

Annual Drinking Water Quality Report
Elmwood Park Water Department
For the Year 2018
Public Water System ID # 0211001

Dear Consumer:

During calendar year 2018, the Borough of Elmwood Park water supply was tested for over 80 contaminants that might be found in water. These tests included items ranging from taste and odor to bacteriological and chemical contaminants. The United States Environmental Protection Agency (USEPA) and the New Jersey Department of Environmental Protection (NJDEP) set health and safety standards for public water supplies.

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).

This annual Consumer Confidence Report (CCR), required by the Safe Drinking Water Act (SDWA), provides additional information on our sources of supply and the quality of the water we deliver. For more information on this report or about the next opportunity for public participation in decisions concerning drinking water, please contact;

Robert De Block (De Block Environmental Services)
Licensed Water System Operator
Borough of Elmwood Park
182 Market Street
Elmwood Park, New Jersey 07407
973-998-9100

The Elmwood Park Water Department is a division of local government working under the direction of the Mayor and Council. All meetings of the Mayor and Council are advertised in advance in the legal section of the local newspaper. The Elmwood Park Water Department will notify consumers as required by the NJDEP if water quality fails to meet the standards.

General Information

Rivers, lakes, streams, ponds, reservoirs, springs and wells are sources for both tap water and bottled water. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and picks 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 the result from urban storm water runoff, and residential uses.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

- Organic, chemical contaminants, 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.
- 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, the 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. However, the presence of a contaminant does not necessarily indicate that the water poses a health risk.

Health Effects of Detected Contaminants:

Turbidity. Turbidity has no health risk effects. However, turbidity can interfere with disinfecting and provide a medium for biological growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as cramps, nausea, diarrhea, and associated headaches.

Radioactive Contaminants/Inorganic Contaminants

Copper. Copper is an essential nutrient, but some people who drink water-containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water-containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Lead. Infants and children who drink water-containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems and high blood pressure.

Sodium – PVWC was above New Jersey's recommended upper limit (RUL) for 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 may be of concern to individuals on a sodium restricted diet.

Volatile Organic Contaminants

TTHMs (Total Trihalomethanes). Some people who drink water-containing trihalomethanes in excess of the MCL over many years could experience problems with their liver, kidneys, or central nervous systems, and may have an increased chance of getting cancer.

Vulnerable Population Language

40 CFR: 141.154(a)

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/CDSC 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).

**SPECIAL CONSIDERATIONS REGARDING CHILDREN, PREGNANT WOMEN,
NURSING MOTHERS, AND OTHERS**

Children may receive a slightly higher amount of 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 case of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

ADDITIONAL SPECIAL NOTICE ON LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant woman and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Elmwood Park Water 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. Adults who drink this water with elevated levels of lead over many years could develop kidney problems and high blood pressure.

Additional information is available from the SAFE DRINKING WATER HOT LINE (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>

ADDITIONAL INFORMATION

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. Our system received monitoring waivers for asbestos and we are not required to monitor for synthetic organic chemicals.

The MCL's listed in the following tables are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Current Water Issues

TTHMs (Total Trihalomethanes).

The LRAA for TTHMs in June 2018 was 85 ppb at the DPW Garage. Compliance was achieved in September 2018.

In addition to twice annual system wide flushing, the water department has completed chlorine residual testing on each dead end main in the system to identify other areas of high water age and has implemented a schedule of regular hydrant flushing on the mains where water age is highest.

Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

Elmwood Park Water Department works hard to provide top quality water to every tap. We ask that all of our customers help us to protect our water sources, which are the heart of the community, our way of life and our children's future.

If you have any questions, please call our Licensed Operations and consulting contactor, De Block Environmental Services at (973)-998-9100.

Sources of Supply

The Elmwood Park water supply obtains its entire water supply from the Passaic Valley Water Commission (PVWC). Sources of supply include the Passaic River, and treated water that is supplied by the North Jersey District Water Supply Commission (NJDWSC). NJDWSC obtains water its supply from the Wanaque Reservoir.

