

Annual Drinking Water Quality Report

The Township of Roxbury Water Utility

Report for the Year 2023, Results from the Year 2022

Following is this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and the services we deliver to you every day. The Township of Roxbury Water Utility routinely monitors for contaminants in your drinking water according to Federal and State laws. The tables show the results of our monitoring for the period of January 1st to December 31st, 2022. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants does not change frequently. Some of our data, though representative is more than one year old.

If you are a landlord, you must distribute this Drinking Water Quality Report to every tenant as soon as practicable, but no later than three business days after receipt. Delivery must be done by hand, mail, or email, and by posting the information in a prominent location at the entrance of each rental premises, pursuant to section #3 of NJ P.L. 2021, c.82 (C.58:12A-12.4 et seq.).

Our water sources: We have two sources: our wells and water purchased from the Morris County MUA. Our water utility now consists of three individual water systems as shown in the tables below. Our nine (9) wells draw water from geologic formations known as the Precambrian Granite and Stratified Drift Aquifers. Well depths in those formations are approximately 90 feet and 220 feet deep respectively. The Morris County MUA draws water from the Stratified Glacial Drift and the Leithville Limestone Formations. The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for these public water systems, which are available at <http://www.nj.gov/dep/watersupply/swap/index.html> or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your public water system to obtain information regarding your water system's Source Water Assessment. Our source water susceptibility ratings are included in this report.

For additional information: If you have any questions about this report or any matter concerning your water utility, please call Melanie Michetti, Township Engineer/Director of Utilities at (973) 448-2018. Major water utility issues and decisions are discussed at Township Council meetings, 1715 Route 46, Ledgewood. Meetings are normally held on the second and fourth Tuesdays at 7:30 p.m. You may call (973) 448-2001 to confirm the meeting schedule.

Vulnerable populations: 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 (1-800-426-4791).

Skyview Estates & Kenvil/Ledgewood - PWS ID # NJ1436004 "Test Results"						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCLG	MCL	Likely Source
Inorganic Contaminants:						
Barium Test Results Yr. 2021	N	Range = 0.016 – 0.018 Highest detect = 0.018	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium Test results Yr. 2021	N	Range = ND – 0.45 Highest detect = 0.45	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper Test Results 1 st ½ of 2022 Result at 90 th Percentile	N	0.13 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Copper Test Results 2 nd ½ of 2022 Result at 90 th Percentile	N	0.097 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead Test Results 1 st ½ of 2022 Result at 90 th Percentile	N	2.3 No samples exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Lead Test Results 2 nd ½ of 2022 Result at 90 th Percentile	N	2.8 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. 2022	N	Range = 2.1 – 2.3 Highest detect = 2.3	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nickel Test results Yr. 2021	N	Range = 0.52 - 0.88 Highest detect = 0.88	ppb	N/A	N/A	Erosion of natural deposits
PFAS Per- and Polyfluoroalkyl Substances:						
PFOS Perfluorooctane Sulfonic Acid Test results Yr. 2022	N	Range = 2.3 – 3.3 Highest detect = 3.3	ppt	N/A	13	Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam.
PFOA Perfluorooctane Acid Test results Yr. 2022	N	Range = 2.4 – 2.6 Highest detect = 2.6	ppt	N/A	14	Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam.
PFNA Perfluorononanoic Acid Test results Yr. 2022	N	Range = ND	ppt	N/A	13	Used in the manufacture of fluoropolymers

Landing/Shore Hills PWS ID # NJ1436003 "Test Results"						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCLG	MCL	Likely Source
Inorganic Contaminants:						
Barium Test results Yr. 2021	N	Range = 0.03 – 0.05 Highest detect = 0.05	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium Test results Yr. 2021	N	Range = 0.30 – 0.55 Highest detect = 0.55	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper Test Results Yr. 2021 Result at 90 th Percentile	N	0.74 2 samples out of 20 exceeded the action level.	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead Test Results Yr. 2021 Result at 90 th Percentile	N	5.9 1 sample out of 20 exceeded the action level.	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nickel Test results Yr. 2021	N	Range = 1.7 – 2.7 Highest detect = 2.7	ppb	N/A	N/A	Erosion of natural deposits
Nitrate (as Nitrogen) Test Results Yr. 2021	N	Range = ND – 0.83 Highest detect = 0.83	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radioactive Contaminants:						
Combined Radium 228 & 226 Test results Yr. 2018	N	Range = ND – 1.9 Highest detect = 1.9	pCi/l	0	5	Erosion of natural deposits
Combined Uranium Test results Yr. 2018	N	Range = ND – 1.9 Highest detect = 1.9	ppb	0	30	Erosion of natural deposits

