

CONSUMER CONFIDENCE REPORT

Montville Township Water Department

PWSID# NJ1421003

Reporting Period - January 1, 2015 to December 31, 2015

The Montville Township Water Department offices are located in the Montville Township Municipal Building, 195 Changebridge Road. Questions concerning this report should be directed to Mr. John Perry, Director, at (973) 331-3330. The Montville Township Committee holds regular business meetings on the second and fourth Tuesday of every month at 8:00 PM at the Montville Township Municipal Building. Additional information on the water system can be found on the Internet at www.montvillenj.org.

Included in this report are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and State standards. As always, we are committed to providing you with the highest quality drinking water and service. Please do not hesitate to contact us at any time.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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.

Water for the Montville system is derived from the Township's two (2) Indian Lane Wells, from the Jersey City reservoir via pumping facilities located on River Road, and from Passaic Valley Water Commission (PVWC) via the Lincoln Park water system. Approximately 90% of the water delivered to Montville customers derived from the Township's Indian Lane Wells. Water from Jersey City and PVWC is pumped into the system as needed to meet daily supply demands in peak season. Water from Jersey City and PVWC is treated, potable water. Included in this report are copies of the Consumer Confidence Reports for Jersey City and PVWC.

Source Water Assessments: The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for the Montville water system, which is available for review at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. Montville monitors

its water sources for regulated contaminants in accordance with NJDEP requirements.

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.

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 before we treat it include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wild life.

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 and residential uses.

Radioactive contaminants, which are naturally occurring.

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 station, urban stormwater runoff, and septic systems.

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. We treat our water according to EPA's regulations. Food and Drug Administrations (FDA) establish limits of contaminants in bottled water, which must provide the same protection for public health.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2015 calendar year. 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 testing performed between January 1, 2015 and December 31, 2015.

Terms & abbreviations used below:

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a 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 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 contamination

Recommended Upper Limit (RUL): recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as odor, taste or appearance. RUL's are recommendations, not mandates.

Primary Contaminants: substances that are health-related. Water suppliers must meet all primary drinking water standards.

Secondary Contaminants: substances that do not have an impact on health. Secondary contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

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

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

n/a: not applicable; **nd:** not detectable at testing limit; **ppb** parts per billion or micrograms per liter; **NTU:** nephelometric turbidity unit; **TON:** threshold odor numbe**ppm:** parts per million or milligrams per liter; **CU:** color unit; **pCi/l:** picocuries per liter (a measure of radiation).

Contaminants (units)	MCL	MCLG	Montville Water	Range of Detections	Sample Date	Violation Y or N	Typical Source of Contaminant
Microbiological Contaminants							
Total Coliform Bacteria	1	0	0	0	2015	N	Naturally present in the environment
Fecal coliform and E. coli	0	0	0	0	2015	N	Human and animal fecal waste
Secondary Contaminants							
Aluminum (ppb)	200	200	0	n/d	9/9/2014	N	Naturally occurring element
Chloride (ppm)	250	250	66	66 - 66	9/9/2014	N	Erosion from natural deposits; Discharge of human and animal wastes; Discharge from industry
Color (Color Units)	10	10	0	n/d	9/9/2014	N	Physical characteristic
Corrosivity	+/- 1.0	+/- 1.0	-0.29	-.25 to -.33	9/9/2014	N	Physical characteristic
Hardness (ppm)	250	250	336	323 - 349	9/9/2014	Y	Naturally occurring minerals
Iron (ppb)	300	300	n/d	<0.2	2/10/2015	N	Naturally occurring element
Manganese (ppb)	50	50	n/d	<0.04	2/10/2015	N	Naturally occurring element
Odor (Threshold Number)	3	3	0	n/d	9/9/2014	N	Physical characteristic
pH (Standard Units)	6.5 - 8.5	6.5 - 8.5	7.1	7.1 - 7.1	9/9/2014	N	Physical characteristic
Silver (ppb)	100	100	0	n/d	9/9/2014	N	Naturally occurring element
Total Dissolved Solids (ppm)	500	500	461	422 - 500	9/9/2014	N	Erosion of natural mineral deposits
Zinc (ppm)	5	5	0.005	0.0 - 0.01	9/9/2014	N	Naturally occurring element

