

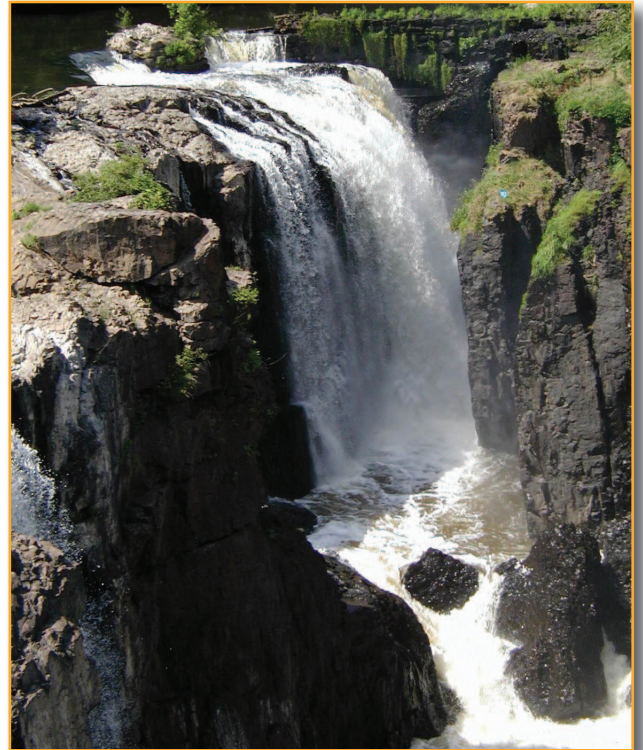


PASSAIC VALLEY WATER COMMISSION

2010 Water Quality Report

Passaic Valley Water Commission's (PVWC) Little Falls Water Treatment Plant (LFWTP) treats surface water diverted from the Passaic and Pompton rivers, or Point View Reservoir. Finished water from the LFWTP is then blended with finished water obtained from the North Jersey District Water Supply Commission's (NJDWSC) Water Treatment Plant. Water is then pumped through underground pipes to the cities of Paterson, Clifton, Passaic, Prospect Park, Lodi, North Arlington and to over 22 wholesale customers in Passaic, Bergen, Essex, Hudson and Morris counties. Emergency interconnections with other water purveyors exist throughout the distribution system.

Open public meetings are held monthly. For dates, times and locations of these meetings, call our Customer Service Department at (973) 340-4300.



2010 WATER QUALITY REPORT

PVWC is required to distribute an annual Water Quality Report, or Consumer Confidence Report, to each customer as a result of amendments made in 1996 to the Safe Drinking Water Act. This Report provides a summary of information collected during the calendar year 2010 regarding compliance monitoring required by both the United States Environmental Protection Agency (USEPA) and New Jersey Department of Environmental Protection (NJDEP).

The quality of the water delivered to your service area is represented by the combined data sets provided for PVWC's LFWTP, NJDWSC's Water Treatment Plant, Jersey City MUA's Water Treatment Plant and in the North Arlington distribution system.

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 completed a 2-year source water monitoring program in accordance with the requirements of EPA's Long Term 2 Enhanced Surface Water Treatment Rule. The data collected in 2008 is presented in Table 3.

TECHNICAL DATA TABLES

The data presented in this Report are from the most recent testing done in accordance with the regulations. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. The data tables present concentrations of detected contaminants at the effluent of the treatment plants and in the distribution system, typical sources of contaminants in drinking water, status of compliance with primary and secondary drinking water standards, and related health information when compliance was not achieved.

SOURCE OF CONTAMINANTS FOR TAP AND BOTTLED WATER



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 at 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. 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.

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.