PFAS Per- and Polyfluoroalkyl Substances:						
PFOS Perfluorooctane Sulfonic Acid Test results Yr. 2022	N	Range = ND – 4.8 Highest detect = 4.8	ppt	N/A	13	Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam.
PFOA Perfluorooctane Acid Test results Yr. 2022	N	Range = ND – 5.5 Highest detect = 5.5	ppt	N/A	14	Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam.
PFNA Perfluorononanoic Acid Test results Yr. 2022	N	Range = ND	ppt	N/A	13	Used in the manufacture of fluoropolymers

Only a portion of the Landing/Shore Hills System exceeded the MCL for PFOA in 2021 of which you have been previously notified. Well #2 of this System continues to be shut down until a treatment system is installed. Please see the included information.

Secondary Contaminants:	Level Detected	Units of Measurement	RUL
Sodium Test Results Yr. 2021	Range = 28 - 76	ppm	50

The Landing/Shore Hills and the Morris County MUA Systems exceeded the Secondary Recommended Upper Limit (RUL) for sodium. For healthy individuals, the sodium intake from water is not considered significant, 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.

Evergreen Acres PWS ID # NJ1436006 "Test Results"						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCLG	MCL	Likely Source
Inorganic Contaminants:						
Arsenic Test results Yr. 2021	N	1.5	ppb	N/A	5	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium Test results Yr. 2021	N	0.04	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper Test Results Yr. 2021 Result at 90 th Percentile	N	0.03 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. 2021 Result at 90 th Percentile	N	0.7 No samples exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nickel Test results Yr. 2021	N	0.97	ppb	N/A	N/A	Erosion of natural deposits

Evergreen Acres PWS ID # NJ1436006 "Test Results" (continued)						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCLG	MCL	Likely Source
PFAS Per- and Polyfluoroalkyl Substances:						
PFOS Perfluorooctane Sulfonic Acid Test results Yr. 2022	N	Range = ND	ppt	N/A	13	Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam.
PFOA Perfluorooctane Acid Test results Yr. 2022	N	Range = ND	ppt	N/A	14	Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam.
PFNA Perfluorononanoic Acid Test results Yr. 2022	N	Range = ND	ppt	N/A	13	Used in the manufacture of fluoropolymers

All Roxbury Township Water Systems PWS ID # NJ1436003, NJ1436004 & NJ1436006 "Test Results"						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCLG	MCL	Likely Source
Disinfection By-Products – All Township Water Systems						
TTHM Total Trihalomethanes Test Results Yr. 2022	N	Range = ND – 22 Highest Detect = 18	ppb	N/A	80	By-product of drinking water disinfection
HAA5 Haloacetic Acids Test Results Yr. 2022	N	Range = ND – 1 Highest detect = 1	ppb	N/A	60	By-product of drinking water disinfection
Regulated Disinfectants:		Level Detected	MRDL		MRDLG	
Chlorine (All Roxbury Systems) Test Results Yr. 2022		Range = 0.2 – 0.6 ppm Average = 0.4 – 0.5 ppm	4.0 ppm		4.0 ppm	

Chlorine: Water additive used to control microbes.

Waivers: 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 systems received monitoring waivers for asbestos and synthetic organic chemicals.

Morris County MUA PWS ID # NJ1432001 "Test Results"						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCLG	MCL	Likely Source
Inorganic Contaminants:						
Barium Test results Yr. 2020	N	Range = 0.01 – 0.1 Highest detect = 0.1	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium Test Results Yr. 2020	N	Range = ND – 0.7 Highest detect = 0.7	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride Test Results Yr. 2020	N	Range = ND – 0.13 Highest detect = 0.13	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) Test Results Yr. 2022	N	Range = 0.7 – 2.9 Highest detect = 2.9	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nickel Test Results Yr. 2020	N	Range = ND – 0.9 Highest detect = 0.9	ppb	N/A	N/A	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
PFAS Per- and Polyfluoroalkyl Substances:						
PFOS Perfluorooctane Sulfonic Acid Test results Yr. 2022	N	Range = ND – 5.8 Highest detect = 5.8	ppt	N/A	13	Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam.
PFOA Perfluorooctane Acid Test results Yr. 2022	N	Range = ND – 8.9 Highest detect = 8.9	ppt	N/A	14	Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam.

Secondary Contaminants:	Level Detected	Units of Measurement	RUL
Sodium Test Results Yr. 2020	Range = 6 - 52	ppm	50

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 constituent is not present.

Parts per million (ppm) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - 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.

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.

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. RULs are recommendations, not mandates.

Susceptibility Ratings for Roxbury Township Water Department

The tables below illustrate the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. Each table specifies 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 at the end of the tables. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of this 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.