Treatment

Water produced by the PVWC is treated at their water treatment plant in Little Falls. The NJDWSC supply is treated at their water treatment plant in Wanaque. The treatment at these plants includes pretreatment, sedimentation, filtration and disinfection.

The Borough of Elmwood Park, PVWC and the NJDWSC Water Quality Tables below list all the drinking water contaminants that were detected during calendar year 2018. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from January 1, 2018 through December 31, 2018. The NJDEP requires us to monitor for certain contaminants less then once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may be more than one year old.

**Table 1
Elmwood Park Water Department - Water Quality Report**

Microbiological Contaminants

Regulated Contaminant	Units	COMPLIANCE ACCHIEVED	MCLG	MCL	Highest Level	Source of Contamination
Total Coliform Bacteria	NA	Yes*	0	Not more than 1 positive sample per month	1	Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

* The Elmwood Park Water Department collects 21 routine total coliform samples per month. Elmwood Park Water recorded a single positive sample for total coliform in the month of July. That sample was negative for e-coli. In conformance with the rules a repeat sample was collected from the same location and 2 additional check samples were taken upstream and downstream of the location of the positive sample within 24 hours and retested. All repeat and check samples were negative therefore the system remained in compliance.

REGULATED DISINFECTANTS and DISINFECTION BYPRODUCTS

Stage 2 Disinfection Byproducts, Note: Stage 2 DBP compliance is based on the locational running average (LRAA) calculated at each monitoring location.

Regulated Contaminant	UNIT	COMPLIANCE ACCHIEVED	MCL LRAA	Highest Detected	Range Detected	Source of Contamination/ and Comments
Total Trihalomethanes (TTHM) Stage 1	PPB	No*	80	85	60 - 85	Byproduct of water disinfection. / TTHM compliance is based on Locational Running Annual Average.
Haloacetic Acids (HAA5) Stage 1	PPB	Yes	60	28	20- 28	Byproduct of water disinfection. / HAA5 compliance is based on Locational Running Annual Average.

*The LRAA in June 2018 was 85 ppb at the DPW Garage. Compliance was achieved in September 2018. Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

Disinfectants:

Regulated Contaminant	Units	COMPLIANCE ACCHIEVED	MRDLG	MRDL	Highest Detected	Range Detected	Source of Contamination
Chlorine as CL2 (Running avg.)	PPM	Yes	4	4	1.2	0.6 – 1.2	Chlorine is used as a drinking water disinfectant.

Secondary Contaminants

Regulated Contaminant	Units	COMPLIANCE ACCHIEVED	RUL	Highest Detected	Range Detected	Source of Contamination
Iron	PPM	Yes	.3	<0.2	<0.2	Erosion of natural deposits, discharge of drilling waste and discharge from metal refineries.
Manganese	PPM	Yes	0.05	0.00432	0.00432	Erosion of natural deposits.

Inorganic Contaminants

Regulated Contaminant	Units	MCLG	MCL	Range Detected	Highest Level	Source of Contamination
Copper	mg/L	1.3	AL=1.3	90 th percentile = 0.0607	0.106	Corrosion of household plumbing systems
Lead (N)	mg/L	0	AL= 0.015	90 th percentile = 0	0.00814	Corrosion of household plumbing systems