Water Quality Data

Contaminants (units)	MCL	MCLG	Montville Water	Range of Detections	Sample Date	Violation Y or N	Typical Source of Contaminant
Lead and Copper							
Lead (ppb)	AL=15	15	7.1	0.26 - 11.4	Aug. 2014	N	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	AL=1.3	1.3	0.24	0.04 - 0.30	Aug. 2014	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Inorganic Contaminants							
Antimony (ppb)	6	6	0	n/d	9/9/2014	N	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	5	n/a	3.4	3.2 - 3.5	9/9/2014	N	Erosion from natural deposits; Runoff from orchards; Runoff from glass and electronics productions wastes
Barium (ppm)	2	2	0.13	0.09- 0.163	9/9/2014	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	4	4	0	n/d	9/9/2014	N	Discharge of metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	5	5	0	n/d	9/9/2014	N	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chromium (ppb)	100	100	6.5	6.2 - 6.8	9/9/2014	N	Erosion of natural deposits
Cyanide (ppb)	200	200	0	n/d	9/9/2014	N	Discharge from steel /metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	4	4	0	n/d	9/9/2014	N	Erosion from natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer
Mercury (ppb)	2	2	0	n/d	9/9/2014	N	Discharge from steel /metal factories; Discharge from plastic and fertilizer factories
Nickel (ppb)	100	100	2.7	2.5 - 2.9	9/9/2014	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate (ppm)	10	10	0.856	0.856	5/26/2015	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	0	n/d	9/9/2014	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sulfate (ppm)	250	250	64.5	50 - 79	9/9/2014	N	Discharge from petroleum and metal refineries; Erosion of natural deposits
Thallium (ppb)	2	0.5	0	n/d	9/9/2014	N	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Sodium (ppm)	50	50	25	22.2 - 28.6	9/9/2014	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Radioactive Contaminants							
Gross Alpha (pCi/l)	15	0	0	n/d	7/8/2014	N	Erosion of natural deposits
Combined Radium 226/228 (pCi/l)	5	0	0	n/d	7/8/2014	N	Erosion of natural deposits

Water Quality Data

Contaminants (units)	MCL	MCLG	Montville Water	Range of Detections	Sample Date	Violation Y or N	Typical Source of Contaminant
Unregulated Contaminants							
Bromodichloromethane (ppb)	-	-	14.20	3.2 to 17.5	2015	NO MCL's AT THIS TIME	
Chloroform (ppb)	-	-	13.80	3.3 to 35.7	2015		
Dibromochloromethane (ppb)	-	-	7.60	2.64 to 8.44	2015		
Regulated Disinfectants							
TTHMs [Total trihalomethanes] (ppb)	80	n/a	39.3 Highest LRAA at Site #1	10 - 58	2015	N	By-product of drinking water chlorination
HAA5 [Five Haloacetic Acids] (ppb)	60	n/a	10.4 Highest LRAA at Site #2	2 - 20	2015	N	By-product of drinking water chlorination
Chlorine (ppm) 2014	Levels Detected - Average & Highest			MRDL		MRDLG	
	0.47		1.39		4.0 ppm		4.0 ppm

Water Quality Data

Regarding hardness. The hardness figure of 336 ppm exceeds the State's Recommended Upper Limit goal of 250 ppm. Hardness is a measure of the amount of non-toxic dissolved minerals in the water, and is a natural characteristic of all waters. The level of hardness is determined at the wellhead, however, water delivered to your tap, in most cases, has lower hardness due to blending of water from the Jersey City supply. Elevated hardness is not a health hazard.

Regarding the manganese test results, the average manganese level of 120 ppb exceeds the State's maximum goal of 50 ppb. Manganese is a naturally occurring element in most well waters. The recommended upper limit for manganese is based on staining of laundry, and toxicity is not expected from levels which would be encountered in drinking water.

Regarding chemical contaminants and health related standards. Montville Township is proud of the fact that our water complies with all drinking water standards for chemical contaminants as set by the State of New Jersey and the U.S. EPA.