Evergreen System Sources

	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 – 1			1	1					1			1			1	1				1			1	

Shore Hills System Sources

	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 – 4		2	2	4				1	3	3		1		4			4		1	3			4	

Skyview Estates Sources

	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 – 4		2	2	2	2			2	2	1		3			4	2	2		4				4	

Sources of Lead in Drinking Water

The Township of Roxbury Water Utility and the Morris County MUA are responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. Although most lead exposure occurs from inhaling dust or from contaminated soil, or when children eat paint chips, the U.S. Environmental Protection Agency (USEPA) estimates that 10 to 20 percent of human exposure to lead may come from lead in drinking water. Infants who consume mostly mixed formula can receive 40 percent to 60 percent of their exposure to lead from drinking water. Lead is rarely found in the source of your drinking water but enters tap water through corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing materials. These materials include lead-based solder used to join copper pipes, brass, and chrome-brass faucets, and in some cases, service lines made of or lined with lead. New brass faucets, fittings, and valves, including those advertised as “lead-free”, may still contain a small percentage of lead, and contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 0.25 percent lead to be labeled as “lead free”. However, prior to January 4, 2014, “lead free” allowed up to 8 percent lead content of the wetted surfaces of plumbing products including those labeled National Sanitation Foundation (NSF) certified. Visit the NSF website at www.nsf.org to learn more about lead-containing plumbing fixtures. Consumers should be aware of this when choosing fixtures and take appropriate precautions. When water stands in lead service lines, lead pipes, or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon if the water has not been used all day, can contain fairly high levels of lead.

Steps You Can Take to Reduce Exposure to Lead in Drinking Water

For a full list of steps visit: <https://www.state.nj.us/dep/watersupply/dwc-lead-consumer.html>

Run the cold water to flush out lead. Let the water run from the tap before using it for drinking or cooking any time the water in the faucet has gone unused for more than six hours. The longer the water resides in plumbing the more lead it may contain. Flushing the tap means running the cold-water faucet. Let the water run from the cold-water tap based on the length of the lead service line and the plumbing configuration in your home. In other words, the larger the home or building and the greater the distance to the water main (in the street), the more water it will take to flush properly. Although toilet flushing or showering flushes water through a portion of the plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your health. It usually uses less than one gallon of water.

Use cold, flushed water for cooking and preparing baby formula. Because lead from lead-containing plumbing materials and pipes can dissolve into hot water more easily than cold water, never drink, cook, or prepare beverages including baby formula using hot water from the tap. If you have not had your water sampled or if you know, it is recommended that bottled or filtered water be used for drinking and preparing baby formula. If you need hot water, draw water from the cold tap and then heat it.

Do not boil water to remove lead. Boiling water will not reduce lead; however, it is still safe to wash dishes and do laundry. Lead will not soak into dishware or most clothes.

Use alternative sources or treatment of water. You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters.

Determine if you have interior lead plumbing or solder. If your home/building was constructed prior to 1987, it is important to determine if interior lead solder or lead pipes are present. You can check yourself, hire a licensed plumber, or check with your landlord.

Replace plumbing fixtures and service lines containing lead. Replace brass faucets, fittings, and valves that do not meet the current definition of “lead free” from 2014 (as explained above). Visit the NSF website at www.nsf.org to learn more about lead-containing plumbing fixtures.

Remove and clean aerators/screens on plumbing fixtures. Over time, particles and sediment can collect in the aerator screen. Regularly remove and clean aerators screens located at the tip of faucets and remove any particles.

Test your water for lead. Please call Melanie Michetti, Township Engineer/Director of Utilities at (973) 448-2018 to find out how to get your water tested for lead. Testing is essential because you cannot see, taste, or smell lead in drinking water.

Get your child tested. Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about lead exposure. New Jersey law requires that children be tested for lead in their blood at both 1 and 2 years of age and before they are 6 years old if they have never been tested before or if they have been exposed to a known source of lead.

Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

Water softeners and reverse osmosis units will remove lead from water but can also make the water more corrosive to lead solder and plumbing by removing certain minerals; therefore, the installation of these treatment units at the point of entry into homes with lead plumbing should only be done under supervision of a qualified water treatment professional.

Health Effects of Lead

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development. Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about lead exposure. You can find out more about how to get your child tested and how to pay for it at <https://www.state.nj.us/health/childhoodlead/testing.shtml>.

In July 2021, P.L.2021, Ch.183 (Law) was enacted, requiring all community water systems to replace lead service lines in their service area within 10 years. Under the law, The Roxbury Water Utility is required to notify customers, non-paying consumers, and any off-site owner of a property (e.g., landlord) when it is known they are served by a lead service line*. Our service line inventories are available on our website at <https://roxburynj.us> or upon request.

