

Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

System Update

Upgrades to The N Church St and Harford Rd water treatment plants are scheduled to be completed in early 2020.

Upgrades to the Kings HWY water treatment plant were completed and plant placed on line in April 2018.

2018 Sampling Results

PWS ID#: NJ0322001

Our water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents only those substances that were detected; our goal is to keep all detects below their respective maximum allowed levels. The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

REGULATED SUBSTANCES				Moorestown Township		Delaware River Regional WTP			
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Violation	Typical Source
1,1-Dichloroethane (ppb)	2018	50	NA	0.1	ND-0.1	NA	NA	No	Discharge from metal degreasing sites and other factories
1,1-Dichloroethylene (ppb)	2018	2	2	0.2	ND-0.2	NA	NA	No	Discharge from industrial chemical factories
Alpha Emitters (pCi/L)	2018	15	0	4.32	ND-4.32	NA	NA	No	Erosion of natural deposits
Barium (ppm)	2017	2	2	0.0377	0.0043 - 0.0377	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	2017	4	4	0.73	ND - 0.73	NA	NA	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Bromate (ppb)	2017	0	10	NA	NA	5	5	No	By-product of drinking water disinfection
Chlorine (ppm)	2018	[4]	[4]	0.32[3]	0.22-0.48	0.51[5]	0.51-1.08	No	Water additive used to control microbes
Combined Radium (pCi/L)	2018	5	0	1.16	ND - 1.16	NA	NA	No	Erosion of natural deposits
Haloacetic Acids [HAA] (ppb)	2018	60	NA	3[4]	0-11	NA	NA	No	By-product of drinking water disinfection
Nickel (ppb)	2017	100	NA	10.9	ND - 10.9	NA	NA	No	Pollution from mining and refining operations; Natural occurrence in soil
Nitrate (ppm)	2018	10	10	ND	ND	1.52	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	2017	50	50	2.2	1 - 2.2	NA	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	24[4]	3-38	NA	NA	No	By-product of drinking water disinfection
Total Organic Carbon (% removal)	2018	TT>or equal 35% removal	NA	NA	NA	41%[2]	41%–69%	No	Naturally present in the environment
Turbidity[1] (NTU)	2018	TT=1 NTU	0	NA	NA	0.08	0.04 - 0.08	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2018	TT=% of samples <0.3 NTU	NA	NA	NA	100%	NA	No	Soil runoff

[1] 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. We monitor turbidity because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

[2] Data represents the lowest removal of Total Organic Carbon (TOC)

[3] Amount Detected value represents the highest running annual average.

[4] Amount Detected value represents the highest locational running annual average (LRAA). Total Holoacetic Acids (HAA5) and Total Trihalomethanes (TTHMs) compliance is based on a LRAA, calculated at each location. LRAA calculations are based on four quarters of results.

[5] Data represents the lowest chlorine residuals entering the distribution system from our surface water treatment plant.

COPPER and LEAD							
Substance (Unit)	Year Sampled	AL	MCLG	Amount Detected (90TH%TILE)	Sites Above AL/ Total Sites	Violation	Typical Source
Copper (ppm)	2018	1.3	1.3	0.163	0/70	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)*	2018	15	0	3.7	1/70	No	Corrosion of household plumbing systems; Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

UNREGULATED CONTAMINANT MONITORING RULE - PART 3 (UCMR3)		Moorestown Township		Delaware River Regional WTP		
Substance (Unit)	Year Sampled	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Typical Source
1,4-Dioxane (ppb)	2018	0.82	0.5 - 0.82	NA	NA	NA
Chlorate (ppb)	2013/2014	90	ND–90	NA	NA	NA
Chromium-3 (ppb)	2013/2014	1.6	ND–1.6	NA	NA	NA
Cobalt (ppb)	2013/2014	6.3	ND–6.3	NA	NA	NA
Hexavalent Chromium (ppb)	2013/2014	1.5	ND–1.5	1	0.65–1.22	Naturally occuring element; Used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation
Molybdenum (ppb)	2013/2014	2.1	ND–2.1	1.4	1.2–1.7	Naturally occuring elemental found in ores and present in plants, animals, and bacteria; Commonly used from molybdenum trioxide used as a chemical reagent
Strontium (ppb)	2013/2014	432	ND–432	79	74.3–90.2	Naturally occurring element, historically commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions
Total Chromium (ppb)	2013/2014	NA	NA	1.8	ND–1.8	Naturally occurring element; used in making steel and other alloys; chromium-3 or -6 forms used for chrome plating, dyes and pigments, leather tanning, and wood preservation
Vanadium (ppb)	2013/2014	0.31	ND–0.31	NA	NA	NA

We will be participating in UCMR4 testing. Our UCMR4 sampling and testing is scheduled to begin in July 2019

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER – Moorestown Water Department Failed to Comply With a Testing Procedure

The Moorestown Water Department recently failed to comply with a required testing procedure. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

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 our drinking water meets health standards. During 2018, we did not complete all monitoring or testing for iron–manganese, and therefore cannot be sure of the quality of your drinking water during that time.

Any sample we collect must be sent to, analyzed, and reported by a certified laboratory within a specific amount of time. A distribution manganese sample was collected on 11/7/2018 and analyzed by a certified lab, however, testing for iron was omitted. The 2018 testing result for manganese was non-detect.

What should I do?

There is nothing you need to do at this time. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

What is being done?

On 3/27/19 we collected iron and manganese samples and sent to a certified lab for analysis. The sample was analyzed and iron and manganese was not found at detectable levels. For more information, contact Moorestown's Water Department, Martin Pratt at 856-235-3520.

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.

This notice is being sent to you by the Moorestown Water Department.
State Water System ID#: NJ0322001.
Date distributed: June, 2019.

Additional Information: Iron and Manganese are Secondary Contaminants (substances that do not have an impact on health and are primarily aesthetic). The Secondary MCL for iron in drinking water is 0.3 ppm, and 0.05 ppm for manganese. Water with secondary contaminants concentrations under these parameters should not have an unpleasant taste, odor, appearance or side effect.

Definitions:

In the table above, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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 contaminants.

NA: not applicable

ND (Not Detected): indicates that the substance was not found by laboratory analysis.

Nephelometric Turbidity Unit (NTU): measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): measure of the radioactivity in water.

ppb (parts per billion) or µg/l (micrograms per liter): one part by weight of analyte to 1 billion parts by weight of the water sample.

ppm (parts per million) or mg/l (milligrams per liter): one part by weight of analyte to 1 million parts by weight of the water sample.

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.

TT (Treatment Technique): a required process intended to reduce the level of a contaminant in drinking water.