Verona Township Water Department

Quality on Tap Report Annual Drinking Water Quality Report
Township of Verona Water System
For the Year 2024, Results from the Year 2023

PWSID # 0720001

Our Mission Continues

We are once again pleased to present to you this year's Annual Drinking Water Quality Report covering all testing performed between January 1 and December 31, 2023. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water. For more information about this report and other questions regarding your drinking water, please contact Chuck Molinaro at the Verona Public Works (973) 857-4806 or at cmolinaro@veronanj.org. You may also call the U.S. EPA Bureau of Safe Drinking Water Hotline at (800) 426-4791 or the New Jersey Department of Environmental Protection (NJDEP), Bureau of Safe Drinking Water, at (609)292-5550.

What Is the Source of Our Drinking Water?

Our water is derived from two different water supplies: groundwater wells that the Township of Verona owns and operates, and treated surface water purchased from the Passaic Valley Water Commission (PVWC). Following an exceedance for PFOA in July of 2021 the Township of Verona shut down both wells and uses only the water from PVWC currently. Verona will continue to use water from PVWC until the Verona wells are rehabilitated to treat for PFOA.

The well water is withdrawn from the Feltville aquifer via two deep rock wells located in Verona. Since the water from PVWC comes from the Wanaque Reservoir, owned and operated by the North Jersey District Water Supply Commission (NJDWSC) and located in Wanaque, New Jersey. PVWC can also provide water from their Little Falls Treatment plant located in Totowa, New Jersey, that utilizes water from the Passaic River and/or the Pompton River. All water sources are treated to produce safe drinking water that satisfies all state and federal standards. In addition to these water supplies, we have emergency water connections with both Essex Fells and the New Jersey American Water Company, which are capable of, providing drinking water to Verona in the event of an interruption in our normal water services.

Source Water Assessment

Source Water Assessments (SWA) were completed at the end of December 2004 for all community water systems. Water systems are required (40 C.F.R. 141.153(b)(2)) to notify their customers how they can obtain the information in these reports, and to provide a summary of the results for the system's source(s). Federal regulations also recommend the systems provide a summary of potential sources of contamination. 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 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 . This document is available from the website at http://www.nj.gov/dep/watersupply/swap/index.html . A list of the potential contaminant sources utilized in the report can be obtained from the SWA Report available online at watersupply@dep.nj.gov . Assessments have been completed for the PVWC and NJDWSC systems. These reports are 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. Each report lists the susceptibility ratings for eight contaminate categories, ranging from LOW to HIGH.

Educational Information

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)

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 projection, 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.

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

- 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 for advice from your health care provider.

- Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

- Arsenic –your drinking water meets EPA's standard for arsenic. Only a small amount of Arsenic was detected in your system. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems (40 CFR 141.154(b)(1)). Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer (40 CFR 141.154(f) and 141.153(d)(6)).

- PFOA – Perfluorooctanoic Acid, your water detected levels over the limit for PFOA, compliance is determined by a running annual average. The typical or likely source per NJAC 7:10-5.2(b)4 stated in table below.

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.

Test Results

Our water is monitored for, many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only those substances that were detected in our water. (A complete list of all our analytical results is available upon request.) Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. The state recommends monitoring for certain substances less often 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.

REGULATED SUBSTANCES							
				Township of Verona Water Department			
SUBSTANCE (Unit of Measure)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOWHIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2017	15	0	5.812	5.057 – 6.566	No	Erosion of natural deposits
Arsenic (ppb)	2020	5	0	0.002	0.0015 – 0.0021	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production waste
Barium (ppm)	2020	2	2	0.312	0.268 – 0.356	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2023	[4]	[4]	0.63	0.54 – 0.68	No	Water additive used to control microbes
Chromium (ppb)	2020	100	100	0.002	<0.0005 – 0.0034	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	2020	4	4	ND <0.2	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories

Haloacetic Acids [HAAs] (ppb)	2023	60	NA	28.6	10.6 – 46.6	No	By-product of drinking water disinfection
Nickel (ppb)	2020	100	NA	0.0046	0.00450.0047	No	Pollution from mining and refining operations; Natural occurrence in soil
Lead (ppb)	2023	15	15	< 2	0	No	Corrosion of household plumbing systems, erosion of natural deposits
Copper (ppb)	2023	1.3	1.3	0.0774	0.0723 - 0.0824	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Selenium (ppb)	2020	50	50	<0.006	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Nitrate (ppm)	2021	10	10	1.8	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
***TTHMs [Total Trihalomethanes]** (ppb)	2023	80	NA	87.5	48.9 – 126	Yes	By-product of drinking water disinfection

PFNA (ng/l) Perfluorononanoic Acid	2021	13	6.5	<2	NA	No	These chemicals were used in the production of non-stick, stain repellent and chemically inert coatings. Compounds were also used to make firefighting foam, stain-resistant clothing, and food packaging.
PFOA (ng/l) Perfluorooctanoic Acid	2021	14	7	28	20.4 – 35.1	*Yes	These chemicals were used in the production of non-stick, stain repellent and chemically inert coatings. Compounds were also used to make firefighting foam, stain-resistant clothing, and food packaging.
PFOS(ng/l) Perfluorooctanesulfonic Acid	2021	13	6.5	10	7.61 – 13.9	No	These chemicals were used in the production of non-stick, stain repellent and chemically inert coatings. Compounds were also used to make firefighting foam, stain-resistant clothing, and food packaging.
EDB & DBCP (ug/l)	2021	0.2	NA	<0.008	<0.007 – <0.008	No	Synthetic organic compounds. DBCP was used primarily as soil fumigant for many crops like on soybeans, cotton, pineapples, and orchards.
VOCs	2021			<0.386	<0.05 - <0.386	No	VOC's include the burning of fuels such as gas, wood and kerosene and tobacco products. VOCs can also come from personal care products such as perfume and hair spray, cleaning agents, dry cleaning fluid, paints, lacquers, varnishes, hobby

							supplies and from copying and printing machines.
1,2,3 Tri-chloropropane (ug/l)	2021	0.03	NA	<0.004	<0.004 – <0.00402	No	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards

UNREGULATED SUBSTANCES			
		Township of Verona Water Department	
SUBSTANCE (Unit of Measure)	**YEAR SAMPLED**	**AMOUNT DETECTED**	**RANGE LOW-HIGH**
Bromoform (ppb)	2021	0.72	<0.161-2

SECONDARY SUBSTANCES							
				Township of Verona Water Department			
SUBSTANCE (Unit of Measure)	**YEAR SAMPLED**	**RUL**	**MCLG [MRDLG]**	**AMOUNT DETECTED**	**RANGE LOWHIGH**	**VIOLATION**	**TYPICAL SOURCE**
ABS/L.A.S. (ppm)	2017	500	NA	ND	NA	No	Common major components of synthetic detergents
Aluminum (ppb)	2020	200	NA	<0.01	NA	No	Erosion of natural deposits; Residual from some surface water treatment process
Chloride (ppm)	2020	250	NA	194	187-201	No	Runoff/ leaching from natural deposits
Color (units)	2020	10	NA	<2	NA	No	Natural occurring organic materials

Corrosivity (uits)	2020	Non-corrosive	NA	0.208	-0.107-0.308	No	Naturally or industrially influenced balance of hydrogen, carbon, and oxygen in the water; Affected by temperature and other factors
Hardness [as CaCO3][6] (ppm)	2020	250	NA	400	376-424	No	Naturally occurring
***Iron** (ppb)	2022	300	<0.2	ND	NA	Yes	Leaching from natural deposits; Industrial wastes
***Manganese** (ppb)	2022	50	<0.01	ND	NA	Yes	Leaching from natural deposits
Odor (TON)	2020	3	<1	ND	NA	No	Naturally occurring organic materials
pH (Units)	2023	6.5-8.5	NA	7.8	7.4-.8.8	No	Naturally occurring
Sodium[7] (ppm)	2020	50	NA	40.4	29.950.9	No	Naturally occurring
Sulfate (ppm)	2020	250	NA	35.45	25.445.5	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (ppm)	2020	500	NA	618.5	609 - 628	No	Runoff/leaching from natural deposits
Zinc (ppm)	2020	5	NA	0.012	<0.01 – 0.0147	No	Runoff/leaching from natural deposits; Industrial wastes

