

# PASSAIC VALLEY WATER COMMISSION (PVWC) PWS ID NJ1605002

## 2015 WATER QUALITY DATA

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/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).

### Water Quality Results - Table of Contaminants Detected in 2015

PRIMARY CONTAMINANTS	Compliance Achieved	MCLG	MCL	Water Treatment Plant Results		TYPICAL SOURCE
				PVWC Little Falls WTP PWS ID NJ1605002	NJDWSC Wanaque WTP PWS ID NJ1613001	
<b>TURBIDITY AND TOTAL ORGANIC CARBON</b>				<b>Highest Result (Range of Results)</b>	<b>Highest Result (Average)</b>	
Turbidity, NTU	Yes	NA	TT = 1	0.53 (0.02 - 0.53)	0.28 (0.11)	Soil runoff.
	Yes	NA	TT = percentage of samples <0.3 NTU (min 95% required)	99.97%	100%	
Total Organic Carbon, %	Yes	NA	TT = % removal; or removal ratio	<b>Percent (%) Removal</b>	<b>Removal Ratio</b>	Naturally present in the environment.
				46 - 72 (25 - 45 required)	1.0 (RAA) (0.94 - 1.0)	
<b>INORGANIC CONTAMINANTS</b>				<b>Highest Result (Range of Results)</b>		
Barium, ppm	Yes	2	2	0.027 (0.016 - 0.027)	0.013	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium, ppb	Yes	100	100	0.57 (ND - 0.57)	ND	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride, ppm	Yes	4	4	0.09 (ND - 0.09)	ND	Erosion of natural deposits.
Nickel, ppb	NA	NA	NA	1.98 (1.63 - 1.98)	ND	Erosion of natural deposits.
Nitrate, ppm	Yes	10	10	3.7 (0.89 - 3.7)	0.503	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium, ppb	Yes	50	50	0.69 (ND - 0.69)	ND	Discharge from petroleum and metal refineries; Erosion of natural deposits. Discharge from mines.

### 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.state.nj.us/dep/swap> 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 lists 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

## CRYPTOSPORIDIUM

*Cryptosporidium* is a microbial pathogen found in surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are viable or capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may spread through means other than drinking water.

PVWC and NJDWSC started the second round of source water monitoring in accordance with the requirements of EPA's Long Term 2 Enhanced Surface Water Treatment Rule. This monitoring will continue through the spring of 2017. The data collected in 2015 for both water systems is presented in the Source Water Pathogen Monitoring table below.

## SOURCE WATER PATHOGEN MONITORING

Contaminant	PVWC Sourcewaters		NJDWSC Sourcewater	Typical Source
	Passaic River	Pompton River		
<i>Cryptosporidium</i> , Oocysts/L	0 - 0.372	0 - 0.78	ND	Microbial pathogens found in surface waters throughout the United States.
<i>Giardia</i> , Cysts/L	0 - 0.372	0 - 0.744	0 - 0.1	

## 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 - 110	Yes	70	Yes
Alkalinity, ppm	NA	45 - 66	NA	41	NA
Aluminum, ppb	200	11 - 27	Yes	50	Yes
Chloride, ppm	250	124 - 188	Yes	80	Yes
Color, CU	10	ND	Yes	1	Yes
Corrosivity	Non-Corrosive	Non-Corrosive	Yes	Non-Corrosive	Yes
Hardness (as CaCO <sub>3</sub> ), ppm	250	108 - 142	Yes	72	Yes
Hardness (as CaCO <sub>3</sub> ), grains/gallon	15	6 - 8	Yes	4	Yes
Iron, ppb	300	ND	Yes	7	Yes
Manganese, ppb	50	3 - 8	Yes	ND	Yes
Odor, TON	3	4 - 14	No	ND	Yes
pH	6.5 to 8.5 (optimum range)	7.99 - 8.15	Yes	8.34	Yes
Sodium, ppm	50	75 - 281	No*	47	Yes
Sulfate, ppm	250	43 - 89	Yes	11	Yes
Total Dissolved Solids, ppm	500	321 - 450	Yes	159	Yes
Zinc, ppb	5,000	2 - 5	Yes	ND	Yes

### \* PVWC's FINISHED WATER EXCEEDS SODIUM RUL

PVWC's finished water was above New Jersey's Recommended Upper Limit (RUL) of 50 ppm for sodium in 2015. 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

Contaminant	Little Falls WTP Effluent Average (Range)	Test results presented in this table were collected in 2015 as part of a study to determine the general occurrence of chlorate. Currently, there is no drinking water standard for chlorate to compare the results to and thus they are presented for informational purposes only. PVWC continues to participate in and support these types of regulatory and research efforts to maintain a position of leadership in drinking water supply.
Chlorate, ppb	174 (88 - 373)	

## **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.

**CDC:** United States Centers for Disease Control and Prevention

**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

**Inorganic Contaminants:** 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. These contaminants may be present in source water.

