

New Jersey American Water – Mount Holly System - PWSID # NJ0323001

The New Jersey American Water – Mount Holly System is a public community water system consisting of 9 active wells. This system’s source water comes from the following aquifer: Upper and Lower Potomac-Raritan-Magothy Aquifer System. This system can purchase water from the following water system: Mt. Laurel MUA

New Jersey American Water – Mount Holly System Sources

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors			
	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 - 9			9			9			9			9		3	6		3	7			9			5	4

If you have questions about this report or concerning your water utility, please contact us at 609-654-6791. 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 Township Meetings. Times and dates for those Meetings are posted in the Township’s Calendar.

We at the Medford Township Utility Department work around the clock to provide you with top quality drinking water. We ask that our customers and residents help us protect our water sources, which are the heart of our community, our way of life, and our children’s future.

IMPORTANT INFORMATION ABOUT OUR DRINKING WATER

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 the drinking water meets health standards. The Medford Township Utility Department violated a few drinking water standards in 2019. These violations occurred due to inadvertent errors with sample collection. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations. It is important to note that these violations did not occur because contaminants exceeded allowable limits, but because samples were not collected correctly.

The Medford Township Utility Department did not monitor for Combined Radium (226 & 228) and did not complete all monitoring for Gross Alpha Excl. Radon during the 2014 – 2019 Monitoring Period

We were required to monitor for Combined Radium (226 & 228) and Gross Alpha Excluding Radon during the 2014 – 2019 monitoring period at all of our drinking water treatment facilities. We inadvertently missed monitoring at some sites and therefore cannot be sure of the quality of your drinking water during that time with respect to these contaminants. The results from the sampled facilities are listed in the “Test Results” table. We have monitored for the above in 2020 and all results are in compliance.

Gross Alpha: 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.

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.

The Medford Township Utility Department monitored early for Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s)

We inadvertently monitored at the wrong time for the Disinfection Byproducts: Total Trihalomethanes (TTHMs) and Haloacetic Acids in 2019. We were required to monitor in March, June, September and December, but samples were collected in February and May instead of March and June. The September and December samples were taken at the correct time. The sample results from the February and May monitoring are reflected in the “Test Results” table.

Total Trihalomethanes (TTHMs) & Haloacetic Acids (HAA5s): Some people who drink water containing Total Trihalomethanes (TTHMs) & Haloacetic Acids (HAA5s) 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.

The Medford Township Utility Department did not collect the correct number of Total Coliform (TC) Bacteria Samples in June 2019

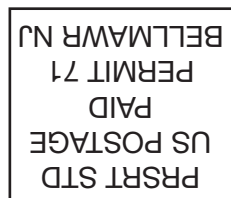
We are required to take twenty (20) Total Coliform Bacteria (TC) samples per month in the drinking water distribution system. Due to problems with sample collection, in June 2019 we took only fifteen (15) samples and therefore cannot be sure of the quality of your drinking water during that time with respect to TC. The fifteen (15) TC samples that we did take in June had negative results and were in compliance. Five (5) extra samples were taken in July, beginning on July 2, for a total of twenty-five (25) samples, to verify that the TC results remained negative. In all subsequent months, the correct number of samples was taken.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

What should I do?

There is nothing you need to do at this time.

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.



Township of Medford
17 North Main Street
Medford, NJ 08055

Annual Drinking Water Quality Report

**Medford Township Utility Department
For the Year 2020, Results from the Year 2019**

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 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.

Our Drinking Water sources include wells and water purchased from New Jersey American Water (NJAW). Our eight active wells draw groundwater from the Upper Potomac-Raritan-Magothy Aquifer System and the Mount Laurel-Wenonah Aquifer System. NJAW’s sources include nine active wells that draw groundwater from the Upper & Lower Potomac-Raritan-Magothy Aquifer System and surface water treated at the Delaware River Regional Treatment Plant. The New Jersey Department of Environmental Protection (NJDEP) has prepared Source Water Assessment Reports and Summaries for all public water systems. Further information on the Source Water Assessment Program can be obtained by logging onto NJDEP’s source water assessment web site 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 public water system. Medford Township Utility Department’s and NJAW’s Source Water Assessment Summaries are included. 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 two of these types of contaminants, asbestos and synthetic organic chemicals. NJAW received a monitoring waiver for synthetic organic chemicals.