We participated in the 4th stage of the U.S. EPA's Unregulated Contaminate Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the EPA with data on the occurrence of contaminates suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining this information. If you would like more information on the U.S. EPA's Unregulated Contaminate Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

UCMR4		Township of Verona Water Department	
SUBSTANCE (Unit of Measure)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Germanium, Total (ppb)	2018	ND	NA
Manganese, Total (ppb)	2018	1.9	1.9
Total Microsystins (ppb)	2018	ND	NA
Semivolatiles (ppb)	2018	ND	NA
Anatoxin-a (ppb)	2018	ND	NA
Cylindrospermopsin (ppb)	2018	ND	NA
Butylated hydroxyanisole (BHA) (ppb)	2018	ND	NA
O-toluidine (ppb)	2018	ND	NA
Quinoline (ppb)	2018	ND	NA
2-Propen-1-ol (allyl Alcohol) (ppb)	2018	ND	NA
1-Butanol (ppb)	2018	ND	NA
2-Methoxyethanol (ppb)	2018	ND	NA
MonoChloroAcetic Acid (ppb)	2018	ND	NA
MonoBromoAcetic Acid (ppb)	2018	0.4	<0.3 – 0.4
DiChloroAcetic Acid (ppb)	2018	16.9	10.4 – 16.9
TriChloroAcetic Acid (ppb)	2018	16.6	12.2 – 16.6
BromoChloroAcetic Acid (ppb)	2018	3.8	2.4 – 3.8
BromoDiChloroAcetic Acid (ppb)	2018	3.3	2.7 – 3.3
DiBromoAcetic Acid (ppb)	2018	0.9	0.4 – 0.9
ChloroDiBromoAcetic Acid (ppb)	2018	0.9	0.4 – 0.9
TriBromoAcetic Acid (ppb)	2018	ND	NA
HAA5 Group (ppb)	2018	32.4	26.2 – 32.4
HAA6Br Group (ppb)	2018	9.3	5.9 – 9.3

HAA9 Group (ppb)	2018	39.1	31.7 – 39.1

Violation of Monitoring and/or Reporting Compliance Data

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 your drinking water meets health standards.

What does this mean?

We have learned through our monitoring and testing that some contaminants have been detected. As you can see by the tables above our system had violations for exceeding their Maximum Contaminant Levels which you will see an explanation of below. The system also received several monitoring and paperwork violations. We are proud that currently the Verona Water Department drinking water meets or exceeds all Federal and State safety requirements.

Monitoring Violation#2023-7986,7979
During the 07/01/2023 – 12/31/2023, the system exceeded the MCL for TTHM. System worked with the NJDEP to bring the system back into compliance and issued several public notices regarding the violation.

Monitoring Violation#2024-7982 & 2023-7965
During 7/01/2022 – 12/31/2022, the system was required to test certain water quality parameters specifically pH, orthophosphate and alkalinity at the distribution system. System is working with NJDEP to bring system back into compliance. Please see public notice included with this report.

Monitoring Violation#2024-10148
During 1/01/2023 – 12/31/2023, the system was required to test for Iron-Manganese in the distribution system. System is working with NJDEP to bring system back into compliance. Please see public notice included with this report.

The system has an on-going violation exceeding an action level is the on-going 2021 violation # 7906 for Perfluoroctanoic Acid (PFOA).

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Verona WATER SYSTEM (NJ0720001)

Our water system violated drinking water requirements over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we are doing to correct these situations.

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 the 01/01/2023 – 12/31/2023 compliance period we* did not monitor for Iron-Manganese *and therefore cannot be sure of the quality of your drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant we did not properly test for during the last year, how often we are supposed to sample for total coliform, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken if applicable.

