Deptford Township Municipal Utilities Authority

Public Water Systems ID# 0802001

2022 Annual Water Quality Report

JUNE 2023

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Protecting Your Drinking Water

To comply with state and federal regulations, the Deptford Township Municipal Utilities Authority [DTMUA] issues a report annually describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and your awareness of the need to protect our drinking water sources.

Drinking water standards are regulations that the Environmental Protection Agency (EPA) sets to control the level of contaminants in the nation's drinking water. These standards are part of the Safe Drinking Water Act's (SDWA) "multiple barrier" approach to drinking water protection, which includes assessing and protecting drinking water sources; protecting wells and collection systems; making sure water is treated by qualified operators; ensuring integrity of distribution systems; and making information available to the public on the quality of their drinking water.

The Origin Of Your Water

The source of Deptford Township Municipal Utilities Authority [DTMUA] is groundwater from seven wells, each with individual chlorinating treatment facilities. The wells vary in depth from 261 to 355 feet deep. Water pumped from the wells is treated with a polyphosphate for corrosion control and to minimize the staining effects on fixtures. The seven wells pump water from the Potomac-Raritan-Magothy (PRM) Aquifer formation. The DTMUA's annual diversion from the Aquifer for the year 2022 was 379.188 million gallons.

Deptford Township used 963,188,000 gallons of water last year. In order to meet this demand, the DTMUA must augment its well water supply with the bulk purchase of treated water from NJ American Water Company (NJAWC). NJAWC's water originates from the Delaware River. Approximately fifty-nine percent of our water came from NJAWC in 2022.

The DTMUA has approximately 11,088 water connections serving over 31,977 residents (provided by the U.S. census bureau, April 2020). Last year, the DTMUA supplied on average, 2.41 million gallons of water per day during the winter months and 2.87 million gallons of water per day during the summer months. This equates to approximately 83 gallons of water daily per person in the service area.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for DTMUA's water system which is available at www.nj.gov/dep/watersupply or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550 or watersupply@dep.nj.org.

All seven wells tested low in the susceptibility ratings for pathogens, nutrients, pesticides, volatile organic compounds and radon. All seven wells tested medium for disinfection by-product precursors and inorganics. Four wells tested medium and three wells tested low for radionuclides.

Our Commitment To You

The DTMUA is committed to providing residents with a safe and reliable supply of high-quality drinking water all year round. Each day our employees are working to ensure that the water delivered from our facilities meet or exceed all Federal and State regulatory requirements.

This brochure is a summary of the quality of water provided to our customers last year. Included are details about where your water comes from, what our test results show about it, and how it compares to standards set forth by the Federal and State regulatory agencies. Copies of all test results as submitted to regulatory agencies are available for examination during normal business hours at the DTMUA's office.

Waiver

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 asbestos and synthetic organic chemicals.

The State of New Jersey allows monitoring for some substances less than once a year because the concentrations of these substances do not change frequently. Some of our data in the Table of Detected Contaminants, though representative, may be more than one year old.

Deptford MUA Table of Detected Contaminants - Results for 2022

Contaminants	Unit	MCL	MCLG	Deptford MUA Highest Detection		Deptford MUA Range Detected	Major Sources
Radiologicals							
Alpha Emitters (2020)	pCi/l	15	0	<.3		-	Erosion of natural deposits
Combined Radium (Ra226/228) (2020)	pCi/l	5	0	1.5		1.5	Erosion of natural deposits
Inorganic Substances							
Barium (2020)	mg/L	2	2	0.083		0.014 to 0.083	Discharge of drilling wastes & metal refineries; Erosion of natural deposits
Copper (2020)	mg/L	AL=1.3	AL= 1.3	0.389 with 0 sites exceeding AL		Homes above AL[0]	Corrosion of household plumbing systems
Fluoride (not added) (2020)	mg/L	4	4	0.74		0.08 to 0.74	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Lead (2020)	mg/L	AL=.015	AL=0	0.00473 with 1 site exceeding AL		Homes above AL[1]	Corrosion of household plumbing systems
Nickel (2020)	mg/L	NA	NA	<0.0016		-	Erosion of natural deposits
Nitrate	mg/L	10	10	<1.0		<1.0	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
Sodium	mg/L	50	50	59.12		17.54 to 59.12	Erosion of natural deposits
Disinfection By-Products					LRAA		
Stage 2 Total Trihalomethanes (TTHM)	ppb	80	NA	33.15	NA	<2 to 33.15	Drinking water disinfection
Stage 2 Total Halacetic Acid (HAA5)	ppb	60	NA	18.2	NA	1.3 to 18.2	Drinking water disinfection
Microbial Contaminants							
Total Cloriform Bacteria	Postive Monthly Samples	5%	0	0		0	Naturally present in environment
Disinfectants							
Chlorine	ppm	MRDL = 4	MRDLG = 4	-		0.2 to 1.27	Water additives to control microbes
Other Regulatory Substances							
Perfluoroctanoic Acid PFOA	Ng/L	14		<2		<2 to 5.29	Used in Teflons, fire fighting foams, cleaners, cosmetics, lubricants, paints, polishes, adhesives, photo films.
Perfluoroctane Sulfonic Acid PFOS	Ng/L	13		4.38		<2 to 4.38	Manmade chemical; used in products for stain, grease, heat and water resistance.