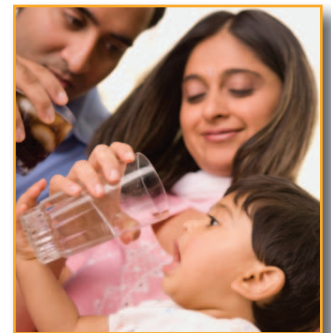


Table 1. Water Quality Results - Table of Detected Contaminants - 2010				NORTH ARLINGTON PWS ID NJ0239001			
Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have 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 <i>Cryptosporidium</i> and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).							
PRIMARY CONTAMINANTS	Compliance Achieved	MCLG	MCL	PLANT EFFLUENT SAMPLE RESULTS			TYPICAL SOURCE
				PWS ID NJ1605002 PVWC	PWS ID NJ1613001 NJDWSC	PWS ID NJ0906001 JERSEY CITY MUA	
TURBIDITY AND TOTAL ORGANIC CARBON							
Turbidity (NTU)	Yes	NA	TT = 1	0.25 (0.14 - 0.25)	0.52	0.52 (0.04 - 0.52)	Soil runoff.
	Yes	NA	TT = percentage of samples <0.3 NTU (min 95% required)	100%	100%	98.9%	
Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.							
Total Organic Carbon (%)	Yes	NA	TT = % removal	60% (25-45% required) (Range 47 to 78%)	40% (35% required) (Range 17 to 45%)	40% (25-45% required) (Range 40 to 62%)	Naturally present in the environment.
INORGANIC CONTAMINANTS							
Arsenic (ppb)	Yes	0	5	ND	0.28	0.60 (0.58 - 0.60)	Erosion of natural deposits.
Barium (ppm)	Yes	2	2	0.028 (0.009 - 0.028)	0.0087	0.02	Erosion of natural deposits.
Chromium (ppb)	Yes	100	100	2 (ND - 2)	ND	ND	Erosion of natural deposits.
Nickel (ppb)	NA	NA	NA	5 (2 - 5)	ND	0.6	Erosion of natural deposits
Nitrate (ppm)	Yes	10	10	3.63 (0.54 - 3.63)	0.21	0.45 (0.04 - 0.45)	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
RADIOLOGICAL CONTAMINANTS				2005-06 Data	2006 Data	2006 Data	
Combined Radium (pCi/L)	Yes	0	5	ND	ND	2.59 (ND - 2.59)	Erosion of natural deposits.
PRIMARY CONTAMINANTS							
Compliance Achieved	MCLG	MCL	DISTRIBUTION SYSTEM SAMPLE RESULTS			TYPICAL SOURCE	
MICROBIOLOGICAL CONTAMINANTS							
Total Coliform Bacteria (%)	Yes	0	5% of monthly samples are positive	2.1% (1 OUT OF 48 samples Total Coliform positive)			Naturally present in the environment.
DISINFECTION BYPRODUCTS							
Haloacetic Acids (HAA5) (ppb)	Yes	NA	60	25 Highest RAA (15 - 34)			By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (ppb)	Yes	NA	80	44 Highest RAA (25 - 61)			By-product of drinking water disinfection.
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems and may have an increased risk of getting cancer.							
DISINFECTANTS							
Chlorine (ppm)	Yes	MRDLG=4	MRDL=4	0.83 RAA (0.49 - 1.11)			Water additive used to control microbes.
LEAD AND COPPER		MCLG	Action Level	90th Percentile (2009 Data)			
Copper (ppm)	Yes	1.3	1.3	0.071 (0 out of 31 samples exceeded AL)			Corrosion of household plumbing systems.
Lead (ppb)	Yes	0	15	10 (0 out of 32 samples exceeded AL)			Corrosion of household plumbing systems.
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. Passaic Valley Water Commission 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at http://www.epa.gov/safewater/lead .							
The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for synthetic organic chemicals. Passaic Valley Water Commission received a monitoring waiver for synthetic organic chemicals for the compliance period 2008-2010.							

SOURCE WATER ASSESSMENT

The New Jersey Department of Environmental Protection (NJDEP) has prepared Source Water Assessment reports and summaries for all public water systems. The Source Water Assessment, and related questions, for the PVWC system (PWS ID 1605002), North Jersey District Water Supply Commission (PWS ID 1613001) and Jersey City MUA (PWS ID 0906001) can be obtained by logging onto 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 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. The source water assessments performed on the intakes for each system lists the following susceptibility ratings as indicated in Table 2. Contaminants that may be present in source water include:

Table 2. Intake Susceptibility Ratings

Intakes	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
Jersey City MUA 1 Surface Water	1-High	1-Medium	1-Low	1–Medium	1-Medium	1-Low	1-Low	1-High

ADDITIONAL SOURCE WATER MONITORING RESULTS**Table 3. Source Water Pathogen Monitoring – 2008 Data**

Contaminant	PVWC Sourcewaters		Jersey City MUA Source water	Typical Source
	Pompton River	Passaic River		
<i>Cryptosporidium</i> , Oocysts/L	0 – 0.4	0 – 0.2	ND	Microbial pathogens found in surface waters throughout the United States.
<i>Giardia</i> , Cysts/L	0 – 0.9	0 – 0.6	-	
<i>E.coli</i> per 100 ml	16.1 – greater than 2419.6	25.6 – 1553.1	-	Human and animal fecal waste.