PASSAIC VALLEY WATER COMMISSION (PVWC) PWS ID NJ1605002 - 2018 WATER QUALITY DATA

				Water Treatment Plant Results		
PRIMARY CONTAMINANTS	Compliance Achieved	MCLG	MCL	PVWC Little Falls WTP PWS ID NJ1605002	NJDWSC Wanaque WTP PWS ID NJ1613001	TYPICAL SOURCE
TURBIDITY AND TOTAL ORGANIC CARBON				Highest Result (Range of Results)	Highest Result (Average)	
Turbidity, NTU*	Yes	NA	TT = 1	0.36 (0.021 - 0.36)	0.41 (0.06 average)	Soil runoff.
	Yes	NA	TT = percentage of samples <0.3 NTU (min 95% required)	Lowest Monthly Percentage of Samples Meeting the Turbidity Limits		
				99.97%	99.9%	
* Turbidity is a measure of the cloudiness of the water, and is monitored as an indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.						
Total Organic Carbon, %	Yes	NA	TT = % removal; or removal ratio	Percent (%) Removal	Removal Ratio	Naturally present in the environment.
				49 - 80 (35 - 50 required)	1.1 (RAA) 1.0 - 1.3	
INORGANIC CONTAMINANTS				Highest Result (Range of Results)	Highest Result	
Barium, ppm	Yes	2	2	Less than 0.10	0.0145	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride, ppm	Yes	4	4	0.080 (ND - 0.080)	ND	Erosion of natural deposits.
Nickel, ppb	NA	NA	NA	2.39 (ND - 2.39)	ND	Erosion of natural deposits.
Nitrate, ppm	Yes	10	10	3.26 (ND - 3.26)	0.351	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium, ppb	Yes	50	50	Less than 2	ND	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.

WAIVER INFORMATION

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. NJDWSC was granted a monitoring waiver for synthetic organic chemicals for the 2017-2019 monitoring period by NJDEP. PVWC received a monitoring waiver for all of the synthetic organic contaminants except for the contaminant Di(2-Ethylhexyl)Phthalate for the 2017-2019 monitoring period.

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 NJDWSC system (PWS ID 1613001) can be obtained by accessing NJDEP's source water assessment web site at <http://www.nj.gov/dep/watersupply/swap/index.html> or by contacting NJDEP's Bureau of Safe Drinking Water at 609-292-5550. 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 list the following susceptibility ratings for a variety of contaminants that may be present in source waters:

Intake Susceptibility Ratings	Pathogens	Nutrients	Pesticides	Volatile Organic Compounds	Inorganic Contaminants	Radionuclides	Radon	Disinfection Byproduct Precursors
PVWC 4 Surface Water	4-High	4-High	1-Medium, 3-Low	4-Medium	4-High	4-Low	4-Low	4-High
NJDWSC 5 Surface Water	5-High	5-High	2-Medium, 3-Low	5-Medium	5-High	5-Low	5-Low	5-High

SECONDARY PARAMETERS – TREATMENT PLANT EFFLUENT

Contaminant	N.J. Recommended Upper Limit (RUL)	PVWC Little Falls WTP PWSID NJ1605002		NJDWSC Wanaque WTP PWSID NJ1613001	
		Range of Results	RUL Achieved	Result	RUL Achieved
ABS/LAS, ppb	500	ND - 150	Yes	ND	Yes
Alkalinity, ppm	NA	40 - 70	NA	38	NA
Aluminum, ppb	200	ND - 39	Yes	60	Yes
Chloride, ppm	250	65 - 194	Yes	71	Yes
Color, CU	10	ND	Yes	2	Yes
Corrosivity	Non-Corrosive	Non-Corrosive	Yes	Non-Corrosive	Yes
Hardness (as CaCO ₃), ppm	250	92 - 160	Yes	52	Yes
Hardness (as CaCO ₃), grains/gallon	15	5 - 9	Yes	3	Yes
Iron, ppb	300	Less than 100	Yes	12	Yes
Manganese, ppb	50	Less than 50	Yes	2	Yes
Odor, TON	3	5 - 10	No	ND	Yes
pH	6.5 to 8.5 (optimum range)	7.7 - 8.4	Yes	8.0	Yes
Sodium, ppm	50	48 - 162	No*	40	Yes
Sulfate, ppm	250	42 - 68	Yes	8	Yes
Total Dissolved Solids, ppm	500	246 - 498	Yes	177	Yes
Zinc, ppb	5,000	Less than 50	Yes	16	Yes

* PVWC FINISHED WATER EXCEEDS SODIUM RUL

PVWC's finished water was above New Jersey's Recommended Upper Limit (RUL) of 50 ppm for sodium in 2018. Possible sources of sodium include natural soil runoff, roadway salt runoff, upstream wastewater treatment plants, and a contribution coming from chemicals used in the water treatment process. 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 recommended upper limit may be a concern to individuals on a sodium-restricted diet. If you have any concerns please contact your health care provider.

