

CONSUMER CONFIDENCE REPORT

Montville Township Water Department

PWSID# NJ1421003

Reporting Period - January 1, 2018 to December 31, 2018

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 2018 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, 2018 and December 31, 2018.

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	2018	N	Naturally present in the environment
Fecal coliform and E. coli	0	0	0	0	2018	N	Human and animal fecal waste
Secondary Contaminants							
Aluminum (ppb)	200	200	n/d	<0.15	5/9/2017	N	Naturally occurring element
Chloride (ppm)	250	250	65	61 - 69	5/9/2017	N	Erosion from natural deposits; Discharge of human and animal wastes; Discharge from industry
Color (Color Units)	10	10	n/d	<3	5/9/2017	N	Physical characteristic
Corrosivity	+/- 1.0	+/- 1.0	-0.29	-.25 to -.33	5/9/2017	N	Physical characteristic
Hardness (ppm)	250	250	285	284 - 286	5/9/2017	N	Naturally occurring minerals
Iron (ppb)	300	300	n/d	<0.2	6/19/2018	N	Naturally occurring element
Manganese (ppb)	50	50	11.7	11.7	6/19/2018	N	Naturally occurring element
Odor (Threshold Number)	3	3	n/d	<1	5/9/2017	N	Physical characteristic
pH (Standard Units)	6.5 - 8.5	6.5 - 8.5	7.64	7.59 - 7.69	5/9/2017	N	Physical characteristic
Silver (ppb)	100	100	n/d	<0.08	5/9/2017	N	Naturally occurring element
Total Dissolved Solids (ppm)	500	500	461	422 - 500	5/9/2017	N	Erosion of natural mineral deposits
Zinc (ppm)	5	5	0	n/d	5/9/2017	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	3.4	n/d - 20.5	9/1/2017	N	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	AL=1.3	1.3	0.32	0.045 - 0.625	9/1/2017	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Inorganic Contaminants							
Antimony (ppb)	6	6	n/d	<3	5/9/2017	N	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	5	n/a	1.93	1.56 - 2.3	5/9/2017	N	Erosion from natural deposits; Runoff from orchards; Runoff from glass and electronics productions wastes
Barium (ppm)	2	2	0.20	0.15 - 0.259	5/9/2017	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	4	4	0.057	0.047-0.067	5/9/2017	N	Discharge of metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	5	5	n/d	<0.063	5/9/2017	N	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chromium (ppb)	100	100	1.14	n/d - 1.14	5/9/2017	N	Erosion of natural deposits
Cyanide (ppb)	200	200	n/d	<5	5/9/2017	N	Discharge from steel /metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	4	4	n/d	<0.25	5/9/2017	N	Erosion from natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer
Mercury (ppb)	2	2	n/d	<0.05	5/9/2017	N	Discharge from steel /metal factories; Discharge from plastic and fertilizer factories
Nickel (ppb)	100	100	1.35	n/d - 2.7	5/9/2017	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate (ppm)	10	10	0.545	<0.5 - 0.59	5/9/2017	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	0.74	n/d - 1.48	5/9/2017	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sulfate (ppm)	250	250	63.4	58.4 - 68.4	5/9/2017	N	Discharge from petroleum and metal refineries; Erosion of natural deposits
Thallium (ppb)	2	0.5	n/d	<0.31	5/9/2017	N	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Sodium (ppm)	50	50	27	22.0 - 31.3	5/9/2017	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Radioactive Contaminants							
Gross Alpha (pCi/l)	15	0	n/d	<3	7/18/2017	N	Erosion of natural deposits
Combined Radium 226/228 (pCi/l)	5	0	n/d	<1	7/18/2017	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)	-	-	5.56	<0.48 to 9.13	Quarterly 2018	NO MCL's AT THIS TIME	
Chloroform (ppb)	-	-	10.59	3.32 to 26.8	Quarterly 2018		
Dibromochloromethane (ppb)	-	-	3.52	1.08 to 6.55	Quarterly 2018		
Regulated Disinfectants							
TTHMs [Total trihalomethanes] (ppb)	80	n/a	14.77 Highest LRAA at Site #4	5.2 to 36.1	2018	N	By-product of drinking water chlorination
HAA5 [Five Haloacetic Acids] (ppb)	60	n/a	19.9 Highest LRAA at Site #4	0.0 to 27	2018	N	By-product of drinking water chlorination
Chlorine (ppm) 2018	Levels Detected - Average & Highest			MRDL		MRDLG	
	0.41		1.07		4.0 ppm		4.0 ppm

Water Quality Data

Regarding hardness. The hardness figure of 284 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 114 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.