ADDITIONAL TREATMENT PLANT MONITORING RESULTS**Table 4. Additional Monitoring Results**

Contaminant	PVWC Intake	PVWC Plant Effluent	Table 4 presents PVWC data collected as part of a study to determine the general occurrence of PFOA, PFOS and Perchlorate. Currently, there are no drinking water standards for these compounds. PVWC continues to participate in and support these types of regulatory and research efforts to maintain a position of leadership in cutting edge water treatment technology.
Perfluorooctanoic Acid (PFOA), ppb	0.029 (0.008 – 0.029)	0.054 (0.008 – 0.054)	
Perfluorooctanoic Sulfonate (PFOS), ppb	0.011 (0.006 – 0.011)	0.026 (0.006 – 0.026)	
Perchlorate, ppb	0.23 (0.15 - 0.23)	0.35 (0.24-0.35)	

Table 5. Secondary Parameters - Plant Effluent

Parameter	RUL	PWSID NJ1605002 PVWC	PVWC RUL Achieved	PWSID NJ1613001 NJDWSC	NJDWSC RUL Achieved	PWSID NJ0906001 Jersey City MUA	Jersey City MUA RUL Achieved
Alkalinity, ppm	NA	30 - 58	NA	33	NA	-	NA
Aluminum, ppb	200	ND - 28	Yes	17	Yes	ND - 217	No
Chloride, ppm	250	52 - 141	Yes	44	Yes	52 - 102	Yes
Color, CU	10	ND	Yes	2	Yes	ND - 15	No
Copper, ppm	1.0	ND – 0.002	Yes	-	-	ND	Yes
Corrosivity	Non-Corrosive	Corrosive	No	-	-	Non-Corrosive	Yes
Hardness (as CaCO ₃), ppm	250	49 - 148	Yes	40	Yes	52 - 122	Yes
Hardness (as CaCO ₃), grains/gallon	15	3 – 9	Yes	2	Yes	3 - 7	Yes
Iron, ppb	300	ND - 60	Yes	10	Yes	ND - 122	Yes
Manganese, ppb	50	4 - 13	Yes	-	-	ND - 165	No*
Odor, TON	3	ND	Yes	-	-	ND - 2	Yes
pH	6.5 to 8.5	8.1 – 8.3	Yes	8.01	Yes	6.4 – 7.6	No
Sodium, ppm	50	23 - 136	No*	22	Yes	40	Yes
Sulfate, ppm	250	40 - 94	Yes	8.1	Yes	12	Yes
Total Dissolved Solids, ppm	500	209 - 467	Yes	114	Yes	136 - 251	Yes
Zinc, ppb	5,000	12 - 14	Yes	51	Yes	ND – 10	Yes

***Health Effects:**

- Manganese:** Jersey City MUA was above New Jersey's Recommended Upper Limit (RUL) for Manganese. The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from levels which would be encountered in drinking water.
- 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 recommended upper limit may be a concern to individuals on a sodium restricted diet.

Additional inorganic contaminants monitored but not detected in the plant effluent in 2010 include asbestos, antimony, arsenic, beryllium, bromate, cadmium, cyanide, fluoride, mercury, selenium, silver, ABS/LAS and thallium.

Table 6. Organic Compounds – Plant Effluent

Contaminant	MCLG	MCL	PWSID NJ1605002 PVWC	PWSID NJ1613001 NJDWSC	PWSID NJ0906001 Jersey City MUA
Haloacetic Acids (HAA5), ppb	NA	NA	7 (3 - 7)	35 (13 - 35)	-
Total Trihalomethanes (TTHMs), ppb	NA	NA	19 (4 – 19)	66 (26 - 66)	-
Chloroethane, ppb	NA	NA	0.50 (ND – 0.50)	ND	ND

ADDITIONAL DISTRIBUTION SYSTEM MONITORING RESULTS

Table 7. Secondary Contaminants – Distribution System

Contaminant	RUL	ANNUAL AVERAGE	RANGE	Compliance Achieved
Iron, ppb	300	7	ND - 80	Yes
Manganese, ppb	50	6	ND - 16	Yes

E. coli Bacteria was monitored but not detected in the Distribution System in 2010.

DEFINITIONS of TERMS and ACRONYMS

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.

CDC: Centers for Disease Control

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

EPA: 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 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.

MF/L: Million Fibers per liter.

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

NJDWSC: North Jersey District Water Supply Commission

NTU: Nephelometric Turbidity Unit

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

Organic Contaminants/Volatile Organic Compounds: Compounds, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems. Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride. These compounds may be present in source water.

Pesticides/Herbicides: Man-made chemicals used to control pests, weeds and fungus, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses and may be present in source water. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.

pCi/L: picocuries per liter (a measure of radioactivity)

ppb: parts per billion

ppm: parts per million

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 and may be present in source water; result of oil and gas production and mining activities. Examples include radium 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: 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.

% Removal Ratio: Actual percent removal divided by required percent removal, multiplied by 100.