Regarding Asbestos, Nitrite and Synthetic Organic Compounds. As permitted under the Safe Drinking Water Act, the State of New Jersey has issued waivers to Montville for testing of asbestos, nitrite and synthetic organic compounds. These waivers were given after careful review of prior negative testing and consideration of factors which indicate low susceptibility to these types of contaminants.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Others

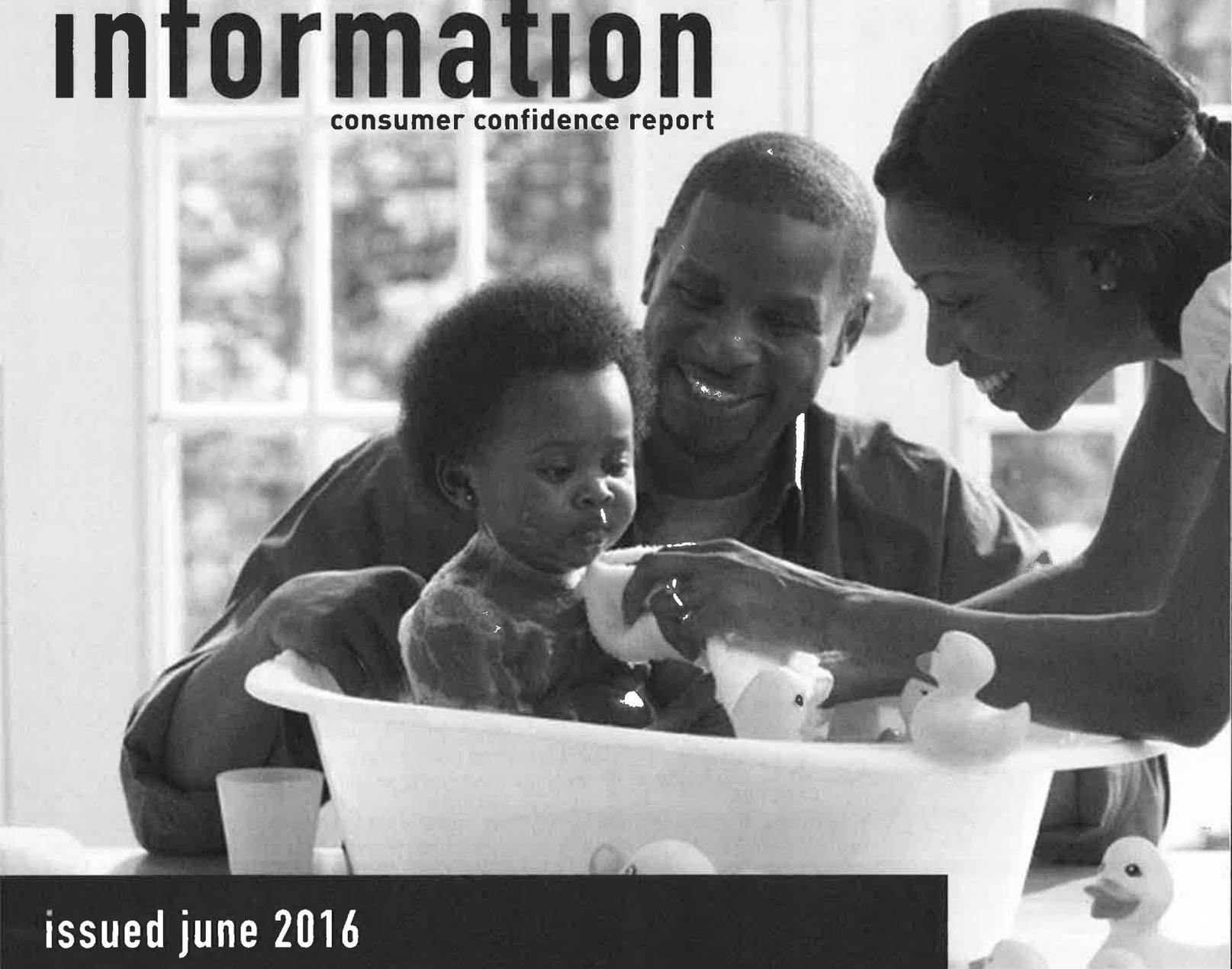
Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking 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 reproduction 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.

