ANNUAL WATER QUALITY REPORT

Reporting Year 2022

Presented By

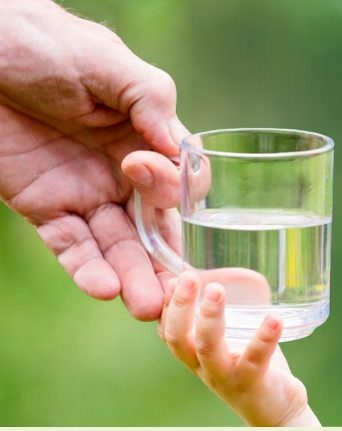
MPWC

MERCHANTVILLE-PENNSAUKEN
WATER COMMISSION

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

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.

PWS ID#: 0424001



Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. 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.

Working Hard For You

Under 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 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 are detected in the drinking water. The U.S. EPA uses this data to ensure that consumers are receiving clean water.

> "Thousands have lived without love, not one without water."
>
> —*W.H. Auden*

This publication conforms to the SDWA regulation 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 Director of Engineering Richard Spafford. Our office hours are 8:00 a.m. to 4:00 p.m., Monday through Friday, or you can visit us online at www.mpwc.com.

Variances and Exemptions

Under a waiver granted on December 30, 1998, by the State of New Jersey Department of Environmental Protection, our system does not have to monitor for synthetic organic chemicals or pesticides because several years of testing have indicated that these substances do not occur in our source water. 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.

Where Does My Water Come From?

The Merchantville-Pennsauken Water Commission (MPWC) pumps groundwater from 14 wells that tap the Potomac-Raritan-Magothy (PRM) Aquifer and transmits it to six pumping stations. These wells vary in depth from 140 to 300 feet. The distribution system consists of 235 miles of piping. At the present time, a very small amount of water (approximately 1 percent of our annual needs) is purchased from New Jersey American Water Company (NJAWC), which supplies water from three sources: surface water from the Delaware River and groundwater from the PRM and Mt. Laurel-Wenonah Aquifers. Information on NJAWC water quality can be found at www.newjerseyamwater.com.

The MPWC prides itself on its groundwater storage facilities, which have been built through the years. These storage tanks greatly benefit our many customers. In total, MPWC has six aboveground water tanks with a total capacity of eight million gallons. This type of water storage not only enhances water pressure (needed to take showers, sprinkle lawns, and fight fires), but it also provides over a full day's 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, we have hosted other water treatment professionals to showcase our facilities and share our success stories. We continue to invest in our infrastructure and strive to live up to our mission of supplying the best product at the most affordable cost.

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 at 4:00 p.m. at our headquarters, 6751 Westfield Avenue, Pennsauken.

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 www.epa.gov/safewater/lead.

Source Water Assessment

Our Source Water Assessment Report and Summary is available online at https://www.state.nj.us/dep/watersupply/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 (856) 663-0043 and asking for Engineering Director Richard Spafford.

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 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 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 through land acquisition, conservation easements, or hazardous waste collection programs. We will continue to keep you informed of source water assessment 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:

- disinfection by-product precursors: high and medium
- inorganics: high, medium, and low
- nutrients: high and medium
- pathogens: medium and low
- pesticides: medium and low
- radionuclides: high
- radon: medium and low
- volatile organic compounds: high

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.

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.

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.

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.

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 [1]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
1,1-Dichloroethane (ppb)	2022	50	NA	0.77	ND–0.77	No	Discharge from metal degreasing sites and other factories
Alpha Emitters (pCi/L)	2021	15	0	11	11–11	No	Erosion of natural deposits
Chlorine (ppm)	2022	[4]	[4]	0.95	0.37–0.95	No	Water additive used to control microbes
cis-1,2-Dichloroethylene (ppb)	2022	70	70	0.68	ND–0.68	No	Discharge from industrial chemical factories
Combined Radium (pCi/L)	2021	5	0	4[2]	4–4[2]	No	Erosion of natural deposits
Fluoride (ppm)	2020	4	4	0.06	ND–0.06	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2022	60	NA	3.48	ND–3.48	No	By-product of drinking water disinfection
Methyl Tert-Butyl Ether [MTBE] (ppb)	2022	70	NA	0.82	ND–0.82	No	Leaking underground gasoline and fuel tanks; gasoline and fuel oil spills
Nickel (ppb)	2020	100	NA	28	ND–28	No	Pollution from mining and refining operations; natural occurrence in soil
Nitrate (ppm)	2022	10	10	4.12	1.28–4.12	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Perfluorononanoic Acid [PFNA] (ppt)	2022	13	NA	2.3	ND–2.3	No	Discharge from industrial chemical factories
Perfluorooctanesulfonic Acid [PFOS] (ppt)	2022	13	NA	9	ND–9	No	Used in the production of Teflon, firefighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives, and photographic films
Perfluorooctanoic Acid [PFOA] (ppt)	2022	14	NA	12	ND–12	No	Used in the production of Teflon, firefighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives, and photographic films
Trichloroethylene (ppb)	2022	1	0	0.75	ND–0.75	No	Discharge from metal degreasing sites and other factories
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2022	80	NA	27.8	4.21–27.8	No	By-product of drinking water disinfection

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.

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 (UNIT OF MEASURE)	YEAR SAMPLED	RUL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2022	250	NA	48	22–48	No	Runoff/leaching from natural deposits
pH (units)	2022	6.5-8.5	NA	8.5	6.6–8.5	No	Naturally occurring
Sodium (ppm)	2021	50	NA	31.3	12.1–31.3	No	Naturally occurring
Sulfate (ppm)	2020	250	NA	64	14.9–64	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2020	500	NA	220	86–220	No	Runoff/leaching from natural deposits
Zinc (ppm)	2020	5	NA	0.133	ND–0.133	No	Runoff/leaching from natural deposits; industrial wastes

UNREGULATED SUBSTANCES

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)	2022	3.08	ND–3.08	NA
Bromoform (ppb)	2022	16.2	ND–16.2	NA
Chloroform (ppb)	2022	1.04	ND–1.04	NA
Dibromochloromethane (ppb)	2022	8.82	ND–8.82	NA

[1] Under a waiver granted on December 30, 1998, by the State of New Jersey Department of Environmental Protection, 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.

[2] Based on quarterly monitoring, determined on annual running average.

BY THE NUMBERS

The number of Olympic-sized swimming pools it would take to fill up all of Earth's water.

800 TRILLION

1 The average cost in cents for about 5 gallons of water supplied to a home in the U.S.

The percent of Earth's water that is salty or otherwise undrinkable, or locked away and unavailable in ice caps and glaciers.

99

50 The average daily number of gallons of total home water use for each person in the U.S.