Annual Drinking Water Quality Report

2020 (2019 Data)

Manchester Township Water Utility—Eastern Service Area

PWSID# NJ1518005

MANCHESTER TOWNSHIP
OCEAN COUNTY, NEW JERSEY

Manchester Township Water Utility's goal is to provide you with water that meets or surpasses all the standards for safe drinking water. The Eastern Service Area (NJ1518005) delivers water to portion of the Twp. Lying along Route 37 and those portions lying to the east of Route 70, the Borough of Lakehurst, and the Lakehurst Naval Air Engineering Station and Warfare Center.

These health and safety standards are set by the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP). We're at work 24 hours a day, 365 days a year to provide you and your family with top quality water. We regularly test water samples to be sure that your water meets the safety standards. All the test results are on file with the NJDEP, the agency that monitors and regulates drinking water quality in our state. Both the EPA and the NJDEP require water suppliers to send a Consumer Confidence Report (CCR) to customers on an annual basis.

This CCR provides important information about your drinking water. It shows how your drinking water measured up to government standards during 2019. Please read it carefully and feel free to call the Manchester Township Water Utility at 732-657-8121 or the EPA Safe Drinking Water Hotline at 800.426.4791 with any questions. If you have specific questions about water as it relates to your personal health we suggest that you contact your health care provider.

Where does your water come from?

Manchester Township Water Utility-Eastern, herein after "Eastern" obtains our water from nine active wells drilled between 75 and 1150 feet into two underground sources of water called the Cohansey and the Upper Raritan Aquifers. The Township controls the property around these wells and restricts any activity that could contaminate them. All of our water is treated at one of five treatment facilities located at or near the wells.

The treatment facilities include treatment for iron removal, corrosion control, and disinfection.

To comply with state and federal regulations, Manchester Township Water Utility-Eastern issues an annual Consumer Confidence Report describing the quality of the drinking water supplied to Lacey Road customers.

If you have any questions about the drinking water that Eastern supplies, please call 732-657-8121. The water quality report for Eastern can be found at **http://www.manchestertwp.com/departments/public-works-and-utilities/**

Contact Information

Please contact Manchester Township Water Utility at 732-657-8121 regarding the content of this report. We encourage public participation at our regular meeting which is held every second and fourth Monday of each month at 6:00pm. Meetings are located at the Municipal Building, 1 Colonial Drive, Manchester, NJ.

Lead Notice

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. Manchester Water Utility 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 or at

http://www.epa.gov/safewater/lead.

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 chemo-therapy, persons who have undergone organ transplants, people with HIV / AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA / CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Waived Requirements

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system has been granted a waiver for asbestos and synthetic organic chemicals.

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How do drinking water sources become polluted?

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that 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 (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 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

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

Source Water Assessments

The NJDEP has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at **http://www.state.nj.us/dep/swap** or by contacting the NJDEP's Bureau of Safe Drinking Water at **609-292-5550**.

The source water assessment table for Eastern is provided below. The table provides the number of wells that have either a high (H), medium (M), or low (L) susceptibility rating for each of eight contaminant categories.

If a water system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, the DEP may change existing monitoring schedules based upon susceptibility ratings.

Pathogens: Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

Nutrients: Compounds, minerals and elements (both naturally occurring and man-made) that aid plant growth. Examples include nitrogen and phosphorus.

Pesticides: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlorodane.

Radionuclides: Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

Volatile Organic Compounds: Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

Inorganics: Mineral-based compounds that are both naturally occur-ring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

Radon: Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to http://www.nj.gov/dep/rpp/radon/index.htm or call 800-648-0394.

Disinfection Byproduct Precursors: A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants used to kill pathogens (usually chlorine) react with dissolved organic material (leaves, etc.) in surface water.