**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.

**Organic Contaminants/Volatile Organic Compounds:** Compounds containing carbon, including synthetic and volatile organic chemicals, which are products or by-products of industrial processes or petroleum production. They are typically used as solvents, degreasers, and gasoline components. These compounds may be present in source water as a result of releases from gas stations, fuel storage tanks, industrial facilities, stormwater runoff, and other sources. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

**Pesticides (Herbicides, Insecticides, Fungicides, and Rodenticides):** Man-made chemicals used to control pests, weeds, and fungus. Common sources include manufacturing centers of pesticides, and where they are used in agricultural, industrial, commercial, and residential environments. Examples include herbicides such as atrazine, and insecticides such as chlordane.

**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

**Radioactive Contaminants/Radionuclides:** Radioactive substances that are both naturally occurring and man-made; may be present in source water naturally or as a result of oil and gas production and mining activities. Examples include radium, radon and uranium.

**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.

**Turbidity:** 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.

**WTP:** Water Treatment Plant

## **ADDITIONAL INFORMATIONAL RESOURCES**

EPA Drinking Water website: [www.epa.gov/safewater](http://www.epa.gov/safewater)

NJDEP Water Supply website: [www.nj.gov/dep/watersupply](http://www.nj.gov/dep/watersupply)

American Water Works Association (AWWA) website: [www.awwa.org](http://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](http://www.njawwa.org)

## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

### Monitoring Requirements Not Met for Totowa borough Water Department

Our water system violated drinking water requirements over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we are doing to correct these situations.

*\*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the **Summer of 2015** we did not complete all monitoring or testing for **Lead and Copper** and therefore cannot be sure of the quality of your drinking water during that time.\**

#### What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for [this contaminant/these contaminants], how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.<sup>1</sup>

Contaminant	Required sampling frequency	Number of samples taken	When samples should have been taken	When samples were taken
Lead and Copper	30 samples every 3 years	25	Summer 2015	Summer 2015

#### What is being done?

**We are increasing our sampling pool and will ask more residents to collect for us when we next sample in 2018.**

For more information, please contact the **Totowa Boro Water Department at 973-956-1000x1074** or at Totowa Boro Water Department 136 Furler St. Totowa NJ 07512

*\*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.\**

This notice is being sent to you by: The Totowa Borough Water Department

State Water System ID#: NJ1612001

State Water SystemID#: NJ1612001				DISTRIBUTION SYSTEM RESULTS	
PRIMARY CONTAMINANTS	Compliance Achieved	MCLG	MCL	TYPICAL SOURCE	
<b>MICROBIOLOGICAL CONTAMINANTS</b>				<b>Highest Monthly Result</b>	
Total Coliform Bacteria, %		0	5% of monthly samples are positive	0%	Naturally present in the environment.
<b>DISINFECTION BYPRODUCTS</b>				<b>Highest LRAA and Range of Results</b>	
Haloacetic Acids (HAA5), ppb		NA	60	.0294 MG/L .002 MG/L-.0294MG/L	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM), ppb		NA	80	.0653 MG/L .0114 MG/L-.0653 MG/L	By-product of drinking water disinfection.
<b>DISINFECTANTS</b>		<b>MRDLG</b>	<b>MRDL</b>	<b>Highest RAA and Range of Results</b>	
Chlorine,ppm		4	4	0.92(Annual Running Average) 0.70-1.20	Water additive used to control microbes.
<b>COPPER AND LEAD</b>				<b>90TH PERCENTILE</b>	
Lead (ppm)		1.3	1.3	not met	Corrosion of household plumbing systems
Copper (ppm)		0.0	15.0	not met	Corrosion of household plumbing systems