Analyte	Required sampling frequency or sample period	Number of samples taken	When samples should have been taken	When samples were taken
Iron-Manganese	1/Year	1	1/1/2023 – 12/31/2023	Samples were not taken

What is being done?

While we did not notify the state as quickly as we should have, we have taken measures to make sure this does not happen in the future.

For more information, please contact Superintendent of Public Works, Chuck Molinaro at 973-857-4806 or email cmolinaro@veronanj.org

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 Verona Water System ID#: NJ0720001.

Date distributed: Sent as part of the Verona Water Department CCR Report

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Verona WATER SYSTEM (NJ0720001)

Our water system violated drinking water requirements over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we are doing to correct these situations.

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 the 01/01/2023 – 12/31/2023 compliance period we* did not monitor and report Water Quality Parameter results for pH at the Point of Entry *and therefore cannot be sure of the quality of your drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant we did not properly test for during the last year, how often we are supposed to sample for total coliform, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken if applicable.

Analyte	Required sampling frequency or sample period	Number of samples taken	When samples should have been taken	When samples were taken
pH	1 / Every 2 Weeks	1	1/1/2023 – 12/31/2023	Samples were not taken

What is being done?

While we did not notify the state as quickly as we should have, we have taken measures to make sure this does not happen in the future.

For more information, please contact Superintendent of Public Works, Chuck Molinaro at 973-857-4806 or email cmolinaro@veronanj.org

> **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.**

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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. **The Verona Township Water Department** 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 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water you may, wish to have your water tested. Information on lead in drinking water is available from the Safe Drinking Water Hotline at (800) 426-4791or at http://www.epa.gov/safewater/lead. However, for those served by a lead service line, flushing times may vary based on the length of the service line and plumbing configuration in your home. If your home is set back further from the street a longer flushing time may be needed. To conserve water, other household water usage activities such as showering, washing clothes, and running the dishwasher are effective methods of flushing out water from a service line.

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.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

We at **The Verona Township Water Department** 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 our office if you have questions.

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:

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

LRAA (Location Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

MCL (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.

MCLG (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 allows 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 contaminates.

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 contamination.

NA: Not Applicable

ND (Not Detected): Indicates that the substance was found by laboratory analysis. **NTU (Nephelometric Turbidity Units)** : Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is not noticeable to the average person.

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

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

RUL (Recommended Upper Limit): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TON (Threshold Odor Number): A measure of odor in water.

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

The following pages have been provided by The Passaic Valley Water Commission because Verona Water Department Water System purchases a portion of their water from them.

2024 Consumer Confidence Report

2023 Water Quality Parameters and Results

A Note to People with Special Health Concerns

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 reduce the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

Source Water Assessment

NJDEP has prepared Source Water Assessment reports and summaries for all public water systems. The Source Water Assessment for the PVWC system (PWS ID 1605002) and the North Jersey District Water Supply Commission (NJDWSC) (PWS ID 1613001) can be found online at the NJDEP's source water assessment website-http://www.nj.gov/dep/watersupply/swap/index.html or by contacting NJDEP's Bureau of Safe Drinking Water at 609-292-5550 or watersupply@dep.nj.gov.

If a system is rated highly susceptible for a contamination category, it does not mean a customer is or will be consuming contaminated water. The rating reflects the potential for contamination of a source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any of those contaminants are detected at frequencies and concentrations above allowable levels. The source water assessments performed on the intakes for each system resulted the following susceptibility ratings for a variety of contaminants that may be present in source waters:

Sources	Pathogens	Nutrients	Pesticides	Volatile Organic Compounds	Inorganic Contaminants	Radionuclides	Radon	Disinfection Byproduct Precursors
PVWC Surface Water (4 intakes)	(4) High	(4) High	(1) Medium (3) Low	(4) Medium	(4) High	(4) Low	(4) Low	(4) High
NJDWSC (5 intakes)	(5) High	(5) High	(2) Medium (3) Low	(5) Medium	(5) High	(5) Low	(5) Low	(5) High