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 a infant, you should ask advise from your health care provider.

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. Montville 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.

your water quality information

consumer confidence report



issued june 2016

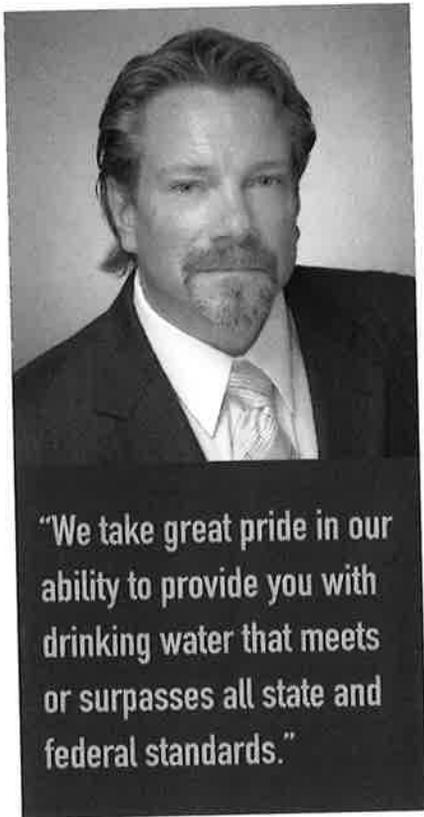
SUEZ | Jersey City Operations

PWSID # NJ0906001

This report contains important information about your drinking water.
Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo ó hable con alguien que lo entienda bien.



our commitment to you



Dear Customer,

The Jersey City Water System is a partnership between SUEZ and the City of Jersey City. Through this partnership, the City retains ownership of all the water facilities including the treatment plant, watershed and distribution system. The Jersey City Municipal Utilities Authority (JCMUA) is responsible for the oversight of the City's water system. SUEZ, as contract operator, provides the day to day management of the water system. These organizations work together to provide you with water that meets — and often surpasses — all the health and safety standards set by the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP).

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. The EPA and the NJDEP establish these regulations. They also require water suppliers to provide a Consumer Confidence Report (CCR) to customers on an annual basis. This CCR contains important information about your drinking water. Please read it carefully and feel free to call us at 800.575.4433 if you have any questions.

In addition, you can write to us at 69 DeVoe Place, Hackensack, NJ 07601. You can also call the EPA Safe Drinking Water Hotline at 800.426.4791 with water-related questions. If you have specific questions about your water as it relates to your personal health, we suggest that you contact your health care provider. For more information about SUEZ see our website www.mysuezwater.com.

Sincerely,

Chris Riat
Senior Director, Contract Operations

who we are

SUEZ provides water and wastewater services to over 7 million people in the United States. In addition to owning and operating regulated utilities, SUEZ operates municipal systems through public-private partnerships and contract agreements. Three of the nation's largest water and wastewater contracts are operated by SUEZ.

about your water supply

Your water comes from the Jersey City Reservoir at Boonton, as well as the Split Rock Reservoir in Rockaway Township. The source for this water is a 120 square mile watershed that drains into these two reservoirs. Combined, these two reservoirs can store 11.3 billion gallons of water.

The Jersey City Water Treatment Plant purifies about 50 million gallons of water a day on average and can treat up to 80 million gallons a day during peak periods. Purified water moves by gravity through 23 miles of aqueduct and 300 miles of water mains. From time to time you may receive water from the North Jersey District Water Supply Commission, the Passaic Valley Water Commission or the City of Newark when routine maintenance is performed on the plant, aqueduct and mains. We strive to provide our customers with a safe, sure supply of water 24 hours a day, 365 days a year.

about the treatment process

We strive to provide you with drinking water that meets or surpasses all federal and state standards. Your water is purified at the Jersey City Water Treatment Plant in Boonton.