ADDITIONAL PVWC TREATMENT PLANT MONITORING RESULTS

Detected Contaminants, ppb	Little Falls WTP Effluent Range of Results	
Chlorate	(102 - 475)	<p>Test results presented in this table were collected in 2018 as part of a study to determine the general occurrence of these contaminants. PVWC continues to participate in, and support these types of regulatory and research efforts to maintain a position of leadership in drinking water supply.</p> <p>There are currently no EPA drinking water standards in effect for these contaminants although EPA has established health advisory levels for some of these to provide an estimate of acceptable drinking water levels based on health effects information.</p> <p>EPA has published Health Advisory levels for Perfluorooctanoic acid, (PFOA) and Perfluorooctanesulfonic acid, (PFOS), of 0.070 parts per billion (ppb) combined.</p> <p>The results observed in 2018 were below EPA established health advisory levels.</p> <p>NJDEP adopted a maximum contaminant level (MCL) of 0.013 parts per billion (ppb) for Perfluorononanoic acid (PFNA) in September 2018 and is considering a maximum contaminant level of 0.014 ppb for PFOA.</p>
Perfluorobutanesulfonic acid (PFBS)	(0.0020 - 0.0051)	
Perfluoroheptanoic acid (PFHpA)	(0.0021 - 0.0049)	
Perfluorohexanesulfonic acid (PFHxS)	(0.0025 - 0.0053)	
Perfluorohexanoic acid (PFHxA)	(0.0042 - 0.012)	
Perfluorononanoic acid (PFNA)	(ND – 0.0021)	
Perfluorooctanesulfonic acid (PFOS)	(0.0049 - 0.012)	
Perfluorooctanoic acid (PFOA)	(0.0072 - 0.016)	

Health advisory levels are non-enforceable and non-regulatory and provide technical information to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.

DEFINITIONS of TERMS and ACRONYMS

ABS/LAS: Alkylbenzene Sulfonate and Linear Alkylbenzene Sulfonate (surfactants)

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

CU: Color unit

Disinfection By-product Precursors: A common source is naturally-occurring organic material in surface water. Disinfection by-products are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (DBP precursors) present in surface water.

EPA: United States Environmental Protection Agency

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.

Microbial Contaminants/Pathogens: Disease-causing organisms such as bacteria, protozoa, and viruses, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Common sources are animal and human fecal wastes. These contaminants may be present in source water.

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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

NA: Not applicable

ND: Not detected above the minimum reporting level.

NJDEP: New Jersey Department of Environmental Protection

NJDWSC: North Jersey District Water Supply Commission

NTU: Nephelometric Turbidity Unit

Nutrients: Compounds, minerals and elements that aid growth, which can be either naturally occurring or man-made. Examples include nitrogen and phosphorus.

ppb: parts per billion (approximately equal to micrograms per liter)

ppm: parts per million (approximately equal to milligrams per liter)

PWS ID: Public Water System Identification

PVWC: Passaic Valley Water Commission

RAA: Running Annual Average

Radon: Colorless, odorless, cancer-causing gas that occurs naturally in the environment.

RUL: Recommended Upper Limit; the highest level of a constituent of drinking water that is recommended in order to protect aesthetic quality.

RUL Achieved: A "YES" entry indicates the State-recommended upper limit was not exceeded. A "NO" entry indicates the State-recommended upper limit was exceeded.

TON: Threshold Odor Number

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

WTP: Water Treatment Plant

ADDITIONAL INFORMATIONAL RESOURCES

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

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

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

EPA Safe Drinking Water Hotline: 800-426-4791

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

AWWA New Jersey Section website: www.njawwa.org