2023 Water Quality Results - Table of Detected Contaminants

Regulated Contaminant (units)	Goal (MCLG)	Highest Level Allowed (MCL)	PVWC Little Falls-WTP PWSID: NJ1605002	NJDWSC Wanaque-WTP PWSID: NJ1613001	Source of Substance	Violation
Treated Drinking Water at Treatment Plant						
Turbidity (NTU)	N/A	Treatment Technique TT =1 NTU	**Highest Level Detected and Range (Low - High)**		Soil run-off	No
			0.121 (0.028-0.121)	0.66 (0.03-0.66)		
	N/A	TT = % of samples <0.3 NTU (min 95%)	**Lowest Monthly % of Samples meeting Turbidity Limits**			
			100%	99.96%		
Turbidity is a measure of the cloudiness of the water and is monitored as an indicator of water quality. High turbidity can limit the effectiveness of disinfectants.						
Total Organic Carbon (%)	N/A	TT = % Removal or Removal Ratio	**% Removal Achieved Range:** 46.4 - 81.4 Required: 25-45	**Removal Ratio** 0.9 - 1.3	Naturally present in the environment	No
Barium (ppm)	2	2	0.018 (0.016-0.018)	0.00961 (ND - 0.00961)	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No
Fluoride (ppm)	NJ = 2 Fed = 4	NJ = 2 Fed = 4	0.06 (<0.05 - 0.06)	ND[1]	Erosion of Natural Deposits	No
Nickel (ppb)	N/A	N/A	2.6 (2.1 - 2.6)	ND[1]	Erosion of Natural Deposits	No
Nitrate (ppm)	10	10	1.82 (0.62-1.82)	0.267 (ND - 0.267)	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natual deposits	No
Combined Radium (pCi/L)	0	5	ND (2023 Data)	1.5 (2023 Data)	Erosion of Natural Deposits	No
Perfluorooctanesulfonic acid [PFOS] (ppt)	0	14[2]	5.52 highest running annual average 3.27 - 6.95	<3.63	Metal plating and finishing, discharge from industrial facilities, aquoes film- forming (fire-fighting) foam	No
Perfluorooctanoic acid [PFOA] (ppt)	0	13[2]	7.99 highest running annual average 4.6 - 9.96	<4.38	Metal plating and finishing, discharge from industrial facilities, aquoes film- forming (fire-fighting) foam	No

[1] *These values taken from NJ Drinking Water Watch.* [2] *MCL created by the state of New Jersey. Currently there is no Federal MCL for perfluorinated compounds.*

2023 Water Quality Results - Table of Detected Secondary Contaminants					
Contaminant (units)	NJ Recommended Upper Limit (RUL)	PVWC Little Falls-WTP PWSID: NJ1605002		NJDWSC Wanaque-WTP PWSID: NJ1613001	
		Range of Results	RUL Achieved	Result	RUL Achieved
Alkylenzene Sulfonate [ABS]/ Linear Alkylbenzene Sulfonate [LAS] (ppb)	500	70-130	Yes	<50.0	Yes
Alkalinity (ppm)	N/A	50 - 57.5	N/A	40.0	N/A
Aluminum (ppb)	200	13.8 - 21.2	Yes	37.3	Yes
Chloride (ppm)	250	66.2 - 103.6	Yes	52.2	Yes
Color (CU)	<10	<5	Yes	2	Yes
Copper (ppm)	<1	ND	Yes	0.0152	Yes
Hardness, $CaCO_3$ (ppm)	250	84 - 100	Yes	70.0	Yes
Iron (ppb)	300	<100	Yes	<200	Yes
Manganese (ppb)	50	9.9-17.7	Yes	17.7	Yes
Odor (Threshold Odor Number)	3	7.0 - 14.0	No[3]	<1.00	Yes
pH	6.5 to 8.5 (optimum range)	7.84 - 8.20	Yes	8.15	Yes
Sodium (ppm)	50	50.2 - 81.1	No[4]	33.0	Yes
Sulfate (ppm)	250	44.1 - 59.3	Yes	8.11	Yes
Total Dissolved Solids (ppm)	500	203.5 - 327.5	Yes	79.0	Yes
Zinc (ppb)	5000	1.4 - 22.8	Yes	<10	Yes

[3] The Odor exceeds the New Jersey's Recommended Upper Limit (RUL) due to chlorine disinfection.