	Pathogens			Nutrients			Pesticides			Volatile-Organic Compounds			Inorganics			Radio nuclides			Radon			Disinfection Byproduct		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
7 Wells	0	0	9	4	3	2	0	2	7	1	0	8	6	3	0	6	3	0	0	6	3	0	9	0

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2019 Water Quality Results

Radioactive Contaminants	MCLG	MCL	Level Detected	Violation	Likely Source
Combined Radium - 228 & 226 Test Results Year 2019	0 pCi/L	5 pCi/L	Range: ND-2.45 Highest: 0.75 LRAA	**N**	Erosion of natural deposits
Radium-226 Test Results Year 2019	0 pCi/L	5 pCi/L	Range: ND-5.1 Highest: 2.78 LRAA	N	Erosion of natural deposits
Radium-228 Test Results Year 2019	0 pCi/L	5 pCi/L	Range: ND-4.36 Highest: 1.44 LRAA	N	Erosion of natural deposits
Gross Alpha Emitters Test Results Year 2019	0 pCi/L	15 pCi/L	Range: ND-7.28 Highest: 2.4 LRAA	N	Erosion of natural deposits
Inorganic Chemicals	**MCLG**	**MCL**	**Level Detected**	**Violation**	**Likely Source**
Barium Test Results Year 2017	2 ppm	2 ppm	Range: 0.02-0.09 Highest: 0.09	N	Discharge of drilling wastes, metal refineries, and erosion of natural deposits
Chromium Test Results Year 2017	100 ppb	100 ppb	Range: ND-1.0 Highest: 1.0	N	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide Test Results Year 2017	200 ppb	200 ppb	Range: ND-4.0 Highest: 4.0	N	Runoff from fertilizer, leaching from septic tanks, sewage, and erosion of natural deposits
Nitrate (as Nitrogen) Test Results Year 2019	10 ppm	10 ppm	Range: ND-3.07 Highest: 3.07	N	Corrosion of household plumbing systems and erosion of natural deposits
Fluoride Test Results Year 2017	4 ppm	4 ppm	Range: 0.04-0.07 Highest: 0.07	N	Erosion of natural deposits
Nickel Test Results Year 2017	n/a	n/a	Range: ND-1.0 ppb Highest: 1.0 ppb	N	Leaching from ore-processing sites, and discharge from electronics, glass, and drug factories
Copper & Lead	**MCLG**	**AL**	**Level Detected**	**Violation**	**Likely Source**
Copper Test Results Year 2018	1.3 ppm	1.3 ppm	90th Percentile: 0.094 Samples > AL: 0	N	Corrosion of household plumbing systems and erosion of natural deposits
Lead Test Results Year 2018	0 ppb	15 ppb	90th Percentile: 1.0 Samples > AL: 0	N	Corrosion of household plumbing systems and erosion of natural deposits
Regulated Disinfectants	**MRDLG**	**MRDL**	**Level Detected**	**Viola-tion**	**Likely Source**
Chlorine Test Results Year 2019	4.0 ppm	4.0 ppm	Range: 0.2-1.0 Average: 0.62	N	Treatment process
Volatile Organic Compounds / Disinfection By-products	**MCLG**	**MCL**	**Level Detected**	**Viola-tion**	**Likely Source**
HAA5 Haloaecetic Acids Test Results Year 2019	n/a	60 ppb	Range: ND-6.51 Highest: 4.75 LRAA	N	Byproduct of drinking water disinfection
TTHM Total Trihalomethanes Test Results Year 2019	n/a	80 ppb	Range: 2.6-16.1 Highest: 12.9 LRAA	N	Byproduct of drinking water disinfection
Secondary Contaminants		**RUL**	**Level Found**	**Violation**	**Likely Source**
Iron Test Results Year 2017/2019		0.3 ppm	Range: ND-0.11 Highest: 0.11	N	Erosion of natural deposits
Manganese [+] Test Results Year 2017/2019		50 ppb [++]	Range: 9-87 Highest: 87	N	Erosion of natural deposits
Chloride Test Results Year 2017/2019		250 ppm	Range: ND-27.0 Highest: 27.0	N	Erosion of natural deposits
Sodium Test Results Year 2017/2019		50 ppm	Range: 3.17-15.0 Highest: 15.0	N	Naturally present in the environment
pH Test Results Year 2017/2019		6.5-8.5 Units	Range: 7.0-8.32 Highest: 8.32	N	Naturally present in the environment
Sulfate Test Results Year 2017		250 ppm	Range: ND-8.72 Highest: 8.72	N	Erosion from natural deposits; Industrial wastes
Hardness, Carbonate Test Results Year 2017		250 ppm	Range: 61.5-86.7 Highest: 86.7	N	Naturally present in the environment