The Medford Township Utility Department and New Jersey American Water routinely monitor 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 1st to December 31st 2019. 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.

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).

Medford Township Utility Department Test Results PWSID # NJ0320001						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Likely Source of Contamination
Radioactive Contaminants:						
Gross Alpha Test results Yr. 2018	N	Range = ND – 3.5 Highest detect = 3.5	pCi/l	0	15	Erosion of natural deposits
Inorganic Contaminants:						
Arsenic Test results Yr. 2017	N	Range = ND – 0.4 Highest detect = 0.4	ppb	N/A	5	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Copper Test results Yr. 2017 Result at the 90 th Percentile	N	0.004 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Barium Test results Yr. 2017	N	Range = 0.02 – 0.03 Highest detect = 0.03	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride Test results Yr. 2017	N	Range = 0.26 – 0.27 Highest detect = 0.27	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Test results Yr. 2017 Result at the 90 th Percentile	N	0.06 No samples exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) Test results Yr. 2019	N	Range = ND – 0.14 Highest detect = 0.14	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Disinfection Byproducts:						
TTHM Total Trihalomethanes Test results Yr. 2019	N	Range = ND - 33 Highest LRAA = 9	ppb	N/A	80	By-product of drinking water disinfection
HAA5 Haloacetic Acids Test results Yr. 2019	N	Range = ND - 12 Highest LRAA = 3	ppb	N/A	60	By-product of drinking water disinfection
Regulated Disinfectants		Level Detected	MRDL		MRDLG	Likely Source
Chlorine Test results Yr. 2019		Range = 0.2 – 0.4 ppm Average = 0.3 ppm	4.0 ppm		4.0 ppm	Water additive used to control microbes

Unregulated Contaminants for Which EPA Required Monitoring

The Medford Township Utility Department participated in the Unregulated Contaminant Monitoring Rule (UCMR) in 2018 & 2019. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Contaminant	Level Detected	Average Detected	Units of Measurement	Likely source
Manganese	Range = 2.8 – 13.2	8.5	Ppb	Manganese is an essential nutrient, and toxicity is not expected from levels which would be encountered in drinking water.
HAA5s	Range = 2.4 – 10.2	4.2	Ppb	By-product of drinking water disinfection
HAA6 Br	Range = 0.7 – 3.6	1.6	Ppb	By-product of drinking water disinfection
HAA9	Range = 3.1 – 13.5	5.7	Ppb	By-product of drinking water disinfection

HAA5s: Dichloroacetic Acid (DCAA), Monochloroacetic Acid (MCAA), Trichloroacetic Acid (TCAA), Monobromoacetic Acid (MBAA), Dibromoacetic Acid (DBAA)
HAA6 Br: Monobromoacetic Acid (MBAA), Dibromoacetic Acid (DBAA), Bromochloroacetic Acid (BCAA), Bromodichloroacetic Acid (BDCAA), Chlorodibromoacetic Acid (CDBAA), Tribromoacetic Acid (TBAA)
HAA9: Dichloroacetic Acid (DCAA), Monochloroacetic Acid (MCAA), Trichloroacetic Acid (TCAA), Monobromoacetic Acid (MBAA), Dibromoacetic Acid (DBAA), Bromochloroacetic Acid (BCAA), Bromodichloroacetic Acid (BDCAA), Chlorodibromoacetic Acid (CDBAA), Tribromoacetic Acid (TBAA)

New Jersey American Water – Mount Holly System Test Results PWSID # NJ0323001						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Likely Source of Contamination
Inorganic Contaminants:						
Barium Test results Yr. 2017	N	Range = ND – 0.1 Highest detect = 0.1	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper Test results Yr. 2019 Result at the 90 th Percentile	N	0.28 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead Test results Yr. 2019 Result at the 90 th Percentile	N	2 1 sample out of 64 exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection Byproducts:						
TTHM Total Trihalomethanes Test results Yr. 2019	N	Range = 1 - 24 Highest LRAA = 13	ppb	N/A	80	By-product of drinking water disinfection
HAA5 Haloacetic Acids Test results Yr. 2019	N	Range = ND - 10 Highest LRAA = 8	ppb	N/A	60	By-product of drinking water disinfection
Regulated Disinfectants	Level Detected	MRDL	MRDLG	Likely Source		
Chlorine Test results Yr. 2019	Range = 0.14 – 1.63 ppm Average = 0.7 ppm	4.0 ppm	4.0 ppm	Water additive used to control microbes		

