ANNUAL WATER OUALITY REPORT

Reporting Year 2021



Presented By



MERCHANTVILLE-PENNSAUKEN WATER COMMISSION

If you are a landlord, you must distribute this CCR 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 P. L. 2021, c. 82 (C.58:12A-12.4 et seq.).



We've Come a Long Way

nce again, we are proud to present our annual water quality report covering the period between January 1 and December 31, 2021. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at all hours—to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

Where Does My Water Come From?

The Merchantville-Pennsauken Water Commission pumps groundwater from 14 wells that tap the Potomac-Raritan-Magothy (PRM) Aquifer and transmits it to the MPWC's six pumping stations. These wells vary in depth from 140 to 300 feet deep. The distribution system consists of 220 miles of piping. At the present time, a very small amount of water is purchased from New Jersey American Water Company - approximately 1 percent of our annual needs. NJAWC supplies water from three sources: surface water from the Delaware River and groundwater from the PRM and Mount Laurel - Wenonah aquifers. Information on NJAWC water quality can be found at www.newjerseyamwater.com.

The MPWC prides itself on the aboveground water storage facilities that have been built through the years. These storage tanks greatly benefit

our many customers.
In total, MPWC has six aboveground water tanks. The total capacity of the aboveground storage tanks is eight million gallons of



water. This type of water storage not only enhances water pressure (which is needed to take showers, sprinkle lawns, and fight fires) but also provides over a full days' worth of water supply to our entire franchise area in case of an emergency situation.

The MPWC is committed to keeping abreast of the most recent advancements in water treatment technologies through continuous training and education. Our management staff and treatment and transmission personnel attend training seminars and courses designed to keep us up to date and aware of better ways to serve our customers with the safest and best tasting water possible.

The MPWC has invested in the most current and modern methods for the treatment and transmission of your drinking water. In fact, the MPWC has hosted other water treatment professionals to showcase our facilities and share our success stories.

The MPWC continues to invest in our infrastructure and work aggressively at living up to our mission of supplying the best product at the most affordable cost.

Variances and Exemptions

Inder a waiver granted on December 30, 1998, by NJDEP, our system does not have to monitor for synthetic organic chemicals/pesticides because several years of testing have indicated that these substances do not occur in our source water. The SDWA regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system received monitoring waivers for synthetic organic chemicals and asbestos.

Working Hard for You

Inder the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (U.S. EPA) is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Each system continually monitors for these substances and reports to the U.S. EPA if they were detected in the drinking water. The U.S. EPA uses this data to ensure that consumers are receiving clean water.

This publication conforms to the regulation under the SDWA requiring water utilities to annually provide detailed water quality information to each of their customers. We are committed to providing you with this information about your water supply because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking-water standards.



For more information about this report, or for any questions relating to your drinking water, please call the main office at (856) 663-0043 and ask for Richard Spafford, director of engineering. Our office hours are 8:00 a.m. to 4:00 p.m., Monday through Friday; or visit us on the web at www.mpwc. com.

Source Water Assessment

ur Source Water Assessment Report and Summary are available at www.state.nj.us/dep/swap/ or by contacting the New Jersey Department of Environmental Protection (NJDEP), Bureau of Safe Drinking Water, at (609) 292-5550. The source water assessment performed on our 14 sources can be obtained by calling Richard Spafford, MPWC engineering director, at (856) 663-0043.

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. Public water systems are required to monitor for regulated contaminants and to initiate treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, NJDEP may customize or change the existing monitoring schedules based on the susceptibility ratings.

Source water protection is a long-term dedication to clean and safe drinking water. It is more cost effective to prevent contamination than to address contamination after the fact. Every member of the community has an important role in source water protection. The NJDEP recommends controlling activities and development around drinking water sources, whether through land acquisition, conservation easements, or hazardous waste collection programs. We will continue to keep you informed of Source Water Assessment Program progress and developments. If you have any questions about these findings, please contact us during regular business hours.

MPWC's susceptibility ratings, depending on well sources are:

Pathogens	medium and low
Nutrients	high and medium
Pesticides	medium and low
Volatile organic compounds	high
Inorganics	high, medium, and low
Radionuclides	high
Radon	medium and low
Disinfection by-product precursors	high and medium

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we 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 two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

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

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



Community Participation

You are invited to participate in our public forum and voice any concerns about your drinking water. We meet the second Thursday of each month beginning at 4:00 p.m. at our headquarters, 6751 Westfield Avenue, Pennsauken.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show 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 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.

Call us at (856) 663-0043 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.

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

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2021	15	0	11	11–11	No	Erosion of natural deposits
Chlorine (ppm)	2021	[4]	[4]	0.9	0.3-1.08	No	Water additive used to control microbes
Combined Radium¹ (pCi/L)	2021	5	0	4	4–4	No	Erosion of natural deposits
Haloacetic Acids [HAAs]-Stage 2 (ppb)	2021	60	NA	3.51	ND-3.51	No	By-product of drinking water disinfection
Methyl Tert-Butyl Ether [MTBE] (ppb)	2021	70	NA	2.01	ND-2.01	No	Leaking underground gasoline and fuel tanks; Gasoline and fuel oil spills
Nitrate-Nitrite (ppm)	2021	10	10	3.31	2.12-3.31	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perfluorononanoic Acid [PFNA] (ppt)	2021	13	NA	3.2	ND-3.2	No	Discharge from industrial chemical factories
Perfluorooctanesulfonic Acid [PFOS] (ppt)	2021	13	NA	9.2	ND-9.2	No	Used in the production of Teflon, firefighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films
Perfluorooctanoic Acid [PFOA] (ppt)	2021	14	NA	10	ND-10	No	Used in the production of Teflon, firefighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives, and photographic films
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2021	80	NA	24.6	1.2–24.6	No	By-product of drinking water disinfection

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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2021	1.3	1.3	0.0814	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2021	15	0	1.56	2/30	No	Corrosion of household plumbing systems; Erosion of natural deposits



SECONDARY SUBSTANCES SUBSTANCE YEAR AMOUNT RANGE (UNIT OF MEASURE) SAMPLED RUL MCLG VIOLATION TYPICAL SOURCE DETECTED LOW-HIGH Chloride (ppm) 2021 250 47.5 20-47.5 Runoff/leaching from natural deposits NA 2021 Leaching from natural deposits; Industrial wastes Iron (ppb) 300 NA ND NA No Manganese (ppb) 2021 50 4.8 ND-4.8 Leaching from natural deposits NA No 7.8 6.9 - 7.8**pH** (units) 2021 6.5 - 8.5NA No Naturally occurring Sodium (ppm) 2021 50 Naturally occurring NA 31.3 12.1-31.3 No Runoff/leaching from natural deposits; Industrial wastes Sulfate (ppm) 2020 250 NA 64 14.9-64 No **Total Dissolved Solids** Runoff/leaching from natural deposits 2020 500 NA 220 86-220 No (ppm) Zinc (ppm) 2020 5 NA 0.133 ND-0.133 No Runoff/leaching from natural deposits; Industrial wastes

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SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
1,4-Dioxane (ppb)	2018	5.69	0.32-5.69	NA
Bromodichloromethane (ppb)	2021	3.6	ND-3.6	NA
Bromoform (ppb)	2021	14.8	ND-14.8	NA
Chloroform (ppb)	2021	1.25	ND-1.25	NA
Dibromochloromethane (ppb)	2021	9.14	ND-9.14	NA

¹Based on quarterly monitoring, determined on annual running average

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 contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (**Maximum Contaminant Level**): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

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).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

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