We use coagulants and filter the water to remove impurities and microscopic particles. A small amount of chlorine is then added to disinfect the water. Finally, we apply corrosion control chemicals to reduce the chance of lead and copper dissolving in the water from household plumbing.

To further ensure the safety of your water, we monitor it before, during and after the treatment process. For example, we routinely test the water at the rivers, lakes, and streams that supply drinking water. We also sample and test treated water to be sure that it remains pure as it travels to your home.

lead and your drinking water

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. Jersey City 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 and 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 or at <http://www.epa.gov/safewater/lead>.

Frequently asked questions about lead in drinking water can be found here:
https://www.mysuezwater.com/sites/default/files/SUEZ_8.5x11_Lead_FAQ.pdf

waiver information

The Safe Drinking Water Act (SDWA) regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals (VOCs) and synthetic organic chemicals (SOCs). Our system received monitoring waivers for asbestos and SOCs.

We have the asbestos waiver because we do not have any asbestos cement pipe in the distribution system. We have a synthetic organic chemical (SOC) waiver because we are not vulnerable to this type of contamination.

drinking water quality

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 infections by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800.426.4791. The table below shows how the quality of your drinking water in 2015 compared to the standards set by the NJDEP.

primary standards - directly related to the safety of drinking water.

Inorganic Chemicals	MCLG	MCL	Highest* Result	Range of Results#	Violation	Likely Source
Barium ppm	2	2	0.02	NA	No	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
Nitrate as nitrogen ppm	10	10	0.44	0.16 - 0.44	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Copper and Lead	MCLG	AL	90th Percentile	Samples >AL	Violation	Likely Source
Copper ppm	1.3	1.3	0.14	0	No	Corrosion of household plumbing
Lead ppb	0	15	7.4	0	No	Corrosion of household plumbing systems; erosion of natural deposits

Microbiologicals	MCLG	MCL	Highest** Result	Range of Results	Violation	Likely Source
Total coliforms (% in monthly samples)	0	5% monthly with TT Positive routine and repeat sample	7.7%	0.0% - 7.7%	Yes*	Naturally present in the environment

*Please see additional information about this coliform exceedance on page 7.

Disinfectant Residual	MRDLG	MRDL	Highest Result RAA	Range of Results#	Violation	Likely Source
Chlorine ppm Note: Disinfectant Residual range of results are site specific.	4	4.0	1.04	ND - 1.51	No	Water additive used to control microbes

TOC Removal	MCLG	MCL	Lowest Ratio RAA	Range of Ratio (Monthly Ratio)	Violation	Likely Source
TOC Removal Ratio (RAA)	NA	NA	1.25	1.00 - 1.63	No	Naturally present in the environment

Disinfectant By-Products - Stage 2	MCLG	MCL	Highest Result LRAA	Range of Results#	Violation	Likely Source
HAA5 ppb (HAA5: dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, trichloroacetic acid)	NA	60	37.0	ND - 44.9	No	By-product of drinking water disinfection
Total THMs ppb (THMs: bromoform, bromodichloromethane, chlorodibromomethane, chloroform)	NA	80	78.2	23.6 - 98.0	No	By-product of drinking water disinfection

Turbidity	MCLG	MCL	Level Found	Range of Detections	Violation	Likely Source
Turbidity NTU* (monthly avg. plant)	NA	TT=1NTU TT=95% <0.3NTU	0.22 100.0%	0.06 - 0.22 NA	No	Soil run-off

*Turbidity is a measure of cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

*Highest results are based upon the highest single sample.

**Highest results are based upon the highest monthly results.

#The Range of Results represent the lowest and highest detection during the monitoring year.

RAA=Running Annual Average

LRAA = Locational Running Annual Average is the yearly average of all the results at each specific sampling site in the distribution system.

secondary standards – water quality parameters related to the aesthetic quality of drinking water.