ADDITIONAL INFORMATIONAL RESOURCES

PVWC's website: www.pvwc.com

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

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

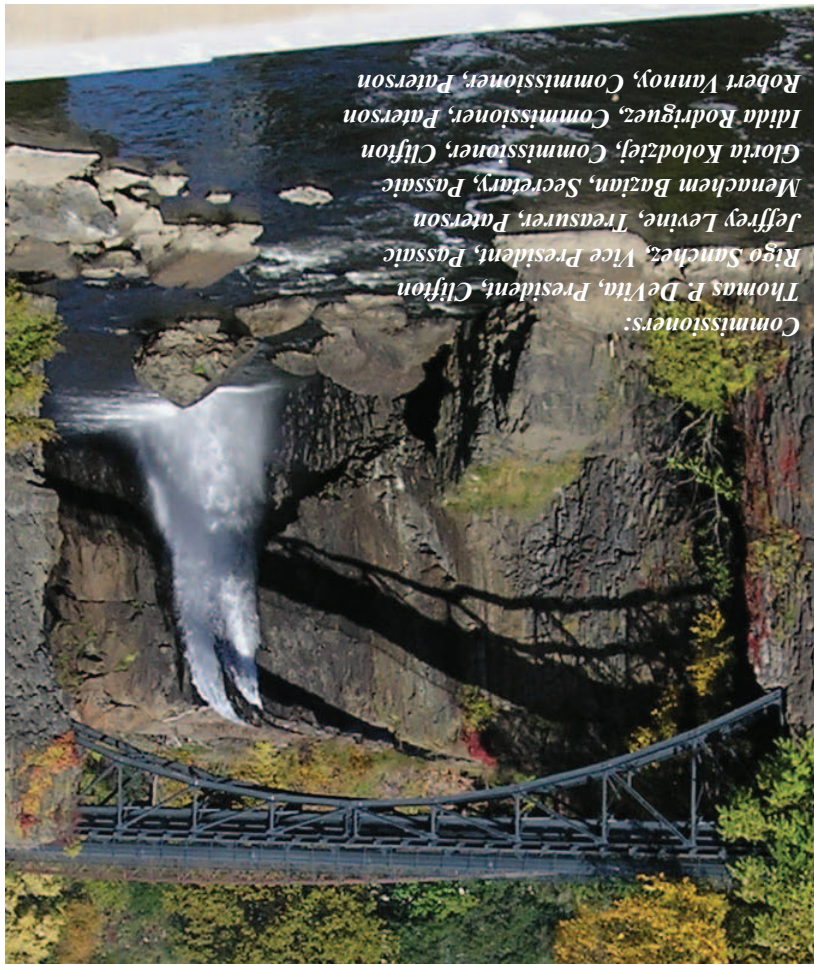
American Water Works Association (AWWA) website: www.awwa.org

PVWC Customer Service Department: 973-340-4300

USEPA Safe Drinking Water Hotline: 800-426-4791

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

AWWA New Jersey Section website: www.njawwa.org



Commissioners:
 Thomas P. DeVita, President, Clifton
 Rigo Sanchez, Vice President, Passaic
 Jeffrey Levine, Treasurer, Paterson
 Menachem Bazian, Secretary, Passaic
 Gloria Kolodziej, Commissioner, Clifton
 Idida Rodriguez, Commissioner, Paterson
 Robert Vannoy, Commissioner, Paterson

Dear Passaic Valley Water Commission Consumer,

Passaic Valley Water Commission (PVWC) is dedicated to providing high-quality drinking water to the citizens and industries of Northeast New Jersey. PVWC has created, and continues to improve, one of the nation's most innovative water treatment facilities. For almost 80 years, PVWC has been dedicated to providing drinking water to our customers at the highest quality, service and reliability, and at a competitive price – all while meeting the highest of drinking water treatment standards to aid in the protection of public health. Today, PVWC's commitment to delivering the highest quality drinking water, reliable service and competitive rates to the more than 52 communities we serve is stronger than ever.

This Water Quality Report was prepared on behalf of all of our consumers in accordance with regulatory requirements established by the US Environmental Protection Agency and the New Jersey Department of Environmental Protection.

If you have any questions related to this report, water quality, water pressure, a construction project or billing, please call our Customer Service Department at 973-340-4300, M-F, 8:30 a.m. to 4:30 p.m. For emergencies, contact 973-340-4300, 24 hours per day, 7 days per week.

Sincerely,
 Thomas P. DeVita, Clifton
 President, Board of Commissioners



Passaic Valley Water Commission
 1525 Main Avenue • P.O. Box 230
 Clifton, NJ 07011

**PRSRT STD
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This report contains information about your drinking water. If you do not understand it, please have someone translate it for you.

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

આ અહેવાલ માં તમારા પીવાના પાણી વિષે
 અગત્ય ની માહિતી આપવા માં આવી છે.
 એનો અર્થુષ્ટ કરો અથવા જેને સમજાવવા માટે
 કોઈ લોક સાથે વાત કરો

للعومات في هذا التقرير تحتوي على
 معلومات مهمة عن مياة الشرب التي
 تشربها. من فضلك اذا لم تفهم هذه
 للعومات اطلب من يترجمها لك.