Deptford MUA Table of Detected Contaminants - Results for 2022

Unregulated contaminants monitoring (UCMR4): 2019 - 2020 DTMUA Results				
Contaminate	Units	Minimum Reporting Level	Results	Typical Source
Ethoprop	ppb	0.03	< 0.03	Used in insecticides
Oxyflourfen	ppb	0.05	< 0.05	Used in herbicides and insecticides
Profenofos	ppb	0.3	< 0.3	Used in insecticides
Tebuconazole	ppb	0.2	< 0.2	Used in insecticides
Total Permethrin (cis- & trans-)	ppb	0.04	<0 .04	Used in medication and insecticides
Tribufos	ppb	0.07	< 0.07	Used in herbicides and insecticides
Germanium	ppb	0.3	< 0.3	Naturally-occuring elemental metal - used in some medications
Manganese	ppb	0.4	< 0.4	Naturally-occuring elemental metal - essential dietary element
Alpha-Hexachlorocyclohexane	ppb	0.01	< 0.01	Used in insecticides
Clorpyrifos	ppb	0.03	< 0.03	Used in insecticides
Dimethipin	ppb	0.2	< 0.2	Used in herbicides and insecticides

Table Definitions

90th percentile Value: Of the samples taken, 90% of the values of the results were below the level indicated in the table.

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 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 contaminants.

NA – Not Applicable

ND – Not Detected

NJAWC – New Jersey American Water Company.

NR (Not Regulated): Indicates that there currently are no available regulations for these substances.

NTU (Nephelometric Turbidity Units): Measurement of clarity, or turbidity of water.

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

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

pCi/L (picoCuries per liter): A measure of the radioactivity in water.

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

New Jersey American Water - Results for 2022

DRRWTP NJ0327001 - Primary Regulated Substances

DISINFECTANTS - Collected at the Surface Water Treatment Plant								
Substance (with units)	Year Sampled	Compliance Achieved	MRDLG	MRDL	Minimum Chlorine Residual	Lowest Detected	Range Detected	Typical Source
Entry Point Chlorine Residual (ppm)	2022	Yes	4	4	TT ≥ 0.20	0.5[1]	0.50 to 1.15	Water additive used to control microbes.

1- Data represents the lowest residual entering the distribution system from our water treatment plant.

DISINFECTANTION BYPRODUCTS - Collected at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MRDLG	MRDL	Highest Running Annual Average	Range Detected	Typical Source
Bromate (ppb)	2022	Yes	0	10	4.3	ND to 7	By-productof drinking water disinfection.

TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant								
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	% Removal Required and Lowerst Quarterly Average Ratio	Range of % and Ratio Removal Achieved	Number of Quarters Out of Compliance	Typical Source
Total Organic Carbon (TOC) (mg/L)	2022	Yes	NA	TT ≥ 35% Removal	35%	43% to 61%	0	Naturally present in the environment.
Actual/ Required TOC Removal (Ratio)	2022	Yes	NA	TT: Running Annual Average ≥ 1.0	1.5	1.23 to 1.60	0	Naturally present in the environment.

TURBIDITY - Continuous Monitoring at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Single Measurement and Lowest Monthly % of Samples ≤ 0.3 NTU	Range Detected	Typical Source
Turbidity (NTU)[2]	2022	Yes	0	TT: Single result > 1 NTU	0.1	0.03 to 0.15	Soil runoff.
	2022	Yes	NA	TT: At least 95% of samples ≤ 0.3 NTU	100%	NA	Soil runoff.