Secondary Contaminants	RUL	Level Found	Violation	Likely Source
Total Dissolved Solids (TDS) Test Results Year 2017	500 ppm	Range: 102-142 Highest: 142	N	Erosion from natural deposits
Aluminum Test Year 2017	0.2 ppm	Range: ND-0.169 Highest: 0.169	N	Erosion of natural deposits
Color Test Results Year 2017	10 CU	Range: ND-10.0 Highest: 10.0	N	Naturally present in the environment

[+] The recommended upper limit for manganese is based on staining of laundry. manganese is an essential nutrient, and toxicity is not expected from high levels which would not be encountered in drinking water.

[++] The recommended upper limit for manganese is 50 ppb unless a sequestering agent is added, increasing the RUL to 100 ppb. We add a sequestering agent at two of our facilities where the concentration of manganese exceeds 50 ppb.

Microbiologicals-Revised Total Coliform Rule (RTCR)	Number Required	Number Completed	Corrective Actions Required	Corrective Actions Completed
Level 1 Assessment - Total Coliform	0	0	0	0

Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. 0 of 360 samples tested negative for coliform bacteria.

Unregulated Substances for which the EPA requires monitoring	Reference Concentration	Level Detected	Violation	
Manganese Test Results Year 2019	300 ppb	Range: 14.1-71.1 ppb Highest : 71.1 ppb	N	
HAA5 Haloaecetic Acids Test Results Year 2019	60 ppb	Range: 1.23-3.81 ppb Highest : 3.81 ppb	N	
Chlorate Test Results Year 2015	210 ppb	Range: ND-110 ppb Average: 35 ppb	N	
Bromide Test Results Year 2019	N/A	Range:ND-60.1 ppb Highest: 39.8 ppb	N	
Chromium Test Results Year 2015	100 ppb	Range: ND-0.3 ppb Average: 0.2 ppb	N	
Cobalt Test Results Year 2015	70 ppb	Range: ND-1.6 ppb Average: 0.4 ppb	N	
Hexavalent Cromium (dissolved) Test Results Year 2015	N/A	Range: ND-0.2 ppb Highest: 0.1 ppb	N	
Strontium Test Results Year 2015	1500 ppb	Range: 30-440 ppb Average: 174 ppb	N	
Vanadium Test Results Year 2015	21 ppb	Range: ND-0.3 ppb Average: 0.1 ppb	N	

Footnotes

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 healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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Definitions

ppm **Parts Per Million**: equivalent of one second in 12 days

ppb **Parts Per Billion**: equivalent of one second in 32 years

RUL **Recommended Upper Limit**

ND **Not Detected**

RAA **Running Annual Average**

LRAA **Locational Running Annual Average**

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.

NA **Not Applicable**

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

AL **Action Level** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Primary Standards: Federal drinking water regulations for substances that are health-related. Water suppliers must meet all primary drinking water standards.

Secondary Standards: Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as taste, odor and appearance. Secondary standards are recommendations, not mandates.

MRDL **Maximum Residual Disinfection Level** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG **Maximum Residual Disinfection Level Goal** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefit of the use of disinfectants to control microbial contamination.