New Jersey American Water – Delaware River Regional Treatment Plant						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Likely Source of Contamination
Microbiological Contaminants:						
Turbidity	N	Range = 0.06 – 0.08 100 % < 0.3 NTU	NTU	N/A	TT 95% of monthly samples < 0.3 NTU	Soil runoff
Total Organ Carbon (TOC)	N	Range = 49% - 71% Removal	ppm	N/A	TT ≥ 35 % of removal	Soil runoff
Inorganic Contaminants:						
Nitrate (as Nitrogen)	N	1.17	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Regulated Disinfectants	Level Detected	MRDL	MRDLG	Likely Source		
Chlorine Test results Yr. 2019	Range = 0.6 – 1.22 ppm	4.0 ppm	4.0 ppm	Water additive used to control microbes		

NJAW Mount Holly System – Unregulated Contaminant Monitoring Rule (UCMR4) 2019					
New Jersey American Water – Mount Holly System participated in the Unregulated Contaminant Monitoring Rule. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted. The following substances were found.					
Contaminant	Unit	MRL	Average	Range Detected	Use or Environmental Source
Manganese	ppb	0.4	0.66	ND to 2.1	Naturally present in the environment; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical
Bromochloroacetic Acid	ppb	N/A	0.65	ND - 1.7	By-product of drinking water disinfection
Bromodichloroacetic Acid	ppb	N/A	0.42	ND – 1.1	By-product of drinking water disinfection
Chlorodibromoacetic Acid	ppb	N/A	0.23	ND – 0.62	By-product of drinking water disinfection
Dichloroacetic Acid	ppb	N/A	3.9	0.49 – 5.9	By-product of drinking water disinfection
Total Haloacetic Acids	ppb	N/A	2.8	0.49 – 9.9	By-product of drinking water disinfection
Total Haloacetic Acids - Br	ppb	N/A	1.3	ND - 3.4	By-product of drinking water disinfection
Total Haloacetic Acids – UCMR4	ppb	N/A	4.88	0.49 - 13	By-product of drinking water disinfection
Trichloroacetic Acid	ppb	N/A	0.66	ND - 4	By-product of drinking water disinfection

NJAW Delaware River Regional Treatment Plant - Unregulated Contaminant Monitoring Rule (UCMR4) 2019					
New Jersey American Water Delaware River Regional Treatment Plant participated in the Unregulated Contaminant Monitoring Rule. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted. The following substances were found.					
Contaminant	Unit	MRL	Average	Range Detected	Use or Environmental Source
Manganese	ppb	0.4	1.02	ND - 1.8	Naturally present in the environment; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical

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 Medford Township Utility Department and New Jersey American Water 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 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>.

Definitions:

In the “Test Results” tables you may find some 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 contaminant is not present.

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.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a 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 nanogram per liter - one part per trillion corresponds to one minute in 20,000 years, or a single penny in \$100,000,000.

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.

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.

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.

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.

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.

Turbidity – A measure of the particulate matter or “cloudiness” of the water. High turbidity can hinder the effectiveness of disinfectants.

Drinking Water Sources:

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 the 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 septic systems, 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 tables below illustrate the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The tables provide the number of wells and intakes 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 below. 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: 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.

Medford Township Utility Department - PWSID # NJ03210001

The Medford Township Utility Department is a public community water system consisting of 8 active wells. This system’s source water comes from the following aquifer: Upper Potomac-Raritan-Magothy Aquifer System and the Mount laurel-Wenonah Aquifer System. This system purchases water from the following water system: New Jersey American Water – Mount Holly System

Susceptibility Ratings for Medford Township Utility Department Sources

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors			
	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 - 8			8			8			8			8			4	4		4	4		4	4		8	