We at the Township of Roxbury Water Utility work hard to ensure quality drinking water for each customer we serve. 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 our office if you have questions. Thank you for the opportunity to provide you this important resource.

Potential sources of contamination: 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.

Special Notice – Morris County MUA:

Public community water systems must comply with the Consumer Confidence Rule, which requires community water systems to prepare a Consumer Confidence Report (CCR) / Water Quality Report annually, containing the previous year's drinking water monitoring data, and submit to both their customers and New Jersey Department of Environmental Protection (NJDEP) by July 1st and a CCR Certification Form to NJDEP by October 1st of each year. For the year 2022 Morris County MUA inadvertently submitted their water system's CCR Certification Form late to NJDEP. NJDEP received the CCR Certification on 12/2/22. Compliance was achieved.

Special Notice – Roxbury Township Water Systems:

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What are PFOA and PFOS?

Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are per- and polyfluoroalkyl substances (PFAS), previously referred to as perfluorinated compounds, or PFCs, that are man-made and used in industrial and commercial applications. PFOA was used as a processing aid in the manufacture of fluoropolymers used in non-stick cookware and other products, as well as other commercial and industrial uses based on its resistance to harsh chemicals and high temperatures. PFOS is used in metal plating and finishing as well as in various commercial products. PFOS was previously used as a major ingredient in aqueous film forming foams for firefighting and training, and PFOA and PFOS are found in consumer products such as stain resistant coatings for upholstery and carpets, water resistant outdoor clothing, and grease proof food packaging. Although the use of PFOA and PFOS has decreased substantially, contamination is expected to continue indefinitely because these substances are extremely persistent in the environment and are soluble and mobile in water. More information can be found at: [https://www.state.nj.us/dep/wms/bears/docs/2019-4-15-FAQs_PFOA-PFOA-websites-OLA%204-24-19SDM-\(003\).pdf](https://www.state.nj.us/dep/wms/bears/docs/2019-4-15-FAQs_PFOA-PFOA-websites-OLA%204-24-19SDM-(003).pdf)

IMPORTANT INFORMATION ABOUT OUR DRINKING WATER

A Portion of the Roxbury Township Landing/Shore Hills System (NJ1436003) “Well #2” Had Levels of Perfluorooctanoic Acid (PFOA) Above Drinking Water Standards in 2021

Of Which You Were Notified

In 2021, our water system violated a New Jersey drinking water standard, and as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation. If you are serviced by this water system, you were previously notified of this issue in June 2021.

We routinely monitor for the presence of drinking water contaminants. On May 27, 2021, we received notice that the sample collected on May 4, 2021, showed that our system exceeded the standard, or maximum contaminant level (MCL), for PFOA. The New Jersey standard for PFOA is 14 ppt (parts per trillion) and is based on a running annual average (RAA). The well, Well 2, which experienced exceedance, was removed from service in July 2020 for the planned rehabilitation and pump and motor replacement. The well was returned to service in May 2021. The average level of PFOA over the year prior to being removed from service was 12.9 ppt. The first PFOA result obtained from rehabilitated Well 2 was found at 59 ppt which caused the RAA to be 14.75 ppt which exceeds the NJDEP MCL of 14 ppt regardless of the next three (3) quarter results. This well was again removed from service and will not be supplying water to the system until a treatment system has been installed.

What has been done?

The Township, as of June 17, 2021, has removed Well 2 from service and will only be utilizing our other compliant water sources until such time as we correct this issue. The Township has contracted with the water system’s consulting engineer for a planning study to address the presence of per- and polyfluoroalkyl substances (PFAS) chemicals in Well 2 to evaluate treatment alternatives and recommend an effective treatment system. The treatment system to address PFOA is currently under design.

What does this mean?

**Some people who drink water containing PFOA in excess of the MCL over many years could experience problems with their blood serum cholesterol levels, liver, kidney, immune system, or, in males, reproductive system. Drinking water containing PFOA in excess of the MCL over many years may also increase the risk of testicular and kidney cancer. For females, drinking water containing PFOA in excess of the MCL over many years may cause developmental delays in a fetus and/or an infant. **

For more information refer to https://www.nj.gov/health/ceohs/documents/pfas_drinking%20water.pdf.

What should I do?

- If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water.
- If you have specific health concerns, consult your doctor.
- Boiling your water will not remove PFOA.

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QUALITY REPORT FOR 2023
RESULTS FROM THE YEAR 2022**

**TOWNSHIP OF ROXBURY
WATER UTILITY**