[4] PVWC's finished water was above New Jersey's Recommended Upper Limit (RUL). Possible source of sodium include soil runoff, roadway salt runoff, upstream wastewater treatment plants and a contribution coming from chemical used in the water treatment process. For healthy individuals,sodium levels are of less concern, however high sodium levels may be a concern with individuals on a sodium restricted diet.

NA – Not Applicable

ND – Not Detected

Source Water Pathogen Monitoring
Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are viable or capable of causing disease. Ingestion of *Cryptosporidium* may cause crytosporidiosis, an abdominal infection. Symptons of infection include nausea, diarrhea, and abdominal cramps.

Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to avoid infection. *Crytosporidium* must be ingested to cause disease, and it may spread through means other than drinking water.

PVWC samples our source water for *Cryptosporidium* and *Giardia*. The data collected in 2023 is presented in the table above.

Contaminant	Results for PVWC Plant Intake	Typical Source
Cryptosporidium (Oocysts/L)	ND – 0.19	Microbial pathogens found in surface waters throughout the United States.
Giardia (Cysts/L)	ND – 0.47	

Testing For Emerging Contaminants – PVWC PWSID NJ1605002		
Contaminant	PVWC Little Falls-WTP PWSID NJ1605002 Range of Results	Test results presented in this table were collected in 2023 to monitor the occurrence of emerging contaminants. There are currently no EPA drinking water standards for these contaminants.
Treated Drinking Water at the Entry Point to the Distribution System		
Chlorate (ppb)	210.5 149.8 – 283.0	
1,4-Dioxane (ppb)	<0.07	
Perfluorobuta nesulfonic acid [PFBS] (ppt)	<1.83 – 3.61	PVWC monitors for the presence of perfluorochemicals in source water and finished drinking water monthly.
Perfluoroheptanoic acid [PFHp/A] (ppt)	<1.84 – 3.1	
Perflorohexanesulfonic Acid [PFHxS] (ppt)	<1.84 – 3.49	
Perfluorohexanoic Acid [PFHxA] (ppt)	2.87 – 10.6	

Definitions of Terms in Table of Water Quality Parameters:

- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Parts per Million (ppm) or Milligrams per Liter (mg/L):** A measure of the concentration of a substance in a given volume of water. One part per million corresponds to one penny in $10,000.
- **Parts per Billion (ppb) or Micrograms per Liter (ug/L):** An even finer measure of concentration. One part per billion corresponds to one penny in $10,000,000.
- **Parts per Trillion (ppt) or nanograms per Liter (ng/L):** An even finer measure of concentration. One part per trillion corresponds to one penny in $100,000,000.
- **Picocuries Per Liter (pCi/L):** A measure of radioactivity.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible, using the best available treatment technology.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of 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 contaminants.
- **Nephelometric Turbidity Units (NTU):** A unit of Turbidity measurement. The higher the NTU, the more turbid the liquid is.
- **Running Annual Average (RAA):** The average of all sample analytical results taken during the previous four calendar quarters.
- **Recommended Upper Limit (RUL):** The highest level of a constituent of drinking water that is recommended to protect aesthetic quality.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

For More Information:

Contact us at 973-340-4300, customerservice@pvwc.com or visit our website at www.pvwc.com. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's resources below, or contact your healthcare provider.

EPA Drinking Water Website: www.epa.gov/safewater

EPA Sate Drinking Water Hotline: 800-426-4791

NJDEP Water Supply Website: www.nj.gov/dep/watersupply

NJDEP Bureau of Safe Drinking Water: 609-292-5550

American Water Works Association (AWWA) Website: www.awwa.org

AWWA New Jersey Section Website: www.njawwa.org