2 - 100% of the turbidity readings were below the treatment technique requirement of 0.3 NTU. Turbidity is a measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Other Regulated Substances - Collected at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL/ SMCL	Highest Compliance Result	Range Detected	Typical Source
Nitrate (ppm)	2022	Yes	10	10	1.03	NA	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposit.
Perfluoroctanoic Acid - PFOA (ppt)	2022	Yes	NA	14	3.0	ND to 4.0	Used in Teflons, fire fighting foams, cleaners, cosmetics, lubricants, paints, polishes, adhesives, photo films.
Perfluoroctanesulfonic Acid - PFOS (ppt)	2022	Yes	NA	13	3.0	ND to 3.5	Manmade chemical; used in products for stain, grease, heat and water resistance.

New Jersey American Water - Delaware Regional Water Treatment Plant

Unregulated Contaminants Monitoring (UCMR4) 2019				
Parameter	Units	Average Result	Range Detected	Typical Source
Maganese[3]	pbb	1.02	ND to 1.8	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element.
2-Methoxyethanol	pbb	0.24	ND to 47	Used as a solvent in varnishes, dyes, resins, airplane deicing solutions. It is also used in organometallic chemistry synthesis.

3 - Maganese is regulated as a secondary contaminant with a secondary maximum contaminant level of 50 ppb

Secondary Standards (related to the aesthetic quality of drinking water)

Substance	Unit	Recommended Upper Limit Detection	DTMUA Highest Detection	DTMUA Range Detected	NJAWC Highest Detection	NJAWC Range Detected	Major Sources
Iron	mg/L	0.3	<0.01	ND to <0.1	NA	NA	Naturally occuring
Sodium	mg/L	50	59.12	17.54 to 59.12	NA	NA	Naturally occuring
Sulfate 2020	mg/L	250	36.7	8.1 to 36.7	NA	NA	Erosion of natural deposits

Iron: The secondary recommended upper limit for iron is based on unpleasant taste of the water and staining of fixtures and laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

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.

Required Health Language

All 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 may be obtained by calling the EPA Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled) 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.

LEAD : If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. DTMUA 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 water tested. Information on lead in drinking water is available from Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Substances that may be present in source water before we treat it include:

- **Inorganic substances**, such as salts and metals that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Microbial substances**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Sodium: For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the secondary RUL may be of concern to individuals on a sodium restricted diet. This shall serve as public notice for consumers that the sodium levels slightly exceed the secondary standards for sodium.

- **Organic chemical substances** , including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- **Pesticides and herbicides** , which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- **Radioactive substances** , 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, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

NITRATE : 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.

Vulnerable Population Language

"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 microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791."

2023 Meeting Dates

Our monthly meetings are usually held on the 3rd Tuesday of each month at 5:30pm at 898 Cattell Road. Below is a list of meeting dates for 2023.

June 20, 2023
July 18, 2023
August 15, 2023
September 19, 2023
October 17, 2023
November 21, 2023
December 19, 2023
January 16, 2024

Source of Information

Deptford Township Municipal Utilities Authority
898 Cattell Rd., Wenonah, NJ 08090
Tel: (856) 415-1111 Fax: (856) 415-0199
Monday - Friday from 7:45am to 4:45pm
www.deptfordmua.com

New Jersey American Water Company
1025 Laurel Oak Road, Voorhees, NJ 08043
Customer Service - Tel: (800) 272-1325
www.amwater.com

U.S. EPA Safe Drinking Water: (800) 426-4791

NJ DEP Bureau of SDW: (609) 292-5550

DTMUA PWS ID #: NJ0802001

NJAWC PWS ID#: 0327001

Board Members

Linda Tramo - Chairman
Patrick Medany - Vice Chairman
Daniel Reed - Secretary / Treasurer
Ruby Love - Board Member
Joseph Sacerdote - Board Member
Gregory Thelen - Alternate Member #1
Edward Kalinowski - Alternate Member #2

Professionals & Staff

Michael J. Cusick - Executive Director
Marmero Law, LLC - Attorney
CME - Consulting Engineer
Bowman and Company - Auditor
Parker & McCay - Bond Council
Hardenbergh Insurance Group- NJ JIF Insurance Risk Consultant
Insurance Consultant For Dental, Life, and Vision Policies
John Stocklin - Assistant Utilities Superintendent

2023 Holidays

Tuesday, July 04, 2023	Independence Day
Monday, September 04, 2023	Labor Day
Monday, October 09, 2023	Columbus Day
Tuesday, November 07, 2023	Election Day
Friday, November 10, 2023	Veterans Day
Thursday, November 23, 2023	Thanksgiving
Friday, November 24, 2023	Day After Thanksgiving
Monday, December 25, 2023	Christmas
Monday, January 1, 2024	New Years
Monday, January 15, 2024	Martin Luther King
Monday, February 19, 2024	Presidents Day
Friday, March 29, 2024	Good Friday
Monday, May 27, 2024	Memorial Day