Substance	NJ RUL**	Highest Result*	Range of Results	Likely Source
Alkalinity ppm	NA	64	34 - 64	Natural mineral
Aluminum ppb	200	95	ND - 95	Treatment process
Calcium ppm	NA	26	18 - 26	Natural mineral
Chloride ppm	250	134	93 - 134	Natural mineral, road salt
Color CU	10	10	5 - 10	Natural mineral and organic matter
Corrosivity	Non-corrosive	Non-corrosive	NA	Natural mineral, road salt, (A phosphate based corrosion inhibitor is applied)
Hardness (as CaCO ₃) ppm	250	113	84 - 113	Natural mineral
Iron ppb	300	15	ND - 15	Erosion of natural deposits and oxidation of iron components
Manganese ppb [^]	50	204	ND - 204	Erosion of natural deposits
Odor TON	3	1C	N - 1C	Naturally occurring, chlorine
pH	6.5 - 8.5	7.72	6.76 - 7.72	Natural mineral, treatment process
Sodium ppm ^{^^}	50	61	46 - 79	Natural mineral, road salt
Specific Conductance, umhos	NA	852	408 - 852	Natural mineral
Sulfate ppm	250	12	NA	Natural mineral
Total Dissolved Solids ppm	500	344	189 - 344	Natural mineral
Zinc ppm	5	0.04	ND - 0.04	Erosion of natural deposits and industrial discharge

[^]Note on exceedences: Secondary standards are non-mandatory guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor. These contaminants are not considered to present a risk to human health.

^{^^}Jersey City was above the 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 RUL may be of concern to individuals on a sodium restricted diet. Highest Result is based on the Running Annual Average (RAA), due to multiple samples collected for sodium during 2015. Please see additional sodium information on page 7.

** New Jersey Recommended Upper Limit.

* Highest results are based upon the highest single sample.

unregulated substances – for which the epa requires monitoring.

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA and DEP in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted.

Substance	MCLG	MCL	Highest Result*	Range of Results	Violation	Likely Source
Chromium ppb	NA	100	0.31	ND - 0.31	No	Prevalent natural element
Strontium ppb	NA	NA	100	87 - 100	No	Naturally occurring element
Vanadium ppb	NA	NA	0.22	ND - 0.22	No	Naturally occurring element
Chlorate ppb	NA	NA	160	64 - 160	No	Known by-product of the drinking water disinfection process, forming when sodium hypochlorite or chlorine dioxide are used in the disinfection process
Chromium (VI) ug/L	NA	NA	0.088	ND - 0.088	No	Industries that process or use chromium, chromium compounds, or chromium processes

*Highest results are based upon the highest single sample.

Additional information about unregulated contaminants can be found at the following link, courtesy of American Water Works Association:
<http://www.drinktap.org/home/water-information/water-quality/ucmr3.aspx>

definitions

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

CU: Color unit.

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of 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 disinfectant to control microbial contamination.

NA: Not applicable.

ND: Not detected.

NJ RUL: New Jersey Recommended Upper Limit

NTU: Nephelometric Turbidity Unit.

ppb Parts per billion: The equivalent of one second in 32 years.

ppm Parts per million: The equivalent of one second in 12 days

pCi/L Picocuries per liter: The equivalent of one second in 32 million years.

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.

TON: Threshold Odor Number.

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

explanation of coliform exceedance

The Jersey City Water System, operated by SUEZ, violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we did to correct this situation.

We routinely monitor for drinking water contaminants. During the month of July 2015, we collected 198 samples to test for the presence of coliform bacteria. During this testing, 15 samples of the 198 taken (7.5%) showed the presence of total coliform bacteria. The standard is that no more than five percent (5%) of samples may test positive.

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. Whenever we detect coliform in any sample, we do follow-up testing to see if other bacteria of greater concern are present. Additional testing of these samples for other bacteria were negative in all the samples collected in July. Additional samples collected in early August throughout the entire system also have tested negative.

Uncharacteristically warm water temperature may have caused the positive samples. To rectify, we made immediate, successful modification to our treatment procedures and thoroughly flushed the distribution system.

Since this was NOT an emergency, CUSTOMERS DID NOT NEED TO BOIL THEIR WATER OR TAKE ANY CORRECTIVE ACTIONS. However, if you have specific health concerns, consult your doctor. In accordance with safe drinking water regulations, customers were sent notification of this incident on August 10, 2015.

sodium information

We routinely monitor the drinking water to ensure that it meets the standards set by United States Environmental Protection Agency (EPA) and the New Jersey Division of Environmental Protection (DEP). While the EPA does not have a maximum level for sodium in drinking water, the NJDEP has a recommended upper limit (RUL) of 50 parts per million (ppm).

2015 results showed that the Jersey City Water System exceeded the recommended upper limit for sodium. The highest running annual average at the Jersey City Water Treatment Plant was 61 ppm, with a range of monthly average results of 46 ppm to 79 ppm.

The first two months of 2016 test results show that the Jersey City Water System did not exceed the recommended upper limit for sodium with a range of monthly average results of 45 ppm to 47 ppm.

According to the DEP, 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, elevated levels of sodium may be a concern for persons on a sodium restricted diet. If you have any concerns, please consult your health care provider.

For more information, please call 800.575.4433.

tap water or 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at 800.426.4791.

The sources of drinking water (for both tap 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 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.

In order to ensure that the 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. So, what's the bottom line? If bottled and tap water meet the federal standards, they are both safe to drink. However, your tap water is substantially less expensive than bottled water.



In keeping with our commitment to the environment, this report was printed on paper containing at least 10% post consumer fiber.

SUEZ

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**FAOJAHU VALLE I WAJEN UJIMIHIDJUN (F V W U) F W O I D I W I U U U U U Z
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

				Water Treatment Plant Results			
PRIMARY CONTAMINANTS	Compliance Achieved	MCLG	MCL	NUDWSC Wanaque WTP PWS ID NJ1613001		TYPICAL SOURCE	
				Highest Result (Average)			
TURBIDITY AND TOTAL ORGANIC CARBON							
Turbidity, NTU	Yes	NA	TT = 1	0.28 (0.11)	100%	Soil runoff.	
	Yes	NA	TT = percentage of samples <0.3 NTU (min 95% required)				
Total Organic Carbon, %	Yes	NA	TT = % removal; or removal ratio	Removal Ratio	1.0 (RAA) (0.94 - 1.0)	Naturally present in the environment.	
INORGANIC CONTAMINANTS							
Barium, ppm	Yes	2	2	Highest Result (Range of Results)	0.013	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.	
Nitrate, ppm	Yes	10	10		0.503	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	

SOURCE WATER ASSESSMENT

NUDEP has prepared Source Water Assessment reports and summaries for all public water systems. The Source Water Assessment for the NJDWSC system (PWS ID 1613001), can be obtained by accessing NUDEP's source water assessment web site at <http://www.state.nj.us/deplswap> or by contacting NUDEP'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
NUDWSC 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.

NUDWSC 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 is presented in the Source Water Pathogen Monitoring table below.

SOURCE WATER PATHOGEN MONITORING

Contaminant	NUDWSC Sourcewater	Typical Source
	<i>Cryptosporidium</i> , Oocysts/L	
<i>Giardia</i> , Cysts/L	0 – 0.1	

SECONDARY PARAMETERS – TREATMENT PLANT EFFLUENT

Contaminant	N.J. Recommended Upper Limit (RUL)	NUDWSC Wanaque WTP PWSID NJ1613001	
		Result	RUL Achieved
ABS/LAS, ppb	500	70	Yes
Alkalinity, ppm	NA	41	NA
Aluminum, ppb	200	50	Yes
Chloride, ppm	250	80	Yes
Color, CU	10	1	Yes
Corrosivity	Non-Corrosive	Non-Corrosive	Yes
Hardness (as CaCO ₃), ppm	250	72	Yes
Hardness (as CaCO ₃), grains/gallon	15	4	Yes
Iron, ppb	300	7	Yes
Manganese, ppb	50	ND	Yes
Odor, TON	3	ND	Yes
pH	6.5 to 8.5 (optimum range)	8.34	Yes
Sodium, ppm	50	47	Yes
Sulfate, ppm	250	11	Yes
Total Dissolved Solids, ppm	500	159	Yes
Zinc, ppb	5,000	ND	Yes

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. MRDLGs 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

PVMC: 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

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